

THE ROLE OF TRANSPORT AND LOGISTICS IN THE NATIONAL ECONOMY

Eshankulov Tursunpulat Kuchkorovich

Master's student of the
Banking and Finance Academy

Abstract. This paper explores the role of the transport and logistics system within the national economy, emphasizing the key factors driving the development of the sector. The research analyzes the efficiency of transport and logistics in the operations of industrial enterprises, exporters, and importers, as well as their contribution to production outcomes and foreign trade performance, supported by analytical evidence. Furthermore, particular attention is given to other market participants - such as transport companies and logistics service providers - and their assessment of existing infrastructure and service quality. The study also formulates recommendations and conclusions aimed at enhancing the transport and logistics system as a mechanism for improving economic efficiency and ensuring the sustainable development of the national economy.

Keywords: Transport; logistics; national economy; infrastructure; efficiency; competitiveness; service provision; integration; foreign trade; export; import; investment; innovation; market development; modernization; sustainability; transportation; international relations; economic growth.

Introduction. The transport and logistics system represents an integral component of the modern national economy. In today's era of globalization, the efficiency of production processes, trade in goods, and the provision of services is closely linked to the advancement of transport and logistics services. Indeed, the ability to deliver manufactured products to domestic and foreign markets quickly and at low cost ensures a country's economic competitiveness. From this perspective, the development of transport and communication infrastructure, alongside qualitative improvements in logistics services, constitutes not only a critical factor in national economic growth but also a foundation for strengthening international cooperation.

As officially stated, "automobile, air, railway, water, electric transport, metropolitan systems, and transport infrastructure facilities together form the unified transport system of Uzbekistan."¹ In recent years, the Republic of Uzbekistan has implemented wide-ranging reforms in the field of transport and logistics. In particular, the construction of modern highways, railway lines, air transport facilities, and multimodal logistics centers has contributed significantly to the dynamic development of the national economy. These initiatives have played a vital role in expanding the country's export potential, regulating import flows, and increasing the volume of foreign trade turnover.

Review of the Literature. The significance of transport and logistics in the national economy, their stages of development, and their impact on economic efficiency have been extensively examined by both international and domestic scholars.

For instance, R. Ballou argues that "the effective organization of logistics systems not only reduces production costs but also makes a substantial contribution to a country's overall

¹ Law of the Republic of Uzbekistan "On Transport", No. ORQ-706, August 9, 2021

economic growth.”² He stresses that the advancement of transport and logistics infrastructure constitutes a critical determinant in strengthening the competitiveness of national economies.

Likewise, M. Christopher emphasizes that “modern logistics networks should be regarded not merely as instruments to satisfy domestic market needs, but also as strategic resources enabling effective participation in international trade processes.”³ In his view, a well-structured logistics system is of paramount importance in enhancing a nation’s export capacity and fostering the development of external economic relations.

Uzbek scholars have also contributed to this discourse. Y. Karriyeva and colleagues, for example, highlight that “digital transformation in the field of logistics and transport enables industry actors to harness the advantages of new technologies, thereby ensuring competitiveness in an ever-expanding marketplace.”⁴ Similarly, M. Yakubov and N. Abulov contend that “no economy can achieve consistent and sustainable development without an effectively functioning model of transport and logistics systems.”⁵

In recent years, significant reforms aimed at strengthening transport and logistics infrastructure have been implemented, which hold particular importance for the sustainable development of the national economy. According to international experts, the implementation of transport-communication projects in Central Asia contributes not only to regional integration, but also to the expansion of foreign trade volumes and the growth of investment inflows.

Analysis and Results. The transport and logistics system represents one of the fundamental driving forces of the national economy, serving as an integral connecting link across production, trade, services, and export - import operations. The transport sector ensures the rational allocation of resources across all branches of the national economy, facilitates the delivery of finished goods to markets, and guarantees the timely supply of raw materials and semi-finished products to manufacturing enterprises. Consequently, the effective functioning of transport and logistics constitutes a critical determinant of sustainable economic growth.

- for the development of the national economy, the transport sector fulfills three core functions:
- ensuring stability of economic processes by maintaining continuity in production and distribution cycles;
- strengthening territorial integration, thereby fostering regional cohesion and balanced development;
- facilitating foreign trade by supporting export capacity and international market access.

² R. Ballou’s article titled 'Business Logistics: Importance and Some Research Opportunities,' published in *Gestão & Produção* in 1997, pages 117 to 124

³ Christopher, M. *Logistics and Supply Chain Management*. 5th Edition. Pearson Education Limited, 2016

⁴ Karriyeva, Yaquxtxon; Masharipova, Shahlo; Karriyeva, Shahnoza; Karriyev, Karimbergan; Sobirova, Nilufar.

“The role of information technologies in the development of digital logistics.” — *Journal of Economic Development and Analysis*, 2024, Vol. 2(3), pp. 58–68

⁵ Yakubov, Maksadxon; Abulov, Nodirbek. “Transport logistics of Uzbekistan: The analysis of development potential.” — *AIP Conference Proceedings*, Vol. 2432, Article 030093, 2022

Within the broader framework of economic activity, transport serves as the mechanism enabling uninterrupted flows between production, distribution, and consumption. In contexts where the transport system remains underdeveloped, even with an expansion of production volumes, significant delays arise in the delivery of goods and services to end-users. For this reason, many countries allocate substantial investment toward the development of transport and logistics infrastructure as a strategic priority.

Logistics, being closely interlinked with transport, encompasses the optimization of all processes from production through to final delivery to consumers. It integrates not only the physical movement of goods but also warehousing operations, cargo handling, customs clearance, management of information flows, and cost-reduction strategies. Evidence from advanced economies demonstrates that logistics services can account for as much as 10 - 15 percent of gross domestic product (GDP), thereby underscoring their pivotal contribution to national economic performance and global competitiveness.

Table 1.

The Current State of Uzbekistan's Transport Sectors (2024)

Mode of Transport	Total Length/Number	Main Share (%)	Service Orientation
Road transport	185,000 km	36%	Interregional and suburban
Railways	7,600 km	42%	Freight transport, transit
Air transport	11 airports	12%	International and domestic flights
Pipeline transport	13,000 km	8%	Oil and gas transportation
Inland waterways	1,200 km	2%	Local freight transport

As shown in the table, Uzbekistan's transport system is predominantly represented by rail and road networks, which account for the largest shares of the sector. While air and pipeline transport play a strategically significant role in the national economy, their relative contribution to the overall transport structure remains comparatively modest. Inland waterway transport, due to geographical and regional constraints, is relatively underdeveloped.

In recent years, the modernization of transport and logistics infrastructure has become one of Uzbekistan's key strategic priorities. Central to these efforts is the efficient utilization of international transport corridors, the establishment of new transit routes, and the enhancement of the country's transit potential. Among the flagship initiatives are projects such as the construction of the *China – Kyrgyzstan -Uzbekistan* railway, the development of the *Tashkent - Andijan* highway, and the reconstruction of *Tashkent International Airport*. These projects are not only expected to improve domestic connectivity but also to significantly enhance the competitiveness of Uzbekistan's transport system at the international level.

The contribution of each mode of transport to the economy varies depending on their functional characteristics. For instance, road transport serves as the primary carrier for short- and medium-distance freight. Railways provide cost-effective solutions for transporting bulk cargo over long distances. Air transport plays a critical role in the movement of time-sensitive goods and passenger services, where speed is paramount. Meanwhile, inland water and maritime transport continue to serve as essential components of global trade flows.

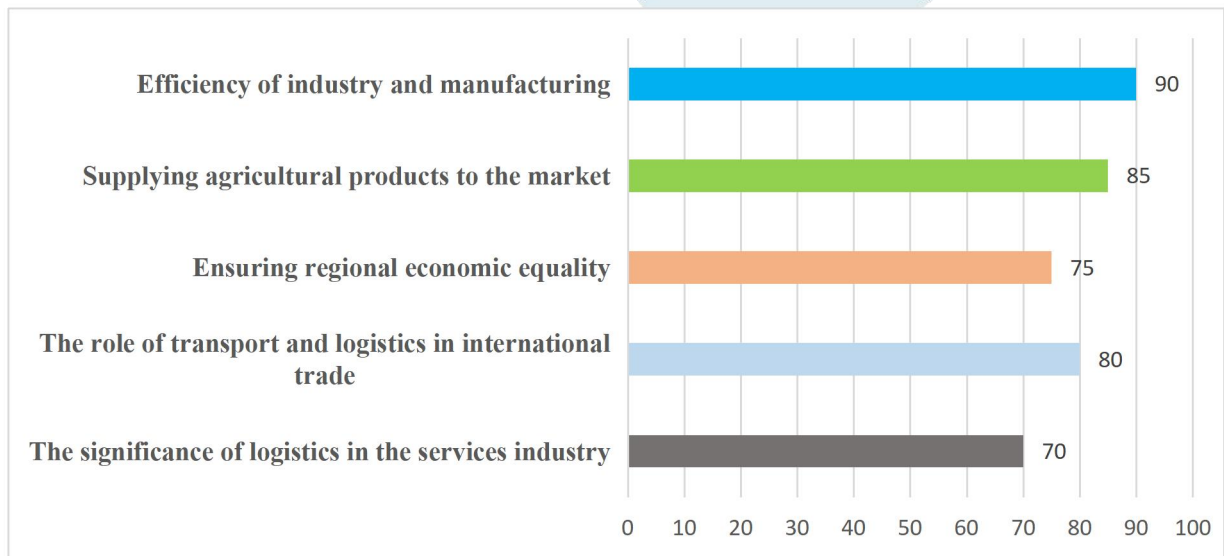


Figure 1. The Significance of Transport and Logistics in the Sectors of the National Economy

From the perspective of the national economy, the role of transport and logistics is most evident in the following directions:

1. Industrial production and efficiency.

Efficient transport ensures the timely and cost-effective delivery of manufactured goods, enabling producers to increase output. For instance, if raw materials fail to reach enterprises on time, production lines may be halted. In such cases, the uninterrupted operation of the transport system enhances overall production efficiency.

2. Delivery of agricultural products to markets.

Agricultural output largely consists of perishable goods that must reach consumers within a short timeframe. An effective logistics system reduces losses during storage and transportation, thereby increasing the income of farmers and agricultural producers.

3. Promoting regional economic equality.

In regions with developed transport infrastructure, industry and services tend to grow more rapidly. Conversely, weak transport connectivity slows down economic growth. Therefore, by investing in transport networks, the state contributes to reducing regional disparities and fostering closer integration among territories.

4. The role of transport and logistics in foreign trade.

The competitiveness of export goods in international markets depends on delivery time and cost. For example, Uzbek cotton or fruit and vegetable products can be sold at higher prices abroad if delivered promptly and in good condition. Likewise, the efficient import of goods at lower costs benefits the national economy.

5. Logistics in the service sector.

In recent years, the rapid development of e-commerce has significantly increased demand for logistics services. Fast and convenient delivery not only enhances consumer satisfaction but also determines companies' market share. Consequently, logistics services are generating new jobs and high added value in the service sector of the national economy.

The importance of transport and logistics in the economy has also been extensively studied internationally. For instance, countries ranking high in the World Bank's Logistics Performance Index (LPI) - such as Germany, the Netherlands, and Singapore - are among the most active participants in global trade. Their highly efficient transport and logistics systems strengthen national economic competitiveness.

Beyond economic functions, logistics systems also play a vital role in social life. Countries with well-developed transport infrastructure generally enjoy higher living standards, as people gain easier access to workplaces, educational institutions, and healthcare services. This accessibility contributes to greater social stability.

Moreover, transport and logistics are integral to ensuring national security. In emergencies - such as natural disasters or pandemics - the transport system provides rapid assistance by delivering essential goods, medical supplies, and humanitarian aid. Thus, the resilience of the transport-logistics system constitutes a key component of the national security framework.

In today's economy, the development of transport and logistics is closely intertwined with digital technologies. For instance, smart logistics systems, GPS monitoring, electronic customs declarations, and blockchain solutions enable faster, more transparent, and more reliable transport operations, thereby enhancing economic competitiveness.

To summarize, the role of transport and logistics in the national economy can be understood more comprehensively through the following fundamental aspects:

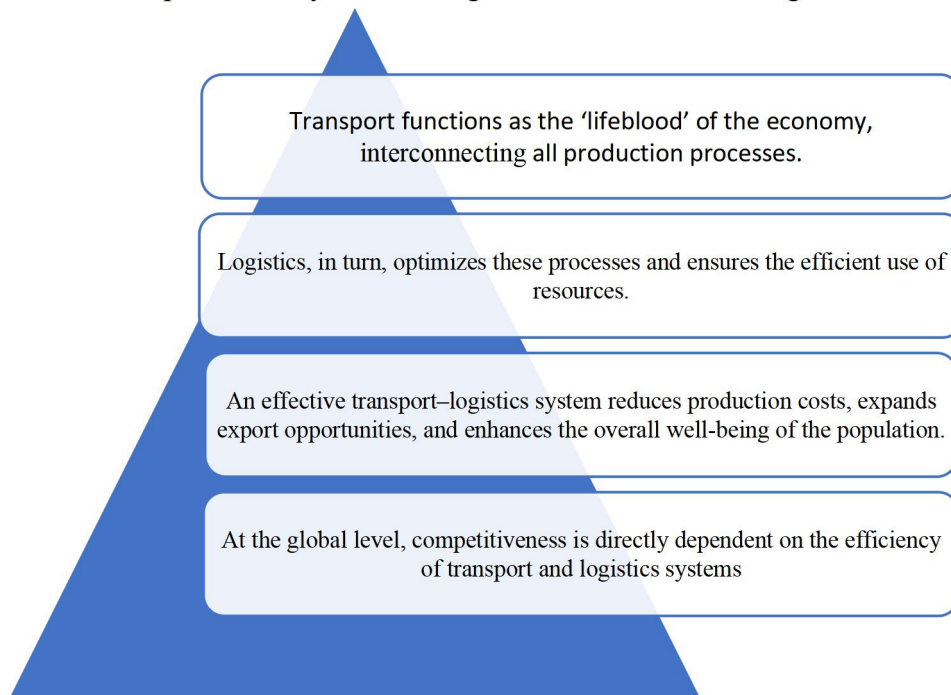


Figure 2. Key Aspects of Transport and Logistics in the National Economy

Transport, often referred to as the "lifeblood" of the economy, serves as the backbone connecting all stages of the production process. It ensures that manufactured goods are delivered swiftly and seamlessly from producers to consumers. Consequently, the transport system plays a decisive role in maintaining the uninterrupted functioning and sustainable development of the national economy.

Logistics, in turn, optimizes these processes by enabling the efficient use of resources. Through the reduction of storage, transportation, and delivery costs, logistics significantly enhances overall efficiency. As a result, both producers and consumers benefit from improved outcomes. An effective transport-logistics system reduces production costs, expands export opportunities, and enhances social welfare. Lower production costs increase the competitiveness of goods, while higher export volumes bring additional revenues to the national economy.

At the global level, competitiveness is directly linked to the efficiency of transport and logistics. Countries with modern logistics networks gain advantages in international markets, whereas

nations with underdeveloped transport and logistics infrastructure lag behind in terms of economic growth.

Conclusion. In summary, the role of transport and logistics in the national economy extends far beyond the movement of goods and services. It is vital for ensuring sustainable development across all sectors, fostering interregional integration, expanding foreign trade, and enhancing the efficiency of the services sector. A well-developed transport system not only facilitates the timely and high-quality delivery of domestic products but also strengthens their competitive position in international markets. Simultaneously, the advancement of logistics infrastructure contributes to domestic market stability, simplifies export-import operations, and accelerates external economic relations. Most importantly, the effective functioning of transport and logistics improves the overall quality of life by expanding access to essential goods and services at lower costs, reducing regional disparities, and creating a more favorable investment climate. Therefore, the transport-logistics system can justifiably be regarded as the “arteries” of the national economy.

REFERENCES

1. Christopher, M. Logistics and Supply Chain Management. 5th Edition. Pearson Education Limited, 2016.
2. Ballou, R. “Business logistics importance and some research opportunities.” Gestao-Producao, 1997, pp. 117–124.
3. Karriyeva, Y., Masharipova, S., Karriyeva, Sh., Karriyev, K., Sobirova, N “The role of information technologies in the development of digital logistics.” Journal of Economic Development and Analysis, 2024, 2(3), 58–68.
4. Yakubov, M., Abulov, N. “Transport logistics of Uzbekistan: The analysis of development potential.” AIP Conference Proceedings, Vol. 2432, Article 030093, 2022.
5. World Bank. Connecting to Compete 2018: Trade Logistics in the Global Economy – The Logistics Performance Index and Its Indicators. Washington, DC: World Bank, 2018.
6. OECD. Transport Infrastructure Investment and Maintenance Spending. OECD Publishing, Paris, 2019.
7. UNCTAD. Review of Maritime Transport 2021. United Nations, Geneva, 2021.
8. Law of the Republic of Uzbekistan “On Transport,” No. O‘RQ-706, August 9, 2021.
9. Ministry of Transport of the Republic of Uzbekistan. Available at: <https://www.mintrans.uz>
10. Logistika.uz. Available at: <https://logistika.uz>