Analysis of Trade and Production Linkages between Border Regions of Russia and Kazakhstan: Impact of Customs Union and Single Economic Space

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The present article, based on the corresponding report CU and cross-border cooperation between Kazakhstan and Russia by the Centre for Integration Studies of the Eurasian Development Bank (EDB) and the International Centre...
for Social and Economic Research (Leontief Centre) (EDB, 2012a). The complete Russian version of the report contains a full description of the methodology and references.

On July 1, 2011, Belarus, Kazakhstan and Russia abolished customs controls at interstate borders within their Customs Union (CU), transferring them to the external borders of the Union, which became the sixth such bloc in the world economy.

The three countries’ common customs zone thus began to function in full scale, which created favourable conditions for the development of trade and production ties between border regions in Russia and Kazakhstan. Firstly, this led to a significant simplification of international trade both between Russia and Kazakhstan and between these and other countries. Russian and Kazakh companies got better access to the markets of each other and that of Belarus, as well as to markets outside the CU. Secondly, the transportation time for freight and passengers shortened. Thirdly, new opportunities emerged for the development of multifaceted cooperation ties between Russian and Kazakh companies, which helps establish joint production enterprises and increase the supply of raw materials, components and finished products. Fourthly, favourable conditions were created for the joint operation, modernisation and capacity enhancement of engineering, power supply and transport infrastructures that tie the two countries together. Fifthly, important prerequisites were created for improving the economic climate and the investment attractiveness of the border regions of Russia and Kazakhstan that are viewed as the main ground for deepening the process of integration between the two countries. These prerequisites include, among others, the potentially positive effect of competition between jurisdictions, as the CU makes it possible to choose more favourable conditions for business operations within the common economic area, including better tax conditions.

The purpose of this article is to analyse the effects of the Customs Union on economic interaction and production cooperation between the border regions of the Russian Federation and the Republic of Kazakhstan. The article is based on the results of joint research by the EDB Centre for Integration Studies and the Leontief Centre. The authors also used research done by the Kazakhstan branch of Russia’s Institute for Comparative Social Research (CESSI) under a project titled, “The Impact of the Customs Union and the Single Economic Space on the Small and Medium-Sized Business Sector in Kazakhstan’s Regions Bordering Russia.”

1 http://www.eabr.org/r/research/centre/projectsCII/KAZ_RUS/
1. TRADE EFFECTS OF ESTABLISHMENT OF CUSTOMS UNION

Dynamics of Bilateral Trade between Russia and Kazakhstan

Bilateral trade between Russia and Kazakhstan\(^2\) has been developing rather dynamically since the late 1990s, when the downturn caused by the 1998 financial crisis started to be overcome. The value of bilateral trade rose at a high rate until 2009. That year was marked by a decline, which, however, was largely due to a fall in dollar prices. The upward trend continued in 2010 and the value of bilateral trade closely approached the record 2008 level in 2011.

Approximately since 2000, a feature of trade between Russia and Kazakhstan has been an export surplus for Russia and a trade deficit for Kazakhstan: the value of Russian exports to Kazakhstan has been steadily higher than the value of imports from Kazakhstan. Moreover, the trade imbalance in favour of Russia, partially due to the scale of its economy, has increased significantly in the last decade. In recent years, the value of Russian exports to Kazakhstan has been more than twice the value of imports from the neighbouring country. In 2011, Russia’s export surplus in bilateral trade decreased, but not significantly (see Figure 6.1).

\(^2\) Owing to the abolition of customs clearance procedures for goods at the Russian-Kazakh border on July 1, 2010, the figures for exports and imports of Russia and Kazakhstan for the second half of 2010 and for 2011 do not include exports and imports in bilateral trade. That is why the data for 2010 and 2011 are not comparable with each other and with data for previous years.
At the same time, despite the growing absolute figures of bilateral trade, relative figures have been rather stable for both countries in the last few years. This is true for the share of exports to Kazakhstan in overall Russian exports, the share of exports to Russia in overall Kazakh exports, the share of Kazakhstan in overall Russian imports and the share of Russia in overall Kazakh imports (see Figure 6.2), which can suggest an increased degree of diversification of foreign trade for both Russia and Kazakhstan.

Table 6.1 shows data about bilateral trade between Russia and Kazakhstan in the first quarter of 2012. It should be noted that data for Russian-Kazakh trade published by the Kazakh finance ministry’s Customs Control Committee, Kazakhstan’s Statistics Agency and the Federal State Statistics Service of the Russian Federation differ rather significantly, showing different trends.

This is largely due to differences in methods used in customs statistics and balance of payments statistics. In addition, while analysing customs data, one should take into account the fact that the first quarter is usually a down period for bilateral trade between Russia and Kazakhstan – especially in terms of exports – and therefore statistics for Q1 of 2012 are not very impressive and do not precisely reflect the actual state of bilateral trade.
### Table 6.1.
Trade between Russia and Kazakhstan in Q1 of 2012 against Q1 of 2011 ($ million)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>January – March 2012</th>
<th>January – March 2011</th>
<th>Growth rates (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakh exports to Russia (Russian imports from Kazakhstan)</td>
<td>1525</td>
<td>2137</td>
<td>71.4</td>
</tr>
<tr>
<td>Kazakh imports from Russia (Russian exports to Kazakhstan)</td>
<td>3515</td>
<td>3135</td>
<td>112.1</td>
</tr>
<tr>
<td>Volume of trade between Russia and Kazakhstan</td>
<td>5040</td>
<td>5272</td>
<td>95.6</td>
</tr>
</tbody>
</table>

*Source: Data from the Customs Control Committee of the Ministry of Finance of Kazakhstan;*

*Note: Data from the Federal State Statistics Service of Russia*

### Peculiarities of Foreign Trade of Border Regions of Russia and Kazakhstan

The overall volume of foreign trade of Russia’s regions bordering Kazakhstan (Russian border area) is comparable with that of Kazakhstan as a whole in absolute terms. At the same time, although the overall volume of foreign trade of Kazakhstan’s regions bordering Russia (Kazakh border area) is predictably lower than that of the Russian border regions, the difference between the volumes of trade of the adjacent regions of the two countries is noticeably smaller than the difference between the overall volumes of foreign trade of Russia and Kazakhstan (see Figure 6.3).

![Figure 6.3.](image.png)

This is due to the fact that the role of the Kazakh regions bordering Russia in the foreign trade of Kazakhstan is noticeably greater than that of the Russian border
regions in Russia’s foreign trade. Moreover, while the share of the Russian regions bordering Kazakhstan in Russia’s foreign trade has been relatively stable in recent years, fluctuating within a range of 14 to 15% – 12% in 2011 – the respective indicator for Kazakhstan increased from about 40% in 2007 to almost 47% in 2010 – and declined to 41% in 2011 because of changes in the global market for crude oil and mineral resources. For Kazakhstan, its regions bordering Russia are really a sort of window to Russia, the Single Economic Space (SES) and the West, while the role of trade, including transit trade, between the Russian border regions and Kazakhstan in Russia’s foreign trade is rather secondary. However, this is due to the fact that the main trading partners of Russia are in the West and not in the South or the East.

The higher focus of the Kazakh border area on foreign trade compared with the Russian border area – as well as that of Kazakhstan as a whole against Russia – can also be seen in the ratio of foreign trade to GDP/GRP. Moreover, the significance of foreign trade is greater for the Kazakh border area than for the country as a whole, while it is smaller for the Russian border area (see Figure 6.4).

As for the regional structure of exports from the border regions of Russia and Kazakhstan, it should be noted that both the former and the latter have only one key export region – or two, at a stretch, in the case of Kazakhstan. In the Russian border area, it is the Tyumen region, which accounts for more than half of all exports from the border regions. For the Kazakh border area, it is
the Atyrau region, which accounts for almost two-thirds of all exports from the border regions and, to a much lesser degree, the Aktobe region. The large share of all the three regions in the border area’s exports is primarily due to the production and processing of oil, natural gas and other mineral resources and the availability of transport and logistics infrastructure in the regions.

It should also be noted that foreign trade plays a more important role in the economy of the border regions of Kazakhstan than in the economy of the border regions of Russia in terms of foreign-trade-to-GRP ratio.

The border regions of Russia and Kazakhstan have similar structures of exports, which are dominated by mineral resources and fuel and energy products, on the other hand and similar structures of imports on the other hand (see Figures 6.5 and 6.6).
Functional ties between businesses in the border areas of Russia and Kazakhstan have largely survived since the Soviet era and exist in the fuel and energy sector and the metallurgical industry, which corresponds with the structures of exports and imports of the border regions (see Figure 6.7). If fuel, energy and metallurgical products are not taken into account, exports from the Russian border area are dominated by chemical products, machinery and equipment, and exports from the Kazakh border area are dominated by chemical products and grain.

While evaluating the potential for the development of trade relations between the border areas of Russia and Kazakhstan, one should take into account the following:
**Figure 6.7.**
The commodity structure of exports and imports of the border areas of Russia and Kazakhstan in 2010

Source: Data from the Federal State Statistics Service of Russia and the Statistics Agency of Kazakhstan

- a) Apart from the Kazakh border area, there are other regions in Kazakhstan that are attractive for Russian companies. In particular, those are Almaty and Astana. It is where there is demand for highly processed goods, electronics, household appliances, medicines and cosmetics.

- b) Small and medium-sized wholesale and retail businesses need a different type of infrastructure, in particular motor roads, crossings and related services. At the same time, large businesses that sell raw materials mainly use railroads and pipelines. Therefore a diversified policy is needed to support businesses on both sides of the lengthy border between the two countries.

**2. STRUCTURAL EFFECTS OF ESTABLISHMENT OF CUSTOMS UNION**

As a result of the creation of new conditions for business activities and interaction between various types of businesses, there should be structural effects in the two countries, which manifest themselves in the use of labor resources, production and infrastructural cooperation and mutual investment. This section deals with manifestations of these effects in the border areas of Russia and Kazakhstan in the context of the national economies.
Dynamics of Population Growth and Migration Flows

Structural effects manifest themselves in the use of labor resources, in which migration is an indicator. Therefore it is expedient to review in detail migration trends in the two countries and their border areas.

The intensity of migration between the countries has been on the decline. This is characteristic of migration both to and from Russia. Migration from Kazakhstan to Russia has decreased much faster than migration from Russia to Kazakhstan. In particular, in the period between 2000 and 2010, migration from Kazakhstan to Russia decreased 4.1 times, while migration from Russia to Kazakhstan decreased 2.8 times. This led to a significant reduction in the share of migrants from Kazakhstan to Russia in the total number of migrants to Russia, which shrank from 35% in 2000 to 15% in 2010. The share of migrants from Russia to Kazakhstan in the total number of migrants to Kazakhstan, on the contrary, increased from 12% in 2000 to 21% in 2010 (see Figure 6.8).

![Figure 6.8. The number of migrants from Kazakhstan to Russia and from Russia to Kazakhstan (in % of the total number of migrants)](image)

Source: Data from the Federal State Statistics Service of Russia

Amid this trend, the intensity of migration between the border areas of Russia and Kazakhstan has remained at the same level. The number of migrants to the Russian border area from Kazakhstan has been much higher than the number of those leaving it. For a long time, the Astrakhan region was an exception to this rule, but in 2011, the number of migrants from Kazakhstan to this region exceeded the number of those leaving for Kazakhstan. In the period between 2007 and 2011, the immigration exceeded emigration by 38%. Moreover, the number of migrants to Kazakhstan from the Russian border area has tended to fall. In particular, their number decreased by 78.2% between 2007 and 2011.
Dynamics of Amount and Structure of Gross Regional Product in Border Regions of Russia and Kazakhstan

The aggregate gross product of the Russian-Kazakh border area is dominated by the production of mineral resources (28%), followed by other sectors (21%), the manufacturing industry (15%), transport, communications and trade (10% each).

The proportion of the gross regional product (GRP) of Kazakhstan’s border regions in the aggregate gross product of the Russian-Kazakh border area is significantly smaller than that of the GRP of Russia’s border regions.

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Figure 6.9.
The regional structure of the GRP of the border regions of Russia and Kazakhstan (%)

Source: Data from the Federal State Statistics Service of Russia and the Statistics Agency of Kazakhstan
However, in the period between 2007 and 2010, the share of Kazakhstan’s border regions in the aggregate gross product of the border area was steadily growing to reach 20% in 2010.

Owing to the economic crisis, the aggregate gross product of the border area decreased by almost one-fourth in 2009. It should be noted that the GRP of Kazakhstan’s border regions decreased less than that of Russia’s border regions.

The Tyumen region accounts for more than 30% of the aggregate gross product of the border area, and the Tyumen, Chelyabinsk, Samara, Orenburg, Omsk, Novosibirsk and Atyrau regions account for more than 60% (see Figure 6.9).

The period between 2007 and 2010 saw an increase in the share of the Kazakh border area in Kazakhstan’s GDP and a slight decrease in the share of Russia’s border regions in the GDP of the Russian Federation.

In particular, the proportion of the GRP of the border regions of Kazakhstan in its GDP increased from 37 to 40%, and the proportion of GRP of the border regions in Russia’s GDP decreased from 21 to 20%.

**Dynamics of Two-way Investment**

In the period between 2000 and 2011, there was a rise in investment from Russia to Kazakhstan and from Kazakhstan to Russia. In particular, during that period, Kazakh investment in the Russian economy increased 427.7-fold, and Russian investment in the Kazakh economy increased 557.8-fold. It is noteworthy
that Kazakh investment in the Russian economy has always exceeded Russian investment in the Kazakh economy. However, the gap decreased from 63.1% in 2000 to 25.1% in 2011 (see Figure 6.10).

Fixed capital investment by entities involving foreign capital in Russia’s border regions was significantly smaller than in other regions of Russia. In the border regions of Kazakhstan, such entities’ investment accounted for about 60% of all investment in the national economy (see Figure 6.11).

In the period between 2007 and 2010, the economy of the Atyrau region was, with about 40%, the absolute leader in terms of investment by entities involving foreign capital among the regions of the Russian-Kazakh border area. The Aktobe region ranked second, followed by the Pavlodar, Kostanay and Chelyabinsk regions. The Tyumen region was at the bottom of the list of the leading border regions in terms of the share of entities involving foreign capital in total investment in the region.

An increase occurred in the proportion of companies operating in Russia’s border regions in the total number of companies in Russia that involved Kazakh capital. Their share grew from 30.8% in 2000 to 60.4% in 2010.
3. INSTITUTIONAL EFFECTS OF ESTABLISHMENT OF CUSTOMS UNION

Institutional effects can appear on the basis of conditions and opportunities stemming from the adoption of a number of legal regulations and agreements and the establishment of supranational and intercountry bodies for cooperation.

The effects will be determined by both the activities of these institutions and result in an increase in the competitive capacity of the economies of the CU member countries and the economies of the border regions, the narrowing of the gap between their development indicators, and the implementation of programmes and other budget initiatives for the development of cross-border cooperation. One should distinguish between short-term and long-term effects, with the latter manifesting themselves in economic recovery on both sides of the border and the former in the narrowing of the gap between the indicators of social and economic development. The dynamics of price levels and the dynamics of pay and households’ income serve as indicators of the manifestation of institutional effects. It should be noted that data for a longer span of time are needed for an analysis of institutional effects to produce more representative results.

In the border area, the period of an initial equalisation of prices, in particular gasoline prices, currently comes to an end and economic growth is still largely determined by global crisis developments.

**Comparative Dynamics of Inflation Rates and Price Levels**

In the period between 2007 and 2011, the inflation rates in the border regions of Russia and Kazakhstan tended to be similar (see Figure 6.12).

![Figure 6.12. The December-over-December Consumer Price Index (%)](source: Data from the Federal State Statistics Service of Russia and the Statistics Agency of Kazakhstan)
It may be helpful study changes in the prices of the most socially important goods (electricity, gasoline, beef, flour and milk). We paid particular attention to the changes in electricity and gasoline.

Figure 6.13.
Electricity prices (in $ per 100 kWh)

Source: Data from local offices of the Federal State Statistics Service of Russia and the Statistics Agency of Kazakhstan

Figure 6.14.
Changes in average annual prices of 95-octane gasoline (in $ per liter)

Source: Data from local offices of the Federal State Statistics Service of Russia and the Statistics Agency of Kazakhstan
In the period under review, electricity prices were on the rise and the difference between electricity prices in the border regions of Russia and Kazakhstan increased as well (see Figure 6.13), while prices of 95-octane gasoline rose in both the Russian and the Kazakh border area, but the difference between them decreased across all the regions (see Figure 6.14).

Our analysis found that except for gasoline prices, the levels of prices of most goods in the Russian and Kazakh border regions did not tend to become equal. The difference in prices between the border regions in Russia was higher than between the border regions in Kazakhstan for all goods under review except gasoline.

**Comparative Dynamics of Per Capita Money Income**

Per capita money income was significantly lower in the Kazakh border regions, except for the Atyrau region, than in the Russian border regions. At the same time per capita money income in the overwhelming majority of the Russian border regions, except for the Tyumen and Chelyabinsk regions, was below the average Russian level (see Figure 6.15).
Average money income in Atyrau region exceeded not only that in the other Kazakh border regions but also the average Russian per capita money income.

A comparison of income and wages in the border regions of Russia and Kazakhstan, except the Atyrau region, leads to the conclusion that the gap between the levels of income is much wider than the gap between the levels of pay.

4. TESTING OF HYPOTHESIS OF EXISTENCE OF FUNCTIONAL MACROREGION IN RUSSIAN-KAZAKH BORDER AREA

As far back as the beginning of the 20th century, economists began to study linkages between spatial concentrations of economic activity on the other hand and the development of production, technological, transport, logistical and other ties between firms on the other hand, perceiving these two processes as interdependent. This idea can be found in papers by, among others, Alfred Marshall (1920), Walter Christaller (1933), Bertil Ohlin (1933) and Edgar Hoover (1948). Papers on the new economic geography, in particular those by Paul Krugman (1991), Anthony Venables (Krugman, Venables, 1996) and others, point to the dependence of efficiency on the scale of production (in the case of a regional concentration of production), the existence of common infrastructure and resources (including labor resources), proximity to the consumer market and the size of the market, a preference for diversity in consumption (including intermediate consumption), technological external effects and “face-to-face” contacts as factors contributing to the geographical concentration of production. These are the factors that can be viewed as the basis for those functional inter-regional linkages that make it possible to describe one border region or another as functional.

Given the above, it is justified to test a hypothesis of the existence of established functional linkages in the border area on the basis of determining whether or not there is a geographical concentration of economic activity because geographical concentration is connected with such linkages from the standpoint of economic and geographical models.

One can speak about the existence of a functional macroregion if there is a considerable concentration (agglomeration) of economic activity, because in this case, linkages between its individual constituent regions are either substantial relative to the scale of their economies or determined by geographical proximity.

The concept of a functional macroregion implies the existence of functional linkages between regions because of their proximity or adjacency, or else this concept loses any meaning. That is why we propose analysing the large border area of Russia and Kazakhstan from the standpoint of the phenomenon of the
concentration of economic activity around the core/cores of the macroregion in question.

The postulated lack of a one-direction causal relationship (or rather the lack of theoretical or practical substantiation of such a relationship precludes the possibility of using a regression analysis to explore interdependence between the macroeconomic indicators of neighbouring regions as a tool of statistical (econometric) analysis for testing the above-stated hypothesis.

In addition, even if we assume the causal dependence of variables have one direction or another, it is impossible to use regression-analysis methods because of the shortage of observations for a cross data analysis with regard to data for the 19 (7 + 12) regions in a given period of time to draw statistically representative and substantiated conclusions.

An analysis of panel data (i.e. data for the 19 (7 + 12) regions for several periods of time) or a time-series analysis (i.e. data for a given region for several periods of time) seem to be unfounded in our case because of, apart from the lack of substantiation for the assumption on the direction of the causal relationship, the processes of the geographical concentration (agglomeration) of economic activity are long-term processes that take decades, if not centuries, as they are based on the concentration of human resources, physical capital and infrastructure in certain areas.

Comparable macroeconomic data for regions of Russia and Kazakhstan are only available for the first years after the collapse of the USSR. It is undisputable that the existing transport and other infrastructure, the current pattern of population distribution and the geographical distribution of productive forces in Russia and Kazakhstan were established in the Soviet era and have not undergone a significant change in recent years.

Since the available time series are relatively short, it is impossible to use the Granger causality test to substantiate the assumption of a causal relationship in one direction or the other.

Owing to the above, it seems that correlation analysis – to determine whether or not there are statistically significant relationships between variables – will be an optimal tool to test the hypothesis in question, as it does not imply any functional dependence between variables.

It should be noted that papers on the quantitative study of the concentration (agglomeration) of economic activity in a region (country) usually assess the degree of concentration in the region (country) as a whole. The nature of the subject of this statistical analysis is fundamentally different and there is, as far as we know, no analogue of it in the existing literature. It is aimed at finding out whether or not there is a concentration of economic activity around the core/cores of the macroregion in question. To assess the correlation between
In our case, the use of this coefficient (instead of, for instance, the Pearson correlation coefficient) is justified by the following considerations: firstly, there are a limited number of observations (because of the small number of regions), which are not enough to ensure the statistical significance of conclusions from the calculation of the Pearson coefficient, but are sufficient if Spearman’s coefficient is used, and secondly, there are a large spread of values and the different sizes of the GRP of an individual region on the one hand and the aggregate GRP of the neighbouring regions on the other, which is neutralised in case of using Spearman’s coefficient, which is calculated with the use of ranks, not the absolute values of correlated variables.

Input data for the calculation of Spearman’s coefficient include the amount of GRP in 2010 (the latest available data at the time of analysis) for 12 Russian and seven Kazakh border regions and the amount of GRP of the adjacent regions in Russia (17 regions) and Kazakhstan (five regions).

These data are used to calculate Spearman’s rank correlation coefficient for the following pairs of variables:

1. The GRP of one of the 19 regions of the Russian-Kazakh border area and the aggregate GRP of all adjacent regions regardless of the country;
2. The GRP of one of the 19 regions of the Russian-Kazakh border area and the aggregate GRP of all adjacent regions in Russia;
3. The GRP of one of the 19 regions of the Russian-Kazakh border area and the aggregate GRP of all adjacent regions in Kazakhstan;
4. The GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions regardless of the country;
5. The GRP of one of the seven Kazakh regions bordering Russia and the aggregate GRP of all adjacent regions regardless of the country;
6. The GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions in Kazakhstan;
7. The GRP of one of the seven Kazakh regions bordering Russia and the aggregate GRP of all adjacent regions in Russia;
8. The GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions in Russia;
9. The GRP of one of the seven Kazakh regions bordering Russia and the aggregate GRP of all adjacent regions in Kazakhstan.
The obtained results of the correlation analysis are shown in Table 6.2.

<table>
<thead>
<tr>
<th>Pair of variables</th>
<th>Number of pairs of values</th>
<th>Value of Spearman’s rank correlation coefficient</th>
<th>Value of Student’s t-criterion</th>
<th>Critical value of Student’s t-criterion for R ≤ 0.05</th>
<th>Critical value of Student’s t-criterion for R ≤ 0.10</th>
<th>Critical value of Student’s t-criterion for R ≤ 0.20</th>
<th>Conclusion on the statistical significance of the obtained correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>The GRP of one of the 19 regions of the Russian-Kazakh border area and the aggregate GRP of all adjacent regions regardless of the country</td>
<td>19</td>
<td>0.065</td>
<td>0.268</td>
<td>2.1</td>
<td>1.74</td>
<td>1.333</td>
<td>no</td>
</tr>
<tr>
<td>The GRP of one of the 19 regions of the Russian-Kazakh border area and the aggregate GRP of all adjacent regions in Russia</td>
<td>19</td>
<td>0.174</td>
<td>0.727</td>
<td>2.1</td>
<td>1.74</td>
<td>1.333</td>
<td>no</td>
</tr>
<tr>
<td>The GRP of one of the 19 regions of the Russian-Kazakh border area and the aggregate GRP of all adjacent regions in Kazakhstan</td>
<td>19</td>
<td>−0.541</td>
<td>2.654</td>
<td>2.1</td>
<td>1.74</td>
<td>1.333</td>
<td>negative correlation for R ≤ 0.05</td>
</tr>
<tr>
<td>The GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions regardless of the country</td>
<td>12</td>
<td>0.364</td>
<td>1.234</td>
<td>2.228</td>
<td>1.812</td>
<td>1.372</td>
<td>no</td>
</tr>
<tr>
<td>The GRP of one of the seven Kazakh regions bordering Russia and the aggregate GRP of all adjacent regions regardless of the country</td>
<td>7</td>
<td>−0.714</td>
<td>2.282</td>
<td>2.57</td>
<td>2.015</td>
<td>1.476</td>
<td>negative correlation for R ≤ 0.1</td>
</tr>
<tr>
<td>The GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions in Kazakhstan</td>
<td>12</td>
<td>−0.655</td>
<td>2.74</td>
<td>2.228</td>
<td>1.812</td>
<td>1.372</td>
<td>negative correlation for R ≤ 0.05</td>
</tr>
<tr>
<td>The GRP of one of the seven Kazakh regions bordering Russia and the aggregate GRP of all adjacent regions in Russia</td>
<td>7</td>
<td>−0.893</td>
<td>4.433</td>
<td>2.57</td>
<td>2.015</td>
<td>1.476</td>
<td>negative correlation for R ≤ 0.05</td>
</tr>
<tr>
<td>The GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions in Russia</td>
<td>12</td>
<td>0.405</td>
<td>1.403</td>
<td>2.228</td>
<td>1.812</td>
<td>1.372</td>
<td>positive correlation for R ≤ 0.2</td>
</tr>
<tr>
<td>The GRP of one of the seven Kazakh regions bordering Russia and the aggregate GRP of all adjacent regions in Kazakhstan</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>2.57</td>
<td>2.015</td>
<td>1.4759</td>
<td>no</td>
</tr>
</tbody>
</table>

Table 6.2. Results of the correlation analysis
As can be seen from the correlation analysis results for the time period in question, there is no positive statistically significant correlation between the level of the GRP of an individual region and the aggregate GRP of a sample of contiguous regions. This means that it is premature to assume the existence of a functional macroregion in the Russian-Kazakh border area because the geographical proximity of these regions is not accompanied by a geographical concentration (agglomeration) of economic activity around the key regions inside the macroregion, which is especially true for the Kazakh border area. The only pair with statistically significant – but with an error probability of up to 20% – positive correlation is “the GRP of one of the 12 Russian regions bordering Kazakhstan and the aggregate GRP of all adjacent regions in Russia.” This may suggest that a concentration (agglomeration) of economic activity around key centres really exists on the Russian side of the border, but in the time period in question, it involves only Russian regions (12 border regions plus 17 adjacent Russian regions).

Nonetheless, the recently announced and already launched AvtoVAZ-Asia Auto projects\(^3\) and also EURAS projects are a real basis for establishing functional linkages between the economies of the border regions of Russia and Kazakhstan in the manufacturing sector.

**CONCLUSION**

The initial stage of the existence of the Customs Union has showed positive changes in the volume of external economic activities of Russia and Kazakhstan, but significant trade and structural effects in the border area of Russia and Kazakhstan have not yet manifested themselves in full force.

This is due to:

a) the short period of observation of these effects;

b) the trade and production linkages and commodity flows that exist in the border area;

c) the homogeneity of the economies of the border regions and the long distances between them, coupled with the low degree of connectivity and development of the transport network in the border regions.

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\(^3\) [http://www.lada-auto.ru/cgi-bin/pr.pl?id=0&id_article=93423&prev=1](http://www.lada-auto.ru/cgi-bin/pr.pl?id=0&id_article=93423&prev=1)

On September 19, 2012, within the framework of the 9th Russian-Kazakh InterRegional Cooperation Forum in Pavlodar, Kazakhstan, Russia’s AvtoVAZ and Kazakhstan’s Asia Auto discussed the implementation of a joint project to set up an integrated automobile plant in Kazakhstan with an annual capacity of up to 120,000 cars. The sides agreed that facilities for assembling cars and manufacturing automobile components with a capacity of up to 60,000 units per year would be created at Asia Auto by 2014. The range of models assembled at the plant would include Lada Granta and Lada Kalina-facelift. The sides are also considering the possibility of assembling other models of AvtoVAZ, Renault and Nissan on a semi-knocked-down basis. At the second stage of the project, the output capacity of the plant would be increased to 120,000 cars per year. Kazakhstan, the Siberian and the Far Eastern Federal District of Russia, and the Central Asian and TransCaucasian countries have been identified as markets for the plant’s products.
Companies based in the border regions of Russia and Kazakhstan are mainly engaged in trade with third countries and not with each other – especially with regard to exports – except for the supply of Russian oil to Kazakh refineries and Kazakh oil to Russian refineries. Economically, Russia is the predominant player in the CU, and the common market and the common customs zone cannot fundamentally change the competitive environment for businesses in the emerging Single Economic Space within a short period of time.

In addition, it should be noted that the formal degree of liberalisation of trade and economic cooperation was already rather high before the establishment of the CU. Therefore, in the short run, one should not expect any radical change in the accessibility of each other’s markets for the SES member countries.

That is why in order to further deepen cooperation between Russia and Kazakhstan, it is necessary to step up cross-border cooperation and pursue a proactive policy aimed at the integration of the border regions at all levels of governance, including the Eurasian Economic Commission, the governments of the two countries, and the regional and municipal authorities, as well as on the part of the business community.

Apart from this, one cannot but agree with Evgeny Vinokurov and Alexander Libman (2012) that on the path to establishing Eurasian regions, there is an obstacle that prevents the integration potential from being realised in full.

Regions, including border ones, are able to overcome barriers to international integration only if they have enough autonomy. Unfortunately, in the post-Soviet area, the political and economic autonomy of regions and municipalities is diminishing. In Russia, this manifested itself in a gradual redistribution of tax revenues towards the federal government and the abolition of direct elections for governor and the removal of the most influential regional leaders from power – a process that ended in 2010 – but a new political cycle that began after parliamentary and presidential elections has already brought a number of changes. In Kazakhstan, the central government initiated an administrative reform with a view to strengthen its power, which in particular envisaged changing the borders of regions. In post-Soviet countries, regional and municipal initiatives are thoroughly monitored and controlled by the central government. As a result, sub-national cooperation actually becomes one of the “branches” of the government’s foreign policy, which, as mentioned above, experiences serious problems from the standpoint of cooperation in Northern and Central Eurasia. In addition, in the event of contradictions between the interests of the centre and the interests of regions, the former usually prevail over the latter. Meanwhile, in the European Union, there are both full-fledged federations (for instance, Germany) and countries with strong regional governments (for instance, Spain and Britain) and countries with rather independent municipalities (for instance, Scandinavian countries). Even traditionally centralised France has experienced significant devolution in recent years.
Nonetheless, the development of sub-national cooperation in Eurasia remains a promising avenue. There has lately been a lot of discussion of the idea of establishing an “Asiaregio” similar to the Euroregions in, for instance, Central Asia. The optimistic scenario assumes that “Asiaregios,” along with Euroregions and similar entities comprising both European and Asian areas along the borders of Russia, Kazakhstan and Turkey, for example, could become a strong vehicle for developing Eurasian continental integration.

Of particular importance in this regard is the implementation of the expansive concept of Eurasian regions whose development will be based on integration processes in Eurasia, in the first instance in the SES.

To strengthen trade ties and production cooperation between the border regions of Russia and Kazakhstan, it is advisable to do the following:

1. General economic recommendations:

   - Remove the existing restrictions on access to national markets and carry out a gradual and balanced liberalisation of the foreign exchange and financial policies of the SES member countries;
   - Coordinate and reconcile macroeconomic, tax, monetary, trade and customs tariff policies;
   - Harmonize the national regimes of the CU member countries through making them uniform or through establishing binding standards by SES agreements and supranational regulators;
   - Create common transport, power and information systems for closer cooperation between manufacturers in the SES member countries;
   - Reduce administrative barriers in the natural monopoly sectors, including with regard the provision of services and access to infrastructure, in particular Russia’s infrastructure (pipelines and railroads);
   - Develop uniform principles and rules for competition in the SES, including agreements on uniform principles and rules of competition, on uniform rules for industrial subsidies, on state support of agriculture, and on government procurement.

2. Recommendations for creating conditions for the development of functional regions:

   - Create conditions for investment that would help increase the degree of raw material processing (extend added-value chains, especially in Kazakhstan) and transmit growth impulses from the mineral resources sector and the initial processing sector to the manufacturing and services sectors to give an impetus to the development of functional regions in the Russian-Kazakh border area;
• Promote the decentralisation of decision-making for the development of functional regions;

• Coordinate investment to the implementation of infrastructure projects, which can significantly increase the effects of investment; establish a Structural Fund within the framework of the Eurasian Economic Community to carry out infrastructure projects under the aegis of the Eurasian Economic Commission; consider the idea of involving other countries of the region in the SES Structural Fund, primarily countries that are candidates for SES membership. Selection criteria should include an assessment of the potential environmental impact of the project;

• Pay more attention to projects aimed at increasing transport capacity and efficiency in the border areas and developing the local road infrastructure for the purpose of promoting the social and economic development of neighbouring regions. Of particular interest are the standards and practices applied in certain Euroregions to protect water resources;

• Develop requirements for the selection of projects, the co-financing of projects by regional and municipal authorities, the openness and transparency of decision-making procedures;

• Ensure the decentralisation of proposals submitted to the Structural Fund on the part of regional and municipal authorities in neighbouring countries, and the coordination of their policies and social and economic development programmes.

3. Recommendations for improving the statistical base:

• Ensure the proper quality and amount of statistical data. Accurate and relevant information is needed to analyse and assess trade and production linkages in the Russian-Kazakh border area and make decisions on their regulation. Researchers studying integration processes currently experience information problems. All this significantly complicates the analysis of processes taking place in the Russian-Kazakh border area, and therefore affects the quality of administrative decision-making. In this regard it is necessary to improve the quality and amount of statistical data about trade, production and migration linkages between the border regions of Russia and Kazakhstan.

REFERENCES


