ROLE OF THE SILK ROAD ECONOMIC BELT IN ACHIEVING SUSTAINABLE ECONOMIC GROWTH IN CENTRAL ASIA

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ABSTRACT

Objective: The study aims to confirm the People’s Republic of China's Silk Road Economic Belt initiative as a sustainable development strategy for Central Asian countries, in particular Kazakhstan. The article aims to determine how participation in the Silk Road Economic Belt can help these countries ensure sustainable economic growth, focusing on factors such as GDP per capita and GDP growth rate.

Methods: The main research method is the comparative method, which allows the use of comparative descriptive analysis to justify the prospects of participation of Central Asian countries in the Silk Road Economic Belt project. Statistical analysis and the index method are used to quantitatively demonstrate the volatility of economic dynamics.

Results: Statistical data analysis reveals the volatility of economic growth in Kazakhstan, which confirms the need for the country to participate in the Silk Road Economic Belt. The analysis of economic indicators of other Central Asian countries shows that GDP per capita and GDP growth rates are lower compared to Kazakhstan, suggesting that participation in the Silk Road Economic Belt gives these countries strategic advantages as well, particularly in the implementation of joint transport and logistics projects.

Conclusion: In light of the Sustainable Development Goals, the Silk Road Economic Belt project offers potential benefits to Central Asian countries, especially in areas such as transportation and logistics, and emphasizes the importance of global cooperation and strategic partnerships in achieving economic sustainability.

Keywords: silk road economic belt, sustainable development, economic growth, investment, development strategy, central Asian countries.

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PAPEL DO CINTURÃO ECONÔMICO DA ROTA DA SEDA PARA ALCANÇAR O CRESCIMENTO ECONÔMICO SUSTENTÁVEL NA ÁSIA CENTRAL

RESUMO

Objetivo: O estudo visa confirmar a Iniciativa do Cinturão Econômico da Rota da Seda da República Popular da China como uma estratégia de desenvolvimento sustentável para os países da Ásia Central, em particular o Cazaquistão. O artigo tem como objetivo determinar como a participação no Cinturão Econômico da Rota da Seda pode ajudar esses países a garantir um crescimento econômico sustentável, com foco em fatores como o PIB per capita e a taxa de crescimento do PIB.

Métodos: O principal método de pesquisa é o método comparativo, que permite o uso da análise descritiva comparativa para justificar as perspectivas de participação dos países da Ásia Central no projeto Cinturão Econômico da Rota da Seda. A análise estatística e o método do índice são usados para demonstrar quantitativamente a volatilidade da dinâmica econômica.

Resultados: A análise dos dados estatísticos revela a volatilidade do crescimento econômico no Cazaquistão, o que confirma a necessidade do país participar do Cinturão Econômico da Rota da Seda. A análise dos indicadores econômicos de outros países da Ásia Central mostra que o PIB per capita e as taxas de crescimento do PIB são menores em comparação com o Cazaquistão, sugerindo que a participação no Cinturão Econômico da Rota da Seda também oferece vantagens estratégicas a esses países, principalmente na implementação de transporte conjunto e projetos logísticos.

Conclusão: À luz dos Objetivos de Desenvolvimento Sustentável, o projeto Silk Road Economic Belt oferece benefícios potenciais para os países da Ásia Central, especialmente em áreas como transporte e logística, e enfatiza a importância da cooperação global e parcerias estratégicas para alcançar a sustentabilidade econômica.


1 INTRODUCTION

The Silk Road Economic Belt (SREB)\(^1\) is presented as a transport and logistics entity that is unprecedented in today's global economy.

The project is intended not only to strengthen world economic ties but to reform the processes of international territorial division of labor, influencing the spatial organization of regions and entire countries (Garnov et al., 2022). In our view, the SREB forms a new paradigm of economic and geostrategic development, ensuring the sustainable growth of Central Asian economies.

The development of the SREB project has the goal of achieving the following sustainable development goals, as formulated in the UN Resolution "Transforming Our World: The 2030 Agenda for Sustainable Development": development of infrastructure, innovation; decent work and economic growth; partnership for sustainable development.

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\(^1\) SREB: Silk Road Economic Belt
(United Nations General Assembly, 2015). Thus, the implementation of the project will contribute to overcoming infrastructure constraints in the economies of Central Asia, as well as the development of most countries in the eastern hemisphere, which now concentrate about 80% of world GDP (Ospanaliyev et al., 2022; Bekezhanov et al., 2021).

The SREB emerged as a "quadrilateral of competition and cooperation" between China, Russia, the USA, and Europe (Hao & Xia, 2015). The SREB, uniting more than 50 countries with a population of more than 3.5 billion people and concentrating about 2% of international transport freight turnover, including maritime transport, acts as a basis for economic integration, primarily of Central Asian countries, and turns Kazakhstan into a leading operator of transit traffic between continents and countries (Alekseev et al., 2022). The SREB project reflects China's geo-economic interests above all, but it also creates new opportunities for countries along its route, allowing them to integrate more deeply into the global economy and become part of the world's technological chains (Abrashkin, Barkovskaya, 2023; Firsova et al., 2019).

With the annual growth of trade between China and Europe and a marked trend toward increased shipments of compact and high-tech goods, faster, albeit expensive, rail transport is beginning to take an ever larger share. Currently, 90% of trade between China and Europe is carried by ship, and less than 5% by rail. If political and financial capital is invested, particularly in the modernization of rail infrastructure, rail traffic could be increased to 10% by 2025 (PwC Kazakhstan, 2017). Taking advantage of its geographical location, Kazakhstan can act as a bridge between Europe and Asia. The country's geostrategic position offers significant opportunities for trade and investment, especially from countries with impressive economic potential, such as China (Eshimova & Sadvakasova, 2017; Kanybek, 2016). Kazakhstan intends to act as the geographical center of the overland part of the SREB project. This offers the country tremendous opportunities for the development of trade and industrial production, as local businesses will benefit in the form of cost savings on export and import, as well as in the provision of logistics services to railway carriers (PwC Kazakhstan, 2017; Stan Radar, 2017; Schmitt, Alberton, 2022).

Thus, the participation of Central Asian countries in China's large-scale SREB project will allow them to use the massive potential of the project to ensure their sustainable economic growth. In particular, it will enable Kazakhstan to solve the
problems of the economic weakness and underpopulation of its eastern regions (Minbayeva et al., 2019; Zhapekova et al., 2020).

In this paper, we hypothesize that the SREB should be perceived as a strategy to ensure the attainment of sustainable economic growth in the countries involved in the project.

2 METHODOLOGY

The study utilized the following research methods.

The comparative method helped to identify the most common patterns and trends in the economic development of Central Asian countries during the implementation of China's SREB initiative. Comparative descriptive analysis is intended to be used to identify the potential for Central Asian countries' participation in the SREB project.

Statistical analysis and the index method allowed us to quantitatively demonstrate the unsustainability of the economic growth of the countries.

The information basis of the study was the data posted on the official website of the World Bank, in the materials of the China Statistical Yearbook, as well as in the Statistical Bulletin on Foreign Direct Investment of China.

In accordance with the methodology of comparative analysis, several sequential operations for grouping and summarizing statistical data were carried out, which allowed us to specify the most relevant trends in the dynamics of indicators characterizing the economic growth of countries in the period from 2000 to 2021.

As basic parameters for comparative analysis, we chose the indicators characterizing sustainable development, namely:

- GDP per capita,
- GDP growth rate,
- data on the volume of China's trade and investment in the Central Asian economies.

The comparative method made it possible to substantiate the specific direction of the strategy of Central Asian countries – attracting investment to ensure sustainable economic growth through their participation in the Chinese SREB initiative.

For the analysis of economic growth prospects among the Central Asian countries, Kazakhstan was chosen as a special object, since this state acts as a key participant in the SREB, a project that allows it to realize the huge transit potential of the country. In
addition, for Kazakhstan, the SREB is the most important infrastructure project in the modern history of the country, and participation in it will provide conditions for the country's long-term development.

3 RESULTS AND DISCUSSION

Despite a tenfold increase in Kazakhstan's GDP (in 2000, Kazakhstan's GDP was 18.3 billion USD, and in 2019, it reached 181.7 billion USD), the country's economic growth has not been coupled with economic development, as evidenced by the dynamics of the macroeconomic indicator of per capita GDP (Figure 1).

The per capita GDP data shown in Figure 1 demonstrate the significant superiority of the USA over China, Russia, and Kazakhstan. For example, in 2021 GDP per capita in the USA was 72,500 USD, about 5.7 times higher than in China (12,556.3 thousand USD per capita). China's economy has grown rapidly in recent decades, and the growth rate has increased even further since the country joined the WTO. However, given China's population of billions, per capita income is rather low. The per capita GDP in Russia in 2021 was 12,194.8 USD, compared to 10,169.1 USD in 2020 (an increase of 119.2%). The maximum value of the indicator in Russia during the analyzed period occurred in 2013 and amounted to 15,974.4 USD per capita and the minimum – 1,771.6 USD per capita in 2000. The value of the analyzed indicator in the USA is much higher than in China, Russia, Kazakhstan, and the world average. Russia and Kazakhstan, as post-Soviet
countries, have some similarities in the dynamics of GDP per capita, which exceeded the global average after 2008 and then declined further and further toward the global average. China's GDP per capita, by contrast, was below the world average in 2000-2020 and only got as close to it as possible in 2021 (the world average was 12,243.8 USD per capita, and China's was 12,556.3 USD per capita).

An important indicator describing the sustainability of the countries under consideration is the GDP growth rate. The growth rate of the world economy as a whole remained at about 2% from 2000 to 2020, having plummeted to -2.56% in 2008 after the global economic crisis, and then returning to its original level (Figure 2). Economic growth in Kazakhstan peaked at 13.5% in 2001 and remained positive until 2019 when it turned negative at -2.6%. The main reason for the negative economic dynamics was the COVID-19 pandemic, which disrupted world economic relations and, as a consequence, led to a drop in global GDP growth rates and higher prices for energy and consumer goods.

The statistical data presented in Figure 2 clearly illustrate the unstable dynamics of the GDP growth rate for the analyzed countries, which allows us to speak of the instability of their economic development in the long term. In our view, the problem can be solved through participation in global projects that will attract long-term investments in the economies of the countries that are the drivers of the modern world economy. Economic growth in China and the USA, in turn, will contribute to the formation and implementation of a strategy to achieve sustainable economic growth in the participating countries, including Kazakhstan.
The SREB is capable of ensuring Kazakhstan's greater participation in the international division of labor, which, in turn, requires an evolution in management, specifically a more active use of strategic mechanisms and tools (Nurgaliyeva et al., 2020). We believe it is reasonable to consider the country's economic growth prospects in the context of its economic integration with the world's leading economies. According to the World Bank, Kazakhstan belongs to the group of successful transition economies with a nominal GDP of 197.1 billion USD and a GDP per capita of 10,373.8 USD in 2021 (Figures 1 and 2) (Sultanov & Sultanov, 2017). The problem is that the territories adjacent to the SREB are heterogeneous in terms of economic and industrial development. In particular, there are significant differences in the economic dynamics of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The countries also differ in the composition of their national economies and the saturation of transport and logistics networks, which has imposed certain barriers to the growth of freight turnover and rail freight transportation in general.

We are convinced of the need for a comprehensive economic-geographical approach to the development of Euro-Asian cargo traffic routes, which would reduce, and from the strategic perspective – eliminate, technological and organizational barriers to the development of railway container transportation. The relevance of this issue increases sharply in the context of the conjugation of the EAEU and the Chinese SREB initiative. If logistical problems are overcome, overland routes through the SREB could provide up to 4% of freight movements going by sea between China and Europe. However, with the increase in the volume and intensity of freight traffic, the above-mentioned problem of the need for technical modernization of the railway infrastructure will become particularly acute. In this respect, a condition for the successful implementation of the SREB project is the removal of bottlenecks and the elimination of infrastructure barriers that hamper the establishment of trade and economic relations between the countries on the PRC-EAEU-EU axis. The implementation of the SREB project is already contributing to higher investment in infrastructure development, the unification of transport standards of the participating countries, and the abolition of excessive customs procedures and transport barriers, which will ultimately raise the efficiency of transportation and all economic activities carried out within the framework of the SREB project.

For Central Asian countries, economic interaction with China is mutually beneficial. The inflow of investments from China into the infrastructure sector of Central
Asian countries can significantly improve the socioeconomic situation by creating additional jobs, reducing inflation, and enhancing integration cooperation between the countries involved in the project. Yet these benefits can only be gained provided that Central Asian economies are built into international technological chains and take their rightful place in them. Otherwise, Central Asia will turn into a giant transport and engineering infrastructure for the exploitation of energy and mineral resources for the world's leading economies (Shermatova, 2015; Klimovskikh et al., 2023).

Importantly, the idea of the SREB at the political level has already been approved by all Central Asian states, and all of them have expressed their desire to actively take part in the practical implementation of this project (Kolosov, 1992; Belova et al., 2023). The reasons for such unity lie in the fact that the project is already secured with financial resources. At present, the financial institutions offering financial support for the construction of the SREB fall into four categories (Professionalnyi komitet, 2016; Tsenina et al., 2022; Abdullaev, Khamraev, 2020):

1. Global multilateral financial institutions for development, such as the World Bank.
2. Regional multilateral development financial institutions – the Asian Development Bank, the Asian Infrastructure Investment Bank led by China and the BRICS Development Bank, and the European Bank for Reconstruction and Development.
4. Commercial banks and other financial institutions in various countries, such as the Insurance Investment Fund, the ASEAN Investment Cooperation Fund, the Golden Fund, and the Silk Road Fund.

China's share in the foreign trade turnover of Central Asian states is now substantial and, judging by the positive dynamics (Table 1), will grow at an even higher rate as the SREB project progresses.

Table 1. China's trade operations with Central Asian countries, million USD (National Bureau of Statistics of China, 2022)

<table>
<thead>
<tr>
<th>Year</th>
<th>With countries</th>
<th>Kazakhstan export</th>
<th>Kazakhstan import</th>
<th>Kyrgyzstan export</th>
<th>Kyrgyzstan import</th>
<th>Uzbekistan export</th>
<th>Uzbekistan import</th>
<th>Tajikistan export</th>
<th>Tajikistan import</th>
<th>Turkmenistan export</th>
<th>Turkmenistan import</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td>45,948.5</td>
<td>14,680.8</td>
<td>89.0</td>
<td>5,073.4</td>
<td>1,091.9</td>
<td>1,783.5</td>
<td>108.8</td>
<td>1,747.5</td>
<td>8,673.4</td>
<td>1,699.1</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td>50,274.1</td>
<td>16,050.3</td>
<td>12,545.4</td>
<td>5,075.4</td>
<td>62.4</td>
<td>1,938.1</td>
<td>2,613.4</td>
<td>88.8</td>
<td>1,869.4</td>
<td>8,893.3</td>
</tr>
</tbody>
</table>
Despite the slowdown in economic activity in 2019-2021 caused by the COVID-19 pandemic and its consequences, China did not stop investing in the economies of Central Asia. In 2021 alone the investments amounted to 1,505 million USD. The largest volume of total investments during the period under study was in Kyrgyzstan, while investments in the economy of Tajikistan had been growing quite steadily. However, in terms of the total amount of China’s investments, Kazakhstan's economy takes the leading place, which allows the country to be defined as China’s major strategic partner.

Between 2012 and 2021, the volume of China's foreign trade transactions with Central Asian countries had an upward trend. Despite the negative dynamics of the global economy in 2015-2016, it grew by 8.9%. Import transactions prevail in the structure of foreign trade turnover, meaning that Central Asian countries are important markets for Chinese goods. China's trade relations with Kazakhstan had been the most active, with its share in the country's foreign trade turnover amounting to 50.4% (2021). Notably, China's interaction with Uzbekistan has become more active. Import trade operations with Uzbekistan increased by 2.7 times over the period under study but did not reach the level typical of China-Kazakhstan trade relations.

Of note is the upward trend of Chinese investment (loans) in the economies of Central Asian states since 2013 (Table 2).

### Table 2. China's total investment in Central Asian economies, million USD (Ministry of Commerce of the People's Republic of China, 2022)

<table>
<thead>
<tr>
<th>Year</th>
<th>Kazakhstan</th>
<th>Kyrgyzstan</th>
<th>Turkmenistan</th>
<th>Uzbekistan</th>
<th>Tajikistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>45,012.1</td>
<td>9,741.8</td>
<td>12,709.1</td>
<td>5,242.5</td>
<td>2,678.2</td>
</tr>
<tr>
<td>2015</td>
<td>32,615.5</td>
<td>5,849.0</td>
<td>8,441.2</td>
<td>4,282.1</td>
<td>1,267.1</td>
</tr>
<tr>
<td>2016</td>
<td>30,047.1</td>
<td>4,805.1</td>
<td>8,292.6</td>
<td>5,605.5</td>
<td>1,607.1</td>
</tr>
<tr>
<td>2017</td>
<td>35,879.2</td>
<td>6,378.7</td>
<td>11,564.1</td>
<td>5,336.8</td>
<td>1,471.5</td>
</tr>
<tr>
<td>2018</td>
<td>41,700.7</td>
<td>8,526.6</td>
<td>11,351.4</td>
<td>5,566.8</td>
<td>2,324.5</td>
</tr>
<tr>
<td>2019</td>
<td>46,353.8</td>
<td>9,273.7</td>
<td>12,729.6</td>
<td>6,280.5</td>
<td>2,180.8</td>
</tr>
<tr>
<td>2020</td>
<td>38,607.5</td>
<td>9,805.1</td>
<td>11,703.3</td>
<td>2,865.4</td>
<td>1,483.5</td>
</tr>
<tr>
<td>2021</td>
<td>50,056.7</td>
<td>11,290.4</td>
<td>13,959.1</td>
<td>7,474.0</td>
<td>2,155.4</td>
</tr>
</tbody>
</table>

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China shares a border with three Central Asian countries (Kazakhstan, Kyrgyzstan, and Tajikistan), which gives it undeniable advantages in developing joint transport and logistics projects. Moreover, it is quite important that the countries through which the SREB will pass are also interested in the implementation of these projects. This endeavor will not only provide an increase in revenues from transit fees and financial injections into the economies of the region's countries but also facilitate greater transport connectivity between them. The increasing number of transport infrastructure and other projects important to the region's economies, in which China is a major shareholder, as well as the growing volume of countries' credit dependence on China, make their choice in favor of a strategic partnership with China virtually a no-regret option.

The main risk deterring potential investors in the economy of Kazakhstan and other Central Asian countries is the risk of government efficiency due to excessive bureaucratization of managerial processes, corruption in some sectors of the economy and social sphere, and so forth (Kanybek, 2016; Ivanova, 2020; Soschinski, Rodrigues Junior, 2022).

Thus, we established a negative trend of decline in the sustainability of economic growth rates, which is quantified in the reduction of GDP growth rates and GDP per capita in the analyzed countries. In our opinion, the SREB project should be considered as a strategy to ensure the attainment of sustainable economic growth in the countries participating in the project.

Currently, there are scientific papers devoted to the study of the problems and prospects of the development of the SREB project, the effectiveness of this project, as well as the interest of the Central Asian countries to participate in it. Researchers (Sharapov, n.d.; Zabella et al., 2019) agree that the implementation of this project will contribute to comprehensive trade and economic cooperation in the Eurasian space, as well as long-term stability in the region. In particular, Z. Jinjian (2015) emphasizes that all Central Asian states are motivated to strengthen relations with China to the level of strategic partnership, attract Chinese investment capital to develop national economies and transport communications, ensure mutually beneficial trade, and strengthen monetary circulation, as well as cultural and humanitarian convergence of the peoples of the region. In this way, the present study and conclusions drawn from it are supported by the findings of Z. Jinjian (2015), which establish the trend of the explosive growth of Chinese investment (provided loans) in the economies of Central Asian states. K.L. Syroezhkin
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(2016) concludes that China's closest neighbors and strategic partners need to closely follow the development of the SREB, plan participation in it, correlate it with national interests, and comprehensively and continuously study the economic and political processes in modern China. A. Sharapov (n.d.) stresses the importance of achieving stability in bilateral relations between China and Central Asian countries, which are friendly neighbors with strong mutual political trust and expanding mutually beneficial economic cooperation.

Considering the prospects for cooperation between China and Central Asian countries, many experts (Syroezhkin, 2016) note the increased complementarity of the economies of countries involved in the SREB, as the project removes current barriers in their trade and economic relations.

Some analysts see some risks stemming from China's domestic policy. For example, V. Paramonov, A. Strokov and O. Stolpovsky (2008) believe that at the present stage, China's economic policy in Central Asia is rigidly subordinated to China's overall strategy of ensuring the most favorable external conditions to achieve a systemic breakthrough in terms of modernization, further sustainable economic growth, and subsequent transformation of the country into one of the global economic centers of the world economy. China has decided to more actively pursue the Central Asian vector of its policy, choosing to radically strengthen its position in the national economies of Central Asia by intensifying project-investment activities and increasing the volume of loans. S. Shermatova (2015) cites the statements of experts and notes their agreement that the positive effects far exceed the negative consequences of the countries' participation in the project. Experts (Shermatova, 2015) even suggest that, perhaps, in the future, the Chinese initiative will displace other competing projects from the region, including those of the EAEU.

Thus, the results obtained in the present study do not contradict the conclusions of other researchers but confirm and supplement them.

4 CONCLUSION

The paper provides an analysis of statistical indicators for assessing the sustainable development of the economies of countries involved in the SREB project, which has revealed the following trends:
The GDP per capita indicator of Russia and Kazakhstan in 2015 decreased to the level of the world average, while the same indicator of China, on the contrary, grew in 2021 up to the world average;

The GDP growth rate has been trending downwards since 2019 and is turning negative. This trend applies both to the global average and to some leading countries of the world, including the USA, Russia, and China.

The paper analyzes China's trade operations and total investments in Central Asian countries and found Kazakhstan to be a leader by these indicators. It has been substantiated that for the member countries of the SREB, this project is mutually beneficial. Apart from this, the study also notes the risks whose elimination in the future will strengthen the positive impact on the sustainable development of Central Asian countries.

The identified trends provide for the conclusion that global projects, such as the SREB, are necessary to foster sustainable development, which will not only attract investment in the economies of countries leading the modern world economy but will also positively affect the participating countries, whose economies are much weaker and less sustainable.
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NOTES

1. The Belt and Road Initiative (BRI) was first announced by President of the People's Republic of China Xi Jinping in Astana (capital of Kazakhstan) in 2013 and initially had the title "One Belt, One Road". Since 2016, the initiative has been referred to as the BRI, with the word "belt" referring to land routes for road and rail transport (also called the Silk Road Economic Belt, SREB) and "road" referring to maritime routes, or the 21st century Maritime Silk Road (Danilova, 2019).