

**STRUCTURAL FEATURES AND DYNAMICS OF KAZAKHSTAN'S EXTERNAL TRADE
(2004–2024)**

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Abstract

In this article, the authors discuss how the external trade in Kazakhstan developed between 2004 and 2024 based on the increase in trade volumes, export and import structure, geographic concentration, and structural imbalances underlying it. The total turnover in the trade grew about four times, exports rose to US\$81.6 billion and US\$59.7 billion as a result of the 20 years. This quantitative growth notwithstanding, export structure remained starkly contingent on raw materials (approximately 77-88 percent of exports), and imports were still characterised by machinery, equipment, and consumer goods, which is still symptomatic of technological asymmetry. The importance of geographic concentration and susceptibility to external shocks in response to changes in world energy and commodity prices is highlighted by leading trade partners (Russia, China, Italy). Even though recent years reflect a slight diversification of services (IT, finance, culture) and re-export activity, little structural transformation has occurred. The article talks about the trade policy implications, diversification strategy implications, and structural resilience implications.

Keywords: Kazakhstan; foreign trade; export structure; import composition; trade balance; diversification; raw materials; services export; re-export; trade concentration; Herfindahl–Hirschman Index; economic development; external shocks; trade policy; Central Asia.

INTRODUCTION

External trade is one of the central aspects of economic change in countries with rich resources and middle-income. In the case of Kazakhstan, blessed with much endowment of hydrocarbons and minerals, the ensuing years between 2004 and 2024 have been marked by significant growth in external trade. The numbers on the quantitative growth are astounding: trade turnover (imports + exports) increased not only in 2004 (around US\$32.9 billion) but also in 2024 (around US\$141.3 billion). During the same time, exports increased by about US\$20.1 billion to US\$81.6 billion, and imports increased by about US\$12.7 billion to US\$59.7 billion.

Growth is, however, not an assurance of structural sustainability. In the economies that depend on the export of commodities and are highly dependent on the select few, the growth might conceal the underlying weaknesses. The primary aim of the article is to examine the external trade of Kazakhstan in relation to: (a) growth patterns; (b) form of export-import structure; (c) concentration of export and import partners; (d) phenomenon of services trade and re-export; and (e) policy suggestions towards diversification and resiliency.

Research Context and Literature Review

External trade is also generally accepted as one of the key factors in economic growth, the spread of technology, and structural change in international economics (Krugman et al., 2022). Export diversification, the level of technological sophistication of the goods to be exported, and the involvement of a nation in world value chains are some of the factors that tend to mediate the relationship between

trade and growth. Based on the comparative advantage theory and its dynamic comparative advantage theory developed by Balassa (1985), countries with a natural resource endowment are prone to specialisation in commodities in the initial processes of development, but have to progressively shift to the processing of goods and services in order to achieve sustainable development.

As a post-Soviet transition economy, Kazakhstan had an intensive export structure based on resources as it entered the 2000s. The country's dependence on hydrocarbons (mainly crude oil and gas), ferrous and non-ferrous metals, and mineral resources determined its course of trade. The literature on the resource dependence problem has been presented in the form of the resource curse (Auty, 2001) and the Dutch disease (Corden & Neary, 1982) focusing on the negative structural and institutional implications of commodity booms. These models give an analytical perspective on evaluating Kazakhstan's external trade trends from 2004 to 2024.

A number of empirical studies have examined the performance of Kazakh external trade, but they have used shorter periods or limited fields. As an example, Pomfret (2019) noted that the structure of the exports in Kazakhstan continues to be predominantly mineral, with over 80 per cent of the total exports comprising mineral commodities and less than 10 per cent of manufacturing exports. He claimed that even though there has been a tremendous increase in exports made since 2000, the lack of deep industrialization prevents the integration of Kazakhstan into global value chains.

In the same way, according to the World Bank's report (2021) on the Kazakhstan Country Economic Memorandum, the country's export base is limited to crude oil, copper, uranium, and grain with minimal technological content. The report determined that Kazakhstan's trade performance has been volume and not value performance, and the growth in productivity outside the resource sector is still low (Lall et al., 2022).

Kalyuzhnova (2016) also investigated the impacts of external shocks, especially the fluctuation in oil prices, on Kazakhstan's export revenues and fiscal balance. As shown by her study, in oil boom periods, trade surpluses significantly grow and contract considerably in periods of crisis, indicating pro-cyclical fiscal and external policies. This leads to cyclical dependence that causes instability in the macroeconomy and makes planning difficult.

The trade of Kazakhstan is also to be examined in the context of the Central Asian and the Eurasian economic space in general. Being an original member of the Eurasian Economic Union (EAEU), the Kazakh trade relations with Russia, Belarus, Armenia, and the Kyrgyz state adhere to a customs union government. Research by Vinokurov (2018) and Libman and Shagina (2020) shows that the EAEU has not only led to the liberalisation of trade between the states but also increased Kazakhstan's exposure to Russia's external sanctions and supply-chain risks.

The general trade environment of Central Asia is typified by a two-fold reliance of the region on the export of resources to the international markets, as well as the importation of capital goods and technology from Russia, China, and the European Union. In this respect, Kazakhstan has a strategic transit and logistic location- the geography of this country places it both as a landlocked and transit-locked economy (Alam et al., 2019). The creation of the trans-Eurasian routes (the Trans-Caspian International Transport Route, the China-Europe rail corridor, and the North-South Corridor) has been mentioned, again and again, as a tool for diversifying trade flows and increasing connectivity (ADB, 2020).

It is estimated that Kazakhstan's engagement in such initiatives has increased the export of transport services, but it has yet to be reflected in significant industrial diversification and value addition (solid empirical studies indicate this) (Vinokurov et al., 2023).

The need to have an export diversification has not been a new concept in the policy discourse of Kazakhstan. Both the "Kazakhstan 2050 Strategy" (Nazarbayev, 2012) and the National Development

Plan 2025 focus on the growth of processed and high-value exports, as well as on facilitating the involvement of SMEs in trade. The focus of the programme in terms of diversification is on clusters in metallurgy, petrochemistry, agriculture, and machine-building, which are focused on in the Industrial-Innovative Development Programme 2020-2025.

However, the Anderson et al. (2018) and WorldBank (2017) evaluations indicate that the pace of progress has been slow and disproportionate. Export to non-oils has increased at a modest growth but the total composition of the export is biased towards commodity. In addition, the coordination of policies in the trade, industrial and innovation sectors is still poor.

At the regional level, Kazakhstan seeks to leverage the Trans-Caspian International Transport Route (Middle Corridor) within China's Belt and Road Initiative (BRI) to enhance connectivity and logistics competitiveness. Empirical assessments (ADB, 2023) indicate that the corridor's efficiency has improved, but logistical costs and border-crossing times remain constraints.

Although various institutional and academic studies exist, few cover the full twenty-year period 2004–2024 with integrated quantitative and qualitative analysis. Earlier works tend to stop around 2016 or 2020 and seldom include the pandemic and post-sanction periods. Moreover, the re-export phenomenon and service-sector expansion have emerged only recently and remain understudied in peer-reviewed literature.

This article, therefore, contributes to the existing body of knowledge by:

- i. Providing a comprehensive two-decade analysis (2004–2024) of Kazakhstan's external trade dynamics;
- ii. Integrating merchandise and service trade statistics into a unified structural framework;
- iii. Applying the Herfindahl–Hirschman Index to evaluate product and partner concentration;
- iv. Linking macroeconomic shocks (oil-price fluctuations, COVID-19 pandemic, sanctions) with trade structure evolution; and
- v. Discussing the policy implications of re-export growth and the transition toward service-based exports.

In doing so, the study aims to fill an empirical and analytical gap in Central Asian trade research by offering a longitudinal, data-driven overview of Kazakhstan's trade structure, its vulnerabilities, and its evolving integration into regional and global trade systems.

MATERIALS AND METHODS

The data sources are not only official national statistics (e.g., Kazakhstan Statistics Agency), but also international databases (UN COMTRADE, Wits), as well as the series given in the introduction (2004-2024). The most important variables: total trade (turnover), exports, imports, export share, export composition (raw materials; semi-processing goods; finished goods), import composition (consumer goods; intermediate/investment goods), partner country share, and concentration measures (e.g., HHI). Structural shares and growth rates are calculated. It provides descriptive time-series analysis of the growth and structure, identifies key years of inflexion (2008-2009, 2014-2016, 2020), and deciphers imbalances in the structure. The qualitative discussion is another extension of the quantitative results, relying on the commodity price shocks and the geopolitical events.

FINDINGS

The overall external trade of Kazakhstan grew between 2004 and 2024 by approximately US\$32.9 billion to approximately US\$141.3 billion, approximately four times. Exports stood at US 20.1 billion (61.1 percent export share) and imports at 12.7 billion in the year 2004. The export was US\$81.6 billion, imports were US\$59.7 billion, and the export share was approximately 57.7 percent by 2024. This

expansion, however, did not follow a straight line: the boom years culminated in 2008 with trade paying US\$109 billion (exports). Before the 2009 global financial crisis, it grew to US\$71.2 billion but was severely contracted (e.g., exports declined by approximately 39 per cent in 2009). The fall following the 2014 oil-price plummet and once more in the 2020 COVID-19 pandemic show that external commodity price shocks and externalities are a considerable burden. Trade balance was positive during numerous years; trade surplus was the highest in the period of 2011 (US\$47.4 billion) and the lowest in 2016 (US\$11.4 billion) when the conditions were not the most favourable.

Table 1: Dynamics of Kazakhstan’s External Trade, 2004–2024

Year	Total Trade (US\$ billion)	Export (US\$ billion)	Import (US\$ billion)	Export Share (%)	Trade Balance (US\$ billion)
2004	32.9	20.1	12.7	61.1	+7.4
2008	109.0	71.2	37.8	65.3	+33.4
2011	125.3	86.4	38.9	68.9	+47.5
2014	119.8	84.0	35.8	70.1	+48.2
2016	60.0	46.0	25.0	59.2	+21.0
2020	82.0	47.5	34.5	57.9	+13.0
2022	132.7	84.6	48.1	63.8	+36.5
2024	141.3	81.6	59.7	57.7	+21.9

Source: Based on data from the State Revenue Committee under the Ministry of Finance of the Republic of Kazakhstan.

The composition is still skewed, notwithstanding the dramatic export growth. In 2004, raw materials and primary processing contributed about 84 per cent, increased to 89.4 per cent in 2012, and dropped to approximately 77.5 per cent in 2024. In 2004, semi-finished (intermediate) and finished consumer goods were 10-12 percent and 5 percent, respectively, and in 2024, it is projected at about 9.8 percent. These data indicate that, though an upgrade toward finished goods has been done to some degree, it is at a slow rate, and reliance on raw materials is still high.

Table 2: Composition of Exports by Product Category (%)

Category	2004	2012	2021	2024	Change 2024	2004–2024
Raw and primary commodities	84.0	89.4	81.0	77.5	-6.5	
Intermediate/semi-processed	11.0	10.0	10.0	12.7	+1.7	
Finished/consumer goods	5.0	4.0	9.0	9.8	+4.8	

Source: Based on data from the KDG MF RK

Structural change can also be seen in import composition: In 2004, imports of investment goods (capital and intermediate goods) predominated (81 %), and only a little more than 19 percent of imports were of consumer goods. The share of investment goods decreased to approximately 64% by 2024, with consumer goods increasing to approximately 36%. This reflects a shift in Kazakhstan’s import orientation from heavy infrastructure investment-led imports to consumption-driven import growth,

EMIDWORLD 3rd International Congress on Economics Public Finance Business & Social Sciences which may signal the maturation of some investment projects but could also reveal rising dependency on consumer imports.

Table 3: Export Concentration and Partner Diversification

Indicator	2004	2012	2018	2024	Benchmark
Herfindahl–Hirschman Index (HHI) for product concentration	0.36	0.40	0.35	0.34	EU-27 = 0.07
HHI for partner concentration	0.33	0.38	0.36	0.31	Uzbekistan = 0.20
Top-3 partners' share (Russia + China + Italy) % of exports	63	68	61	59	—

Source: Based on data from the KDG MF RK

Kazakhstan’s major trade partners remain concentrated. The main export partners include Russia, China, and Italy. For example, according to Trading Economics, in 2024, exports were significantly shaped by these three partners. High concentration is confirmed by HHI values of about 0.34–0.40 for export distribution, which are notably higher than, e.g., EU-27 (≈ 0.07) or Uzbekistan (≈ 0.17 – 0.22). This concentration implies vulnerability to partner-specific shocks (e.g., sanctions, demand slowdown).

Kazakhstan has shown some positive trends in services exports: transport services (especially international transit) grew from about US\$841 million in 2004 to over US\$4 billion in 2024; IT and telecom exports rose from US\$61 million in 2004 to US\$623 million in 2024; financial services exports increased from US\$19 million to US\$615 million over the same period. Nonetheless, these figures remain minor relative to total merchandise exports, and the significant growth in some high-tech goods (e.g., electronic components, communications equipment) appears driven largely by re-exports (especially to Russia/Belarus) rather than domestic value-added expansion. For instance, the export of smartphones rose by +8 076 % from 2021 to 2022, and computer hardware rose by +24 200 %. These are extraordinary rates but point to re-export rather than indigenous production scale-up.

Although the growth is quantitative, a number of structural challenges remain: (i) raw-materials export share is too high; (ii) import structure is based on machinery, electronics, consumer goods, which means that the country remains technologically asymmetrical; (iii) the trade partners are highly geographically concentrated; (iv) the country is too sensitive to external commodity price and geopolitical shocks (examples of these phenomena are the oil-price collapse in 2014 and the COVID-19 pandemic in 2020). The implication of these facets is that the trade development in Kazakhstan is still weak and is not diversified.

DISCUSSION AND CONCLUSION

The figures show that the external trade of Kazakhstan was impressive in terms of volumetric growth between 2004 and 2024, with the best years being boom years. However, the structural characteristics demonstrate the perpetuation of dependence on the extraction of raw materials and energy exports, as well as reliance on the imports of technology and consumer goods. The large concentration of partners is one more risk factor: the country is still vulnerable to changes in world trade of commodities and to geopolitical interruptions.

The fact that the import composition is changing, with more weight being placed on investment goods than consumer goods, indicates that domestic demand is gaining momentum. However, that can also be a result of earlier maturing infrastructure investment cycles. The increase in services exports and

IT/finance points to promising diversification; however, absolute volumes are small, and the situation with re-exports makes one question domestic value-added.

To policymakers, the dilemma is to create real structural change: more processing of raw materials at home, more into higher-value-added exports, more partner and product diversifications, more industrialisation down the value chain, and more integration of domestic companies into world value chains. The objective of increasing the export of processed goods by 2030 is, therefore, quite topical.

Besides, one needs to focus on the risk of re-exports: on the one hand, re-exports increase the volumes; however, on the other hand, they do not lead to sustainable industrial growth, and on the third hand, they leave the country vulnerable to sanctions or transport issues. Developing transparency, improving the customs/statistics systems, tracking the value-added content, and diversifying the logistic corridors are necessary.

Also, the larger landscape of transport corridors (e.g., the Middle Corridor between China and Europe) provides Kazakhstan with the potential to capitalise on its geographical position as a transit point. However, transit services must be complemented with industrial upgrading to prevent the lockage of transit services in low-value services.

Structurally, Kazakhstan needs to reduce its export concentration (product and partner) to lower vulnerability. Measures might include promoting non-hydrocarbon exports, bilateral/multilateral trade agreements beyond traditional markets, investment in human capital and manufacturing, and enhancing institutional capacity to support export diversification.

Conclusion

Kazakhstan's external trade expanded substantially over the two decades from 2004 to 2024, but structural transformation has been partial. The dominance of raw-material exports, the reliance on imported technology and consumer goods, and the geographic concentration of trade partners continue to pose risks. While services exports and re-exports have grown rapidly, the new growth is still small in absolute terms and often lacks deep domestic value-added. Moving forward, the country's strategic aim to expand processed goods exports and diversify its trade must be operationalised with robust industrial, institutional, and trade-policy support. Without that, Kazakhstan's trade growth may remain vulnerable to external shocks and not translate into broad-based structural resilience.

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REFERENCES

- ADB. (2020). The Central Asia Regional Economic Cooperation (CAREC) Transport Strategy 2030. A. D. B. (ADB).
- Alam, M., Dappe, M. H., Melecky, M., & Goldblatt, R. J. P. R. W. P. (2019). Wider Economic Benefits of Transport Corridors. 9057.
- Anderson, K., Capannelli, G., Ginting, E., & Taniguchi, K. (2018). Kazakhstan: Accelerating economic diversification. Asian Development Bank.
- Auty, R. M. (2001). Resource abundance and economic development. Oxford university press.

Balassa, B. J. J. o. d. e. (1985). Exports, policy choices, and economic growth in developing countries after the 1973 oil shock. 18(1), 23-35.

Corden, W. M., & Neary, J. P. J. T. e. j. (1982). Booming sector and de-industrialisation in a small open economy. 92(368), 825-848.

Kalyuzhnova, Y. (2016). *The Kazakstan Economy: Independence and Transition*. Springer.

Krugman, P. R., Obstfeld, M., & Melitz, M. J. (2022). *International Economics: Theory & Policy* (Vol. 12th Edition). Pearson Education.

Lall, S. V., Izvorski, I. V., Correa, P. G., Seitz, W. H., Rahardja, S., Iooty De Paiva Dias, M.,...Bogdan, O. (2022). *Kazakhstan Country Economic Memorandum: Dependence, Distance, Dispersion-Options for Upgrading Kazakhstan's Economy*.

Libman, A., & Shagina, M. J. R. A. D. (2020). *Eurasian Economic Union*. 247.

Nazarbayev, N. J. A. S. o. t. N. A. A., December. (2012). *Kazakhstan 2050 Strategy: New political course of the established state*.

Pomfret, R. (2019). *The Central Asian economies in the twenty-first century: Paving a new silk road*.

Vinokurov, E. (2018). *Introduction to the Eurasian economic union*. Springer.

Vinokurov, E., Kuznetsov, A., Berdigulova, A., Fedorov, K., & Babajanyan, V. J. A. a. S. (2023). *EDB Macroeconomic Outlook 2023*.

WorldBank. (2017). *Kazakhstan Systematic Country Diagnostic*. W. B. Group.