Frontier and peripherality as factor of socio-economic development of Russian-Belorussian border regions

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Abstract

Russian Federation is one of the countries in the world where concentration of decreasing areas is the highest. Vast majority of such territories is located in the European part of the country. At the same time the state policy in the field of regulation of socio-economic development still has unidirectional character and is expressed only in formation of the stimulating measures adapted for the most perspective areas (large cities, suburb, transport knots, seaside areas). Regions with uncertain prospects receive less not only private investments, but also the state measures for providing normal level of social and economic development. The identification of genetic factors of depression on an example of one of decreasing territories in the European part of the country – Russian-Belorussian borderland – was made in the given work. Quiet negative situation in Russian-Belorussian border region calls into question its future development even under the influence of the integration effect of the union state creation.

The social and economic depression of these areas can be explained by the different reasons. One of the major factor of negative dynamics is population decline. In some areas the economic decrease is connected with closing of city-forming enterprises. Areas near the large cities can apply for positive influence of agglomeration effect (occurrence of the new industrial enterprises, logistical complexes, recreational objects). For the areas which are not possessing resources of growth the most actual are preservation of social guarantees for the population, stimulation of moving of the most active population in other regions, etc. The results of the study proved that the main lines and nodes of the territorial structures of the border areas are at the same time the «corridors» and «centers» of transborder links. In other areas low intensity of communications doesn't allow to gain additional positive social and economic effect.

The development of the differentiated mechanisms of regulation of social and economic development is based in the given work on the statistical analysis of socio-economic indexes and
empirical researches in key areas. The research provides the typology of the border regions between Russia and Belarus (taking into account the influence of frontier and peripherality on socio-economical development and perspectives of transborder cooperation).

Introduction
The studying of border regions have gained special popularity in foreign researches in the 1960-ies, and in Russian and other countries of the former Soviet Union – in the early 1990-ies. From the middle 1990-ies in works of Russian geographers, sociologists, economists, political scientists A. Granberg, V. Kolosov, L. Vardomsky, P. Baklanov, R. Turovsky [1-2, 4-6, 11-12], etc. two basic problems of border regions have been mentioned: 1) phenomenology of «a new border zone» of Russia, revealing its economic, infrastructural, social and other features; 2) typology of new Russian borders on regional or interregional levels (aiming at making forecast of different ways of its development).

As noted above the vast majority of Russia’s border regions have low level of socio-economic development. The frontier phenomenon usually provides additional resources for the development. It is also often associated with the peripherality phenomenon, which is “working” in the opposite direction. So their study should be deeply interconnected and much detailed.

It is not accidentally that as the object of study in this paper the Russian-Belarusian border area is taken. For this region the properties of the frontier and the periphery are immanent.

The main purpose of this research is to identify regularities and features of the influence of frontier and peripherality on the socio-economic development of the border regions of Russia and Belarus.

Statistical databases of the Federal State Statistics Service of Russia, collections of territorial bodies of Russian state statistics in Pskov, Smolensk and Bryansk became an information base of this research. For the cross-border comparisons – the data of the National Statistical Committee of the Republic of Belarus was taken [3, 8-10]. The information database (including expert interviews and sample surveys of the population) of this research was collected by authors themselves during the field study in the cities and regions of the Russian-Belarusian border region, conducted in 2008-2010.

Frontier and peripherality as factors of regional development
Frontier factor should be seen not only in the immediate vicinity of the phenomenon of the border (Figure 1), but also taking into account the position of relevant features and functions of border areas. Peripherality factor may also be considered from two perspectives: as a
condition of development of territories due to their remoteness from the center(-s) and as a special feature due to a specific location.

Under the special properties of the peripheral region we mean:

- In the political sense: the dependence from the center management solutions, low level of political will and liberalization, conservative political views and voting behavior;
- In the demographic sense: low population density, the degradation of the settlement system, the high demographic pressure, a negative migration balance (including, under certain conditions – the outflow of population of working age);
- In the socio-economic sense: a high proportion of primary industries in the economy and, consequently, low income, low level of consumption, the dependence in the technological sense from enterprises located in the center, narrow specialization of local enterprises.

**Figure 1. The influence of frontier factor on regional development**

<table>
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<th>Possible influence of frontier vicinity</th>
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| The morphology and structure of frontier territorial unit | - the presence of functionally oriented objects (such as border crossing checkpoints, placements of frontier troops)  
- "expressions" on the ground of one of the boundaries of the territorial unit, which coincides with the state |
| Settlement system | - concentration of settlements near the border / a relatively small number of settlements near the border *  
- concentration of population in the settlements of the border line / desertification settlements border area * |
| Industry and agriculture | - distribution of enterprises in the frontier zone (presence of production and technology, raw material linkages, exchange of human resources)  
- the presence of joint ventures |
| Tertiary industry | - accommodation service businesses near the border (service population on both sides of the border)  
- speciality service businesses near the border ("division of labor" in the service industry on both sides of the border) |
| Transport | - availability of transport units and their hierarchical status  
- availability of logistics facilities |

* The form displays (one of the two opposite manifestations) is dependent on the function of a part of the boundary, its characteristics.
Genetic peculiarities of Russian-Belorussian border regions

Historical, geographical and settlement features of frontier regions of Russia and Belarus have laid the predominant role of genetic background factor – the peripherality of their socio-economic development. Therefore, peripherality is a negative factor in determining the regional development of the frontier regions of Russia and Belarus, while as frontier location is a factor contributing (mostly potential) regional development.

Historical and geographical peculiarities of the Russian-Belarusian frontier regions, namely the frequent changes of borders and their status, do not allow us to allocate sustainable features of the territorial structure of this regions connected with their frontier allocation. Most of the cities in Pskov, Smolensk and Bryansk regions had defensive functions in the past. The further transformation of these functions was in three ways: "extinction" of the city, in some cases, before the passage through it of the railway in the late XIX – early XXth century, transformation to the center of trade, development of handicrafts and later industry. The modern peripherality of some cities had been inherited from the time as they failure successfully to pass described stage of transformation. Thus, the cities which had fewer benefits of their economic-geographical position (not on navigable rivers, not on the main roads, etc.) left behind in socio-economic development.

Settlement features of Russian-Belarusian frontier regions have the same configuration as the passage of the main transboundary transport routes. The bipolar system of settling in Bryansk and Pskov regions, multipolar system of settlement in Smolensk region, meshwork transport axes of the Pskov region, cruciform structure with a displaced center of Bryansk and Smolensk regions cause the configuration features which form internal and external periphery.

Typology of Russian frontier regions (with Belarus)

Typology is held by the combined effect of two factors – frontier and peripherality, but with their different weight and value in determining the typological groups. Peripherality factor defines many of the negative phenomena and processes observed in cities and regions. Therefore, assessment of the extent of its influence appears the first level of differentiation. The second level – the impact of frontier factor. The methodology for assessing the role of frontier and peripherality factors on regional development is described in one of the authors article [7]. It is important to note the limited forms of influence of frontier factor on socio-economic development of cities and regions and, on the contrary, widespread impact peripherality factor. Frontier factor appears only in the features of settlement systems in some areas, in the completion of a transit function in a number of areas and in a negative way and indirectly - in the impact on demographic characteristics.
Extensive and intensive use of the frontier allocation can be identified among the features of transborder interactions. Most of the contacts are mainly extensive – the principle of "any interaction with any neighbor" (not necessarily in the adjacent state), without the use of gradients in the cross-border provision of raw materials, consumer products, labor, recreational resources, etc. More promising from this point of view are intensive contacts based on the above gradients. Special shades impose on both types of interactions randomness (impermanence), and shady character (especially in the area of small business).

Detailed analysis of the socio-economic indicators (quantitative and qualitative parameters) remained outside of this article. As the result of that analysis became the following typology.

Type 1. City-centers with adaptive use of frontier allocation. To this type we assigned regional centers Pskov, Smolensk and Bryansk. These cities are the administrative, economic, cultural, educational centers in their regions. Therefore, on a regional scale peripherality not affect them. Their socio-economic and political peripherality is expressed only at higher hierarchical levels. In this case the influence of the frontier we called "adaptive". By this we mean that the regional centers naturally are the main agents of frontier contacts with the neighboring country, but the impact of this factor do not have a decisive effect on their socio-economic development.

Type 2. Sub-central cities and districts. This type includes Velikie Luki, Ostrovsky district, Desnogorsk, Dorogobuzhsky, Roslavlsky districts, Klintsy, Starodub, Dyatkovsky, Zhukovsky, Karachevsky and Unechsky districts. Occupying one of the leading places in the regional center-periphery systems, these cities and districts hardly use the relative proximity of the frontier. Demographic, social, economic indicators of these municipalities are among the best in the frontier zone.

Type 3. Sub-central cities and districts, focused on the use of frontier and/or transit allocation. These are Novosokolnichesky, Pechorsky, Pskovsky, Sebezhsky, Vyazemsky, Safonovsky, Yartsevsky, Pochepsky, Vygonichsky districts and the city of Novozybkov. In this group cities and districts with fairly good social and economic indicators are included, where major transport hubs (e.g. Novosokolniki) are planned or already posted large logistics systems (e.g. Vyazemsky district), there are transborder cooperation programs (e.g. within the framework of the Euroregion "Pskov-Livonia" and other programs co-financed by the EU funds).

Type 4. Suburban (allocated near administrative centers) districts. In this group are assigned Velikoluksky, Smolensky, Bryansky, Klintovsky districts, town of Seltso and Fokino. Listed municipalities have a negative impact from the nearness to the economic centers, which divert resources of the economic growth. As a result, these areas are characterized by a number
of adverse socio-economic characteristics: low level of development of the service, distorted 
age structure of the population, etc. Frontier contacts here generally have a random character.

Type 5. Peripheral districts with intensive use of frontier allocation. These are Gdovsky, 
Dedovichsky, Krasnogorodsky, Palkinsky, Pytalovsky, Krasninsky districts. Offsetting the 
negative trends of socio-economic development and "sad leadership" within their areas on a 
number of indicators, these areas tend to active (intense) contacts with the frontier areas of 
neighboring countries. In particular, this is reflected in the design of companies with capital of 
the neighboring state (e.g. the pulp and paper mill with the participation of «Estonian Pulp», 
Dedovichsky district), construction of logistics complex (Krasninsky district), participating in 
the projects of development of transport corridors of international importance (Krasnogorodsky 
district), etc.

Type 6. Peripheral districts with extensive use of frontier allocation and/or regional 
subsidy mechanisms. These include Surazhsky, Staradubsky, Krasnogorsky, Klimovsky, 
Zlynkovsky, Gordeevsky, Shumyachsky, Hislavichsky, Rudnyansky, Monastyrschinsky, 
Ershichsky, Velizhsky, Usvyatsky, Pustoshkovsky, Opochsky, Nevelsky, Kunyansky, 
Novozybkovsky, Kletnyansky districts. This group has got quite a few frontier districts – the 
neighbors of the 1st and 2nd order of Belarus. "Extensive" nature of the use of frontier allocation 
suggests frontier contacts as "survival" – for example, the help of Belarusian agricultural 
machinery in the treatment field, harvesting, raw materials due to the lack of own raw materials 
(for example, the supply of Belarusian milk to the local creamery plants). In some cases, 
peripheral trends in socio-economic development are so deep that support a minimal standard of 
living only with the help of subsidy mechanisms.

Type 7. Semi-peripheral districts without marked influence of frontier allocation. These 
are Sevsky, Trubchevsky, Pogarsky, Komarichsky, Gagarinsky, Dnovsky districts. In this group 
there are districts with relatively good socio-economic environment. The influence of the 
Moscow agglomeration (Gagarinsky district), the proximity of St. Petersburg (Gdovsky district) 
and other factors have a greater impact on regional development than the position in the regional 
center-periphery systems and frontier factor.

Type 8. Inner periphery. This group consists of Navlinsky, Mglinsky, Zhiryatinsky, 
Pochinkovsky, Kardymovsky, Duhovschinsky, Demidovsky, Glinkovsky, Strugo-Krasnensky, 
Pushkinskinogorsky, Porkhovsky, Novorzhevsky, Loknyansky, Bezhanitsky districts. These 
districts are including the "configuration" inner periphery areas located between the poles and 
axes of intraregional development.

Type 9. Outer periphery. These are Suzemsky, Rognedinskay, Dubrovsky, Brasovsky, 
Holmzhirkovsky, Ugransky, Temkinsky, Sychevskiy, Novoduginsky, Elninsky, Plyussky districts.
In contrast to the previous type of districts listed municipalities are geographically located on the outskirts of the area, mainly outside the main lines of development of territorial units and structures. As a rule, they have fewer connections with the centers and sub-centers in their regions than the inner periphery areas.

The last two types are characterized by a minimum level of economic activity, which, along with the features of transport and geographical location, does not allow districts to be influenced by frontier factor.

**Line-nuclear territorial structures – directions of transborder cooperation**

The intensity of transborder linkages are not directly related to the proximity to the frontier, but from the position in the regional system of center-periphery. This thesis can be illustrated by the transborder links in the profile Desnogorsk – Roslavl – Shumyachi – Chaussy - Mogilev. 3.2% of the population surveyed (survey conducted in August 2010) in Mogilev cross the border with Russia more than 20 times per month, the same – once a week, 12.9% – once a month, the same – every six months, more rarely make it 67.7% of the respondents. In Chaussy 3.3% of the population visit Russian settlements once a month, 6.7% – twice a year, 90% - even rarer. The frequency of visits does not increase when approaching the frontier. More opportunities and/or needs to go to Russia still has population of the regional center. For the Russian chain of settlements on the cross section in a trip at least once every six months, up from 76.9 to 93.8% (with an increase in the indicator in the direction of the frontier). The first conclusion is the same as the same for Mogilev and Chaussy. And the second is that only people with higher income from relatively rich Desnogorsk can afford to travel to Belarus - for example, shopping manufactured goods.

Frontier districts may gravitate to the regional center of the neighboring state more than to own under certain conditions – they can be defined as the physical parameters (distance from the center, in km) and due to historical, political conditions or specific functional relationships. In this case, the low intensity bonds do not yield additional positive socio-economic impact, but the functional structure of the bonds shows the potential to increase the intensity. This thesis illustrates the profile Novozybkov – Zlynka – Dobrush – Gomel allocated within the main lines and knots of Bryansk and Gomel regions. On the functional structure and the intensity of transborder relations, allows us to survey data of the population. Respondents were asked, infrastructure of which settlements they use for different purposes (further there were clarification of purposes). Obviously, the higher the hierarchical rank of the settlement, the less people commit these movements. 24.4% of purposes respondents in Novozybkov, 25.6% in Zlynka, 26.5% in Dobrush, 17.5% in Gomel achieved outside of the place of residence. For
Russian settlements namely the Belarusian city is a major or equivalent with another Russian (for Zlynka) direction of travel. To hold similar with Zlynka position in the territorial structure of the Belarusian Dobrush share of trips to the Russian cities, in particular, Novozibkov does not exceed 5%. For trips from Russian cities to the Belarusian in the first place are cultural purposes, medical services, the purchase of food and industrial products.

Conclusions

The presented typology of frontier cities and regions of Russia with Belarus was based on a combined analysis of the frontier and peripherality factors. It can serve as a basis for the development of "frontier"-oriented regional policy. Line-nuclear territorial structures formed in the regions of the Russian-Belarusian frontier areas can serve as "corridors" and "poles" of transborder relations. This approach can increase the effectiveness of regulation and control of transborder cooperation, as well as help to overcome the negative effects of the peripherality.

The intensity of transborder contacts did not correlate with the factor of location (distance from the border). The perception of the frontier phenomenon related to the level of socio-economic development of the frontier areas. At the same time, frontier as a factor of regional development is a significant feature of Russian districts and rural communities, rather than Belarus. The low level of socio-economic development of the district contributes to the perception of transborder relations as the main source of relative economic stability. As the level of socio-economic development becomes higher the frontier phenomena becomes rather taken for granted, and do not benefit or prospect, as it binds and some negative developments in the economy (illegal trade, etc.).

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