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# Cross border trade of a region as a factor of efficient integration interaction

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Abstract — The goal of the research is the analysis of the cross border trade of the Volgograd region and the Republic of Kazakhstan during 2015-2017. The paper substantiates the importance of cross border trade relations as an important form of international economic relations, specific for the boundary regions of any state. The conducted analysis of trade and economic cooperation of the cross border regions of Russia and Kazakhstan allowed identifying the strengths and opportunities, to reveal the weaknesses (poorly competitive structure of regional economy, insufficiency of transport infrastructure) and threats (reduction of the standard and quality of life of population). The analysis of the cross border trade of the Volgograd region and the Republic of Kazakhstan showed that in 2016 the exceeding development of the imports over the exports in the mutual trade was observed however in 2017 the situation changed. The mutual trade is unbalanced as in 2017 the exports from the Volgograd region exceeded the imports from the Republic of Kazakhstan. The most important commodity groups in the export trade flows from the Volgograd region into the Republic of Kazakhstan are the organic chemical compounds and in the import trade the most weighty commodity groups are the aluminum and cotton.

Keywords – integration groupings, cross border trade, index of goods flow, turnover of cross border trade, coefficient of balance

### I. INTRODUCTION

The Russian and Kazakhstan border zones which are considered conventionally as a potentially united region present a homogenous type and for each of them the export of goods is typical.

It can be stated that practically the whole region is focused on the exports of its products which as a rule has a narrow specialization. In the result the exchange between the economic entities of such a region is practically of the same intensity as their external economic relations.

The main directions of the economic interaction of the regional economies of Russia and Kazakhstan in many aspects are determined by their specialization. In the goods flow across the cross border regions of two countries a relatively small number of firms predominate which supply their production through transit via the railroad and the supply pipeline. Small and medium sized enterprises have the other position in the market which can become one of the drivers of the cross border cooperation. That's why the development of such enterprises, their problems and needs are seen as one of the specific factors of prerequisites' creation of a functional regional market.

#### II. MATERIALS AND METHODS (MODEL)

The analysis of the mutual trade of cross border regions will allow determining the degree of difference between export and import flows and also the accelerating dynamics of growth rates of imports and exports, identifying the priority focus of foreign trade relations and their peculiarities; drawing a general conclusion about the balanced character of mutual trade [1], [2]. The data for the calculation will be taken over the last 3 years.

The index of goods flow in cross border regions is calculated as the ratio of export growth rates of the Volgograd region into the Republic of Kazakhstan to the growth rates of the imports from the Kazakhstan.



In order to assess the balance of the cross border trade the coefficient of balance is calculated which presents the ratio of the balance of cross border trade with Kazakhstan to the cross border turnover of goods.

The potential of cross border trade and correspondingly the priorities can be determined by means of the index of the ratio of the volume of imports / exports of the i commodity type from the Republic of Kazhakhstan into the Volgograd region to the trade with the countries of the former Soviet Union and beyond.

#### III. RESULTS AND DISCUSSION

A. Mutual trade of the Russian Federation and the Republic of Kazhakhstan

According to the statistical data of the Eurasian Economic Commission [3] the share of mutual trade in the total volume of the foreign trade of the countries of the Eurasian Economic Union in comparison with year 2017 reduced and at the same time the share of mutual trade of the Republic of Kazakhstan reduced by 2,4% and in the Russian Federation in total it decreased by 0,7%.

The proportions of the mutual trade also changed. The contribution of the Republic of Kazakhstan to the mutual trade grew by 0,3% and in the Russian Federation in the whole it increased by 1,4%.

The contribution of the Republic of Kazakhstan to the purchase of goods in the total market (imports) reduced by 0,6%, and for the Russian Federation in total it decreased by 1.5%.

The volume of the export of the Republic of Kazakhstan in the market of the Eurasian Economic Union increased by 12% due to the growth of the supply of mineral products by 16,3% (36,6% of the total volume of the Republic of Kazakhstan in the mutual trade), chemical products by 26,1% (15%), food products and raw materials for agriculture by 8,1% (9%), machines, equipment and vehicles by 35,4% (6,3%).

The export of the Russian Federation to the market of the Eurasian Economic Union grew by 11,5% due to an increase of the mineral resources supply by 15% (37,7% from the total volume of the export of the Russian Federation in the mutual trade), machines, equipment and vehicles by 17,7% (17,8%), metals and their products by 12,6% (12,9%), chemical products by 2,4% (11,4%), food products and raw materials for agriculture by 10,6% (8,4%).

In the mutual trade of the countries members of the Eurasian Economic Union the goods for intermediary consumption predominate (64,1%). Other intermediary goods account for 39,2% of the turnover, energy commodities make up 24,9%, consumer goods account for 24,3% of the mutual export, investment goods account for 9% of the export turnover.

B. SWOT-analysis of trade and economic cooperation of boundary regions of Russia and Kazakhstan

The strengths are in the economic sphere as follows:

- 1. Creation of the Eurasian Economic Union;
- 2. Important transit region for both of the countries;

The strengths in the sphere of human capital are:

- 1. Considerable number of higher educational institutions and scientific and research institutions;
- 2. Relatively young population in cross border regions of Kazakhstan:
- 3. Significant number of the economically active population;
- 4. Common cultural inheritance of the Soviet Union, good knowledge of the Russian Language, absence of communication problems.

The strengths in the geographical and environmental sphere are:

- 1. Geographical position gives the access to the sea, presence of the deposits of mineral resources;
  - 2. Climate favourable for tourism development;
  - 3. Important crossing of transport mains;
- 4. Absence of geographic (natural) barriers for a cross border cooperation.

The strengths in the public sector are as follows:

- 1. Positive experience of cross border cooperation, existence of joint intergovernmental development programs;
- 2. Absence of visas what facilitates the cross border contacts and creates the opportunities for tourism development.

The weaknesses in the economy are as follows:

- 1. Poorly competitive structure of regional economies which is connected with a high share of employment in the extracting industry and agriculture;
- 2. Insufficient level of interregional investment cooperation;
- 3. Absence of safe mechanisms of mutual payments and regulation of economic disputes between the economic entities (without the mechanism of dispute regulation within the WTO).
- 4. Poorly developed transport infrastructure reducing the transport accessibility and connectedness of economic entities of the region;
  - 5. High transport and first of all railroad tariffs;
- 6. Decrease in social and economic development in small and medium cities;
- 7. Insufficiently developed infrastructure in the tourist sector.

The weaknesses in the sphere of human capital are as follows:

- 1. High level of unemployment in some regions (especially in the rural area);
- 2. Ageing and population loss in the largest part of the Russian regions;
- 3. Low professional potential of the workers for the attraction of investments, insufficient number of technical specialists and engineers;
- 4. Outflow or migration of high school students who got high grades for the Common State Examination (Russia) for



the higher education training in Moscow universities and other federal universities after leaving school;

- 5. Reduction of the activity of local people in the solution of regional issues;
  - 6. Low mobility of the population;
  - 7. Insufficient support of socially vulnerable groups.

The weaknesses in geographical and environmental sphere are as follows:

- 1. Relatively long distances between cities, necessity of additional financial resources for the creation and maintenance of the transport infrastructure in the due order;
- 2. Poor ecological situation connected with the wear out of the communal infrastructure (high level of water sources pollution, poor condition of the systems of sewage treatment and so on).

The opportunities in the economy are as follows:

- 1. High integration potential of boundary regions;
- 2. Development of transport infrastructure;
- 3. Development of cross border tourist zones and corresponding infrastructure;
- 4. Support of innovative enterprises (joint initiatives of Rosnano and Kazyna Capital Management);
- 5. Policy harmonization of cross border cooperation within the Eurasian Economic Union;
- 6. Efficiency and transparence growth at the realization of regional projects.

The opportunities in the sphere of human capital are as follows:

- 1. Adaptation of educational programs to the requirements of cross border economy development;
- 2. Assistance in the training for a new profession and development of new educational forms.

The opportunities in the geographical and environmental sphere are presented by the tourism development (including environmental one).

The threats in the economy are as follows:

- 1. Insufficient funds accessible to local authorities for the development of transport infrastructure, education and implementation of other joint projects;
  - 2. Absence of an efficient territorial marketing;
  - 3. Growth of labour migrant number.

The threats in the sphere of human capital are as follows: social tensions, reduction of standard and quality of life of the population.

The characteristics of strengths and weaknesses and also opportunities and threats for the development of cross border regions of Russia and Kazakhstan together with the results of the analysis of trade effects which are presented below gives the opportunity of analyzing the integrated assessment of prospects of the cross border economic development of Russia and Kazakhstan.

C. Analysis of cross border trade of the Volgograd region and the Republic of Kazhakhstan in 2015-2017

The growth rates of goods flows for the mentioned period show the opposite trends.

The index of goods flow in 2016 = 0.70; the index of goods flow in 2017 = 2.17

Thus, in 2016 we observe the import which exceeds the export and in 2017 the situation changes.

The coefficient of balance which takes the values from +1 to -1, goes to the optimality when approaching 0 but at the same time when approaching the limits it speaks about the balance violation, complete one sidedness of cross border trade which is presented mainly by only export and import. In 2015 this coefficient made up 0,38, in 2016 it was 0,22, in 2017 it made up 0,55.

For the analysis of the cross border trade the most tradable goods between the regions under analysis were chosen. The results are presented in Table 1.

TABLE 1.The most tradable commodities (according to the groups of Commodity Nomenclature of the Eurasian Economic Union) in the mutual trade of the Volgograd region and the Republic of Kazakhstan, 2015-2017

NC-	E	T 1.	№	T	T 1.	
№	Export	Trade	Νō	Import	Trade	
	(commodity	volume,		(commodity	volume,	
	group)	thousand		group)	thousand	
		US dollars			US	
					dollars	
2015						
1	Ferrous metals	36418,9	1	Aluminum and	55013,2	
	and products			products made		
	made thereof			thereof (76)		
	(73)					
2	Organic	27744,6	2	Ferrous metals	6801,0	
	chemical			(72)		
	compounds (29)					
3	Tobacco and	24536,0	3	Cotton (52)	6239,5	
	manufactured					
	tobacco (24)					
2016						
1	Fuels, oil and oil	30490,3	1	Aluminum and	67094,9	
	refined products,			products made		
	mineral wax (27)			thereof (76)		
2	Organic	23610,2	2	Cotton (52)	9527,4	
	chemical					
	compounds (29)					
3	Tobacco and	16410,2	3	Inorganic	4929,3	
	manufactured			chemistry		
	tobacco (24)			products;		
				inorganic or		
				organic		
				compounds of		
				precious metals,		
				rare earth		
				metals,		
				radioactive		
				elements or		
				isotopes (28)		
		201	7			
1	Fuels, oil and oil	28558,2	1	Aluminum and	24590,1	
	refined products,			products made		
	mineral wax (27)			thereof (76)		
2	Organic	24848,7	2	Ferrous metals	12407,6	
	chemical			(72)		
	compounds (29)					
3	Ferrous metals	20280,1	3	Cotton (52)	4318,9	
	and products					
	made thereof					
	(73)					



By means of comparison of the data with the foreign trade flows of the Volgograd region we get the most integrated goods in the cross border trade.

TABLE 2. Goods with the highest orientation in the mutual trade of the Volgograd region and the Republic of Kazakhstan in 2015-2017

Export	Value of	Import	Value of the
•	the index	_	index
		2015	
Ferrous metals and	17,98	Aluminum and	49,75
products made		products made	
thereof (73)		thereof (76)	
Organic chemical	41,90	Ferrous metals (72)	3,35
compounds (29)			
Tobacco and	17,16	Cotton (52)	41,63
manufactured			
tobacco (24)			
		2016	
Fuels, oil and oil	6,00	Aluminum and	82,99
refined products,		products made	
mineral wax (27)		thereof (76)	
Organic chemical	47,48	Cotton (52)	51,52
compounds (29)			
Tobacco and	29,34	Inorganic	54,20
manufactured		chemistry	
tobacco (24)		products;	
		inorganic or	
		organic compounds	
		of precious metals,	
		rare earth metals,	
		radioactive	
		elements or	
		isotopes (28)	
		2017	
Fuels, oil and oil	6,00	Aluminum and	57,0
refined products,		products made	
mineral wax (27)		thereof (76)	
Organic chemical	51,0	Ferrous metals (72)	17,0
compounds (29)	,		
Ferrous metals and	8,0	Cotton (52)	47,0
products made	,	` ′	,
thereof (73)			

Thus, the most important trade groups in the export flows from the Volgograd region into the Republic of Kazakhstan are chemicals and the most significant goods in the import are the aluminum and cotton.

## IV. CONCLUSION

For the largest part of boundary territories a relatively low level of the economic development is typical what is explained by the fact that the boundary regions of the USSR were undeveloped as the industrial enterprises were located in the heart of the country due to security considerations. In the result of use of such principles of location and development of production forces the boundary territories are in average less developed and economically more depressive in comparison with similar territories located in the heart of the country. This is an obstacle for entrepreneurship development in a boundary region as they are often depressive regions with a limited transport connection and imperfect infrastructure which cannot contribute to foreign trade and other foreign economic operations including the activity between the boundary regions.

The Volgograd region and the Republic of Kazakhstan have a certain experience of development of cross border economy (positive cross border cooperation, joint programs, considerable number of higher educational institutions and scientific and research institutes; relatively young working population in the bordering regions of Kazakhstan; development of transport infrastructure and so on).

However the existing mutual trade shows the increasing conservation of unbalanced trade, existence of "conservative" or raw material tendencies in the structure of goods flow. It is possible that as a result the potential of the Volgograd region should be considered not as a boundary region but as a cross border region what is confirmed by a satisfactory condition of the transport infrastructure.

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