**Received on: 22 June 2024** **Revised on: 01 July 2024** **Accepted: 19 August 2024**

**RESEARCH ARTICLE**
DOI: 10.47703/ejebs.v68i3.411

# Assessing the Impact of New Silk Road Initiatives on Kazakhstan's Business Environment

**Assel K. Jumasseitova**[1*] | **Siddharth Saxena**[2]

[1] Kazakh British Technical University, Almaty, Kazakhstan

[2] University of Cambridge, Cambridge, United Kingdom

**Corresponding author**:
* Assel K. Jumasseitova – PhD, Professor, Kazakh British Technical University, Almaty, Kazakhstan.
Email: a.dzhumaseitova@kbtu.kz

**How to cite this article**:
Jumasseitova, A.K. & Saxena, S. (2024). Assessing the Impact of New Silk Road Initiatives on Kazakhstan's Business Environment. Eurasian Journal of Economic and Business Studies, 68(3), 51-81.

**Conflict of interest**:
author(s) declare that there is no conflict of interest.

EJEBS

## ABSTRACT

This study conducts a comprehensive evaluation of four major regional economic integration initiatives along the New Silk Road in Eurasia: The Eurasian Economic Union (EAEU), the Silk Road Economic Belt (SREB), the New Silk Road (NSR), and the Central Asia Regional Economic Cooperation (CAREC) program. By employing an expert-based analysis method, the research assesses the initiatives from the perspective of the Kazakhstani business environment, identifying critical criteria for successful economic integration, including intra-union trade, market expansion, supply chain optimization, regulatory harmonization, and access to financing. Drawing parallels with the historical Silk Road's focus on trade and economic prosperity, this research employs an expert-based analysis method to assess these modern initiatives from the perspective of the Kazakhstani business environment. Through structured expert panel assessments and statistical analysis, the study determines which initiatives offer the most tangible benefits to businesses in Kazakhstan and the broader region. The findings indicate that the SREB initiative scored highest overall, particularly in fostering regional economic development and business growth, with a total score of 197, followed by the EAEU with 181. The findings reveal that the SREB initiative scored highest overall, followed by the EAEU, indicating their strong potential for fostering regional economic development and business growth. This study provides valuable insights for policymakers and businesses navigating the complex landscape of Eurasian economic integration. It offers a framework for evaluating the effectiveness of new Silk Road initiatives in promoting regional prosperity and cooperation, with particular relevance to Kazakhstan's position in Central Asia.

**KEYWORDS:** Economic Integration, Trade, Silk Road Initiatives, Business Perspectives, Regional Cooperation, Supply Chains, Market Expansion, Business Financing

**SCSTI:** 06.35.31

**JEL Code:** F15, L53, R11

**FINANCIAL SUPPORT:** The study was not sponsored.

# 1. INTRODUCTION

In an era of unprecedented globalization, the revival of the ancient Silk Road as the "New Silk Road" is a testament to the enduring power of connectivity and trade. This ambitious initiative, aimed at forging a modern trade corridor stretching from East Asia to Europe, encapsulates a vision of economic integration that promises to redefine the contours of global commerce. Kazakhstan's participation in numerous trade unions has been complemented by its involvement in four major initiatives aimed at reviving the Silk Road: the Eurasian Economic Union (EAEU), the Silk Road Economic Belt (SREB), the New Silk Road (NSR), and the Central Asia Regional Economic Cooperation (CAREC) program. These initiatives leverage the country's strategic location and historical trade legacy to foster economic growth and regional integration.

The resurgence of interest in Silk Road initiatives stems from the region's rich historical background of trade and cultural exchange. This renewed focus recognizes these ancient pathways' enduring economic potential for modern enterprises. Kazakhstan's geographical positioning grants it significant geoeconomic importance as a vital link between Europe and Asia and a critical player in transcontinental trade.

The importance of these initiatives is undeniable. However, this study's primary focus is to ascertain the business perception of these initiatives at their current stage of development. While conducting a comprehensive quantitative analysis may be premature due to the relatively short implementation period, understanding which initiative is perceived as most 'valuable' by the business community is crucial. This insight can provide valuable guidance for policymakers and investors alike.

As these new Silk Road initiatives unfold, they promise to reshape Eurasia's economic landscape. Understanding each initiative's implications and potential benefits is crucial for strategic planning and growth for businesses in Kazakhstan and beyond. This study aims to evaluate these four major initiatives from a business perspective, offering insights into their relative strengths and the opportunities they present for regional economic integration and development.

By examining the business community's perceptions of these initiatives, we can gain valuable insights into their practical impact and potential for future success. This approach allows us to bridge the gap between policy objectives and on-the-ground business realities, providing a nuanced understanding of how their intended beneficiaries receive these ambitious projects. This study provides an insightful exploration of unions and, through a comprehensive literature review, delves into the concept of the Silk Road and its transformation into regional integration unions. The methodological section details the research design, including criteria for expert selection, methods of data collection, and statistical measurements to ensure data validity. The primary data obtained through in-depth interviews allows for concluding and further discussions on policy implications and suggests directions for future research.

# 2. LITERATURE REVIEW

The Eurasia region has long been the heart of the ancient Silk Road trade routes, facilitating the exchange of goods, ideas, and cultures across the Eurasian landmass for centuries (Allsen, 2001). These ancient networks, which allowed for free trade from the East to the West and vice versa, are often associated with the modern concept of regional economic integration (Kalra & Saxena, 2021).

Historically, Central Asia, at the crossroads of these lucrative trade networks, played a pivotal role. From the earliest nomadic empires to the Mongol era and the colonization by Tsarist Russia, trade across the Eurasian region was dominated by the trading communities and peoples of Central Asia (Kalra & Saxena, 2021). The caravan trade, in particular, stimulated economic activity and development in peripheral regions along the Silk Road routes (Levy, 1999).

The success of Central Asian countries during this period can be attributed to their geographical proximity, converging interests in state-building, and shared norms of brotherhood and collective decision-making (Dadabaev, 2021). During the Soviet era, factors such as the widespread use of the Russian language, a unified currency (the Soviet ruble), the absence of internal borders, and centralized governance from Moscow fostered regional cohesion and economic integration (Kalra & Saxena, 2021).

However, the dissolution of the Soviet Union in 1991 and the subsequent establishment of new national borders disrupted this regional integration, shaping the fragile socio-economic fabric of Central Asian societies (Kalra & Saxena, 2021). Despite shared historical roots, cultures, and norms of resilience and informal collective decision-making for nation-building, the literature presents diverse perspectives on regional economic integration in the post-Soviet space.

Some studies, like Adams's (1998), examine regional integration in Central Asia within the broader context of other post-Soviet subregions. Others concentrate solely on integration within the Central Asian region, distinct from the former Soviet republics. A third approach emphasizes integration built upon the historical success of cooperative trade and economic ties between these regions (Omonkulov & Baba, 2019).

Since the collapse of the Soviet Union, major global powers such as Russia, China, and the United States, alongside regional actors, have sought to shape Central Asia's political and economic trajectory through initiatives like the Eurasian Economic Union (EAEU), the Silk Road Economic Belt (SREB), and the New Silk Road (NSR) (Omonkulov & Baba, 2019). These competing initiatives, driven by the divergent interests of their respective powers, vie for influence over the region's economic and political processes.

The EAEU, spearheaded by Russia, aims to create a common market and facilitate the free movement of goods, services, capital, and labor among its member states through measures such as a common customs union, coordinated macroeconomic policies, and regulatory harmonization (Kaczmarski, 2017). In contrast, China's SREB, a central component of the broader Belt and Road Initiative (BRI), focuses on infrastructure development, trade facilitation, investment promotion, and fostering cultural exchange along the historic Silk Road routes (Kaczmarski, 2017).

While these initiatives promise potential economic benefits through increased trade, investment, and regional cooperation, they also face challenges stemming from the divergent political interests of the major powers involved and internal factors such as infrastructure deficiencies and regulatory barriers within Central Asian countries (Omonkulov & Baba, 2019). Despite Kazakhstan's participation in numerous integration unions (Tashtemkhanova et al., 2019), four major initiatives currently exist aimed at fostering economic integration and recreating the new Silk Road. These initiatives will be examined in detail below, as their activities constitute the focus of our research.

*The Eurasian Economic Union (EAEU)*

Established in 2015, this union represents a significant endeavor in regional economic integration. Spearheaded by Russia, this initiative aims to foster seamless economic cooperation amongst its member states, which include Armenia, Belarus, Kazakhstan, and Kyrgyzstan. The EAEU's primary objectives encompass the creation of a unified economic space, promoting the free movement of goods, services, capital, and labor, and implementing coordinated economic policies. This union seeks to enhance the competitiveness of member states' economies, stimulate economic growth, and improve living standards across the region. The EAEU has made notable strides in customs union implementation, technical regulation harmonisation, and the development of common markets in various sectors. However, challenges persist, including disparities in economic development among member states and the need for further policy alignment (Vinokurov, E. ,2018). The EAEU emerged as a natural progression and expansion of its predecessor, the Eurasian Economic Community (EurAsEC).

EurAsEC, established on 10 October 2000, laid the groundwork for deeper economic integration among its member states. This earlier union aimed to create a single economic space and foster closer economic ties between Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan. EurAsEC played a crucial role in harmonising customs procedures, coordinating foreign economic policies, and facilitating the free movement of goods within its member states. While EurAsEC focused primarily on creating a customs union and fostering economic cooperation, the EAEU aims to establish a more comprehensive economic union with aspirations for a single market for goods, services, capital, and labour.

*The Silk Road Economic Belt (SREB)*

SREB, unveiled by the Chinese government in 2013, forms a crucial component of China's broader Belt and Road Initiative (BRI). This ambitious project aims to revitalize ancient trade routes connecting Asia, Europe, and Africa through enhanced infrastructure development and economic cooperation. The SREB focuses on terrestrial connectivity, emphasizing the construction of transportation networks, energy pipelines, and industrial corridors. It promotes policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and people-to-people bonds among participating countries. The initiative has garnered significant international attention and participation, with numerous countries signing memoranda of understanding with China. While the SREB promises substantial economic opportunities, it has also faced scrutiny regarding debt sustainability, environmental impacts (Silin et al., 2018).

*The New Silk Road (NSR)*

NSR initiative, introduced by the United States in 2011, represents an alternative vision for regional connectivity and economic development in Central and South Asia. This strategy aims to bolster economic ties, enhance regional stability, and promote sustainable development through increased trade, energy cooperation, and cultural exchange. The NSR initiative emphasizes the importance of private sector involvement, transparent governance, and adherence to international standards in project implementation. Key focus areas include improving cross-border trade procedures, developing energy markets, and strengthening transportation infrastructure. Although the NSR has faced challenges in gaining traction compared to other regional initiatives, it continues to promote principles of economic diversification, sustainable development, and regional cooperation (Firdous & Dar, 2014).

*The Central Asia Regional Economic Cooperation (CAREC)*

CAREC was initiated in 1997 under the auspices of the Asian Development Bank and represents a partnership of 11 countries and development partners working to promote sustainable economic growth through regional cooperation. CAREC's strategic framework focuses on five operational clusters: economic and financial stability; trade, tourism, and economic corridors; infrastructure and economic connectivity; agriculture and water; and human development. The program has implemented numerous projects to improve transportation corridors, facilitate cross-border trade, and enhance regional energy security. CAREC's multilateral approach emphasizes knowledge sharing, capacity building, and the development of regional public goods. Despite facing challenges such as diverse economic structures and varying levels of commitment among member countries, CAREC has made significant progress in fostering regional integration and economic development in Central Asia (Chatterjee,2018).

Table 1 provides a comparative overview of four regional initiatives in the region.

**TABLE 1.** Comparison of Regional Economic Integration Initiatives

| Item | EAEU | SREB | NSR | CAREC |
|---|---|---|---|---|
| Objective | To promote economic integration among its member states by creating a common market, facilitating trade and investment, and harmonizing economic policies. | To revitalize ancient trade routes and promote economic cooperation and connectivity across Eurasia by enhancing infrastructure development, trade facilitation, and investment promotion. | To promote economic connectivity: Enhance trade, investment, and infrastructure links. | To promote economic cooperation and integration through infrastructure development, trade facilitation, and policy dialogue. |
| Geographical Scope | Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia, focusing primarily on the former Soviet republics in Eurasia. | Central Asia, South Asia, the Middle East, and parts of Africa. | Central Asia, South Asia, the Middle East, and parts of Africa | 11 member countries, including Afghanistan, Azerbaijan, China, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan |
| Key Features | Common customs union, common market, coordinated macroeconomic policies, and free movement of goods, services, capital, and labor among member states. | Infrastructure development, trade facilitation, investment promotion, cultural exchange, and people-to-people connectivity. | Infrastructure development, trade facilitation, investment promotion, regional cooperation. | Regional connectivity projects, trade and transport facilitation, energy infrastructure development, and policy coordination. |

*Note*: compiled by authors

A comparative analysis of the four regional initiatives - EAEU, SREB, NSR, and CAREC -reveals Eurasia's distinct economic integration and cooperation approaches. The EAEU emerges as the most formalized structure, focusing on creating a common market and harmonizing economic policies among its five member states. In contrast, SREB and NSR adopt a more flexible, project-based approach, emphasizing infrastructure development and trade facilitation across a broader geographical expanse without formal membership structures.

CAREC occupies a middle ground, featuring a defined membership of 11 countries while maintaining a project-oriented focus similar to SREB and NSR. Its emphasis on regional connectivity projects and policy coordination distinguishes it from the EAEU's more institutionalized integration model.

Geographically, these initiatives exhibit significant overlap, particularly in Central Asia. However, their scopes differ considerably, with the EAEU concentrating on former Soviet republics. At the same time, SREB, NSR, and CAREC extend their reach to include parts of South Asia, the Middle East, and even Africa in some cases.

The key features of each initiative reflect their differing objectives and structures. The EAEU's common customs union and coordinated macroeconomic policies contrast with the infrastructure-centric approaches of SREB and NSR. CAREC, meanwhile, combines elements of both, focusing on tangible connectivity projects alongside policy coordination efforts.

*Crucial Factors for Assessing the Economic Integration*

As evident from our analysis, the unions under examination exhibit diverse approaches to their formation and functionality. However, they share a common overarching aim: to enhance the economic circumstances of their member states and foster innovative policies, among other objectives. From the myriad factors that contribute to the success of an economic union, we have identified eight that are both widely applicable and well-substantiated in the scholarly literature. These selected factors form the foundation of our subsequent analysis, providing a robust framework through which to evaluate the efficacy and potential of these regional economic initiatives.

One factor that reflects a union's effectiveness and justifies its purpose is the significance of intra-union trade in fostering economic growth and development. Increased trade volume between member states indicates enhanced economic cooperation and market integration, leading to economies of scale, increased competitiveness, and overall economic prosperity for businesses, society, and the country as a whole (Baldwin & Seghezza, 1996).

Another important indicator is the expansion of market presence. Expanding market presence allows businesses to diversify their customer base, reduce dependency on a single market, and capitalize on emerging opportunities in new member states. This stimulates business growth and fosters economic development, job creation, and revenue generation, benefiting both businesses and the broader society (Rugman & Verbeke, 2002).

A further crucial factor is supply chain optimization. Efficient supply chains enhance business competitiveness and profitability by leading to cost savings, improved product availability, and faster response to market demands. This translates into lower production costs, higher productivity, and improved consumer satisfaction, contributing to economic growth and competitiveness for businesses, society, and the country (Christopher, 1998; Chopra & Meindl, 2007).

Another significant indicator is the harmonization of regulations. Harmonized regulations reduce compliance burdens, eliminate trade barriers, and enhance legal certainty for businesses operating across member states. This fosters a conducive business environment, encourages investment, and promotes entrepreneurship, ultimately driving economic growth, job creation, and prosperity for businesses, society, and the country (Djankov et al., 2002).

Access to financing is also a critical factor in assessing the effectiveness of a union. Accessible financing across the union provides businesses with the capital needed for investment, expansion, and innovation. This fuels business growth facilitates entrepreneurship, and stimulates economic activity, leading to job creation, income generation, and overall economic development for businesses, society, and the country (Beck et al., 2008; Claessens et al., 2001).

Cross-border partnerships and collaborations are crucial for business success within unions (Gulati et al., 2000). These partnerships facilitate knowledge exchange, resource sharing, and market access, leading to increased innovation, competitiveness, and economic prosperity. Moreover, employee mobility is essential for economic growth and business performance within unions (Bhaskarabhatla & Schmitz, 2009). Labor mobility enhances access to talent, addresses skill shortages, and improves resource allocation, ultimately contributing to increased productivity, innovation, and competitiveness. In addition, innovation and technology transfer are critical drivers of economic growth and business success within unions (Teece, 1986; Cohen & Levinthal, 1990). The exchange of knowledge and technology stimulates productivity, fosters industry evolution, and creates new economic opportunities.

## 3. RESEARCH METHODS

This study employed a structured expert panel assessment through deep interviews to evaluate the significance of various quantifiable indicators for successful business integration within the context of four regional economic initiatives. The data collection process was designed to ensure comprehensive and reliable input from diverse experts. The primary data for this study were derived from in-depth interviews conducted with 20 expert respondents. The expert panel comprised individuals with extensive experience in international economic integration, business expansion, and political decision-making related to international integration initiatives.

By their professional roles, all experts were familiar with the four critical initiatives under examination. The experts, currently based in the Republic of Kazakhstan, responded to open-ended and closed questions, enabling the researchers to determine the weight and significance of specific indicators for the four unions under study. Table presents the demographic profile of the 20 experts who participated in the research study.

**TABLE 2.** Demographic Profile of Experts (N = 20)

| No. | Demographic Feature | | Experts (in figures) | Experts (in %) |
|---|---|---|---|---|
| 1 | Age | 30-39 | 4 | 20 |
| | | 40-49 | 10 | 50 |
| | | 50 and above | 6 | 30 |
| | | Total | 20 | 100.00 |
| 2 | Gender | Male | 14 | 70 |
| | | Female | 6 | 30 |
| | | Total | 20 | 100.00 |
| 3 | Work Sphere | International Business | 10 | 50 |
| | | Academia / Research | 6 | 30 |
| | | Policy Worker | 4 | 20 |
| | | Total | 20 | 100.00 |
| 4 | Living Region in Kazakhstan | Central | 4 | 20 |
| | | East | 0 | 0 |
| | | North | 8 | 40 |
| | | South | 8 | 40 |
| | | West | 0 | 0 |
| | | Total | 20 | 100.00 |

*Note*: compiled by authors

As we can see from the table, the majority of experts (50%) fall within the 40-49 age range, followed by 30% who are 50 and above, and 20% between 30-39 years old. This distribution suggests a relatively senior group of experts with substantial professional experience. The expert panel also shows a gender imbalance, with 70% male and 30% female participants. Half of the experts (50%) are engaged in international business, while 30% come from academia or research backgrounds, and 20% are policy workers. This diverse professional background ensures a multifaceted perspective on the research subject. The experts are primarily located in the North and South regions of Kazakhstan (40% each), with the remaining 20% residing in the Central region. Notably, there are no participants from the East or West regions.

This demographic profile indicates a diverse group of experts in terms of age and professional background despite some limitations in gender balance and geographical representation. The composition of the expert panel suggests a wealth of experience in international affairs and regional dynamics, which is pertinent to the study's focus on international economic integration and regional initiatives. The interviews were structured to explore each indicator's perceived importance (weight) and severity (significance) within the context of the four regional initiatives. The deep interviews were conducted via video conferencing to facilitate detailed and in-depth discussions. Experts were asked to provide ratings and qualitative feedback on each indicator, focusing on their experiences and insights into the practical implications of these indicators.

*Data Processing*

The final results, accompanied by dispersion and concordance coefficient analyses, were comprehensively reported to enhance the study's transparency and reliability.

The collected data underwent a rigorous analysis to ensure accuracy and reliability. Two key statistical measures were employed: the Dispersion Coefficient and the Concordance Coefficient. Dispersion Coefficient (D): This measure was used to evaluate the variability in the experts' assessments. It was calculated using the formula (1):

$$D = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n-1}} \qquad (1)$$

where:

$X_i$ - represents an individual expert's assessment;

$\bar{x}$ - the mean assessment across all experts;

n - the number of experts.

A low dispersion coefficient indicated a high level of agreement among experts, while a higher coefficient suggested differing opinions.

Concordance Coefficient (C): This measure assessed the consistency of the experts' rankings and the degree of concordance among their assessments. It was calculated as follows (2):

$$C = \frac{\sum_{i=1}^{n-1}\sum_{j=i+1}^{n} sign(x_i - x_j)}{\binom{n}{2}} \qquad (2)$$

where:

$X_i$ and $X_j$ are the assessments of two different experts;

sign - a function returning -1, 0, or 1, depending on the relative values of $X_i$ and $X_j$;

n - the number of experts.

The concordance coefficient provided insights into the panel's level of consensus, with higher values indicating more robust agreement. The results were subjected to consistency checks to ensure the coherence of experts' weight and significance ratings. The final analysis incorporated both the dispersion and concordance coefficients to validate the reliability of the data.

## 4. FINDINGS AND DISCUSSIONS

Effective economic integration within regional initiatives requires a thorough evaluation of the various criteria contributing to unified economies' development and prosperity. This study analyzed vital criteria that determine the success of economic integration using expert assessments. For each criterion, measures such as dispersion, concordance coefficient, average, and weight were calculated, allowing for the identification of the most significant factors influencing integration processes. The following sections present the main conclusions drawn from the analysis of these criteria. The initiatives' evaluation criteria were assessed based on their dispersion, concordance coefficient, average, and weight (Table 3).

**TABLE 3**. Evaluation criteria and weighting

| Criteria | Dispersion Coefficient | Concordance Coefficient | Average | Weight |
|---|---|---|---|---|
| Increased intra-union trade | 0,26 | 0,994 | 4,55 | 5 |
| Expansion of market presence | 0,25 | 0,994 | 4,6 | 5 |
| Supply chain optimization | 0,26 | 0,994 | 4,45 | 4 |
| Harmonization of regulations | 0,34 | 0,992 | 3,65 | 4 |
| Access to financing | 0,37 | 0,991 | 4,5 | 4 |
| Cross-border partnerships and collaborations | 0,26 | 0,994 | 3,5 | 3 |
| Employee mobility and talent acquisition | 0,26 | 0,994 | 3,5 | 3 |
| Innovation and technology transfer | 0,25 | 0,994 | 4,6 | 5 |

*Note*: compiled by authors

Based on the results obtained, the following conclusions were drawn.

*(1) Increased intra-union trade:* The findings indicate that increased intra-union trade is crucial for successful economic integration. The dispersion of this criterion was 0.26, with a concordance coefficient of 0.994, signifying a high level of agreement among experts. The average weight assigned to this factor was 4.55, demonstrating its perceived importance in fostering economic ties and promoting market efficiency within the union. This high score underscores the significance of intra-union trade in enhancing economic interdependence and mutual benefits among member states.

*(2) Expansion of market presence:* Expansion of market presence was another highly rated factor, with a dispersion of 0.25 and a concordance coefficient of 0.994. Experts assigned an average weight of 4.6 to this criterion, highlighting its importance in enabling businesses to access new markets and diversify their customer base. This expansion is essential for reducing dependency on a single market and capitalizing on emerging opportunities within the union, thereby stimulating economic growth and job creation.

(*3) Supply chain optimization:* Supply chain optimization received a dispersion score of 0.26 and a concordance coefficient of 0.994, with an average weight of 4.45. This factor is critical for improving business competitiveness and profitability through cost savings, enhanced product availability, and faster response to market demands. Optimizing supply chains across member states can lead to lower production costs and higher productivity, contributing to overall economic growth and consumer satisfaction.

*(4) Harmonization of regulations:* The harmonization of regulations had a dispersion of 0.34 and a concordance coefficient of 0.992. The average weight for this factor was 3.65, reflecting its role in reducing compliance burdens and eliminating trade barriers. Harmonized regulations create a conducive business environment, encourage investment, and promote entrepreneurship by providing legal certainty and simplifying cross-border operations.

*(5) Access to financing:* Access to financing was rated with a dispersion of 0.37 and a concordance coefficient of 0.991. Experts assigned an average weight of 4.5, emphasizing its importance for business growth and development. Access to finance is vital for investment, expansion, and innovation, enabling businesses to fuel economic activity and generate income, which leads to job creation and overall economic development.

(*6) Cross-border partnerships and collaborations:* This factor had a dispersion of 0.26 and a concordance coefficient of 0.994, with an average weight of 3.5. Cross-border partnerships facilitate knowledge exchange, resource sharing, and market access, allowing businesses to leverage complementary strengths and capabilities. These partnerships are essential for fostering innovation, enhancing competitiveness, and driving business success within the union.

*(7) Employee mobility and talent acquisition:* Employee mobility and talent acquisition were rated with a dispersion of 0.26, a concordance coefficient of 0.994, and an average weight of 3.5. Moving employees freely across member states is crucial for efficiently addressing skill shortages and deploying resources. This mobility enhances business productivity, fosters innovation, and strengthens competitiveness, contributing to economic growth and job creation.

*(8) Innovation and technology transfer:* Innovation and technology transfer received a dispersion score of 0.25 and a concordance coefficient of 0.994, with an average weight of 4.6. The flow of innovation and technology between businesses in different member states promotes knowledge diffusion, fosters technological advancements, and stimulates productivity growth. This factor enhances business competitiveness and drives economic development by creating new opportunities, jobs, and wealth.

Figure 1 illustrates the weighted radar chart of the assessed criteria, visually representing each factor's relative importance and performance.

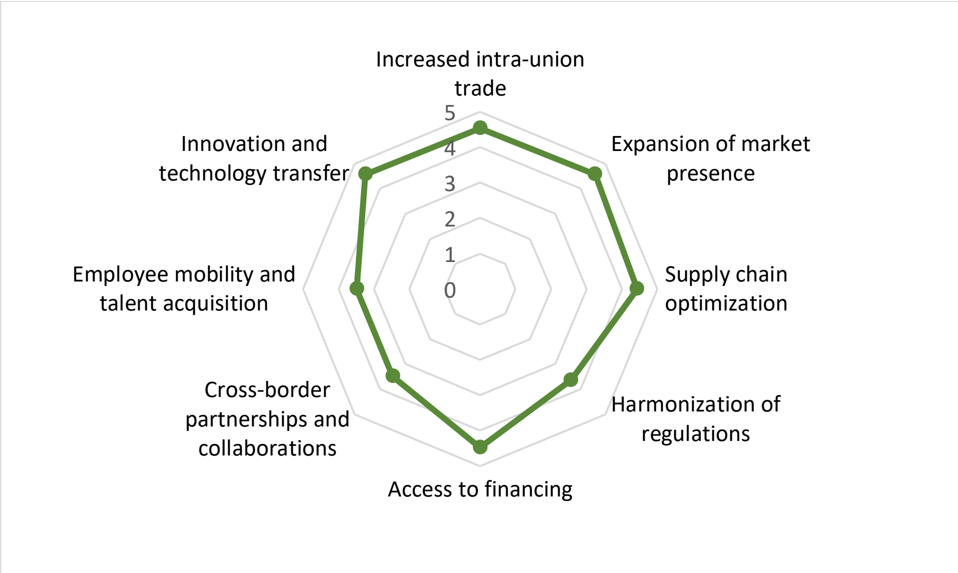


**FIGURE 1.** Criteria weighted radar chart

*Note:* compiled by authors

The radar chart provides a detailed comparison of the key criteria that influence successful economic integration. Each axis represents a critical factor, illustrating the relative importance and performance of different integration dimensions. The highest-rated factors such as increased intra-union trade, expansion of market presence, and innovation and technology transfer emphasize the pivotal role these elements play in enhancing regional economic cohesion and driving competitive advantage. These criteria are closely linked to improving productivity, fostering collaboration, and enabling smoother market operations within the union.

In contrast, areas like access to financing and employee mobility scored lower, highlighting potential bottlenecks that may hinder comprehensive integration. The chart suggests that these dimensions could benefit from targeted interventions or policy adjustments to align them more closely with the overall integration goals. Additionally, factors like harmonization of regulations and supply chain optimization are moderately rated, reflecting both their importance and the challenges that might still exist in achieving full alignment across member states.

The weighted visualization not only underscores the current strengths but also points out areas for strategic improvement. By synthesizing complex data into a clear and accessible format, this chart supports informed decision-making, helping policymakers and stakeholders prioritize resources and initiatives that are most likely to yield sustainable integration outcomes.

The data presented in Table 4 allows for a detailed examination of the initiatives.

**TABLE 4.** Comparative Evaluation of Regional Economic Integration Initiatives

| Criteria | EAEU | | | SREB | | | NSR | | | CAREC | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | weight | Sig. | total | weight | Sig. | total | weight | Sig. | total | weight | Sig. | total |
| Increased intra-union trade | 5 | 4 | 20 | 5 | 7 | 35 | 5 | 5 | 25 | 5 | 5 | 25 |
| Expansion of market presence | 5 | 4 | 20 | 5 | 7 | 35 | 5 | 4 | 20 | 5 | 5 | 25 |
| Supply chain optimization | 4 | 5 | 20 | 4 | 7 | 28 | 4 | 8 | 32 | 4 | 5 | 20 |
| Harmonization of regulations | 4 | 7 | 28 | 4 | 4 | 16 | 4 | 3 | 12 | 4 | 5 | 20 |
| Access to financing | 4 | 6 | 24 | 4 | 5 | 20 | 4 | 6 | 24 | 4 | 5 | 20 |
| Cross-border partnerships and collaborations | 3 | 6 | 18 | 3 | 7 | 21 | 3 | 7 | 21 | 3 | 6 | 18 |
| Employee mobility and talent acquisition | 3 | 7 | 21 | 3 | 4 | 12 | 3 | 5 | 15 | 3 | 6 | 18 |
| Innovation and technology transfer | 5 | 6 | 30 | 5 | 6 | 30 | 5 | 6 | 30 | 5 | 4 | 20 |
| Total | 33 | 45 | 181 | 33 | 47 | 197 | 33 | 44 | 179 | 33 | 41 | 166 |

*Note:* compiled by authors

According to Table 4, SREB's high rating reflects its strategic emphasis on improving trade connectivity and infrastructure, thus enhancing trade flows among member countries. EAEU and CAREC scored 25, while NSR scored 25, reflecting a moderate emphasis on trade integration.

Expansion of market presence was another highly rated factor, with SREB leading the rankings. SREB's high rating highlights its effectiveness in opening vast new markets through improved infrastructure and trade agreements. EAEU and NSR scored 20, and CAREC 25, showing varied approaches to market expansion. Supply chain optimization received high ratings across all initiatives, with SREB again in the lead. Optimizing supply chains reduces production costs and improves productivity, making businesses more competitive. SREB's focus on modernizing infrastructure and logistics networks is critical for streamlining supply chains. Harmonized regulations reduce compliance burdens and eliminate trade barriers, creating a favorable business environment. The highest for EAEU is (28), indicating extensive regulatory harmonization efforts. Access to financing was crucial for all initiatives, the highest for NSR and EAEU (24 each), reflecting solid financial integration initiatives. The importance of cross-border partnerships and collaborations is highlighted by the SREB, which scored the highest at 21, underscoring the significance of partnerships. The EAEU, NSR, and CAREC scored 18, 21, and 18, respectively, indicating varying levels of cross-border cooperation. In employee mobility and talent acquisition, the SREB again scored the highest at 21, emphasizing the promotion of talent mobility. Similarly, the EAEU scored 21, while the NSR and CAREC scored 15 and 18, respectively, reflecting their recognition of the importance of employee mobility. Regarding innovation and technology transfer, the EAEU, SREB, and NSR each scored a high 30, underlining the critical role of innovation. CAREC, with a score of 20, also shows a strong focus on technology transfer.

A bubble chart (Figure 2) visualized the overall scores and rankings of the four regional economic integration initiatives based on the evaluation criteria.

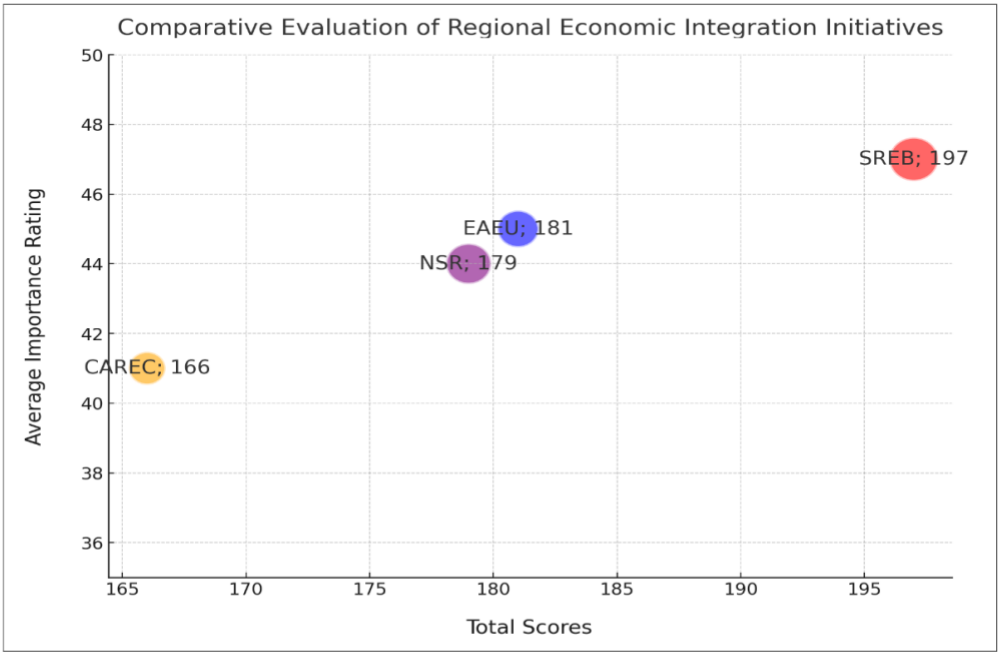


**FIGURE 2.** Bubble chart of regional economic integration initiatives

*Note:* compiled by authors

This chart provides a clear and comparative overview of the initiatives, highlighting their strengths and areas for improvement. The bubble chart visualizes the overall scores and rankings of the four regional economic integration initiatives. It includes (1) the x-axis, the average importance rating assigned to each criterion by the experts; (2) the y-axis, the total significance score for each initiative. Thus, the bubble size visualizes each initiative's overall effectiveness or impact.

SREB scored the highest overall, with a total weight of 197, indicating its strong emphasis on infrastructure development, trade facilitation, and investment promotion. EAEU came in second with a total weight of 181, showcasing significant efforts in creating a common market and promoting intra-union trade. NSR scored 179, reflecting its focus on enhancing connectivity and economic cooperation. CAREC had the lowest total weight of 166, demonstrating its commitment to regional connectivity and economic integration. The bubble chart accurately reflects that the Silk Road Economic Belt (SREB) initiative leads in total score and overall effectiveness, followed closely by the Eurasian Economic Union (EAEU). The New Silk Road (NSR) and Central Asia Regional Economic Cooperation (CAREC) also show significant efforts but with varying levels of focus and effectiveness.

The analysis of the findings reveals that increased intra-union trade, market expansion, and innovation and technology transfer are paramount for successful economic integration initiatives in Central Asia. These factors, along with supply chain optimization, harmonized regulations, access to financing, cross-border partnerships, and employee mobility, collectively contribute to a robust economic union. By addressing these key areas, policymakers and businesses can develop targeted strategies to enhance regional cooperation, stimulate economic growth, and achieve the broader objectives of the revived Silk Road initiatives.

## 5. CONCLUSIONS

Our research aims to identify the business perspectives and perceptions regarding the ongoing integration unions, ensuring that the economic integration efforts align with the business community's interests and needs. This study evaluated the importance of quantifiable indicators for gauging successful business integration within economic unions, focusing on initiatives related to reviving ancient Silk Road trade routes across Central Asia. Through an expert panel assessment and rigorous statistical analysis involving dispersion and concordance coefficients, the research identified several critical factors that contribute to effective economic integration. The analysis shows that from a business perspective, according to the opinion of experts from businesses in Kazakhstan, the most significant criteria among existing criteria for successful economic integration are increased intra-union trade, expansion of market presence, and innovation and technology transfer. Among the four ongoing initiatives, the Silk Road Economic Belt (SREB) received the highest overall score, emphasizing its strategic focus on improving trade connectivity and infrastructure to enhance trade flows among member countries. However, the differences in scores among the initiatives are not significant, indicating a relatively balanced effectiveness across these projects. This slight difference in scores demonstrates that while SREB provides more opportunities, particularly in cross-border partnerships and collaborations, employee mobility, and talent acquisition, other initiatives also show strong potential in different areas. Specifically, SREB leads in total scores for criteria such as increased intra-union trade (35), expansion of market presence (35), supply chain optimization (32), and innovation and technology transfer (30). In comparison, the Eurasian Economic Union (EAEU) has the highest score in the harmonization of regulations (28), reflecting its efforts in creating a single market between countries. This high level of regulatory harmonization facilitates a smoother business environment by reducing compliance burdens and eliminating trade barriers. In conclusion, while SREB stands out slightly due to its comprehensive approach to infrastructure and market expansion, the relatively small differences in scores among the initiatives suggest a general alignment in their effectiveness. In many cases, political and economic objectives drive countries' participation in economic integration unions and initiatives. However, it is crucial to remember that these activities should primarily bring tangible benefits to societies and businesses.

The current study is limited by the availability of data from only 20 experts, based in Kazakhstan. This restricted data pool may not fully represent the diverse perspectives and experiences across the entire Central Asian region. Consequently, the generalizability of the findings to other Central Asian countries might be constrained. To address these limitations, future research will involve conducting in-depth interviews with representatives from all Central Asian countries, providing a more comprehensive understanding of the region's specific contexts and challenges.

## AUTHOR CONTRIBUTION

Writing – original draft: Assel Jumasseitova.
Conceptualization: Assel Jumasseitova, Siddharth Saxena.
Formal analysis and investigation: Assel Jumasseitova.
Funding acquisition and research administration: Assel Jumasseitova.
Development of research methodology: Assel Jumasseitova.
Software and supervisions: Assel Jumasseitova, Siddharth Saxena.
Data collection, analysis and interpretation: Assel Jumasseitova, Siddharth Saxena.
Visualization: Assel Jumasseitova, Siddharth Saxena.
Writing review and editing research: Assel Jumasseitova, Siddharth Saxena.

## REFERENCES


Allsen, T. T. (2001). Culture and Conquest in Mongol Eurasia. *Cambridge University Press*, *24*, 245. https://doi.org/10.4000/abstractairanica.34374

Baldwin, R., & Seghezza, E. (1996). Trade-Induced Investment-led Growth. National Bureau of Economic Research. https://doi.org/10.3386/w5582

Beck, T., Demirguc-Kunt, A., & Maksimovic, V. (2008). Financing patterns around the world: Are small firms different? *Journal of Financial Economics*, *89*(3), 467-487. https://doi.org/10.1016/j.jfineco.2007.10.005

Chatterjee, S. (2018). Revisiting Carec: A New Approach to Regional Economic Integration in Central Asia. *Himalayan and Central Asian Studies*, *22*(1/2), 138-IV.

Chopra, S., Meindl, P. (2007). Supply Chain Management. Strategy, Planning & Operation. In: Boersch, C., Elschen, R. (eds) Das Summa Summarum des Management. *Gabler*, 265–275. https://doi.org/10.1007/978-3-8349-9320-5_22

Christopher, M. (1994). Logistics and supply chain management: strategies for reducing cost and improving service. London: Pitman Publishing. https://doi.org/10.2307/2583864

Claessens, S., Demirgüç-Kunt, A., & Huizinga, H. (2001). How does foreign entry affect domestic banking markets? *Journal of Banking & Finance*, *25*(5), 891-911. https://doi.org/10.1016/S0378-4266(00)00102-3

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, *35 (1)*, 128-152. https://doi.org/10.2307/2393553

Dadabaev, T. (2021). The Silk Road as a paradox of international/regional influences and initiatives. *Third World Quarterly*, *42*(10), 2471-2493. https://doi.org/10.1080/01436597.2021.1959381

Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2002). The regulation of entry. *The Quarterly Journal of Economics*, *117*(1), 1-37. https://doi.org/10.1162/003355302753399436

Firdous, T., & Dar, F. A. (2014). The New Silk Road. *Journal of Central Asian Studies*, *21*(1).

Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, *21*(3), 203-215. https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<203::AID-SMJ102>3.0.CO;2-K

Kalra, P., & Saxena, S. S. (2021). Globalizing local understanding of fragility in Eurasia. *Journal of Eurasian Studies*, *12*(2), 103–112. https://doi.org/10.1177/18793665211044839

Kaczmarski, M. (2017). Non-western visions of regionalism: China's New Silk Road and Russia's Eurasian Economic Union. *International Affairs*, *93*(6), 1357-1376. https://doi.org/10.1093/ia/iix182

Levy, R. (1999). The Silk Roads: A New History. https://doi.org/10.2307/3986982

Omonkulov, O., & Baba, G. (2019). Regional integration via major powers: russian eurasian economic union versus chinese silk road economic belt versus american new silk road project. *Çanakkale Onsekiz Mart Üniversitesi Uluslararası Sosyal Bilimler Dergisi*, *4*(1), 1-28. https://doi.org/10.31454/usb.582691

Rugman, A. M., & Verbeke, A. (2002). Edith Penrose's contribution to the resource-based view of strategic management. *Strategic Management Journal*, *23*(8), 769-780. https://doi.org/10.1002/smj.240

Schmitz, S., & Weinhardt, F. (2019). Immigration and the Evolution of Local Cultural Norms. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3435384

Silin, Y., Kapustina, L., Trevisan, I., & Drevalev, A. (2018). The silk road economic belt: balance of interests. *Economic and Political Studies*, *6*(3), 293-318. https://doi.org/10.1080/20954816.2018.1499340

Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, *15*(6), 285-305. https://doi.org/10.1016/0048-7333(86)90027-2

Tashtemkhanova, R., Zhanbulatova, R., & Zhiyenbayev, M. (2019). *Kazakhstan in the world integration processes*. Éditions du JIPTO.

Vinokurov, E. (2018). *Introduction to the Eurasian Economic Union*. Springer International Publishing. https://doi.org/10.1007/978-3-319-92825-8

## AUTHOR BIOGRAPHIES

***Assel Jumasseitova** – PhD, Professor, Kazakh British Technical University, Almaty, Kazakhstan. Email: a.dzhumaseitova@kbtu.kz, ORCID ID: https://orcid.org/0000-0002-2193-9418

**Siddharth Saxena** – PhD, Director, Cambridge Central Asia Forum University of Cambridge, Cambridge, United Kingdom. Email: sss21@cam.ac.uk, ORCID ID: https://orcid.org/0000-0002-6321-5629