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The Study of the Potential for Attracting Foreign Investment to Support the Development of Railway Transport in the Eurasian Region

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ABSTRACT

The article discusses the financing of railway transport development in the countries of the Eurasian region. This study is relevant because the development of railway transport in the Eurasian region is a key factor for improving the infrastructure of national economies and creating conditions for their effective interaction. In today's reality, this is not only a response to the difficult geo-economic situation, but also an important factor for the growth of the EAEU member states' economies. The purpose of the study is to identify the optimal sources of funding and investment tools for the development of the transport and logistics infrastructure of the railway network in the Eurasian region given limited budgetary resources. Methods of system analysis, scientific abstraction and logical generalization are used. The scientific novelty of the research lies in its analysis of foreign investment practices in the field of railway projects. As a result, potential financial sources have been identified for the development of railway transport in the Eurasian area in light of the sanctions. The study showed that it is nearly impossible to attract external financial resources from international development banks and international financial institutions. The key projects in the field of railway transport in the post-Soviet space that have attracted Chinese investors are analyzed. It has been concluded that financing most often occurs at the expense of internal reserves and public-private partnerships (PPPs). This is due to the fact that traditional methods of fundraising are limited due to Western sanctions. Companies from the Eurasian region, due to a lack of finance, are increasingly investing their profits in the development of transport and logistics infrastructure. The results of the study will be valuable for the economic departments of the member countries of the Eurasian Economic Union (EAEU), as well as direct investment funds in terms of understanding the investment potential of rail transport in the Eurasian region.

Keywords: investment; rail transport; international financial institutions; public-private partnership; climate investment

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INTRODUCTION

The development of railway transport in modern conditions is one of the priorities, since railways are an environmentally friendly and efficient mode of transport for the movement of people and goods, they play an important role in the decarbonization of transport, as well as in economic growth and the green future of the global economy. This segment of the economy is characterized by stable annual growth of 5.04%.¹ The railway freight industry plays a special role in this segment of the economy, as it plays a basic role in global logistics and economic growth.

In the Eurasian space, the development of the railway network is a response to the complex challenges caused by international political tensions. The new routes are designed to overcome these difficulties.

International financial institutions, including international development banks, insurance and pension funds of individual countries, are active participants in the context of investment support for railway transport development. For 2025, experts define cooperation between the public and private sectors as part of the basic trends in financing the global railway industry [1–3]. Public-private partnership (PPP) actually accelerates railway infrastructure projects. Governments provide grants and subsidies to support rail freight transportation. Thus, financial incentives encourage investments in sustainable technologies. These financing trends ensure continuous growth and innovation in rail freight transportation.

The working hypothesis of the study suggests that in Europe and the United States over the past ten years, operating companies prefer to use their own funds to form investment portfolios, even with access to global financial markets. Due to sanctions restrictions, international development banks and investment funds do not finance

projects initiated by Russia for the countries of the Eurasian space. This necessitates the formation of an investment climate aimed at using domestic investment resources.

LITERATURE REVIEW

The issues of investment support for the development of railway transport are considered, as a rule, in conjunction with the development of infrastructure in the Eurasian space. In particular, the importance of the development of rail transport between Europe and Asia, including within the framework of international transit corridors, indicates the need for intensive construction and modernization of existing communication routes, the creation of transport infrastructure facilities [1]. For the development of investment, the authors proposed in the transit tariff to provide an investment component for financing the development programs of the EAEU infrastructure complex. As noted by Russian expert O. S. Abdurasulov, the EAEU lacks the integration of its member states in developing a common plan for cooperation with China [2]. Thus, it is assumed that a unified strategy in the transport and logistics sector would make it possible to carry out effective negotiation processes and determine the vector of development and project implementation plans in a single format, contributing to the deadlines for the implementation of tasks. Russian researchers (D. O. Rogov, M. Y. Karelina) indicate that digitalization and the introduction of modern technologies in the field of transport play a key role in the formation of an innovative economic space [3]. The emerging ecosystems of digital transport corridors have a positive impact on the economic development of the EAEU countries, while the process of promoting the formation of a single transport space is underway.

A study commissioned by the United Nations High Representative for the Least Developed Countries interprets the importance of railway transport corridors

¹ Rail Trends Report 2024: The Future of Train Transportation. URL: <https://trendfeedr.com/blog/rail-trends-report> (accessed on 18.01.2025).

for developing countries in terms of their access to the sea coasts and the possibility of developing multimodal transport schemes. At the same time, the priority role in the investment provision of country investment funds, formed, as a rule, by state budgetary funds, is noted. The authors note the importance of the functioning of institutions in developing economies with a full range of financial products that support infrastructure financing or specialize in private capital mobilization.²

Foreign researchers believe that the main investment resources for the development of infrastructure and railway transport can be provided by both states and institutions, leading multilateral development banks (MDBs) [4, 5]. At the same time, the interconnectedness of parts of Eurasia is proposed to be assessed in connection with the growing need to bypass Russia in trade between Europe and China. Western MDBs such as the World Bank (WB), the European Investment Bank (EIB), and the European Bank for Reconstruction and Development (EBRD) have refocused their lending plans, prioritizing the Middle Corridor. The importance of these ICBMs has been consolidated with the European Union's Global Gateway project. In addition to facilitating faster and more reliable trade between China and European markets, the MDBs prioritize investments in the natural resources of the Caspian Sea, as well as in renewable energy and the green transition in Central Asia, the Caucasus and Turkey.

PROJECTS FOR THE DEVELOPMENT OF RAILWAY TRANSPORT IN THE EURASIAN REGION

In the post-Soviet space, the growth rate of rail transportation tends to increase

both within the framework of the Eurasian Economic Union (EAEU) and within the framework of economic ties with Chinese partners. Shipments from China to Russia and Belarus offset the drop in cargo volume in the China–Europe–China transit segment. Thus, the Eurasian corridor proved to be effective in overcoming external challenges. In 2023, the rail freight transportation sector has once again confirmed its environmental efficiency as an undeniable advantage. This climate-smart alternative remains relevant not only in Europe, but also in China, especially given the trend towards decarbonization.³

Most of the changes in trade relations were due to the deterioration of the international and political situation, which affected the countries involved in rail transport. However, the market is clearly on the way to adapt to modern realities, confirming the flexible nature of rail transportation. At the same time, the average transit time of China-EU-China freight rail transportation increased compared to 2022, reaching 7.5 days, and the average train occupancy reached a six-year high, despite a decrease in train speed to 729 km/day. However, the railway still retains a significant advantage in transit time compared to maritime or multimodal transport. The Eurasian route passing through Belarus, Kazakhstan and Russia has retained its leadership among the railway routes providing China–EU–China freight traffic. In 2023, the Eurasian route (Dostyk and Altynkol border crossings) accounted for 96% of container traffic.⁴

The middle corridor, which is supposed to connect China and Europe, passes through Kazakhstan via a railway route through Dostyk or Khorgos/Altynkol to the port of Aktau,

² Report on best practices for effective transit transport. Corridor development and management. United Nations Office of the High Representative for the Least Developed Countries. UN-OHRLLS. 2019. URL: https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/ldcs_publications/corridor-report_-_final_-_un-ohrlls_28may2020.pdf (accessed on 17.01.2025).

³ Report Rail container transportation in the Eurasian space in 2023. February 2024. URL: https://index1520.com/upload/media-library/9e3/5184rzm6ylmt65pwc2ren5ue2n0cvvl/_en_.pdf (accessed on 17.01.2025).

⁴ Report Rail container transportation in the Eurasian space in 2023. February 2024. URL: https://index1520.com/upload/media-library/9e3/5184rzm6ylmt65pwc2ren5ue2n0cvvl/_en_.pdf (accessed on 17.01.2025).

stretches across the Caspian Sea to the port of Baku, crosses Azerbaijan and Georgia and further to Europe. This corridor implements the idea of Kazakhstan to become a transport and logistics hub [6].

The World Bank experts believe that the value of this corridor is not so much in the transport component as in the general economic significance. The middle corridor has a huge potential for economic development. Its advantages include improved transport accessibility and high economic potential of the regions through which it passes [6].

At the same time, WB experts are exploring a branch line for this region — Uzbekistan and Turkmenistan to the port of Turkmenbashi, and then it is planned to cross the Caspian Sea and further to Baku, subsequently it is planned to connect Turkey, providing access to the Mediterranean Sea. In this regard, the WB Group's interest is focused on a detailed study of the Caspian Sea level, which also affects the operation of ports along the Middle Corridor.

In 2024, the leaders of the EAEU countries signed agreements on a unified customs transit system and a free trade area with Iran, strengthening Russia's position as a transit hub. This agreement provides for the introduction of electronic declarations, uniform enforcement of duties and navigation seals for cargo tracking, which should reduce transit time and costs for businesses. According to experts, Uzbekistan, China, Turkey, Iran and India may be the participants interested in the implementation of the unified customs tariff system.⁵

Kyrgyzstan and other Central Asian (CA) countries may become a key region for the development of the Eurasian transport network. Cargo traffic along transit corridors passing through the Central Asian states will increase by two thirds of the existing

volume in the next six years and, according to forecasts, will exceed 1.7 million containers per year.⁶ Kyrgyzstan and its neighbors experienced major logistical problems, including the long distance to major markets, which reduced the competitiveness of local goods and made production in Central Asian countries unprofitable.

The main financial institution of the integration association, the Eurasian Development Bank (EDB), proposes to create a Eurasian transport framework. This megaproject involves the organization of an effective network of transport corridors that will connect not only the EAEU states, but also major external players located in different parts of the continent. This corridor will be focused on supplies from China to Turkey or Germany.

China, given the growing sanctions packages from Western countries, is also considering the development of a railway link between mainland China and Europe through Asia, with Turkey as the main transit point to European countries and the East. This is also facilitated by the protracted conflict in the Red Sea, which has reduced cargo flow between China and Europe by more than 60%, increasing the average freight rate per 40-foot equivalent (FEU) from Shanghai to Rotterdam by about 78%, reaching a total of \$ 7,961. At the same time, in 2024, according to the Eurasia Rail Alliance (ERA) index, average rail freight tariffs are 59% lower than average sea tariffs on China — Europe routes.⁷

INVESTMENT PRACTICES OF RAISING FUNDS FOR RAILWAY PROJECTS

MDB experts in almost all regions of the world believe that governments will remain the largest investors in the development of railway

⁵ The EAEU has signed an agreement on a unified transit system with other countries. URL: <https://www.rbc.ru/economics/26/12/2024/676d41f19a794706b956375c> (accessed on 17.01.2025).

⁶ Central Asia will become a key region for the development of the transport network (Bishkek). URL: <https://rg.ru/2024/08/07/evrazijskij-karkas.html> (accessed on 17.01.2025).

⁷ Eurasian Railway Corridor: Overview of 2024 Trends in Rail Freight from China to Europe. URL: <https://www.searates.com/blog/post/eurasian-railway-corridor-overview-of-2024-trends-in-rail-freight-from-china-to-europe> (accessed on 17.01.2025).

transport networks, since infrastructure is primarily a matter for the state, and therefore the government has priority in this matter. At the same time, grants and soft loans are welcome, but from the point of view of launching infrastructure development, governments cannot finance the needs alone. In this regard, international financial institutions (IFIs) and other private finance actors will continue to play an important role.

The dominant approach of IFIs and MDBs is the use of mixed financing between the state and the private sector, as it aims to encourage investment by sharing risks to an acceptable level.

The World Bank Group notes that pension funds, sovereign wealth funds, mutual funds, and other institutional investors account for only 0.67% of total global investments in developing countries, including those aimed at developing infrastructure projects.⁸ In general,

private capital is reluctant to invest in large-scale investment projects from scratch, given the difficulties both in accurately budgeting a project and timing its implementation, and in predicting future revenues in the absence of an operational history. Most often, when lending to projects, institutional investors focus on projects that are already under construction.

The experts of the World Bank Group note that the transition to a green economy has led to the creation of investment funds with fairly large funds for investing in accordance with ESG standards,⁹ including in infrastructure projects.

The WB report on railway construction focuses on the importance of railways in achieving low-carbon transport solutions, the investment needs of the railway sector, as well as the challenges and opportunities

⁸ Global infrastructure trends. Part 2: Developments in financing. URL: <https://www.pwc.com/gx/en/industries/capital-projects-infrastructure/publications/infrastructure-trends/global-infrastructure-trends-financing.html> (accessed on 17.01.2025).

trends/global-infrastructure-trends-financing.html (accessed on 17.01.2025).

⁹ Environmental, social and corporate governance. (English Environmental, Social, and Corporate Governance, ESG).

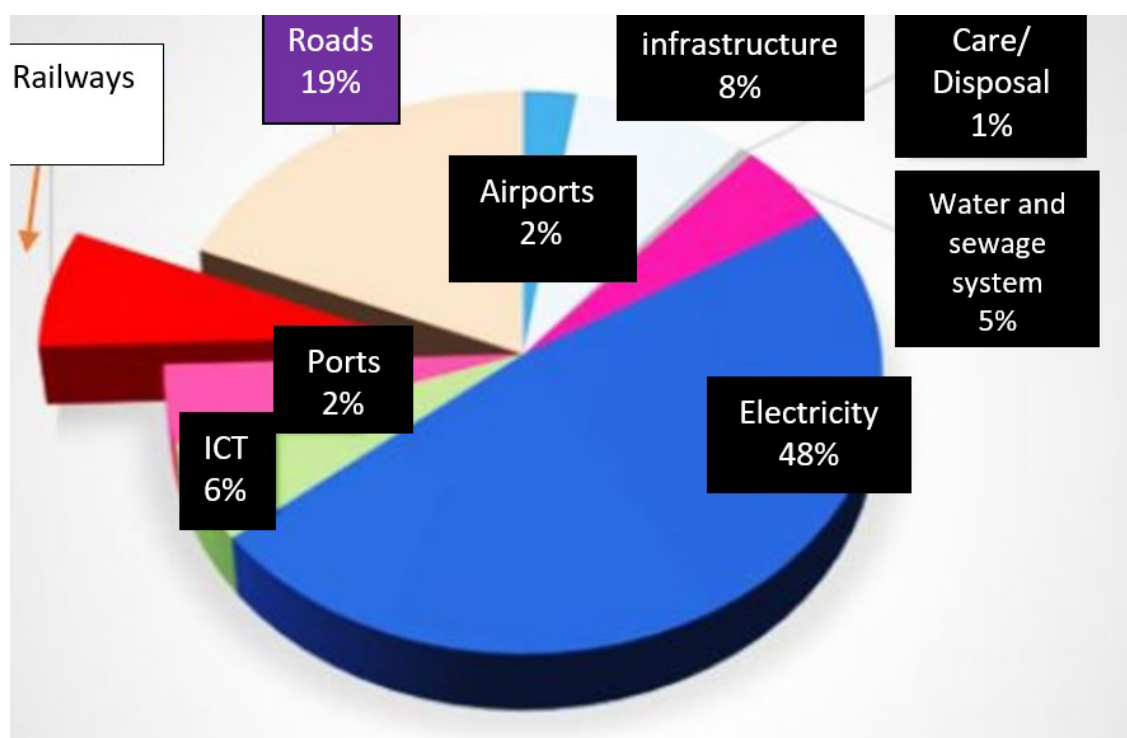


Fig. 1. The Share of PPPs by Sectors of Infrastructure Projects Implemented Between 1990 and 2023

Source: UNECE workshop on the role of Public Private Partnerships (PPPs) in the financing of investment in the railways 2024 (accessed on 17.01.2025).

in accessing climate finance. The report highlights the capital-intensive nature of the railway industry and estimates that developing countries will need between \$ 25 billion and \$ 80 billion per year in direct investment. It is proposed to consider the so-called climate finance, which is aimed

at reducing greenhouse gas emissions, as a source of financing.¹⁰ The following are proposed as climate finance instruments:

¹⁰ World Bank Report: Mobilizing climate finance for railways. 05.04.2024. URL: <https://railmarket.com/news/business/18117-world-bank-report-mobilizing-climate-finance-for-railways> (accessed on 17.01.2025).

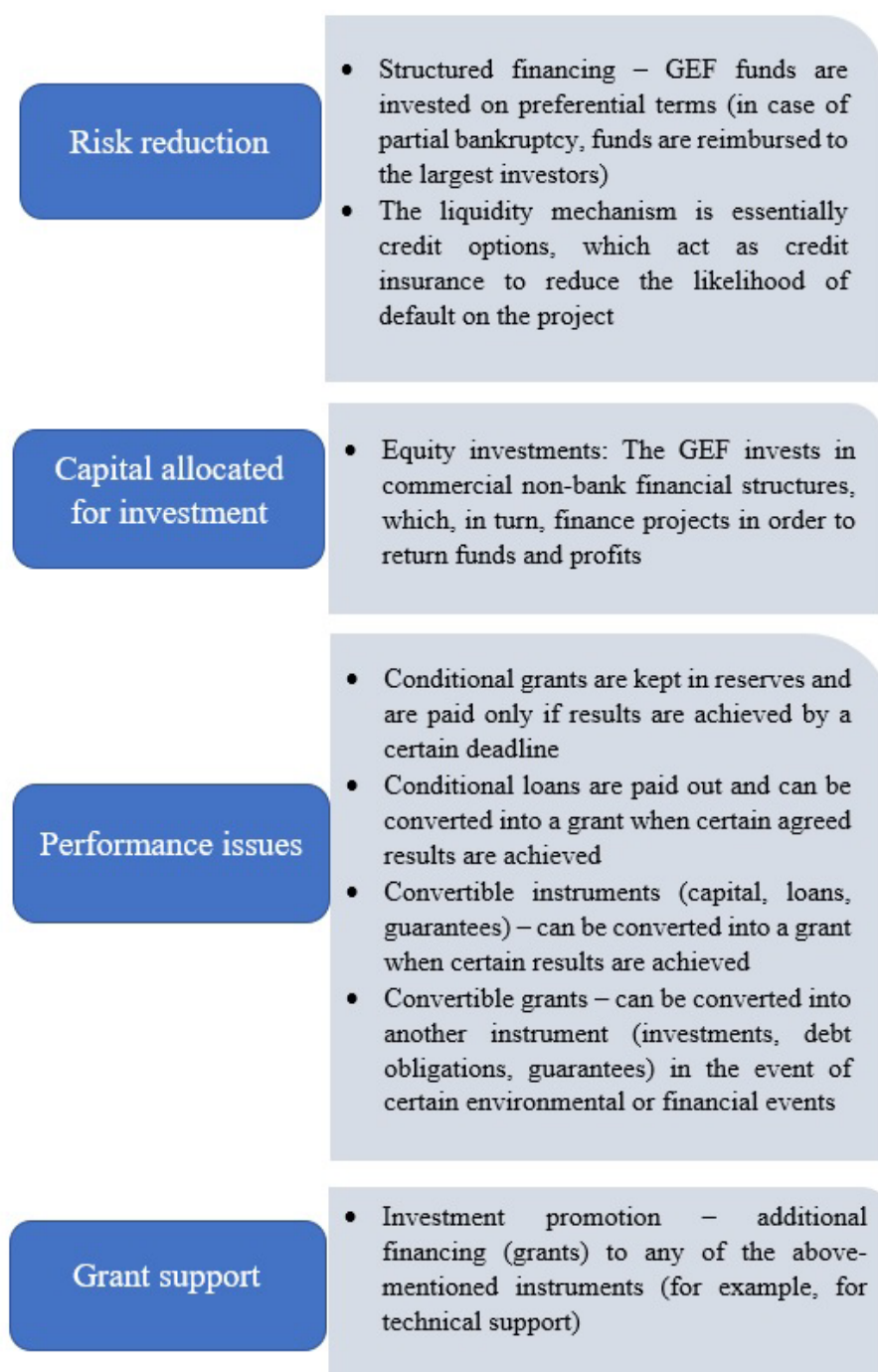


Fig. 2. GEF Mixed Financing Instruments

Source: compiled by the authors based on: Stap information note on blended finance, February 5–9, 2024. Washington D.C., USA, p. 3 (accessed on 17.01.2025).

- private financing instruments: green bonds and loans, as well as financial instruments related to sustainability;

- Multilateral and bilateral climate funds for financing railway projects.

The World Bank experts recommend using funds from the public sector and development assistance institutions¹¹ to finance railway construction, since railways are an environmentally friendly and efficient mode of transport.

According to the World Bank¹²:

- PPPs have been increasingly used to develop railway infrastructure worldwide since the 1990s;

- PPP in the railway sector mainly concerns railway infrastructure projects. The PPP mechanism is designed to create or improve the existing railway infrastructure and may include the purchase of railway rolling stock (*Fig. 1*).

The Global Environment Facility (GEF) allocates most of its funds in the form of grants to projects. Mixed financing exists in many forms; the key tools considered in various GEF projects are shown in *Fig. 2*.

The construction of railways refers to the development of environmentally friendly entrepreneurship. In this regard, it is possible to use the opportunities of the GEF, which invests in the development of environmentally friendly areas. The GEF uses the Non-Grant Instrument (NGI) program, which has successfully attracted private investment at a much faster pace than conventional projects.

As foreign practice shows, in order to ensure the implementation of progressive investments, business entities invest out of profits in cross-border railway communication projects.

The United States is a driving force in the railway sector in terms of railway construction

development, its position is strengthened by significant investments in infrastructure and a solid industrial foundation. In 2024, public investments continue to play an important role in the development of the railway industry, with government investments amounting to \$ 4 billion. One of the largest private investors in the railway industry in 2024 was the American corporation Wabtec, which sent its own funds in the amount of \$ 415 million for the development of railway technology and infrastructure in the USA. In 2024, Goldman Sachs Corporation invested \$ 411.7 million in the US railway industry. In addition, BNSF Railway, the largest railroad company in the United States, invested \$ 250 million¹³ in transportation facilities.

China's significant investments in railways have also led to the proliferation of railway-related enterprises, positioning it as a global leader in railway infrastructure development. The main beneficiaries of the public investment are China Railway Special Cargo Logistics, with a capital investment of US\$ 272 million, and Chengdu Xinzhong Road & Bridge Machinery, which received US\$ 195 million.¹⁴ Thus, government investments in local enterprises reflect China's commitment to improving its railway infrastructure.

In modern conditions, the main investors in the development of the railway industry are both the state and the largest companies operating railways.

THE POSSIBILITIES OF RAISING FUNDS FOR THE DEVELOPMENT OF RAILWAY TRANSPORT IN THE EURASIAN SPACE

With regard to Eurasia, attention should be paid to the activities of the Eurasian Sovereign Wealth Fund.

In the first half of 2024, the total amount of approved financing from the International

¹¹ World Bank Report: Mobilizing climate finance for railways. 05.04.2024. URL: <https://railmarket.com/news/business/18117-world-bank-report-mobilizing-climate-finance-for-railways> (accessed on 17.01.2025).

¹² World Bank Report: Mobilizing climate finance for railways. 05.04.2024. URL: <https://railmarket.com/news/business/18117-world-bank-report-mobilizing-climate-finance-for-railways> (accessed on 17.01.2025).

¹³ Rail Trends Report 2024: The Future of Train Transportation. URL: <https://trendfeedr.com/blog/rail-trends-report/> (accessed on 18.01.2025).

¹⁴ Rail Trends Report 2024: The Future of Train Transportation. URL: <https://trendfeedr.com/blog/rail-trends-report/> (accessed on 18.01.2025).

Table 1

Structure of Sovereign Financing by Instruments in the First Half of 2024

Operating Forms	Financing, billions of dollars	Number of transactions
Investment financing	1376	36
Stabilization financing	850	4
Technical assistance	115.9	66
Total	2341.9	106

Source: Compiled by the authors based on: Stap information note on blended finance, February 5–9, 2024. Washington D.C., USA, p. 3 (accessed on 17.01.2025).

Financial Organization, development agencies and climate funds amounted to 2.3 billion US dollars (106 transactions). In terms of institutions, financing from multilateral development banks prevails — 46 operations worth \$ 1956 million, followed by development agencies and climate funds — 55 operations worth \$ 135 million. Currently, 96 projects are in the active stage of implementation. Financing from international financial organizations (IFIs) was carried out mainly in the following currencies: USD 1.7 billion and EUR 493.3 million. The largest amount of approved financing is accounted for by investment loans in the amount of \$ 1.3 billion (55% of the total financing), followed by stabilization loans — \$ 0.9 billion (41% of the total financing). Investment financing became the main component of operations during the analyzed period. It was provided both in the form of loans and grants. Most of the investments were approved in a credit format. The grants amounted to only \$ 43 million.¹⁵ Investment financing was dominated by projects in the transport sector (USD 564.9 million).¹⁶

Table 1 shows the structure of the sovereign wealth fund in terms of the instruments used.

Stabilization financing is aimed at ensuring the balance of payments, stabilizing national currencies and providing fiscal support — the main creditors are the Eurasian Fund for Stabilization and Development (EFSD), the Asian Development Bank (ADB) and the World Bank. At the same time, the largest amount was approved for Kazakhstan by the World Bank — \$ 600 million.

The results of the analysis of the sectors with the largest number of projects indicate the presence of two clear regional priorities:

- 1) mitigation of economic and fiscal difficulties resulting from global crises;
- 2) improving management practices.

Both groups of projects are implemented with the help of stabilization and investment financing.

We would like to emphasize that according to the results of the activities in 2024, Kazakhstan, Armenia, Uzbekistan, Tajikistan, Georgia and Mongolia were the main borrowers of the approved financing. Neither Russia nor Azerbaijan were recipients of significant investments for the development of national economies.

Multilateral development banks continue to introduce new tools to support countries in coping with the effects of climate change. Thus, the AIIB Board of Directors approved a new instrument, Climate-Focused Policy-Based Financing (CPBF), as part of a set of

¹⁵ Stap information note on blended finance, February 5–9, 2024. Washington D.C., USA, p. 3 (accessed on 17.01.2025).

¹⁶ Led by EBRD and Asian bank infrastructure Urgench investments (AIIB). CM. details: Apostille, 5–9, 2024. Washington D.C., Ferdinando, R. 3 (accessed on 17.01.2025).

Table 2

**Participation of International Institutions in Financing National Economies of Countries
in the Eurasian Space**

International organizations	Amounts in billions of dollars, 2023	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Azerbaijan	Armenia	Georgia	Belarus	Mongolia	Russia
European Investment Bank	604.8	+				+	+	+	+	+	+	+
Asian Development Bank	301.4	+	+			+	+	+	+		+	
International Finance Corporation	110.5	+	+	+		+	+	+	+	+	+	+
European Bank for Reconstruction and Development (EBRD)	81.7	+	+	+	+	+	+	+	+	+	+	+
Asian Infrastructure Development Bank	53.8	+				+			+			
Islamic Development Bank	29.2	+	+	+	+	+	+					
New Development Bank	28.6											+
Eurasian Development Bank	4.2	+	+	+		+		+		+		+
Black Sea Trade and Development Bank	2.4						+	+	+			+
International Investment Bank	1.2							+		+	+	+
International Bank for Economic Cooperation	0.6					+		+		+	+	+

Source: Compiled by the authors based on: Vinokurov E. et al. [9]; EDB Database of Non-Sovereign Financing by International Financial Institutions. Working Paper 24/8. Almaty: Eurasian Development Bank., p. 11 (accessed on 17.01.2025).

sovereign financing tools.¹⁷ This new funding option is aimed at supporting the achievement of national goals for the transition to climate change.

Kazakhstan has become the largest recipient of World Bank investments. In particular, \$ 600 million is aimed at the country's transition to a "green" economy.¹⁸

Describing the possibilities of attracting investment resources from international organizations, we emphasize the role of non-sovereign financing of MFI, which is aimed at supporting sustainable and dynamic economic development of countries and regions. The importance of non-sovereign financing for the economies of the Eurasian region is due to the promotion of private sector development in the absence of pressure on government budgets (*Table 2*).

The Eurasian transport structure includes 12 approved projects with a financing volume of \$ 400 million. On the part of the EDB, while the Eurasian Trade Network is considering eight projects, one of which receives financing in the amount of \$ 70 million.¹⁹

An example of the IFI's implementation of a strategy to promote the development of the transport railway network in the post-Soviet space is the allocation by the Multilateral Investment Guarantee Agency (MIGA), part of the World Bank Group, of a guarantee in the amount of 621.2 million dollars, covering the principal amount and interest on a loan from Citibank NA (USA) and Banco Santander, SA (Spain) JSC "National Railway Company "Kazakhstan Temir Zholy" (KTZ). The MIGA guarantee protects KTZ from the risk of non-fulfillment of financial obligations by a state-owned enterprise for 10 years. This will allow the company to attract long-

term international financing on favorable terms.²⁰

The implementation of railway projects in the Eurasian space within the framework of the Belt and Road Initiative (OBOR) is carried out by China, as a rule, on a loan basis. The PRC is characterized by full financing from the PRC government and the country's investment funds. The Chinese government uses public-private investment funds, known as "leadership funds", to deploy huge amounts of capital in support of strategic and emerging technologies, including artificial intelligence. Management funds raise and allocate capital, manage their investments, and interact with public and private entities. The management fund's model is not a panacea, but it has many advantages over traditional industrial policy mechanisms [7].

As of October 2023, 22,000 private investment funds were registered in China, with assets under management totaling \$ 2.94 trillion. Private equity funds play an important role in serving the real economy, facilitating direct financing, and supporting scientific and technological innovation. In June 2023, the State Council of China published Regulations on the Supervision and Management of Private Investment Funds, which entered into force on September 1, 2023, and in December 2023 The China Securities Market Regulatory Commission (CSRC) has published Measures on Supervision and Management of Private Investment Funds, which, when effective, will replace the current Interim Measures on Supervision and Management of Private Investment Funds.²¹ Private equity funds have gradually shifted from individual investors to institutional ones such as financial institutions, state-owned enterprises, and listed companies. It is expected that the Chinese equity

¹⁷ Stap information note on blended finance, February, 5–9, 2024. Washington D.C., USA, p. 3 (accessed on 17.01.2025).

¹⁸ Stap information note on blended finance, February, 5–9, 2024. Washington D.C., USA, p. 3 (accessed on 17.01.2025).

¹⁹ Eurasian Development Bank's annual investment to reach \$ 2.3bn by end of 2024. URL: <https://daryo.uz/en/2024/12/05/eurasian-development-banks-annual-investment-to-reach-3bn-by-end-of-2024> (accessed on 17.01.2025).

²⁰ Eurasian Development Bank's annual investment to reach \$ 2.3bn by end of 2024. URL: <https://daryo.uz/en/2024/12/05/eurasian-development-banks-annual-investment-to-reach-3bn-by-end-of-2024> (accessed on 17.01.2025).

²¹ Investment Funds 2024. 08.02.2024. Grandall Law Firm. URL: <https://practiceguides.chambers.com/practice-guides/investment-funds-2024/china/trends-and-developments> (accessed on 18.01.2025).

Table 3

PPP Support Measures Implemented at the Regional Level

Financial support	Property support	Organizational, informational and methodological support
Tax benefits – investment tax deduction from income tax (Tax Code), up to 90% of expenses	Provision of land plots on preferential terms without bidding (rent can be up to 1% of the cadastral value per year)	Implemented by the executive authorities in the regions
State guarantees for the repayment of borrowed funds	Leasing of real or movable property for the implementation of the project	–
Financial participation – subsidies from the budgets of the regions of the Russian Federation	–	–

Source: Compiled by the authors based on: Public-private partnership. Investment portal of Primorsky Krai of the Russian Federation (accessed on 17.01.2025).

investment fund industry will move forward against the background of a downward trend in the formation of free financial resources [8].

An important element in the EDB's activities is the promotion of infrastructural connectivity through cross-border projects in the post-Soviet space, promoting the idea of PPP. This applies to projects for the construction and subsequent operation of the China – Kyrgyzstan – Uzbekistan railway, the Russia – South Kazakhstan direct current transmission line, the railway crossing on the Kazakhstan – China border, and others. To ensure the successful development of cross-border infrastructure and effective implementation management, the EDB has developed a set of recommendations based on international best practices in implementing cross-border PPP projects [9]. Among the basic provisions of these guidelines, the following can be distinguished:

- Consistency of national cross-border infrastructure development plans;
- Development of special international and national legal frameworks for cross-border PPPs;
- The existence of bilateral and multilateral institutional mechanisms to support cross-border PPPs;
- Developing partnerships with multilateral development banks to improve the effectiveness of cross-border PPPs.

PPP in relation to the Eurasian region in the field of railway transport development is still being implemented rather limited. In the EAEU, PPP projects are being implemented without any budgetary participation, but mainly in the field of heat supply and water supply [10]. The largest volume of investments (373.5 billion rubles) was contracted in the social sphere. However, in Russia, the segment of transport and transport infrastructure development has priority [11]. Currently, 117 PPP agreements have been concluded, including total investments of 2.4 trillion rubles, and extra-budgetary funds of 1.5 trillion rubles.²²

American companies engaged in freight transportation by rail invest about 3% of their revenue in capital expenditures. However, between 2014 and 2023, these investments increased more than sixfold, reaching a level of more than 18% of revenue.²³ This practice has not yet been sufficiently developed in the EAEU countries. At the same time, PPP activities are often associated with the implementation of concession agreements [12]. This tool is widely used in the regions

²² Public-private partnership in Russia. The results of 2023 and the main trends. URL: <https://data.tedo.ru/publications/ppp-digest.pdf> (accessed on 17.01.2025).

²³ Freight Rail's Strategic Investments. URL: <https://www.aar.org/issue/freight-rail-investments/> (accessed on 17.01.2025).

of Russia [13].²⁴ It has a high degree of government support, including at the regional level (Table 3).

An example in the field of railway transport modernization is the implementation of an investment project by the open Joint Stock Company Russian Railways (JSC Russian Railways), based on the need to find financial resources in conditions of limited budget and own funds. Project financing was applied to the modernization and construction of the Baikal-Amur and Trans-Siberian railways to increase transportation capacity. Thus, budget funds amounted to 110.2 billion rubles, borrowed resources — 41.1 billion rubles, own funds of Russian Railways — 261.1 billion rubles, resources of the National Welfare Fund — 150 billion rubles [14]. The share of Russian Railways' own funds was about 46%, which corresponds to the conditions of economic activity with the progressive process of fragmentation of the global economy [15].

The findings of the study can be used in the implementation of the strategic objectives of the development of the Russian Federation, formulated in the following documents:

- Decree of the President of the Russian Federation No. 309 dated 07.05.2024 “On the National Development Goals of the Russian Federation for the period up to 2030 and for the future up to 2036” (increasing the volume of traffic along international transport corridors);²⁵
- Spatial Development Strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036 (joint development of cross-border transport infrastructure and removal of barriers to increase trade turnover, including within the framework of the Greater Eurasian Partnership initiative) [16];
- Transport Strategy of the Russian Federation until 2030 with a forecast for the

period up to 2035 (approved by Decree of the Government of the Russian Federation dated 27.11.2021 No. 3363-r) [17];

- The national project “Efficient and Competitive Economy” (an increase in the volume of investments in fixed assets by at least 60% by 2030 compared to the level of 2020) [18];
- National project “International Cooperation and Export” [19];
- National project “Efficient Transport System” [20].

CONCLUSIONS

Summarizing the above, the following conclusions can be drawn.

1. Due to the introduction by Western countries of a large-scale sanctions portfolio against Russia for the countries of the Eurasian space, the possibilities of using all available investment tools for cross-border railway projects are significantly reduced.

2. In modern conditions, the project-based approach to financing is becoming the optimal way to attract investment for transport projects in the Eurasian region. The peculiarity of this approach is the emphasis on own funds and the use of public-private partnerships (PPPs). This is due to the fact that sanctions imposed by developed countries restrict access to traditional investment tools in the transport sector, which could contribute to the development of international cooperation. In conditions of limited financial resources, an important area for the development of railway facilities in the post-Soviet space is the investment of companies from the countries of the Eurasian region from profits for the development of transport and logistics infrastructure.

3. The development of railway construction in the Eurasian space is aimed at forming a stable connectivity of the macroregion, where the core is the EAEU countries.

4. The development of transnational railway projects meets the criteria for the transition to an environmentally sustainable development model in the region, while

²⁴ Public-private partnership. Investment portal of the Primorsky Territory of the Russian Federation. URL: <https://invest.primorsky.ru/ru/ppp/gosudarstvenno-chastnoe-partnerstvo/> (accessed on 17.01.2025).

²⁵ Decree on the National Development Goals of the Russian Federation for the period up to 2030 and for the future up to 2036. URL: <http://www.kremlin.ru/events/president/news/73986> (accessed on 17.01.2025).

being competitive in pricing compared to multimodal or sea, air transportation.

5. Since the development of transport infrastructure is one of the priorities for the development of the national economies of the countries of the Eurasian space, the main financial actors will be the states.

6. China, feeling an urgent need to realize its exports to European countries, uses mainly state funds as a source of investment for the development of the railway network in the Eurasian space to implement the OBOR initiative, providing funds on fairly strict credit terms.

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