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Economic integration of Kazakhstan with the neighboring countries

S D Mamenov[1*], A N Dunets[1] and K A Artemieva[2]

[1] Altai State University, 61 Lenina prosp., Barnaul 656049 Russia
[2] Sarsen Amanzholov East Kazakhstan State University, 34 Tridtsatoy Gvardeiskoy Divizii str., Ust-Kamenogorsk 070002 Kazakhstan

E-mail: Mamenov1990@gmail.com

Abstract. Kazakhstan is the main strategic ally of Russia in Central Asia. In its geopolitics, Kazakhstan seeks to maximally respect the priority of its own national interests, despite its active participation in Eurasian integration structures, and implements a multi-vector strategy. Currently, bilateral cooperation with China is coming to the fore. The main directions of integration processes in the Republic of Kazakhstan are related to cooperation in the framework of the Central Asian region, the Eurasian Economic Union, and the Shanghai Cooperation Organization.

Keywords: integration, regional integration, cooperation, country, neighboring countries

1. Introduction

The most fundamental basis for achieving the integrity of the world is to increase the interdependence of countries in the economic sphere. Not a single state of the world can fully develop if it does not participate in the system of world economic relations. Based on this, we can say that integration is a geo-economic process.

First of all, a new level of the international division of labor consists in a more intensive exchange of goods, services, capital and labor. Thus, we can say that international economic integration is a process of economic and political association of countries for the further development of stable interconnections and the division of labor between them, developing the interaction of economies in various forms and at different levels [7].

2. Materials and Methods

From a geographical point of view, integration is an increase in the density of relations between geographic elements; it is a geospatial process, accompanied by an increase in the number of common features. Disintegration is the reverse process, which leads to a weakening of ties, until the complete isolation of elements is achieved [1].

Geographical factors affecting the process of international economic integration, in addition to the geographical aspect, should have an obligatory economic component [4], [5]. The most important and long-term factor in the development of the Republic of Kazakhstan is its economic and geographical position (EGP). The EGP of territories or regions participating in the integration process are the key geographical and economic factors of integration.

In the various integration associations of the world, throughout their existence, with varying degrees of success, attempts were made to monitor the integration process using various indicators [11]. The most successful and effective monitoring systems for regional integration are the EU Internal Market Scoreboard, the ASEAN Economic Community Scorecard, and the EDB Economic Integration Indicators System. The main difference between these systems is that they work for a certain period of time, while maintaining their analysis structure and the ability to compare the obtained data.

The system of indicators of the Eurasian integration (SIEI) developed by the Eurasian Development Bank is a tool for monitoring and evaluating regional integration processes in the post-Soviet space. But the system does not have a strict regional reference and can be used to calculate the integration of any countries.

The SIEI EDB includes three blocks corresponding to the three main aspects of regional interaction:

- Analysis of regional integration as market integration;
- Analysis of regional integration as a convergence of economic systems;
- Analysis of regional cooperation and institutional integration.

The choice of indicators to measure the level of economic integration between countries is determined by the availability of data for economies, as well as their importance for cooperation and the modernization process in the countries of the region.

Three types of indicators are calculated for regional integration analysis: (1) integration of pairs of countries; (2) integration of the country with a group of countries; (3) integration within a group of countries.

Each of these indicators requires its own definition. The integration of pairs of countries is an assessment of the convergence of the two states. Estimates are symmetrical in the sense that a "high" assessment of integration corresponds to a situation where both countries largely depend on each other. At the same time, situations of asymmetric dependence (for example, for one of the countries in a pair, the other country is the most important trading partner, but not vice versa) should correspond to a lower integration score.

Integration of a country and a group of countries assesses the convergence of one of the neighboring states with a group of interest from the point of view of the practice of integration interaction and includes several countries.

Integration within the group is an assessment of the mutual convergence of all the states belonging to the group, that is, it allows to speak about the "average" level of integration in the integration core [2].

3. Results

Analysis of macroeconomic indicators provides an idea of the integration of countries in the economic sphere. We have determined the convergence of the economy of Kazakhstan and the neighboring countries. Assessment of countries' convergence was carried out from the standpoint of similarity of the main quantitative characteristics of their economic development in the macroeconomic sphere (nominal GDP, GDP per capita, economic growth).

The assessment of market integration and convergence of economic systems is carried out on the basis of a system of unified indicators, mainly calculated using state statistics.

In order to analyze regional integration as market integration and the convergence of economic systems, three types of indicators are calculated: (1) integration of pairs (dyads) of countries; (2) integration of a country with a group of countries; and (3) integration within a group of countries. Each of these indicators requires its own interpretation. Integration of pairs of countries shows the extent to which one or another of the two countries are interconnected due to the convergence of economic indicators.

In this case, the approach uses the appropriate concept of σ-convergence (implies a decrease with time of the standard deviation of the value of the indicator) [10].

Each country is considered as a point in a multidimensional space, each dimension corresponds to a particular characteristic. Each indicator included in the analysis is interpreted as the coordinate of a point (country) in the feature space selected for the integration characteristic. The more closely (closer) the points in this space are located, the higher the level of convergence. The simplest Euclidean distance is used to estimate the distance. At the same time, different-quality signs are given in a comparable form at the expense of rationing. Its average value for all countries is subtracted from each indicator value, and the result is divided by the standard deviation. Thus, the dimension of the indicators does not affect the final index. To assess the integration of pairs of countries, a distance between individual points-countries is calculated. To assess the integration of a country and a region in space, a new "point" is built, the coordinates of which correspond to the average value of the corresponding coordinates of all points-countries within the region. Next, the distance between the point-country and the point-region is calculated. Finally, to assess integration within a region, the average modulus of variation coefficient is used (a standard deviation divided by the average value) for all indicators considered in the framework of this index. The main indicators for calculating the convergence of economies include:

- Convergence of a pair of countries where the distance between these coordinates of countries is calculated, including the value of per capita GDP and GDP growth rate;
- Convergence of a country with a study region, where the distance between the coordinates of a country and a region is calculated, including the value of GDP per capita and the rate of growth of GDP. The coordinates of the region correspond to the average of the corresponding coordinates of all countries in the region;
- Convergence of the region as a whole, where the average value of the modules of the coefficients of variation of the GDP per capita and GDP growth rate in the region is calculated.

The values of convergence of economies represent the "interval" between certain economic indicators. Thus, a decrease in the indicator means an increase in the degree of convergence. Figure 1 shows the dynamics of macroeconomic convergence of Kazakhstan with each neighboring country and with the border region as a whole, in terms of macroeconomic indicators, such as per capita GDP and growth rates. The graph is constructed according to the CIS Interstate Statistical Committee.

Analysis of indicators of cross-border cooperation between Kazakhstan and Russia at the present stage shows the presence of actively developing foreign trade relations. Recently, the share of border areas in the foreign trade turnover of the countries has increased to 70%, including 40% in 12 regions of the Russian Federation and 7 border areas of Kazakhstan [6]. With all this, there are many factors that play a negative role in this interaction.

The following factors do not contribute to the integration processes in the adjacent territories: the underdevelopment of transport infrastructure between the regions, the considerable length of the border with large distances between settlements, different legal regulation of economic and business activities, lack of the necessary number of equipped border crossings [8]. About 50 international checkpoints number on the border of the Republic of Kazakhstan with the Russian Federation. In addition, simplified border crossing points are created, the procedure for crossing the border is simplified as much as possible, the terms of stay of citizens of Russia and Kazakhstan in the territory of countries are optimized.
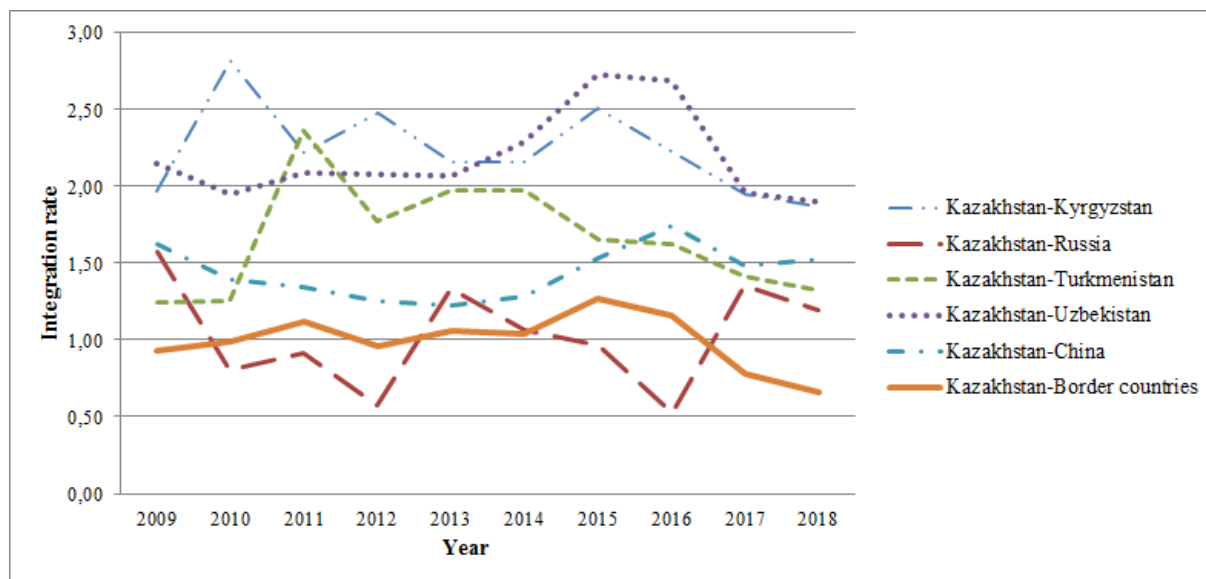
Figure 1. Dynamics of convergence of the economies of Kazakhstan with neighboring countries and in the region as a whole [7].

4. Discussion

The degree of integration processes between states depends on a number of factors. The most important of them are the level of socio-economic development of the country (the higher it is, the more mutually complementary economies are), specialization of the economies of countries in the world market (the number of economic ties depends on the degree of its heterogeneity), regulation of integration processes at all stages, as well as the creation of international organizations whose activities are aimed at strengthening the integration processes of the participating countries.

At one time, one of the reasons for the increase in the rate of growth of economic integration between the countries in question was the creation of the Commonwealth of Independent States. Within the framework of this union, not only the aspiration of the once united states to restore the broken established production, technological and economic ties of enterprises, but also the creation of conditions for the formation of close economic ties, an increase in the volume of international operations, contracts and agreements were traced.

The analyzed macroeconomic statistics of the countries of the CIS lead to the conclusion about the success of the integration of the participating States in the operation of the Commonwealth. However, at the initial stage, there were factors hindering its effective development [3].

The project of the "New Silk Road" begins to play a major role in achieving a high level of integration, the main goal of which is to create an extensive transport infrastructure network with the cooperation of China and Kazakhstan, Russia, and other countries. This project not only involves the revival of the ancient transport route connecting Europe with Asia, but also serves as the idea of a large-scale transformation of the trade and economic model of Eurasia. The construction of the transcontinental highway "Western Europe – Western China", the implementation of the project "Economic Belt of the Silk Road" will open new horizons for the development of international economic relations, the integration of the national economies of Kazakhstan and Russia into the world economy.

To realize the potential of cross-border cooperation, the governments of Russia and Kazakhstan develop and implement various agreements and programs. The main programs and agreements include the Agreement between the Government of the Russian Federation and the Government of the Republic of Kazakhstan on cooperation between the border areas of the Russian Federation and the Republic of Kazakhstan (signed in 1995, 1999, 2010), as well as Programs for cross-border

cooperation between the regions of the Russian Federation and the Republic of Kazakhstan (for 1999-2007, 2008-2011, 2012-2017).

5. Conclusion

The contemporary period of development of integration processes implies the establishment of economic ties, both between regions and individual parts of countries. Interregional cross-border cooperation is a necessary element in the formation of a developed economy of any country. Economic ties between neighboring regions of the countries are of particular importance for Kazakhstan and Russia, since these countries have the second total land border in the world.

Analysis of the dynamics of macroeconomic indicators of the system of indicators of Eurasian integration (SIEI) for the study period suggests that the integration of Kazakhstan with the neighboring countries is increasing. It is important to understand that negative trends are to some extent related to the high growth rates of the studied economies, in which their size systematically increased faster than the scale of economic interrelationships.

References

[1] Alaev E B 1983 *Socio-economic geography: conceptual and terminological dictionary* (Moscow, USSR: Mysl)

[2] Vinokurov E 2009 *EDB Eurasian Integration Indicators System* (Almaty, Kazakhstan)

[3] Yusubov F I 2009 The impact of economic integration on state cooperation *BNTU Vestnik* **2** p 101

[4] Gladyshev A N, Kulikov A V, and Shapalin B F 1974 *Problems of development and location of the productive forces of the Far East* (Moscow, USSR: Mysl)

[5] Gladyshev A N, Nikolaev N I, Singur N M, and Shapalin B F 1971 *Economy of the Far East: problems and prospects* (Khabarovsk, USSR: Khabarovsk Book Publishing House)

[6] Gontmakher E 2013 World migration processes: the need for global regulation *Economic Issues* **10** pp 136-146

[7] *Interstate Statistical Committee of the CIS* 2019 Available at: http://cisstat.com (Accessed 07 04 2019)

[8] Ivanov V N, and Zhundubaev M K 2015 Interregional and cross-border cooperation between Russia and Kazakhstan: main priorities *National Interests: Priorities and Security* **7**(292) pp 38-51

[9] A S Bulatov Ed 1997 *Economics* (Moscow, Russia: BEK Publishing House)

[10] Barro R J, and Sala-i-Martin X 1992 Convergence *Journal of Political Economy* **100**(2)

[11] De Lombaerde Philippe, Estevadeordal Antoni, and Suominen Kati 2008 Governing regional integration for development: introduction In *Governing regional integration for development: Monitoring experiences, methods and prospects* (pp 1-7) (Farnham, UK: Ashgate Publishing)