

## ECONOMIC COOPERATION AND LOGISTICS ISSUES BETWEEN UZBEKISTAN AND XINJIANG

**CaoGang**

*Independent researcher at the department of “Regional Economics and management” faculty of Economics of the National University of Uzbekistan named after Mirzo Ulugbek*

*Correspondence: trueice2020@126.com*

**Abstract** *This study examines economic cooperation and logistics issues between Uzbekistan and the Xinjiang Uyghur Autonomous Region. It analyzes key areas of cooperation such as trade, transport, and energy, as well as the role of logistics infrastructure in supporting regional integration. The study finds that both regions have strong potential due to their strategic location, but face challenges including infrastructure gaps, high transport costs, and inefficient customs processes. The research highlights the importance of improving logistics systems, enhancing connectivity, and strengthening cooperation to ensure sustainable economic development.*

**Keywords:** *Uzbekistan, Xinjiang, economic cooperation, logistics, transport, trade, infrastructure.*

Uzbekistan and the Xinjiang Uyghur Autonomous Region occupy a strategically important position in the Eurasian space, serving as a bridge between Central Asia and China. Historically linked through the Silk Road, these regions have long played a significant role in facilitating trade, cultural exchange, and economic interaction between East and West.

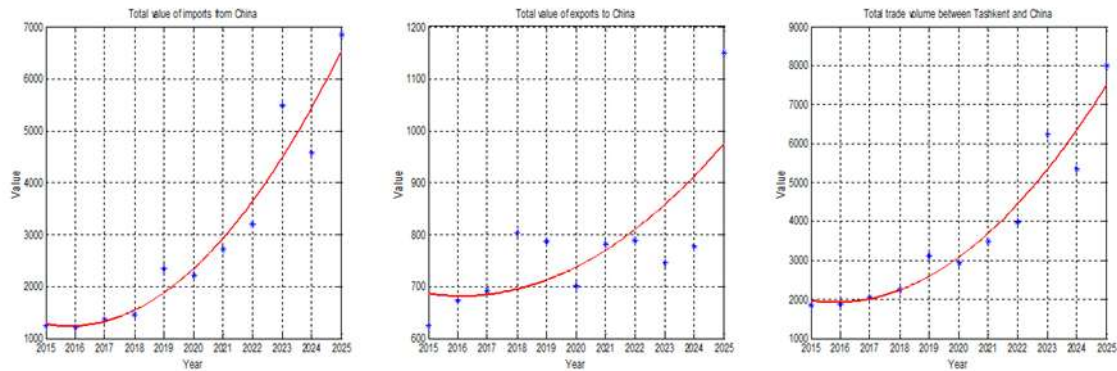
In the contemporary period, their importance has increased further due to the expansion of regional integration processes and large-scale infrastructure initiatives such as the Belt and Road Initiative.

Economic cooperation between Uzbekistan and Xinjiang has been steadily developing, particularly in areas such as trade, investment, energy, and transport. Xinjiang acts as a key gateway for China’s economic engagement with Central Asia, while Uzbekistan serves as an important transit and production hub in the region. The growing volume of bilateral trade and the strengthening of cross-border economic ties highlight the increasing interdependence between the two regions.

At the same time, the effectiveness of this cooperation largely depends on the development of logistics infrastructure. Efficient transport corridors, modern customs systems, and integrated supply chains are essential for enhancing trade flows and reducing transaction costs.

However, several challenges remain, including infrastructure gaps, regulatory barriers, limited connectivity, and environmental constraints, which hinder the full realization of economic potential.

Therefore, analyzing the dynamics of economic cooperation and identifying key logistics infrastructure issues between Uzbekistan and Xinjiang is crucial for improving regional connectivity, increasing competitiveness, and ensuring sustainable economic development.



**Figure 1. Fitted curves trade between Uzbekistan and China<sup>75</sup>**

The fitted functions for Tashkent’s exports to China (denoted by  $y_e$ ), Tashkent’s imports from China (denoted by  $y_i$ ), and Tashkent’s total imports and exports with China (denoted by  $y_t$ ) are obtained as follows:

$$y_e = 0x^2 - 15000x + 15171000 \quad (2-1)$$

$$y_i = 0x^2 - 25000x + 253960000 \quad (2-2)$$

$$y_t = 0x^2 - 270000x + 269130000 \quad (2-3)$$

The analysis of economic cooperation and logistics issues between Uzbekistan and the Xinjiang Uyghur Autonomous Region demonstrates that both regions possess significant potential for strengthening mutually beneficial economic relations due to their strategic geographic location and complementary economic structures. The expansion of trade, investment, and transport connectivity particularly within the framework of the Belt and Road Initiative has enhanced their role as key nodes in Eurasian economic integration.

However, the effectiveness of this cooperation is constrained by several logistics-related challenges, including insufficient infrastructure development, inefficiencies in customs procedures, high transportation costs, and limited digital integration. These barriers hinder the full realization of trade potential and reduce overall competitiveness.

Therefore, improving logistics infrastructure, modernizing transport corridors, implementing digital customs systems, and promoting “green logistics” solutions are essential steps toward deepening economic cooperation. Strengthening coordination

<sup>75</sup> The author calculated this using MATLAB 7.0.



and policy alignment between the two regions will further facilitate sustainable development, increase trade efficiency, and reinforce their positions in global value chains.

### Reference

1. Baikushikova, G., & Apsattarova, G. (2022). NEW APPROACHES TO ECONOMIC COOPERATION BETWEEN KAZAKHSTAN AND UZBEKISTAN. *Journal of Central Asian Studies*, 85(1), 38-47.
2. Tian, R. G. (2009). Xinjiang and the greater central Asia regional economic cooperation. *The Journal of Applied Business and Economics*, 9(3), 1.
3. Катпенова, А. З. (2024). UZBEKISTAN-CHINA TRADE-ECONOMIC COOPERATION ANALYSIS. *Известия. Серия: Международные отношения и регионоведение*, 57(3).
4. Moldaliyeva, A., Kilybayeva, P., Birimkulova, G., Ilyassova, Z., & Atayeva, T. (2023). Participation of Central Asian Countries in Central Asian Regional Economic Cooperation: Transport, Energy. *Global Perspectives*, 4(1), 88417.
5. The State Council of the People's Republic of China. *China-Kyrgyzstan-Uzbekistan Railway Set to Enhance Regional Connectivity*. Beijing, 2024

