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**“GLOBAL RAQAMLI INTEGRATSIYALASHUV:
2030-YILGACHA YASHIL IQTISODIYOTGA O'TISHDA
TEXNOLOGIK VA INDUSTRIAL SANOATNI RIVOJLANTIRISH
ORQALI MIKRO VA MAKROIQTISODIY BARQAROR
O'SISHNI TA'MINLASH DOLZARBLIGI”**

**“GLOBAL DIGITAL INTEGRATION: THE RELEVANCE OF
ENSURING MICRO AND MACROECONOMIC SUSTAINABLE
GROWTH THROUGH TECHNOLOGICAL AND INDUSTRIAL
DEVELOPMENT IN THE TRANSITION TO A GREEN
ECONOMY BY 2030”**

**«ГЛОБАЛЬНАЯ ЦИФРОВАЯ ИНТЕГРАЦИЯ:
АКТУАЛЬНОСТЬ ОБЕСПЕЧЕНИЯ УСТОЙЧИВОГО
МИКРО- И МАКРОЭКОНОМИЧЕСКОГО РОСТА ЧЕРЕЗ
РАЗВИТИЕ ТЕХНОЛОГИЧЕСКОЙ И ИНДУСТРИАЛЬНОЙ
ПРОМЫШЛЕННОСТИ В ПЕРЕХОДЕ К ЗЕЛЁНОЙ
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- 05.01.00 – Axborot texnologiyalari, boshqaruv va kompyuter grafikasi
- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
- 05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
- 05.01.07 – Matematik modellash
- 05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
- 05.02.00 – Mashinasozlik va mashinashunoslik
- 05.02.08 – Yer usti majmualari va uchish apparatlari
- 05.03.02 – Metrologiya va metrologiya ta'minoti
- 05.04.01 – Telekommunikatsiya va kompyuter tizimlari, telekommunikatsiya tarmoqlari va qurilmalari. Axborotlarni taqsimlash
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- 05.05.06 – Qayta tiklanadigan energiya turlari asosidagi energiya qurilmalari
- 05.06.01 – To'qimachilik va yengil sanoat ishlab chiqarishlari materialshunosligi
- 05.08.03 – Temir yo'l transportini ishlatish
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
- 08.00.01 – Iqtisodiyot nazariyasi
- 08.00.02 – Makroiqtisodiyot
- 08.00.03 – Sanoat iqtisodiyoti
- 08.00.04 – Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 – Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 – Ekonometrika va statistika
- 08.00.07 – Moliya, pul muomalasi va kredit
- 08.00.08 – Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 – Jahon iqtisodiyoti
- 08.00.10 – Demografiya. Mehnat iqtisodiyoti
- 08.00.11 – Marketing
- 08.00.12 – Mintaqaviy iqtisodiyot
- 08.00.13 – Menejment
- 08.00.14 – Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 – Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 – Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 – Turizm va mehmonxona faoliyati

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ANALYSIS OF CONTAINER RAIL TRANSPORTATION IN THE REPUBLIC OF UZBEKISTAN: FACTORS AND DIRECTIONS FOR IMPROVING ECONOMIC EFFICIENCY

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Abstract. The purpose of this study is to identify reserves for improving the economic efficiency of container rail transportation in Uzbekistan. Rather than merely comparing absolute traffic volumes, the analysis integrates transportation scale, corridor speeds, border delays, container turnaround, empty mileage, terminal organization, and the regularity of block-train services. The study presents a SWOT analysis of container rail transportation in the Republic of Uzbekistan and proposes directions for improving its economic efficiency.

Keywords: container transportation, railway transport, economic efficiency, container turnaround, block train, transport corridor.

Annotatsiya. Ushbu tadqiqotning maqsadi O'zbekistonda temir yo'l orqali konteyner tashuvlarining iqtisodiy samaradorligini oshirish zaxiralarini aniqlashdan iborat. Mutlaq tashish hajmlarini shunchaki taqqoslash o'rniga, tahlilda tashish ko'lami, transport koridorlaridagi tezlik, chegara kechikishlari, konteyner aylanishi, bo'sh yurish, terminal faoliyatini tashkil etish hamda blok-poyezdlar qatnovining muntazamligi kompleks tarzda baholanadi. Tadqiqotda O'zbekiston Respublikasida temir yo'l konteyner tashuvlarining SWOT-tahlili keltirilgan hamda ularning iqtisodiy samaradorligini oshirish yo'nalishlari taklif etilgan.

Kalit so'zlar: konteyner tashuvlari, temir yo'l transporti, iqtisodiy samaradorlik, konteyner aylanishi, blok-poyezd, transport koridori.

Аннотация. Целью данного исследования является выявление резервов повышения экономической эффективности контейнерных железнодорожных перевозок в Узбекистане. Вместо простого сопоставления абсолютных объемов перевозок в анализе комплексно учитываются масштабы перевозок, скорость движения по транспортным коридорам, задержки на границе, оборот контейнеров, порожний пробег, организация работы терминалов и регулярность движения блок-поездов. В исследовании представлен SWOT-анализ контейнерных железнодорожных перевозок в Республике Узбекистан и предложены направления повышения их экономической эффективности.

Ключевые слова: контейнерные перевозки, железнодорожный транспорт, экономическая эффективность, оборот контейнеров, блок-поезд, транспортный коридор.

INTRODUCTION

Gorev A. E. and Popova O. V. regard the container transport system as an integrated set of technologies for container operation, transportation, control, and logistics process management. This approach makes it possible to assess containerization not merely as a method of cargo packaging but as an organizational and technological system [7]. These considerations are particularly important for Uzbekistan, a landlocked country, because the ultimate economic outcome of container transportation depends on the coordination of the rail leg with terminals, road delivery, and international transport corridors.

The research problem stems from the heterogeneity of international statistics: some countries publish total rail freight tonnage, whereas others report TEU volumes for individual services. Consequently, directly ranking countries by absolute values may be methodologically limited. The study therefore compares two levels: (1) the scale of the freight base and container market; and (2) organizational and economic efficiency factors. The objective is to identify the factors constraining the efficiency of container transportation in Uzbekistan and to quantify selected efficiency reserves.



The research methodology combines several approaches. In the textbook edited by N. P. Tereshina, B. M. Lapidus, and M. F. Trikhunkov, the economic assessment of railway transport is addressed through the analysis of transport competitiveness, operating expenses, cost of transportation, pricing, and the effectiveness of development measures [13]. Belov I. V., Tereshina N. P., Trikhunkov M. F., and co-authors likewise treat railway economics as a system of interrelated indicators reflecting resource utilization and the results of transportation activities [3]. Accordingly, this study applies dynamic analysis of traffic volumes, corridor analysis of time and cost, ratio analysis of container turnaround and empty mileage, and SWOT analysis.

The indicators are constructed using the economic approach associated with N. P. Tereshina's school of transport economics, according to which efficiency should be assessed by comparing the results of transportation activities with the resources and costs employed [14]. Andreev B. F. and co-authors, in their textbook on railway economics, consider cost, revenue, profit, and profitability as interrelated characteristics of economic performance [2].

On this basis, the following indicators are used in the study: $CTEU = Z/Q$; $PTEU = (Revenue - Z)/Q$; $R = P/Z \times 100\%$; $K_{empty} = L_{empty}/(L_{loaded} + L_{empty}) \times 100\%$; annual container turnover $n = 365/T_{turn}$.

In describing container operation and the management of container transport logistics, Gorev A. E. and Popova O. V. demonstrate the need to consider the container throughout the entire transportation cycle rather than only on the loaded leg [7].

Rodrigue J.-P. examines the transport system through the interrelationship among networks, transport modes, terminals, and freight flows, with particular emphasis on the role of intermodal transportation in connecting different modes [11]. Notteboom T., Pallis A., and Rodrigue J.-P. show that terminals and their hinterland connections are key elements of an integrated transport and logistics network [9]. These propositions help explain the comparative results: for Uzbekistan, increasing rail freight tonnage alone may not be sufficient; the economic effect also depends on block-train regularity, terminal productivity, coordination at border crossings, and reliable rail connectivity with road-based last-mile delivery.

Reis V. and Macário R. view intermodal freight transportation as a system in which competitiveness depends on coordination among individual links and transfers between modes [10]. Therefore, the CAREC-observed gap between speed with delay and speed without delay should be interpreted as an economically significant process loss rather than merely a technical indicator. Terminal and corridor key performance indicators (KPIs) should additionally include average dwell time, border idle time, estimated time of arrival (ETA) compliance, flatcar and container turnaround, the share of empty mileage, and revenue per TEU.

Tereshina N. P., Podsorin V. A., Sokolov Yu. I., and co-authors emphasize the importance of efficient utilization of railway production resources and operating indicators for the final economic result [15]. Applied to the container fleet, this means that reducing turnaround time increases the potential productivity of existing assets. With $T_{turn} = 15$ days, theoretical annual turnover equals $365/15 = 24.3$ trips per year; at 12 days, it reaches 30.4 trips, representing an increase of approximately 25%.

Tereshina N. P., Podsorin V. A., Kozhevnikov Yu. N., and Danilina M. G., in their contemporary course on railway economics, associate improved efficiency with rational resource utilization, economic justification of managerial decisions, and better organization of transportation activities [16].

Based on the propositions systematized in the literature review, the study applies dynamic, comparative, structural, ratio, and factor analysis, as well as an assessment of the efficiency of international transport corridors. The evaluation uses traffic volume, TEU, speed with delay and speed without delay, border-crossing time and cost, container turnaround, and the share of empty mileage.

ANALYSIS AND RESULTS

The official SIAT quarterly series reports 73.9 million tonnes of rail freight in Uzbekistan in 2024 and 107.9 million tonnes in 2025 [8]. Kazakhstan transported 437.1 million tonnes of rail freight in 2024, reflecting a substantially larger freight base and a stronger transit specialization [4]. China–Europe freight train services completed 19,000 trips and transported more than 2 million TEU in 2024 (+10% and +9%, respectively), demonstrating the effects of service frequency and network scale [12]. Germany is characterized by mature integration of railways with seaports and intermodal terminals; its rail freight transport performance reached 126.3 billion tonne-kilometres in 2024 [6].

According to the CAREC CPMM report, Table 1 presents trade facilitation indicators for rail transportation in Uzbekistan for 2021–2023 [5]. These data make it possible to quantify process-related losses along Uzbekistan's railway corridors.

Table 1

Trade facilitation indicators for rail transportation in Uzbekistan, 2021–2023¹

Indicator	2021	2022	2023
Border-crossing time, h	6.2	6.8	6.7
Border-crossing cost, USD	133	133	132
Transport cost along a 500 km corridor section (20 t), USD	665	635	626
Speed with delay (SWD), km/h	11.2	11.8	11.9
Speed without delay (SWOD), km/h	13.3	13.1	13.2

The table shows that border-crossing time increased from 6.2 hours in 2021 to 6.7 hours in 2023, or by approximately 8.1%. In 2022, the indicator reached 6.8 hours before declining slightly. Thus, no substantial reduction in the duration of border procedures was observed during the period under review.

At the same time, cost indicators show a positive trend. The cost of crossing the border remained virtually unchanged, declining from USD 133 to USD 132. A more noticeable improvement occurred in the cost of transportation along a 500 km section of the transport corridor for a 20-tonne shipment: it fell from USD 665 in 2021 to USD 626 in 2023, a decrease of USD 39, or 5.9%.

Speed with delay (SWD) increased from 11.2 to 11.9 km/h, corresponding to growth of approximately 6.3%. Meanwhile, speed without delay (SWOD) remained virtually unchanged: 13.3 km/h in 2021 and 13.2 km/h in 2023. This suggests that the improvement in actual movement speed was primarily associated with a modest reduction in the impact of delays rather than an increase in the technical speed of transportation.

Speed-loss coefficient: $K_{\text{delay}} = 1 - \text{SWD}/\text{SWOD}$, or $K_{\text{delay}} = 1 - 11.9/13.2 = 9.85\%$. Thus, approximately 9.9% of potential speed is lost due to stops and organizational and technological delays. This confirms that improving efficiency requires not only higher technical train speeds but also shorter container dwell times at border stations and terminals.

Table 2

SWOT analysis of container rail transportation in the Republic of Uzbekistan²

S — Strengths Central location between China, Central/South Asia, and Western markets; specialized container operator; growing freight base; development of new international routes.	W — Weaknesses Landlocked geographical position; reliance on connectivity with neighboring railway networks; border and terminal delays; risk of empty returns; insufficient publicly available detail on TEU, costs, and dwell time.
O — Opportunities Regular block trains; China–Kyrgyzstan–Uzbekistan corridor; TITR/Middle Corridor and southern routes; digital documentation; dry ports; containerization of higher-value-added products.	T — Threats Competitive pressure from alternative corridors; differences in tariff coordination; changes in the external geopolitical environment; congestion at border nodes; rising capital and terminal costs.

CONCLUSION AND SUGGESTIONS

The economic efficiency of container transportation in Uzbekistan is determined not only by growth in physical traffic volume but also by the productivity of the entire logistics cycle. The CAREC-based calculation identified an approximately 9.85% loss of potential speed due to delays, while the turnaround model shows that reducing the cycle from 15 to 12 days could increase the potential annual productivity of a container by approximately 25%. Therefore, one of the main efficiency reserves lies in reducing non-productive time, followed by balancing directional freight flows and increasing the regularity of block-train services.

Based on the study, the following principal directions for improving economic efficiency are proposed:

- reducing container and railcar turnaround time;
- reducing border and terminal dwell times;
- developing regular block-train services;
- increasing backhaul container loading;

¹ Source: CAREC Institute, CPMM Annual Report 2023, Table 6.10 [5].

² Source: developed by the author.



- reducing the share of empty mileage;
- developing container terminals and dry ports;
- introducing electronic document management;
- improving tariff policy;
- diversifying international transport corridors;
- implementing a KPI system and econometric forecasting of container flows.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan No. PQ-329 dated October 10, 2023 "On Measures for the Fundamental Reform of the Railway Transport Sector of the Republic of Uzbekistan". URL: <https://lex.uz/uz/docs/-6631602>
2. Andreev, B. F., et al. *Railway Transport Economics [Ekonomika zheleznodorozhnogo transporta]* : textbook / ed. by N. P. Tereshina, L. P. Levitskaya, L. V. Shkurina. – Moscow : UMC ZhDT, 2012. – 533 p. – ISBN 978-5-89035-621-5. URL: <https://search.rsl.ru/ru/record/01006555331>
3. Belov, I. V., Tereshina, N. P., Trikhunkov, M. F., et al. *Railway Transport Economics [Ekonomika zheleznodorozhnogo transporta]* : textbook / ed. by N. P. Tereshina et al. – Moscow : UMO MPS Rossii, 2001. – 596 p. – ISBN 5-89035-056-0. URL: <https://search.rsl.ru/ru/record/01000966751>
4. Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. *Transport in the Republic of Kazakhstan (January–December 2024)*. – 2025. URL: <https://stat.gov.kz/en/industries/businessstatistics/stat-transport/publications/287590/>
5. CAREC Institute. *CAREC Corridor Performance Measurement and Monitoring Annual Report 2023*. – 2025. URL: <https://cpmm.carecprogram.org/resources/carec-corridor-performance-measurement-and-monitoring-annual-report-2023/>
6. Eurostat. *Key Figures on European Transport – 2025 Edition*. – Luxembourg: Publications Office of the European Union, 2025. URL: <https://ec.europa.eu/eurostat/documents/15216629/22895843/KS-01-25-057-EN-N.pdf>
7. Gorev, A. E., Popova, O. V. *Freight Container Transportation [Gruzovye konteynerye perevozki]* : textbook. – Moscow : KnoRus, 2022. – 344 p. – ISBN 978-5-406-08909-5. URL: <https://knorus.ru/catalog/transport-avtomobili-aviaciya-flot/610793-gruzovye-konteynerye-perevozki-bakalavriat-uchebnik/>
8. National Statistics Committee of the Republic of Uzbekistan. *Transporting Goods by Rail (Quarterly)* // SIAT official statistical database. URL: <https://siat.stat.uz/data/3264/?lang=en>
9. Notteboom, T., Pallis, A., Rodrigue, J.-P. *Port Economics, Management and Policy*. – New York : Routledge, 2022. URL: <https://porteconomicsmanagement.org/DOI:https://doi.org/10.4324/9780429318184>
10. Reis, V., Macário, R. *Intermodal Freight Transportation*. – 1st ed. – Elsevier, 2019. URL: <https://shop.elsevier.com/books/intermodal-freight-transportation/reis/978-0-12-814464-0>
11. Rodrigue, J.-P. *The Geography of Transport Systems*. – 6th ed. – New York : Routledge, 2024. – 402 p. URL: <https://www.routledge.com/The-Geography-of-Transport-Systems/Rodrigue/p/book/9781032380407>
12. State Council of the People's Republic of China. *China-Europe Freight Trains Complete 19,000 Trips in 2024*. – 2025. URL: https://english.www.gov.cn/news/202501/07/content_WS677c946fc6d0868f4e8ee91f.html
13. Tereshina, N. P., Galaburda, V. G., Trikhunkov, M. F., et al. *Railway Transport Economics [Ekonomika zheleznodorozhnogo transporta]* : textbook / ed. by N. P. Tereshina, B. M. Lapidus, M. F. Trikhunkov. – Moscow : UMC ZhDT, 2006. – 801 p. – ISBN 5-89035-329-2.
14. Tereshina, N. P., Galaburda, V. G., Tokarev, V. A. *Railway Transport Economics [Ekonomika zheleznodorozhnogo transporta]* : textbook. – Moscow : UMC ZhDT, 2011. – 676 p. – ISBN 978-5-9994-0067-3. URL: <https://umczdt.ru/books/1216/225709/>
15. Tereshina, N. P., Podsorin, V. A., Sokolov, Yu. I., et al. *Railway Transport Economics: An Introductory Course [Ekonomika zheleznodorozhnogo transporta: vvodnyi kurs]* : textbook. – Saratov : IPR Media, 2019. – 414 p. – ISBN 978-5-4497-0052-0. URL: https://rusneb.ru/catalog/000199_000009_010104531/
16. Tereshina, N. P., Podsorin, V. A., Kozhevnikov, Yu. N., Danilina, M. G. *Railway Transport Economics [Ekonomika zheleznodorozhnogo transporta]* : textbook / ed. by N. P. Tereshina, V. A. Podsorin. – 2nd ed. – Saratov : Profobrazovanie, 2025. – 370 p. – ISBN 978-5-4488-1298-9. URL: <https://profspo.ru/books/152774>

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