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FULL LENGTH ARTICLE

The Evolution of the Middle Corridor and Its Implications for Kazakhstan's International Trade in the Aftermath of the Russia–Ukraine War

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ABSTRACT

Following Russia's invasion of Ukraine in 2022, the role of the Middle Corridor increased. This paper examines Kazakhstan's trade turnover with ten partner countries that reflect the development prospects of the Middle Corridor. Using graphical methods, economic-statistical analysis, and explanatory analysis, the study identifies key factors influencing the corridor's development. The research is based on data on investment and trade turnover from 2021 to 2025, obtained from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. The findings indicate that growing interest in the Middle Corridor has influenced Kazakhstan's economic trajectory and, in turn, is shaping the country's multi-vector foreign policy.

Keywords: Middle Corridor ▪ Central Asia trade ▪ Transport corridors ▪ Logistics efficiency ▪ Regional integration

1. INTRODUCTION

The Middle Corridor is becoming a strategically important alternative to traditional transport corridors. Russia's war of aggression in Ukraine not only led to casualties but also affected regional and global trade, disrupted logistics, and transformed trade routes. After international sanctions were imposed, traffic on the northern route carrying goods from China to Europe through Russia declined, and traffic shifted toward the Middle Corridor, also known as the Trans-Caspian International Transport Route (TITR) [1]. Before the recent geopolitical shifts, between 2019 and 2021, the Northern Land Route through Russia and Belarus carried about 86% of land trade between China and Europe, while the Middle Corridor accounted for less than 1% of total traffic. During the same period, maritime transport carried 91% of China–Europe trade, whereas rail accounted for only 3.3% [2]. In 2022, trade along the route in Kazakhstan, Georgia, and Azerbaijan increased by 45%, 45%, and 72%, respectively [2]. Despite its increased importance, the Middle Corridor remains inferior to the Northern Corridor because of its limited capacity. Sanctions imposed on Russia increased the role of the Middle Corridor [3]. Kazakhstan is promoting the TITR, which passes through Southeast Asia, China, Kazakhstan, the Caspian Sea, Azerbaijan, Georgia, and Europe [4].

Kazakhstan's role in the Middle Corridor has significantly increased, attracting investment from the European Union and China. In 2022, the European Bank for Reconstruction and Development invested approximately USD 100 million to support Kazakhstan's railways through a local bond issue [5]. On November 1, 2023, during his official visit to Kazakhstan, French President Emmanuel Macron described the country as a "natural bridge of autonomy between Europe and Asia" [6]. Later that month, during a visit by China's Vice Premier, the Chinese side expressed its willingness to contribute to

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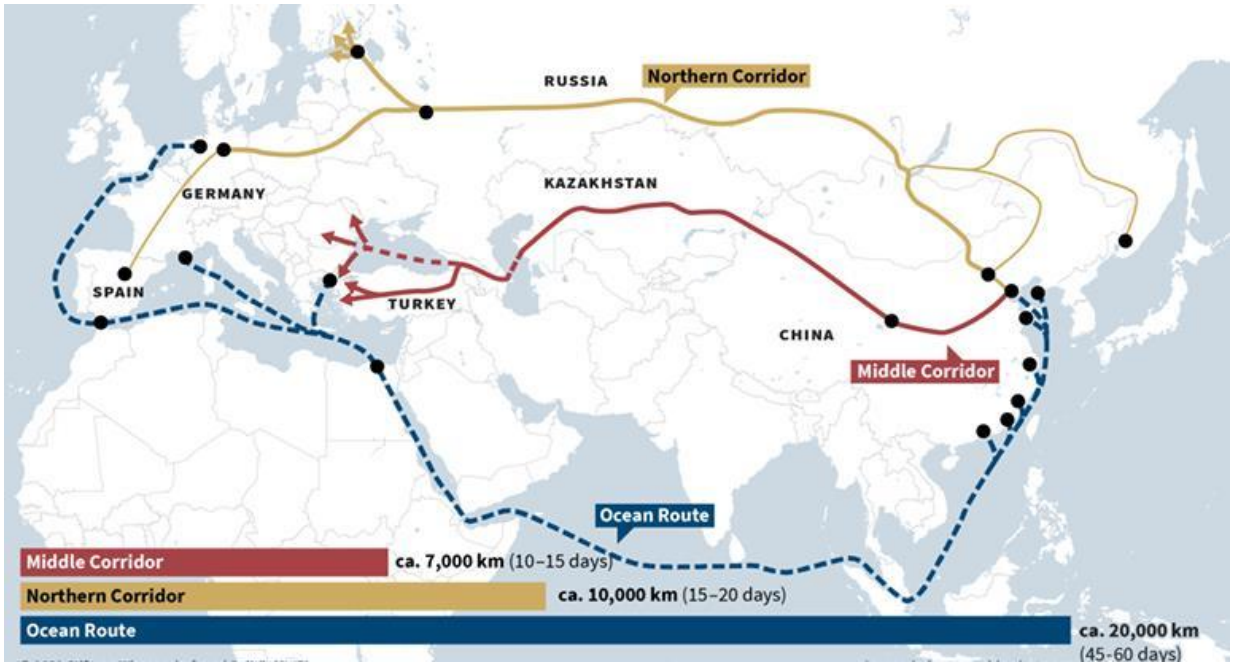


Figure 1. Alternative routes from China to Europe. Source: Baku Research Institute.

implementing agreements between the heads of state and to advancing the One Belt, One Road Initiative [7].

According to World Bank estimates, improved infrastructure could increase cargo for Kazakhstan, Azerbaijan, and Georgia by 44% by 2030, translating into direct gains [8]. Kazakhstan plays a leading role in rail freight transportation, accounting for over 80% of total traffic in Central Asia. Under its 2030 plan, the country has committed approximately USD 40 billion to infrastructure development, focusing on modernizing railways, ports such as Aktau and Kuryk, and logistics hubs [1]. Despite this, more than USD 60 billion of Chinese investment in Kazakhstan between 2000 and 2021 was concentrated in the energy sector, with relatively little allocated to transport [9]. In recent years, Kazakhstan's FDI inflows rose from USD 20.96 billion in 2017 to USD 23.99 billion in 2023, following a peak of USD 28.17 billion in 2022 [10].

Russia's invasion of Ukraine also dramatically changed the situation in Kazakhstan and Uzbekistan. Türkiye has formed strategic partnerships with Kazakhstan and Uzbekistan, and these projects have played a crucial role in developing connectivity between these countries. The Organization of Turkic States (OTS), founded in 2009, is an intergovernmental organization that aims to strengthen cooperation among Turkic-speaking states. Its member states include Azerbaijan, Kazakhstan, Kyrgyzstan, Türkiye, and Uzbekistan, while Hungary and Turkmenistan have observer status. Turkmenistan is expected to become a full member in the near future. The OTS supports regional transport development, has adopted cooperation agreements in this area, and established a coordination council in 2013 to enhance connectivity among member states. The organization also introduced the Turkic World Vision 2040, which aims to integrate member countries into regional and global supply chains, particularly through the development of the Middle Corridor [11].

On August 2, 2022, the ministers of foreign affairs, economy, and transport of Azerbaijan, Türkiye, and Uzbekistan met in Tashkent to launch a trilateral mechanism aimed at strengthening coordination and cooperation among the three Turkic-speaking countries, particularly in relation to the Middle Corridor. The parties supported linking the China–Kyrgyzstan–Uzbekistan railway to the Middle Corridor [12, 13]. This initiative is expected to create an integrated transport network within the TITR and facilitate railway and highway infrastructure development along the Zangezur Corridor. Once completed, the project will position the Middle Corridor as the shortest overland route connecting Asia and Europe [11].

The relevance of transport corridors has increased significantly in recent years, particularly following the COVID-19 pandemic and the escalation of geopolitical tensions after February 24, 2022. These developments, along with economic sanctions imposed on Russia, have disrupted traditional trade routes and affected the broader economic environment, including Central Asia's energy-dependent economies [14, 15].

This study assesses the role of the Middle Corridor and evaluates its impact on trade in Central Asia in light of ongoing changes in global trade and logistics systems. It examines the trade turnover of the Republic of Kazakhstan with other countries from 2021 to 2025, using data collected from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. The analysis focuses on Kazakhstan's trade relations with members of the European Union, China, the Central Asian states, and the Caucasus.

The primary aims of this study are to evaluate the development and performance of the Middle Corridor; examine its influence on trade in Central Asia; and suggest ways to strengthen its role. The study uses qualitative and quantitative analysis and draws on information about trade volumes, investment flows, and infrastructure developments under the Middle Corridor initiative. Section 2 reviews the literature, Section 3 explains the methodology, Section 4 presents the results and discussion, and Section 5 concludes the paper.

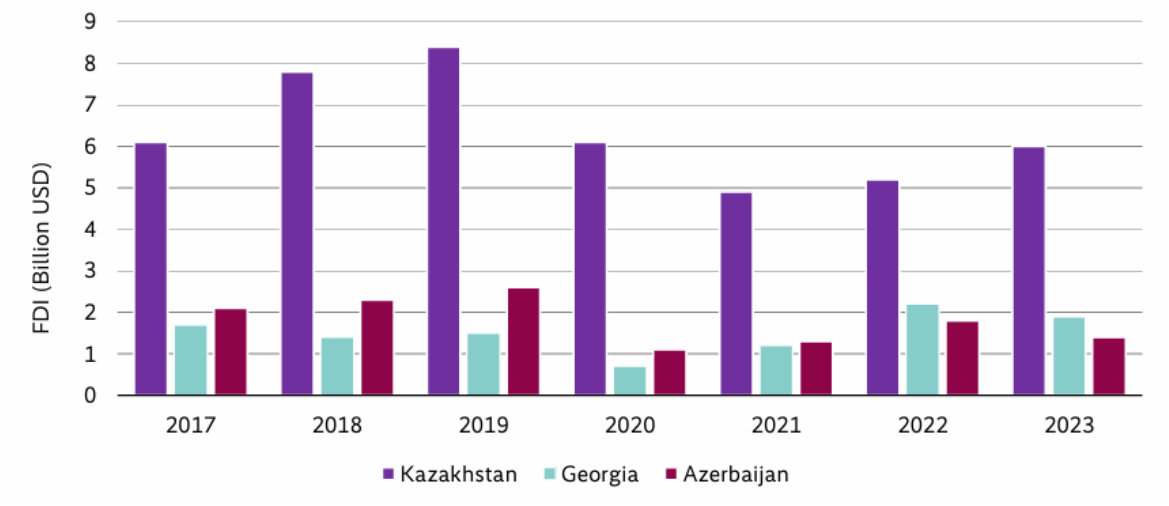


Figure 2. FDI net inflows (BoP, current US$), 2017–2023. Source: World Bank, 2025.

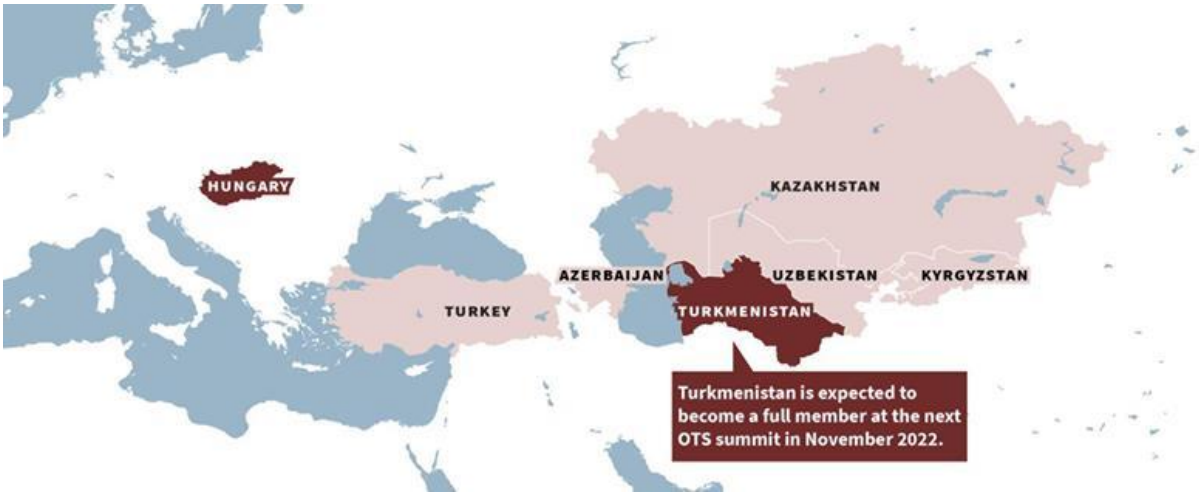


Figure 3. Organization of Turkic States (OTS). Source: Asia Briefing Ltd.

2. LITERATURE REVIEW

With renewed political attention, the Middle Corridor should be developed into an alternative transit corridor. Its multimodal nature gives it a structural position, while its potential to overcome non-competitiveness lies in its ability to promote economic and regional integration within Central Asia and the South Caucasus, and between these regions, Asia, and Europe [1].

Recent research has examined the factors driving the Middle Corridor's growth. Papava analyzed Central Asian transport corridors and the interests of Central Asian and European countries amid confrontational globalization. The findings emphasize that diverse and reliable transport corridors are crucial for resilient global supply chains. Central Asian countries support multiple east–west and north–south routes while balancing the interests of major powers; shifting from competing "alternative" corridors to a more cooperative and complementary network is important for stability and long-term economic growth [16]. Sharashenidze and Cherkezishvili analyzed the Middle Corridor's prospects and argued that development depends largely on investment from major global players, including the United States, China, and the European Union [8]. If the corridor is viewed primarily as a vehicle for advancing Chinese strategic interests, the United States may distance itself from the project or even limit its progress [8]. Assylkhanov examined the corridor's effects on Kazakhstan's foreign policy, economic development, and regional cooperation. The study views the route as a potential link between China and Europe that bypasses Russia, while noting that it remains inferior to the Northern Corridor in time, capacity, and predictability. Its political value and economic potential may shape Kazakhstan's multi-vector foreign policy and deepen cooperation with the South Caucasus, Türkiye, and Europe [17].

Previous studies have used indicators related to trade to examine the relationship between the Middle Corridor's development and trade patterns. Sharashenidze and Cherkezishvili relied on secondary data from international organizations and public sources, including freight volumes, trade flows, transport activity, GDP, and sectoral performance, as well as reports and projections from the World Bank and regional organizations [8]. Eldem used international reports, policy documents, statistics, trade flows, freight volumes, and transport routes, with particular attention to changes following the Russia–Ukraine war [11]. Assylkhanov used official statistics, international databases, policy reports, foreign trade and transit data, and macroeconomic indicators such as GDP growth and investment [17]. Papava analyzed trade flows, transport routes, regional connectivity, and broader macroeconomic



Figure 4. Zangezur Corridor. Source: TRT World.

and geopolitical indicators [16].

These studies mainly apply qualitative, descriptive, and comparative methods rather than econometric modeling. Sharashenidze and Cherkezishvili compared trends in freight volumes, trade flows, and route patterns before and after recent geopolitical shifts. Eldem compared transport infrastructure–including railways, ports, and multimodal logistics systems–across Central Asia, the Caucasus, and Türkiye, alongside policy initiatives and geopolitical developments. Assylkhanov and Papava likewise rely on descriptive and qualitative analysis of secondary data. Earlier research has focused on GDP growth, employment, investment, sectoral development, and FDI. The present study differs by examining Kazakhstan's trade turnover from 2021 to 2025 as a control variable, using a panel dataset to assess its relationship with the Middle Corridor's development. The study uses qualitative and quantitative analysis of Bureau of National Statistics data to explore the statistical significance of this relationship [18].

3. RESEARCH METHODOLOGY

This research uses explanatory analysis. Data on economic integration cover trade volumes under the Middle Corridor initiative. Information on Kazakhstan's trade turnover with other countries was obtained from the Bureau of National Statistics on the website of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan [18]. These data are used to examine Kazakhstan's trade relations with members of the European Union, China, the Central Asian states, and the Caucasus. The study aims to contribute to research on Eurasian connectivity and the influence of the Middle Corridor on Kazakhstan.

4. RESULTS AND DISCUSSION

Table 1 shows significant changes in the structure of Kazakhstan's trade turnover from 2021 to 2025. One of the most notable trends is the changing role of the European Union, China, and Russia. The European Union remained Kazakhstan's largest trading partner throughout most of the period, with its share rising from 29.6% in 2021 to a peak of 34.4% in 2024. Trade grew from USD 30.1 billion in 2021 to USD 48.8 billion in 2024. In 2025, however, the share fell to 26.7% and total trade declined to USD 38.3 billion, indicating a potential reorientation of Kazakhstan's trade away from European markets. In contrast, trade with China grew consistently: its share rose from 17.7% in 2021 to 23.7% in 2025, while trade volume nearly doubled from USD 18.0 billion to USD 34.1 billion, reflecting an eastward shift in trade flows.

Trade with Russia remained significant but declined in relative importance. Its share decreased from 24.2% in 2021 to 19.0% in 2025, although trade volumes remained relatively stable at around USD 27–28 billion. This suggests that Kazakhstan is diversifying its trade relationships and reducing reliance on traditional partners. Trade with Central Asian countries showed moderate but uneven growth. Uzbekistan's share fluctuated between 3.2% and 3.8%, while trade volume reached USD 4.8 billion in 2025. Trade with Kyrgyzstan rose from USD 1.05 billion in 2021 to USD 2.24 billion in 2025, and its share increased from 1.0% to 1.6%. Trade with Tajikistan and Turkmenistan remained low and relatively stable, each accounting for less than 1% of total trade turnover.

Trade with the South Caucasus countries–Azerbaijan, Georgia, and Armenia–remained limited. Azerbaijan maintained a relatively stable share of around 0.3–0.4%, while Georgia's trade fluctuated, peaking in 2022 before declining. Trade with Armenia remained minimal. Despite their strategic importance as transit countries, trade volumes with these countries are still underdeveloped.

Table 2. Mutual trade by EAEU countries, January–July 2024 and 2025.

Country	2024 (Jan–Jul)		2025 (Jan–Jul)	
	USD mln	Share (%)	USD mln	Share (%)
Belarus	489.35	3.1	612.21	3.8
Russia	14,397.92	91.1	14,421.20	88.9
Kyrgyzstan	893.89	5.7	1,163.12	7.2
Armenia	17.87	0.1	28.67	0.2

Source: Bureau of National Statistics [18].

Table 1. Trade turnover of the Republic of Kazakhstan by country, 2021–2025.

Country	2021		2022		2023		2024		2025	
	USD mln	Share (%)	USD mln	Share (%)	USD mln	Share (%)	USD mln	Share (%)	USD mln	Share (%)
EU countries	30,073.27	29.6	41,875.39	30.9	41,302.83	29.6	48,839.33	34.4	38,353.03	26.7
Russia	24,624.28	24.2	26,972.02	19.9	27,054.45	19.4	28,135.58	19.8	27,372.76	19.0
China	18,000.96	17.7	24,203.95	17.9	30,055.39	21.5	30,157.63	21.2	34,149.51	23.7
Kyrgyzstan	1,050.53	1.0	1,246.88	0.9	1,688.14	1.2	1,781.36	1.3	2,242.54	1.6
Tajikistan	1,163.78	1.1	1,384.86	1.0	1,129.97	0.8	1,213.54	0.9	1,235.81	0.9
Turkmenistan	254.21	0.2	438.69	0.3	562.95	0.4	555.75	0.4	508.02	0.4
Uzbekistan	3,833.91	3.8	4,921.94	3.6	4,417.92	3.2	4,130.59	2.9	4,801.62	3.3
Azerbaijan	332.24	0.3	463.39	0.3	556.70	0.4	533.97	0.4	470.73	0.3
Armenia	20.82	0.0	43.08	0.0	103.67	0.1	82.85	0.1	69.26	0.0
Georgia	88.02	0.1	600.76	0.4	293.53	0.2	189.66	0.1	184.45	0.1

Source: Bureau of National Statistics [18].

Table 2 illustrates Kazakhstan's mutual trade with EAEU countries from January to July in 2024 and 2025. Trade with Belarus rose from USD 489.35 million to USD 612.21 million, and its share of total trade turnover increased from 3.1% to 3.8%. Trade with Russia remained the dominant component: volume increased slightly from USD 14,397.92 million to USD 14,421.20 million, while the reported 2025 share of 88.9% indicates a strong concentration of trade with Russia. Trade with Kyrgyzstan grew from USD 893.89 million to USD 1,163.12 million. Its share also increased from 1.1% to 7.2%, reflecting an expansion of bilateral trade and regional economic integration within Central Asia. Trade with Armenia rose from USD 17.87 million to USD 28.67 million, with its share increasing from nearly zero to 0.2%. Although the overall volume remains small, this trend indicates a gradual expansion of trade relations.

The results show a growing share of trade with the European Union and China, strengthening the importance of the east–west transport axis and supporting the Middle Corridor as a strategic alternative to traditional routes. At the same time, the declining or fluctuating share of trade with Russia indicates a gradual shift away from northern corridors. Intra-regional trade within Central Asia and the South Caucasus remains relatively low and unstable, limiting the corridor's potential because regional demand is important for sustainable development. These findings are consistent with studies highlighting the corridor's potential as well as structural challenges such as limited infrastructure and weak regional coordination [8]. Geopolitical changes, including the Russia–Ukraine war, have increased the importance of alternative routes [11, 19]. Confrontational globalization has accelerated the need for diversified transport corridors in Central Asia [16]. The Middle Corridor's development also contributes to economic growth and shapes Kazakhstan's foreign policy and regional cooperation [17].

5. CONCLUSION

This study examined how Kazakhstan's trade structure is increasingly aligned with the geographical logic of the Middle Corridor. The growth of trade with the European Union and China, combined with stable regional trade in Central Asia and gradual increases with Caucasus countries, supports the corridor's development as a viable and strategically important route. The short-term data suggest that external trade with major partners such as the European Union and China is strengthening east–west transit, while relatively weak and inconsistent trade within Central Asia and the Caucasus limits the corridor's development as a fully integrated regional trade route. Realizing its potential requires increased intra-regional trade and stronger economic links among participating countries. These measures would generate stable cargo flows, improve route efficiency, and make the corridor more attractive for long-term investment.

This study has several limitations. First, it relies on descriptive and comparative methods rather than econometric models, limiting the ability to establish causal relationships between the Middle Corridor's development and trade dynamics. Second, the research uses secondary data from official statistical sources, which may have limitations in accuracy, consistency, or completeness. Third, the 2021–2025 period is relatively short and coincides with significant global disruptions, including the COVID-19 pandemic and geopolitical tensions, which may affect the stability and generalizability of the results.

Based on the findings, several practical and academic recommendations can be made to realize the Middle Corridor's potential and develop it into a major trade route [1]:

1. **Regional integration.** Creating traffic and demand on the route will largely stem from increased regional economic and trade integration. From a private-sector perspective, the Middle Corridor is currently less attractive than alternative routes. Limited traffic reflects the absence of demand for goods from Central Asia and the Caucasus, as well as relatively low intermediate import demand from these countries. As a result, the corridor is mainly used as an east–west transit route, while regional trade links and west–east traffic are largely insignificant. Increased regional integration could lead to better global value-chain integration and develop the corridor into a major route connecting Asia and Europe. Disruptions caused by the COVID-19 pandemic and Russia's war on Ukraine offer Central Asia and the Caucasus an opportunity to play a larger role in global supply and value chains. Cost and efficiency gains, and a larger market for regional production, would create regional demand and encourage private-sector participation.

2. **Trade facilitation.** Reforms should advance the digitalization and harmonization of border procedures and permit requirements. Cumbersome transit and trade procedures cause congestion at border points and lead to inconsistent and unpredictable transit and crossing times. Despite reforms in Azerbaijan, Georgia, Kazakhstan, and Türkiye, a regional approach to corridor

development is missing. Multiple, unharmonized license and permit requirements increase transit time and cost. Deficient customs capacity and insufficient cooperation among customs agencies also lead to repeated inspections and delays, creating congestion as traffic increases.

3. **Infrastructure.** Additional investment is needed to improve multimodality along the route and increase port and vessel capacity in the Caspian Sea. Targeted adjustments to the infrastructure network can increase traffic in the short and medium term. Azerbaijan, Georgia, Kazakhstan, and Türkiye have been modernizing roads, railways, and maritime infrastructure, but congestion at border points and seaports remains high. Container and vessel fleet capacity is not aligned with railway freight volumes, causing port delays. Low levels of port automation around the Caspian Sea and insufficient multimodal infrastructure also necessitate repeated loading and unloading for ferry journeys.

4. **Transnational cooperation.** A common regional approach is required to implement reforms and deepen regional economic and trade integration. Regional competition and limited coordination have prevented a joint approach. Reform and investment efforts to address bottlenecks have remained largely national, with limited coordination across government levels and countries. Although the private sector has worked toward common standards and solutions to recurring issues, it has largely been excluded from strategic discussions. Improving the corridor's attractiveness requires coordination across national government levels, greater regional cooperation, and a combination of national initiatives and joint action.

5. **Digitalization of transport and logistics systems.** Accelerating digitalization can increase the corridor's efficiency and attractiveness. This includes unified digital platforms, electronic document management (for example, e-CMR and electronic customs), real-time cargo tracking, and data exchange among participating countries. Enhanced digital integration can reduce delays and transaction costs, increase transparency, and make the corridor more competitive for international trade.

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