

DEMOGRAPHIC TRENDS AND BORDER TRAFFIC AS INDICATORS OF (NON)EXISTING TRANSBORDER REGION IN CROATIAN-HUNGARIAN BORDER AREA

VUK TVRTKO OPAČIĆ

Department of Geography, Faculty of Science, Zagreb
Geografski odsjek, PMF Zagreb

IVANA CRLJENKO

Lexicographic Institute "Miroslav Krleža", Zagreb
Leksikografski zavod "Miroslav Krleža", Zagreb

UDC: 341.222(497.5:439)

314:656(497.5:439)

Original scientific paper

Izvorni znanstveni članak

Primljeno: 2004-05-11

Received:

This paper analyzes passengers' traffic across the border crossings and demographic trends in Croatian-Hungarian border area. The aim of this work is to determine the intensity of transborder relations and processes in neighbouring areas in the period of "loosening" of the Croatian-Hungarian border and their reflection in space. This will be determined through the analysis of the population trends in the last intercensal period (1991-2001 in Croatia, 1990-2001 in Hungary). The assumption is that significant transborder cooperation has not been established yet and that a transborder region has not been formed despite the "loosening" of the border. This statement has been confirmed by comparing demographic trends in the settlements with border crossings, in the settlements along the border, but without border crossings, in the settlements that are within 10 km from the border, but do not have an exit to it and finally, in other settlements of the border area from the Croatian and Hungarian side of the border.

Key words: Croatian-Hungarian border area, border crossings, border traffic, demographic trends, depopulation, transborder region

U radu su analizirani promet putnika preko graničnih prijelaza te demografska kretanja u hrvatsko-mađarskom pograničnom području. Cilj rada je analizom općeg kretanja stanovništva u posljednjem međupopisnom razdoblju (1991.-2001. u Hrvatskoj, 1990.-2001. u Mađarskoj) utvrditi intenzitet transgraničnih odnosa i procesa u susjednim područjima u razdoblju "omekšavanja" hrvatsko-mađarske granice te njihov odraz u geoprostoru. Pretpostavka je da usprkos "omekšavanju" promatrane granice nije došlo do uspostavljanja značajnije transgranične suradnje niti formiranja transgranične regije. Navedena teza potvrđena je komparacijom demografskih kretanja u naseljima s graničnim prijelazima, naseljima uz granicu bez graničnih prijelaza, naseljima koja su udaljena do 10 km od granice, a ne izlaze na nju, i u ostalim naseljima pograničnog područja s hrvatske i mađarske strane granice.

Ključne riječi: hrvatsko-mađarsko pogranično područje, granični prijelazi, granični promet, demografski razvoj, depopulacija, transgranična regija

Introduction

With disappearance of the "iron curtain" and growing tendencies for expanding the European Union to the east, the interstate cooperation between former socialist states and well-developed states of the European Union has constantly been firming in the last fifteen years. Due to the intensification of the above-mentioned cooperation, the border areas have become important bearers of economic development both in the states of the European Union and in former socialist states. In the areas of the closest interstate economic and cultural cooperation there is a tendency for connecting the neighbouring border regions and even for forming transborder regions. Transborder region can be defined as a special form of peripheral region, socially and economically affected by the border, and characterized by a significant level of transborder connections, mutual complementarity and integration (BUFON, 1993).

In the last few years the issue of border areas has become more analyzed in scientific works from various sciences, including geography. A special attention has been given to the analysis of the processes in border areas of the transitional countries and neighbouring border areas in the countries of the European Union, as well as to the border areas between the neighbouring transitional countries. The changes in Polish-German border area, which occurred after 1990s, were analyzed by Grimm (2000), in Czech-German border area by Maier (1993), in Slovenian-Italian border area by Bufon (1996) and in Hungarian border areas by Berenyi (1993) and Hajdú (2004). By analyzing the motives for crossing the border, these works have contributed to comprehension of the intensity of cultural and economic cooperation and understanding the motives of the population for forming institutional type of transborder regions.

Out of all transborder regions in Croatia, the biggest political and geographical interest has been given to Croatian-Slovenian border area and it has been analyzed in the works of some Croatian and Slovenian geographers (CRKVENČIĆ, 1998, CRKVENČIĆ, 2001, BOGNAR, 2001, STIPERSKI, PAVLAKOVIĆ-KOČI, 2001, PAK, 2001, BUFON, 2001a, CRKVENČIĆ, 2002, BARBIČ, 2004, PAVLAKOVICH-KOCHI, STIPERSKI, 2004). A little or almost no attention has been given to the issue of development of the Croatian border areas toward Bosnia and Herzegovina and Serbia and Montenegro. The reason for this primarily lies in the fact that Serbian aggression on Croatia and Bosnia and Herzegovina has disturbed and stopped the spontaneous development of socio-economic processes in the above-mentioned border areas. The exception are articles by Crkvenčić (2004a, 2004b) on changes in ethnic structure of the population in Posavina area, border area between Croatia and Bosnia and Herzegovina and Klemenčić, Schofield (2001) about the evolution of the Croatia-Serbia boundary.

This is why it is surprising that there are few geographic works about the contemporary processes in Croatian-Hungarian border area. The fact that this border also existed during ex-Yugoslavia enables a longer continuous period adequate for the analysis and besides, only a small part of this border area has been affected by the Serbian aggression (Croatian part of Baranja). In this context it is important to mention the work of Hajdú (2004) on changed conditions of transborder cooperation after Croatia gained its independence, then the work of Pepeonik (1985) on transborder traffic between ex-Yugoslavia and Hungary, and finally the work of I. and M. Crkvenčić (2003) on development of settlements and population in Prekodravlje, part of the border area between Croatia and Hungary.

Aim of the work and methodology

Since demographic trends are one of the reliable indicators of development processes in a certain border area, this work analyzes population change in the last intercensal period (1991-2001 in Croatia and 1990-2001 in Hungary). These demographic trends reflect the intensity of processes in the border area, but also the intensity of transborder processes. An important precondition for the occurrence of transborder areas, which at the same time modifies demographic processes in those areas, is the intensity of traffic across the border crossings.

The aim of this work is to analyze how the vicinity of the border influences demographic trends in the settlements of Croatian-Hungarian border area. The assumption is that "loosening" of the border has not led to significant transborder cooperation that would result in more favourable population trends in the settlements that are closer to the border.

The intensity of transborder traffic has been analyzed through the data about the number of passengers travelling in both directions across all road border crossings in chosen years. Only road border crossings were taken into consideration, because the road traffic has a key role in spatial organization of border areas and in forming transborder areas. On the other hand, railway traffic is primarily important for interstate communication between bigger cities, so that it is much less significant for connecting border areas.

In the analysis of demographic trends the authors used population change index between 1991 and 2001 for Croatian settlements and between 1990 and 2001 for Hungarian settlements. Since different methodologies were used in these two censuses in Croatia, the authors compared the total population in 1991 (i.e. together with those who had been working abroad – "foreigners") with total number of inhabitants in 2001 (i.e. the inhabitants actually living in Croatia and those who had been abroad for less than a year).

Spatial frame of this research comprises all former municipalities in Croatia (Čakovec, Koprivnica, Đurđevac, Virovitica, Podravska Slatina, Donji Miholjac, Valpovo, Beli Manastir) and statistical subregions (*kistérség*) in Hungary (Letenye, Nagykanizsa, Csurgó, Barcs, Sellye, Siklós, Mohács) that are located on the border. The analysis also includes the settlements that are not directly on the border, but are located near the border – former municipalities of Ludbreg and Orahovica in Croatia and statistical subregions Pécs, Szigetvár and Nagyatád in Hungary. Similar classification of Croatian part of the border area was made by Šterc (1983). According to Hungarian administrative-territorial division, the territorial unit above the settlement is statistical subregion and in Croatia the corresponding unit is municipality/town. Due to difference in size and number of inhabitants, Hungarian subregion and Croatian municipality/town cannot be compared. Looking further, bigger territorial unit in Hungary is *megye* and in Croatia county, but since the surface of these units exceeds the border area, it was necessary to use the former Croatian municipalities (abolished in 1993) in order to define the border area. Namely, former Croatian municipalities and Hungarian statistical subregions are the only territorial units suitable for comparison based on their surface and number of inhabitants.

The analysis of population trends included all settlements in Croatian-Hungarian border area, which is defined according to the above-mentioned criteria. All settlements on both sides of the border are taken according to territorial division from the beginning

of the last intercensal period (1990 and 1991 respectively)¹. All 599 Croatian border settlements and 379 Hungarian border settlements analyzed in this work have been divided into four groups, considering their distance from the border:

1. settlements on the border crossings²,
2. settlements near the border, but without border crossings,
3. settlements that are within 10 km from the border, but have no exit to the border,
4. other settlements.

The above-mentioned classification was made according to the classification model of border areas applied by HORVAT (1993) in the analysis of Slovenian border area toward Croatia.

Border traffic

Croatian-Hungarian border is 328 km long, which makes 14.9% of all Croatian borders and 15.5% of all Hungarian borders. There are only six road border crossings (Goričan-Letenye, Gola-Berzence, Terezino Polje-Barcs, Donji Miholjac-Drávaszabolcs, Baranjsko Petrovo Selo-Beremend and Duboševica-Udvar) and three railway crossings (Kotoriba-Murakeresztúr, Koprivnica-Gyékényes, Beli Manastir-Magyarbóly) along the border³. The reason for the small number of border crossings is that a larger part of the border is determined by natural characteristics of this area (Drava and Mura River) and only in Baranja and one part of Croatian Prekodravlje the border is artificial.

In 2003 5.1 million passengers passed Croatian-Hungarian border in both directions, which makes only 4.3% of all passengers in Croatia that had crossed the road border crossings toward the neighbouring states (Fig. 1, Fig. 2).

In 2003 the smallest number of passengers was recorded across the border crossings with Hungary and the largest number with Slovenia due to the fact that Slovenia is the main transit country toward Central and Western Europe. Additionally, the level of local cooperation is much higher with Slovenia than with Hungary. Similar situation can be applied to Bosnia and Herzegovina. Namely, Croatia is a transit country for the population of Bosnia and Herzegovina toward the European Union and the level of local transborder cooperation is high. After the political situation had stabilized and the economic relations between the states of Southeastern Europe had improved, the border traffic between Croatia and Serbia and Montenegro intensified, particularly on 10th Pan-European corridor. As a result, in 2003 the traffic across Croatian-Hungarian border decreased.

¹ Due to the change in administrative-territorial division in the last intercensal period, the number of inhabitants in 2001 for the following settlements of Virovitica-Podravina County has been estimated: Ada Lukačka, Brezove Polje Lukačko, Cabuna, Detkovic, Dijelka, Dugo Selo Lukačko, Hadžičevo, Karadorđevo Gradinsko, Majkovic Podravski, Mitrovica Gradinska, Nova Cabuna, Ovčara Suhopoljska, Suhopolje and Žlebina.

² The group "settlements on the border crossings" includes those settlements after which the border crossings are actually named, although those same settlements are not the closest to the crossing (e.g. although the border crossing is named Terezino Polje, the closest settlement to that crossing is Zrinj Lukački).

³ All above-mentioned border crossings are international except Baranjsko Petrovo Selo-Beremend border crossing, which has interstate characteristics. Although there are some other smaller road border crossings, they were not included in this analysis due to their local character.

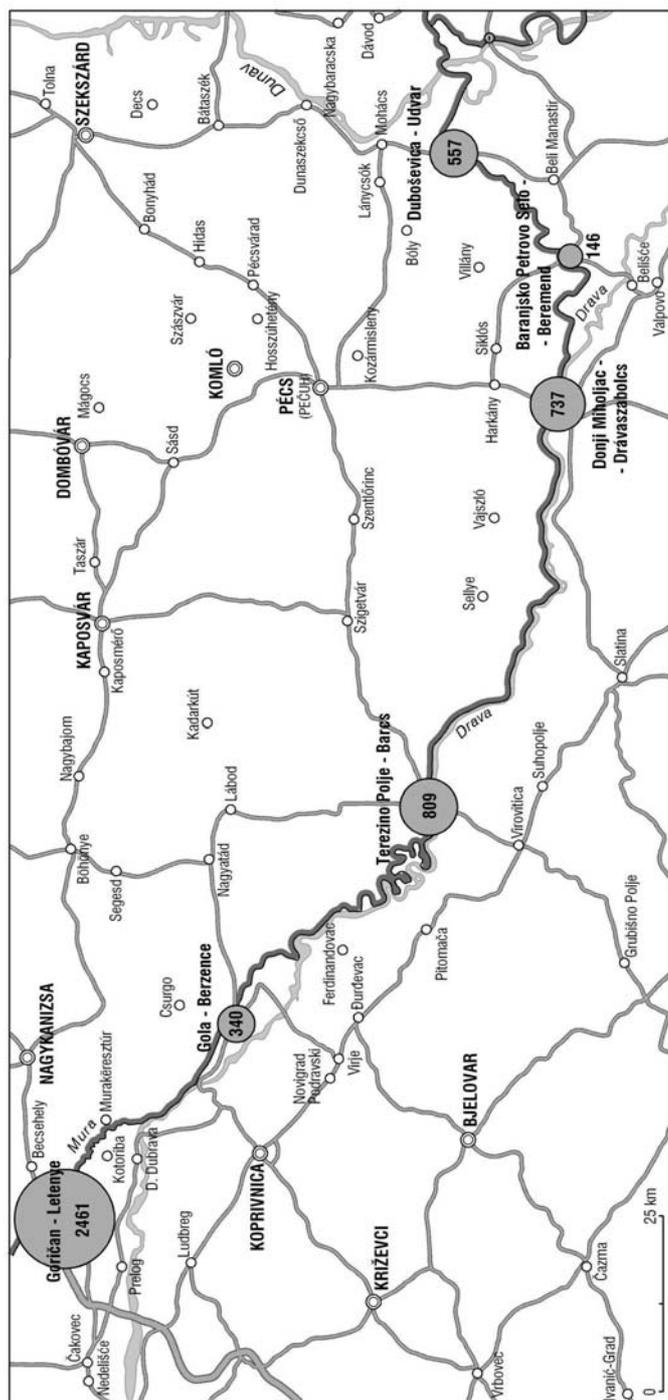


Fig. 1 Number of passengers at Croatian-Hungarian road border crossings in 2003 (in thousands)
 Sl. 1. Broj putnika na hrvatsko-mađarskim cestovnim graničnim prijelazima 2003. godine (u tisućama)
 Source: 9

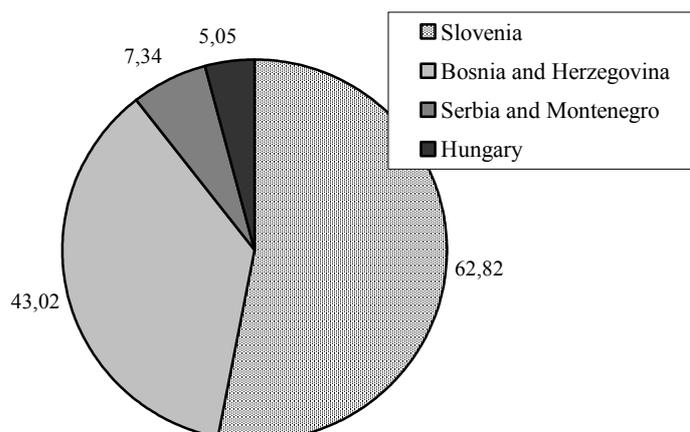


Fig. 2 Number of passengers at Croatian road border crossings toward neighbouring countries in both directions in 2003 (in mil)

Sl. 2. Broj prevezenih putnika na hrvatskim cestovnim graničnim prijelazima prema susjednim državama u oba smjera 2003. (u mil.)

Source: 9

Almost half of the passengers (48.7%) in 2003 were recorded at Goričan-Letenye border crossing, which was to be expected, since this crossing is located on the branch of Pan-European traffic corridor 5b (Rijeka-Zagreb-Budapest highway). The border crossings that follow this one according to the number of passengers are Terezino Polje-Barcs and Donji Miholjac-Drávaszabolcs, because they are located on the state roads Virovitica-Pécs and Našice-Donji Miholjac-Pécs. Although the border crossings in Baranja have recorded notably weaker traffic results from the above-mentioned crossings, they are to be more valorized in the near future due to planned construction of the branch of Pan-European corridor 5c (Ploče-Sarajevo-Osijek-Budapest). There are no significant traffic results across Gola-Berzence border crossing, primarily due to its local character.

In comparison to the period before the fall of the Communist regime, the traffic intensity between Croatia and Hungary increased significantly at the beginning of 1990s. This is obvious from the fact that in 1980 the number of passengers in both directions across both road and railway border crossings between ex-Yugoslavia and Hungary was 7.6 million (PEPEONIK, 1985), while in 1996 the number of passengers only across road border crossings increased by 3 million (10.7 million in total). In the period between 1996 and 2000 the number of passengers stagnated or slightly decreased (10.7 million in 1996, 9.4 million in 2000), but in the last three years this number decreased significantly to only 5.1 million in 2003. (Fig. 3)⁴

⁴ Due to Serbian aggression the border crossings in Baranja (Duboševica-Udvar and Baranjsko Petrovo Selo-Beremend) were reopened only after the peaceful reintegration of the Croatian part of the Danube region in 1997. For this reason only the data since 1998 have been analysed.

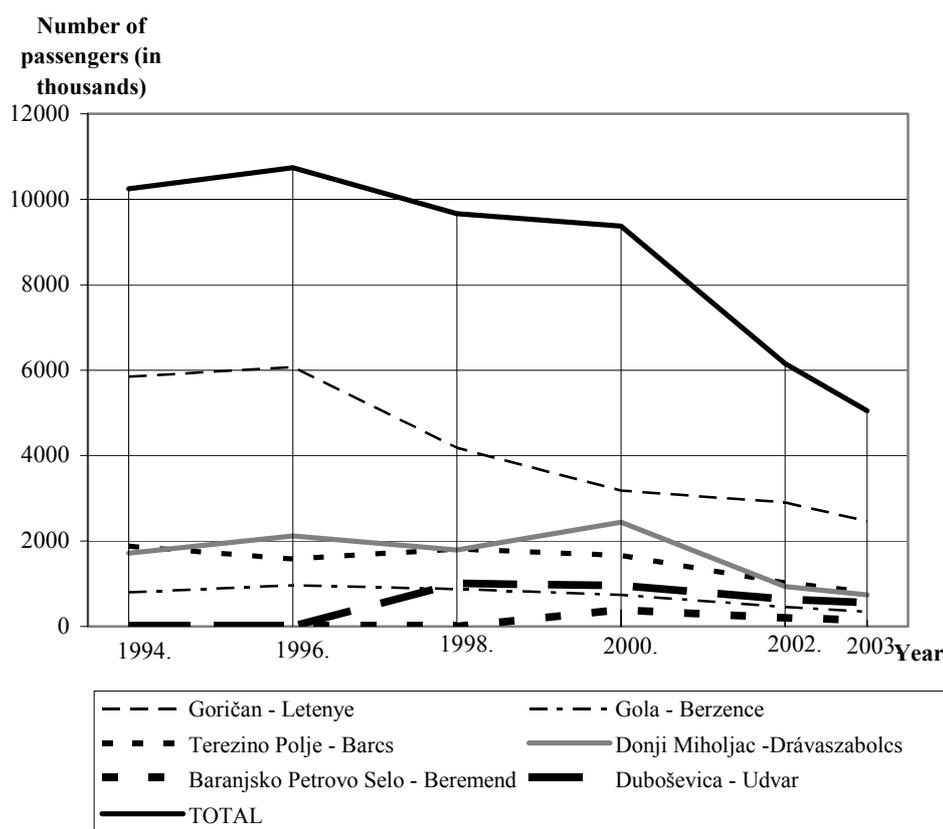


Fig. 3 Number of passengers at Croatian-Hungarian road border crossings in 1994, 1996, 1998, 2000, 2002 and 2003

Sl. 3. Kretanje broja prevezenih putnika na hrvatsko-mađarskim cestovnim graničnim prijelazima 1994., 1996., 1998., 2000., 2002. i 2003. godine

Source: 4, 5, 6, 7, 8, 9

This decrease is clearly the result of reduced interest for one-day shopping trips to Hungary, due to emergence of numerous shopping centers in several Croatian towns.⁵ The emergence of foreign shopping centres and hypermarkets in Croatia occurred about five years later than in Hungary and Slovenia due to war and insecure foreign investments (LUKIĆ, 2004). After that the prices in Croatia, Hungary and Slovenia evened, so the interest of the Croatian citizens for shopping abroad decreased. On the other hand, the interest of the Slovenians and Hungarians for shopping in new shopping centres in Croatia increased. Namely, after Hungary and Slovenia had become part of the

⁵ Today it is almost impossible to find a travel agency in Zagreb that organizes one-day shopping trips to Nagykanizsa.

European Union in 2004 the prices in these countries rose, so Croatia became a popular destination for one-day shopping trips.

The intensity of passenger traffic decreased at all border crossings with Hungary, but the smallest decrease was recorded at Goričan-Letenye border crossing, because this border crossing is on Rijeka-Zagreb-Budapest highway, which absorbs most of the traffic between Croatia and Hungary. The remaining border crossings are of a more local character, so they were more affected by the weakening interest for one-day shopping. The stagnation and decrease of total passenger traffic clearly show that the intensity of transborder processes is not growing, thus influencing demographic development.

Demographic trends in Croatian-Hungarian border area

In the last decade of the 20th century Croatian-Hungarian border area recorded decrease in number of inhabitants. In the last intercensal period the number of inhabitants on Croatian side of the border reduced by 7.7%, while Hungarian side recorded 2.5% decrease. One of the main reasons for stronger depopulation on Croatian side is undoubtedly the size of the settlements. Namely, the average size of the settlements in Hungarian part of the border area is 1362 inhabitants and in Croatian part only 692. This observable reduction in number of inhabitants on Croatian side is not surprising if we bear in mind that the depopulation caused by emigration affects small, rural settlements much stronger than bigger settlements. Besides the size of the settlements, the intensity of depopulation is strongly influenced by spatial distribution and size of the towns. On Hungarian side there are seven towns with more than 10,000 inhabitants (Pécs 162,502 inhabitants, Nagykanizsa 52,102 inhabitants) compared to only four on Croatian side (Koprivnica 24,809 inhabitants, Čakovec 15,790 inhabitants).

In all territorial units analyzed in this work (former municipalities in Croatia and statistical subregions in Hungary), except in Siklós subregion (with 0.2% increase), there were more inhabitants at the beginning of the observed period than at the end (Fig. 4).

In Croatian part, strong depopulation was recorded in former municipality of Beli Manastir (21.4% decrease) and in the middle part of the border area between former municipalities of Đurđevac and Donji Miholjac. Prominent depopulation of Croatian part of Baranja is the result of war activities⁶. Decrease in number of inhabitants in Bilogora and Slavonian part of Podravina region is the result of traditional emigration and reduced birth rate, as well as the departure of Serbs after the establishment of the Republic of Croatia (POKOS, 2001). Not so unfavourable demographic trends were recorded in Međimurje (characterized by traditionally high birth rate and absence of war activities), Ludbreg and Koprivnica (polarizing influence of demographically more vital municipal centres) and in Valpovština (vicinity of Osijek – big centre).

⁶ The latest stage of depopulation in Baranja is distinctively selective considering the pre-war national composition of the population. Namely, from those parts of Croatia that were peacefully reintegrated after the war, a great number of Croats fled because of the Serbian aggression, while most of the Serbs remained living there even after the reintegration (POKOS, 2001).

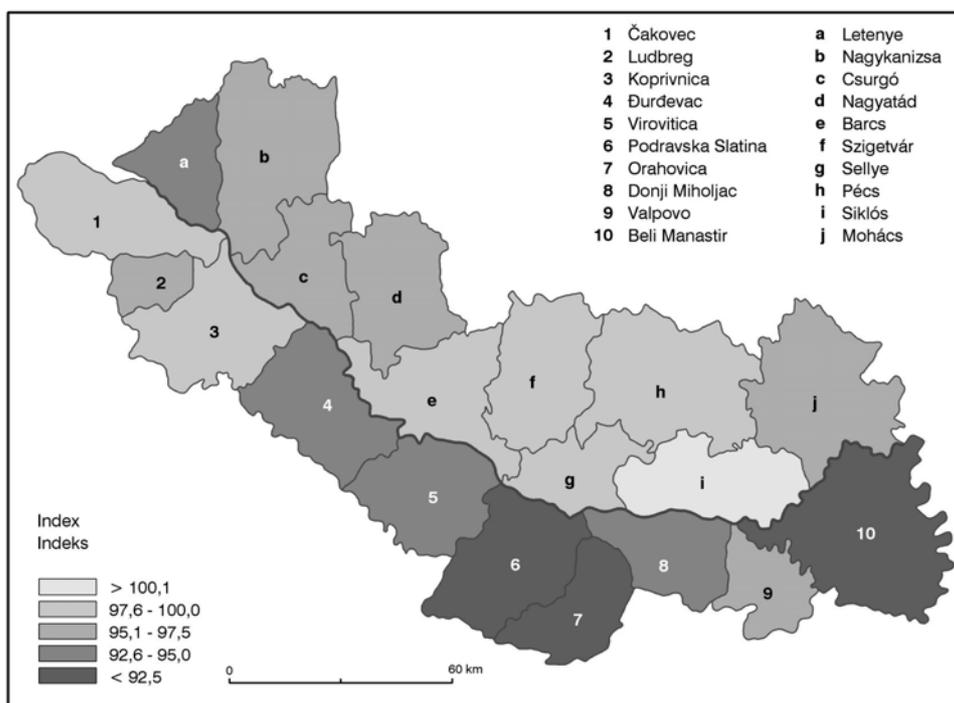


Fig. 4 Change in number of inhabitants in Croatian-Hungarian border area in former municipalities in Croatia from 1991 to 2001 and statistical subregions in Hungary from 1990 to 2001

Sl. 4. Promjena broja stanovnika hrvatsko-mađarskog pograničja po bivšim općinama (Hrvatska) 1991.-2001. i statističkim subregijama (Mađarska) 1990.-2001.

Source: 1, 2, 3

In Hungarian part there are notably smaller differences in the span of population change index. Decrease is noted in the subregions located in northwestern part of the observed area. Although a slight depopulation was recorded in Hungarian part of Baranja, this area still has somewhat more favourable demographic trends (e.g. Siklós recorded 0.2% increase, Szigetvár 0.4% decrease, Sellye 0.8% decrease and Pécs 1.5% decrease). Relatively more stable demographic development of this area can be attributed to stronger and wider influence of the big regional centre (Pécs). In northwestern part of the border area the most unfavourable demographic trends can be explained by a small number of centres that offer working opportunities and the lack of a bigger urban settlement, except Nagykanizsa.

By classifying the settlements in both border areas (see Aim of the work and methodology) it is possible to explore the zonal influence of the border on the settlements considering their distance from the border itself. The results show that both in Croatia and in Hungary the settlements that are closer to the border record a larger decrease in number of inhabitants (Tab. 1, Tab. 2).

Tab. 1 Change in number of inhabitants in Croatian part of border area according to groups of settlements in former municipalities 1991-2001*

Tab. 1. Promjena broja stanovnika hrvatskog dijela pograničja prema skupinama naselja po bivšim općinama 1991.-2001.

Former Municipality	Index 2001/1991				
	Total	BC	WBC	10	OS
Čakovec	98.8	97.7	92.1	96.5	100.9
Ludbreg	97.0	-	-	-	97.0
Koprivnica	97.6	90.3	91.0	93.4	99.1
Đurđevac	93.5	-	92.6	94.1	93.8
Virovitica	93.1	94.4	83.5	93.3	94.8
Podravska Slatina	83.8	-	81.1	82.5	84.5
Orahovica	83.9	-	-	100.7	83.7
Donji Miholjac	93.6	96.3	98.0	89.7	90.2
Valpovo	97.1	-	91.0	95.5	100.2
Beli Manastir	78.6	77.3	72.0	77.9	81.2
TOTAL	92.3	93.8	88.1	91.1	94.8

*BC = settlements on the border crossings; WBC = settlements near the border, but without border crossings; 10 = settlements that are within 10 km from the border, but have no exit to the border; OS = other settlements. Source: 2, 3

Tab. 2 Change in number of inhabitants in Hungarian part of border area according to groups of settlements in statistical subregions 1990-2001*

Tab. 2. Promjena broja stanovnika mađarskog dijela pograničja prema skupinama naselja po statističkim subregijama 1990.-2001.

Statistical Subregion	Index 2001/1990				
	Total	BC	WBC	10	OS
Letenye	93.7	97.5	94.2	92.1	91.9
Nagykanizsa	96.6	-	92.5	100.9	96.5
Csurgó	95.3	99.3	92.3	94.7	97.8
Nagyatád	95.5	-	-	99.7	95.2
Barcs	97.8	99.9	95.3	94.6	94.6
Szigetvár	99.6	-	-	98.2	99.7
Sellye	99.2	-	89.1	100.6	106.4
Pécs	98.5	-	-	-	98.5
Siklós	100.2	101.4	109.2	98.7	99.0
Mohács	95.6	94.4	90.8	95.5	96.4
TOTAL	97.5	99.5	94.9	97.1	97.7

*BC = settlements on the border crossings; WBC = settlements near the border, but without border crossings; 10 = settlements that are within 10 km from the border, but have no exit to the border; OS = other settlements. Source: 1

It is interesting to note that the settlements with border crossings have slightly more favourable demographic trends than other border settlements. This shows a small influence of the border crossings (i.e. border traffic) on the change of the number of inhabitants. In all territorial units analyzed here, the settlements located near the border experienced a decrease in number of inhabitants in the period between the last two censuses, with the exception of the settlements in the statistical subregion Siklós whose slight increase in number of inhabitants can be explained by a pure law of small numbers. Besides poor traffic accessibility, natural characteristics of this area had a very significant impact on demographic development. Agriculturally inadequate zone of low flood plain of the Drava River is a very important limiting factor for the occurrence and demographic development of a greater number of settlements near the river flow. River flow regime, variability of its water level and flow, shape of the riverbed and relief of the hinterland have caused frequent flooding of the adjacent area in the past (ŠTERC, 1983).

A little less unfavourable demographic trends on both sides of the border were recorded in the group of settlements that are within 10 km from the border. A slight increase in number of inhabitants was registered in the municipality of Orahovica and in Nagykanizsa and Sellye subregions, but this fact can also be explained by the law of small numbers.

"The most favourable" demographic trends were recorded in the group of other settlements, which have also been experiencing demographic emptying and in some rare cases a very small increase or stagnation (for example, municipalities of Čakovec and Valpovo or statistical region of Sellye). Longitudinal road Varaždin-Osijek that passes through the contact zone of piedmont and river terrace has a positive influence on demographic development of this group of settlements on Croatian side (FELETAR, 2002). It is important to point out that each of these four groups of settlements on Croatian side recorded a larger decrease in number of inhabitants than the same group on Hungarian side.

Zonal regularity of demographic trends in the groups of settlements classified according to their distance from the border is more emphasized in former municipalities in Croatia than in statistical subregions in Hungary. Only one municipality (Donji Miholjac) does not follow that rule; its settlements show less negative demographic trends than other, farther settlements, due to the location of former municipality centre near the border.

Different effect of the roads on demographic development is clearly visible in the analysis of population change in the settlements located along longitudinal road Varaždin-Koprivnica-Virovitica and transversal road Koprivnica-Gola-Nagyatád (Fig. 5).

The data presented above should be taken conditionally since these settlements are rather small and only one period was taken into consideration. Still, it is obvious that the settlements located along the longitudinal road show slightly more favourable demographic trends than the settlements along the transversal road. Although only demographic indicators were taken into consideration, we can conclude that the main axis of development of Croatian part of border area is situated along the border, and the roads leading to the border are of a secondary importance for demographic and regional development.

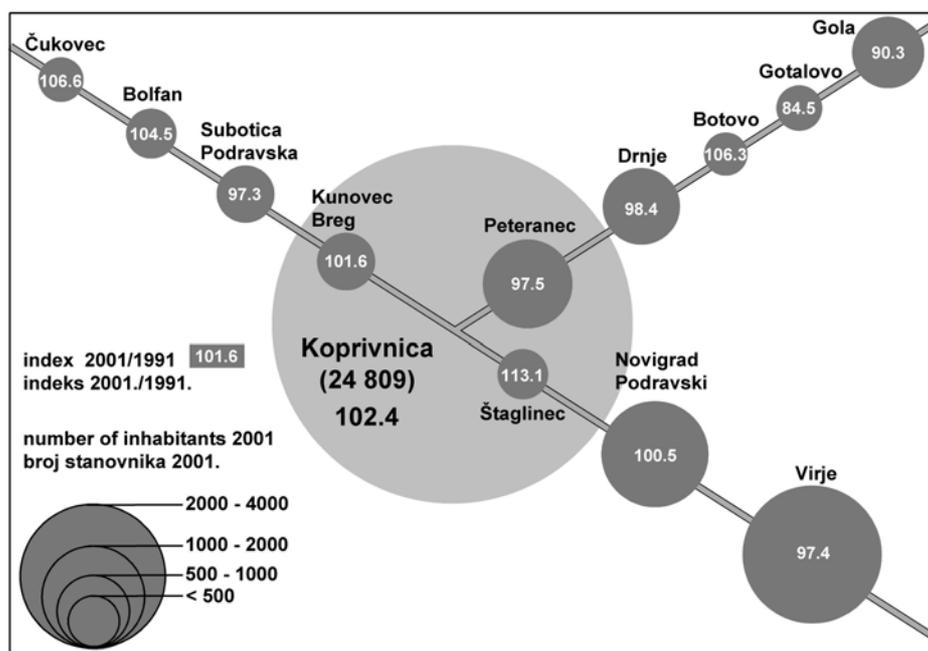


Fig. 5 Population change in the settlements located by the roads Varaždin - Koprivnica - Virovitica and Koprivnica - Gola - Nagyatád from 1991 to 2001

Sl. 5. Promjena broja stanovnika naselja uz ceste Varaždin - Koprivnica - Virovitica i Koprivnica - Gola - Nagyatád 1991.-2001.

Source: 2, 3

The role of Croatian-Hungarian border area in regional development of Croatia and Hungary

In the case of firming transborder cooperation and forming a transborder region, it is essential to apply the model that would be in accordance with structural qualities of transborder regions in Central Europe. This type of region is characterized by a high level of social integration, but at the same time it respects the existing state borders (BUFON, 2001b).

For the purpose of firming transborder cooperation it is very important to synchronize development plans for both border areas. The factor that limits more intensive cooperation on Croatian side is the peripheral location of this area in regional development of the whole border area toward Hungary. Such location is also reflected in depopulation characteristics, especially in rural settlements (underdeveloped agriculture in the period of transition), inadequate traffic connections if compared to more developed regions, and in high unemployment rate in almost whole border area. Additional problems were caused by the war in Croatian part of Baranja and part of Podravina around Virovitica. More developed parts of Croatian border area include Međimurje, parts of Podravina around Ludbreg and Koprivnica and Valpovština.

In regional structure of Hungary, border area toward Croatia is considered as stagnant (NEMES NAGY, 1994). Since border area toward Croatia reveals heterogeneous development, statistical subregions of Pécs and Nagykanizsa belong to prosperous subregions. The other subregions belong to the group of stagnant and critical subregions (HUNGARIAN CENTRAL STATISTICAL OFFICE, 2002). One of the problems that prevents better internal integration of border area toward Croatia is radial, centralized traffic network whose centre is in Budapest (TINER, 1994). The lack of more quality roads that would connect the border area is more emphasized in Hungary than in Croatia.

Although transborder processes have caused a higher concentration of trade and catering establishments in the settlements near the border, it is still not justified to talk about significant transborder cooperation that would form a region. The disjoining factors (such as the lack of traffic and information flows across the border, uncoordinated regional planning, population that is still unused to loose border, language barrier) still prevail over joining factors (similar living standard, positive interstate relations and desire for cooperation) (BUFON, 2001b).⁷

In the future it is possible to expect the increase of transborder cooperation due to Hungarian admittance and Croatian closer orientation toward the European Union. It is certain that the building of modern roads on Pan-European corridors that pass through this area will be in favour of this planned admittance into European associations. Potential intensification of cooperation should also have positive effects on demographic development.

Conclusion

Based on the analysis of traffic flows and demographic trends in the last intercensal period, we can conclude that, for now, a transborder region has not been yet formed along Croatian-Hungarian border. The purpose of this region would be to converge development guidelines of this area and positively influence demographic development. The main reasons for this statement are: weak traffic and information flows across the border, uncoordinated regional planning, population that is still unused to loose border, language barrier, economic crisis in the period of transition, especially in rural areas, which directly reflects itself in demographic development (emigration), direct and indirect negative consequences of the war (in Croatia) – or to put it simply, developmental problems in peripheral areas.

Although "loosing" of the border has intensified traffic flows at the beginning of 1990s, in the last few years there has been a noticeable stagnation and decrease of the intensity of traffic across the road border crossings.

In the last decade of 20th century Croatian-Hungarian border area recorded a decrease in number of inhabitants – Croatian part by 7.7% and Hungarian part by 2.5%. Generally looking, intensity of depopulation on Croatian side increases from northwest toward southeast, while in Hungarian part the situation is reverse.

⁷ According to MAIER (1983): *Grenzen und Raumforschung – eine Problemskizze*, Staatsgrenzen und Einfluss auf Raumstrukturen und Verhaltensmuster, Bayreuth

Comparing population change in the period between the last two censuses in four groups of settlements from Croatian and Hungarian side of the border (settlements with border crossings, settlements near the border but without border crossings, settlements that are within 10 km from the border, but do not have exit to it and other settlements) the authors discovered a zonal pattern of demographic trends of the settlements depending on their distance from the border. In both Croatian and Hungarian part of the border area negative demographic trends increase toward the border. This proves that in the case of Croatian-Hungarian border, the border position is not an advantage, but a handicap, i.e. the guidelines of demographic and economic development are primarily oriented toward mother country.

LITERATURE

- BARBIČ, A. (2004): *Perceptions of new realities along the Slovenian-Croatian border*, Challenged borderlands: transcending political and cultural boundaries (ed. V. Pavlakovich-Kochi, B. J. Morehouse, D. Wastl-Walter), Ashgate, Aldershot, Burlington, 215-235.
- BERENYI, I. (1993): *Entwicklungschancen der Grenzahen Gebiete von Ungarn*, Dela 10, 49-54.
- BOGNAR, A. (2001): *Utjecaj prirodno-geografske osnove na razvoj hrvatsko-slovenske granice*, Dela 16, 61-72.
- BUFON, M. (1993): *Elementi obmejnosti in faktorji oblikovanja prekomejnih območij na primeru Slovenije*, Dela 10, 99-109.
- BUFON, M. (1996): *Social integration in the Italo-Slovene Gorizia transborder region*, Tijdschrift voor Economische en Sociale Geografie 87/3, 247-258.
- BUFON, M. (2001a): *Oblikovanje čezmejnih vezi na tromeji med Slovenijo, Hrvaško in Italijo v Istri*, Dela 16, 39-60.
- BUFON, M. (2001b): *Geografija obmejnosti, čezmejne regije in oblike čezmejne povezanosti*, Geografski vestnik 73/2, 9-24.
- CRKVENČIĆ, I. (1998): *Some geographic features of a Croatian border region along the Croatian-Slovenian border (the Čabranka-Kupa valley)*, Acta Geographica Croatica 33, 73-82.
- CRKVENČIĆ, I. (2001): *Certain socio-geographic characteristics of a Croatian-Slovenian border region (along the Čabranka-Kupa valley)*, Acta Geographica Croatica 35, 97-110.
- CRKVENČIĆ, I. (2002): *Žumberačka gora – transformation from a refuge to an exodus zone*, Migracijske i etničke teme 18/4, 289-306.
- CRKVENČIĆ, I., CRKVENČIĆ, M. (2003): *Prekodravlje-Repaš: development of the settlement and population*, Društvena istraživanja 12/3-4, 445-468.
- CRKVENČIĆ, I. (2004a): *The Posavina border region of Croatia and Bosnia-Herzegovina: development up to 1918 (with special reference to changes in ethnic composition)*, Društvena istraživanja 13/1-2, 293-314.
- CRKVENČIĆ, I. (2004b): *The Posavina border region of Croatia and Bosnia-Herzegovina: development from 1918-1991 (with special reference to changes in ethnic composition)*, Društvena istraživanja 13/3, 579-595.
- FELETAR, D. (2002): *Promjene u prostornom rasporedu naseljenosti Koprivničko-križevačke županije s osobitim osvrtom na razdoblje od 1991. do 2001. godine*, Podravina 1/1, 5-30.
- GRIMM, F. D. (2000): *The German-Polish frontier and the border region on the Oder and Neisse rivers*, Beiträge zur Regionalen Geographie 52, 237-244.
- HAJDÚ, Z. (2004): *Renewal of cross-border cooperation along the Hungarian-Croatian border*, Challenged borderlands: transcending political and cultural boundaries (ed. V. Pavlakovich-Kochi, B. J. Morehouse, D. Wastl-Walter), Ashgate, Aldershot, Burlington, 109-122.
- HORVAT, U. (1993): *Demografska analiza obmejnega območja slovensko-hrvaške meje v SV Sloveniji*, Dela 10, 157-169.

- HUNGARIAN CENTRAL STATISTICAL OFFICE, http://w3.ksh.hu/orszagjaras/angol/kep26_en.gif, Budapest, 9. Oct. 2002.
- KLEMENČIĆ, M., SCHOFIELD C. (2001): *War and Peace on the Danube: The Evolution of the Croatia-Serbia Boundary*, Boundary and Territory Briefing 3/3, International Boundaries Research Unit, University of Durham, Durham.
- LUKIĆ, A. (2004): *Retailing capital and landscape changes in transitional country: an example of Croatia*, International conference "Remapping the southern tier of post-socialist states: politics, economics, environment, identity", Portorož (Slovenija), 8.-11. 6. 2004.
- MAIER, J. (1993): *Auswirkungen der Grenzöffnung 1989 zwischen der Bundesrepublik Deutschland und der Tschechischen Republik (Analyse der zunehmenden Verflechtung zwischen Nordbayern und Westböhmen)*, Dela 10, 33-47.
- NEMES NAGY, J. (1994): *Regional disparities in Hungary during the period of transition to a market economy*, GeoJournal 32/4, 363-368.
- PAK, M. (2001): *Regionalno razvojna problematika območja ob slovensko-hrvaški meji*, Dela 16, 29-38.
- PAVLAKOVICH-KOCHI, V., STIPERSKI, Z. (2004): *The Croatian-Slovenian border: the local experience*, Challenged borderlands: transcending political and cultural boundaries (ed. V. Pavlakovich-Kochi, B. J. Morehouse, D. Wastl-Walter), Ashgate, Aldershot, Burlington, 237-250.
- PEPEONIK, Z. (1985): *Traveler crossing along Yugoslav boundary with special consideration for passes between Yugoslavia and Hungary*, Geographical papers 6, 157-161.
- POKOS, N. (2001): *Međupopisna promjena broja stanovnika Hrvatske 1991.-2001. po gradovima i općinama*, Hrvatski geografski glasnik 63, 67-85.
- STIPERSKI, Z., PAVLAKOVIĆ-KOČI, V. (2001): *Odnosi i veze u prigraničnim područjima na primjeru hrvatsko-slovenske granice*, Dela 16, 119-134.
- ŠTERC, S. (1983): *Prirodno kretanje stanovništva prigraničja SR Hrvatske prema Mađarskoj 1961.-1981. godine*, Geografski glasnik 45, 119-140.
- TINER, T. (1994): *Integration prospects of the Hungarian transport network into the more advanced European networks*, GeoJournal 32/4, 369-371.

SOURCES

- Popis stanovništva 2001., Središnji statistički zavod, Budimpešta, 2001.
- Popis stanovništva, domaćinstava, stanova i poljopoprirednih gospodarstava 31. ožujka 1991., Stanovništvo prema narodnosti po naseljima, Dokumentacija 881, DZS, Zagreb, 1992.
- Popis stanovništva, kućanstava i stanova 31. ožujka 2001., DZS, Zagreb, 2002.
- Promet i veze 1994., Dokumentacija 968, DZS, Zagreb 1996.
- Promet i veze u 1996., Statistička izvješća 1029, DZS, Zagreb, 1997.
- Prijevoz, skladištenje i veze u 1998., Statistička izvješća 1080, DZS, Zagreb, 1999.
- Prijevoz, skladištenje i veze u 2000., Statistička izvješća 1136, DZS, Zagreb, 2002.
- Prijevoz, skladištenje i veze u 2002., Statistička izvješća 1197, DZS, Zagreb, 2003.
- Prijevoz, skladištenje i veze u 2003., Statistička izvješća 1230, DZS, Zagreb, 2004.

SAŽETAK

Vuk Tvrтко Opačić, Ivana Crljenko: Demografska kretanja i granični promet kao indikatori (ne)postojanja transgranične regije u hrvatsko-mađarskom pograničnom području

Zbog intenziviranja međusobne suradnje granična područja kako u državama Europske unije, tako i u nekadašnjim socijalističkim zemljama postaju sve važniji nosioci gospodarskog razvoja. U područjima najtješnje međudržavne gospodarske i kulturne interakcije došlo je do

povezivanja susjednih graničnih regija pa čak i do formiranja transgraničnih regija. Problematika pograničnih područja posljednjih godina postaje sve zastupljenija u znanstvenim radovima mnogih znanosti, pa tako i geografije. Poseban interes usmjeren je na analizu procesa u pograničnim područjima zemalja u tranziciji i susjednim pograničnim područjima u državama Europske unije, kao i između pograničja susjednih tranzicijskih zemalja.

Hrvatsko-mađarska granica dugačka je 328 km, što čini 14,9% ukupne dužine hrvatskih, odnosno 15,5% ukupne dužine mađarskih granica. Budući da su demografska kretanja jedan od pouzdanih indikatora razvojnih procesa u nekom graničnom području, u ovom radu analizirane su promjene u općem kretanju stanovništva u hrvatsko-mađarskom pograničnom prostoru u zadnjem međupopisnom razdoblju (u Hrvatskoj 1991.-2001., u Mađarskoj 1990.-2001.) Važan preduvjet nastanka transgraničnih regija te modifikator demografskih procesa u njima jest i intenzitet prometnih tokova preko graničnih prijelaza.

Duž granice postoji svega šest cestovnih (Goričan – Letenye, Gola – Berzence, Terezino Polje – Barcs, Donji Miholjac – Drávaszabolcs, Baranjsko Petrovo Selo – Beremend i Duboševica – Udvar) i tri željeznička prijelaza (Kotoriba – Murakeresztúr, Koprivnica – Gyékényes, Beli Manastir – Magyarbóly).

Iako su "omekšavanjem" granice ojačali prometni tokovi u usporedbi s razdobljem komunizma, nakon izraženijeg trenda rasta početkom 1990-ih, došlo je do stagnacije i smanjenja intenziteta prometa preko cestovnih graničnih prijelaza u posljednjih nekoliko godina. Navedeno smanjenje moglo bi se objasniti opadanjem interesa za jednodnevne *shopping* izlete u Mađarsku nakon otvaranja brojnih trgovačkih centara i hipermarketa u gradovima s hrvatske strane granice u posljednjih godina. Trend stagnacije ukupnog putničkog prometa jasno pokazuje da ne jača intenzitet transgraničnih procesa, što se izravno odražava u demografskim kretanjima.

U posljednjem desetljeću 20. st. u hrvatsko-mađarskom pograničnom području zabilježeno je smanjenje ukupnog broja stanovnika. U zadnjem međupopisnom razdoblju broj stanovnika s hrvatske strane smanjio se za 7,7%, a s mađarske za 2,5%. Generalno gledajući, intenzitet depopulacije s hrvatske strane raste od sjeverozapada prema jugoistoku, dok je s mađarske strane obratno.

Komparacijom općeg kretanja stanovništva u zadnjem međupopisnom razdoblju u naseljima s graničnim prijelazima, naseljima uz granicu bez graničnih prijelaza, naseljima koja su udaljena do 10 km od granice, a ne izlaze na nju i u ostalim naseljima pograničnog područja s hrvatske i mađarske strane granice uočena je zonalna pravilnost demografskih kretanja skupina naselja s obzirom na udaljenost od granice. I u hrvatskom i u mađarskom dijelu pograničja negativnost demografskih trendova raste s približavanjem granice. To je dokaz da u slučaju hrvatsko-mađarske granice granični položaj ne znači povoljnost, nego hendikep, tj. da su smjernice i demografskog i ekonomskog razvoja ponajprije orijentirane prema matičnim državama.

Na temelju analize prometnih tokova preko hrvatsko-mađarskih cestovnih graničnih prijelaza i demografskih kretanja u posljednjem međupopisnom razdoblju može se zaključiti da duž hrvatsko-mađarske granice za sada nije došlo do formiranja transgranične regije koja bi konvergirala razvojne smjernice navedenog područja te se pozitivno odrazila u demografskom razvoju. Glavni razlozi za navedenu konstataciju su: preslabi prometni i informacijski prekogranični tokovi, neusklađeno prostorno planiranje, navika stanovništva na život u uvjetima zatvorene granice, jezična barijera, kriza gospodarstva u razdoblju tranzicije, posebice ruralnih prostora, što se direktno očitava u demografskom razvoju (emigracija), negativne direktne i indirektno posljedice rata (s hrvatske strane) – ukratko problemi razvoja u uvjetima periferije.

U budućnosti je moguće očekivati porast transgranične suradnje u uvjetima mađarskog ulaska i hrvatskog približavanja Europskoj uniji. Tome će zasigurno pogodovati završetak započete izgradnje suvremenih prometnica na paneuropskim prometnim koridorima u promatranom području. S tim u vezi, potencijalno jačanje suradnje trebalo bi se pozitivno odraziti i na demografski razvoj.