HUNGARIAN INTERNATIONAL MIGRATIONS IN THE CARPATHIAN BASIN, 2011-2017

1. INTRODUCTION

Much more is being said about Hungary's emigrants these days (Blaskó et al. 2016; Siskáné et al, 2017; Egedy, 2017), than there is about the foreigners arriving legally to Hungary, or about Hungarians emigrating from the other countries of the Carpathian Basin. This paper analyses the intersection of the two latter phenomena, focusing on settlers from the Carpathian Basin arriving to Hungary. The study zooming into the present situation of international migration in Hungary, it introduces the foreign population living in Hungary in numbers, as well as the socio-demographic and economic characteristics from the perspective of the source and target territories, revealing the source areas of migration and the impact on the Hungarian population in the Carpathian Basin. The analysis interprets those involved in international migration in broad terms; as such, it is not solely focused on the movements of foreign citizens, but rather examines the effects of migration together with the naturalized Hungarians born abroad.

2. THE FRAMEWORK FOR THE ANALYSIS, THE DATA SOURCES

There are several types of available data sources on foreign nationals, mostly in the shape of administrative records. These are registers created by a given administrative organization to support the implementation of its own statutory administrative tasks (Gárdos et al., 2008). In these cases, statistical and research needs do not primarily determine the concept and the content, the reference time of the data and definitions. Another difficulty is that the content and structure of the register may suffer changes as a result of changes in legislation. All this means that, in some cases, it is difficult to obtain information directly from these data systems to meet statistical needs.

The advantage of census data over administrative data is that everyone can be linked to their habitual place of residence, along with all the variables of the survey. However, this information is not available as often as in administrative records. Surveys were also carried out for Hungarian citizens who habitually live in the national territory, or if they are staying abroad, only temporarily (12 months or less) so; moreover, foreign nationals and stateless persons who stay in the country's territory for a given period of time are also listed. Among the foreign

nationals are not included the members of diplomatic bodies and their family members; members of foreign armed forces, as well as people in the country for the purposes of tourism, business meetings, etc.

In this paper I used these two types of statistical data sources. I worked with the 2011 and 2017 stock data of the Hungarian migration databases as they are relevant to the topic (the Ministry of Interior's Records of Foreign Residents; Censuses). The data underlying the analyses were not directly available, I had to make use of separate classifications for the assessment of territorial impacts. Currently, country classifications are automated in administrative sources, the list of foreign settlements posed a number of challenges: typing errors, instructions, and the city names in different languages made progress difficult¹.

Both data sources contain such information that is missing from the other file (the census contains data related to education and economic activity which are not part of the Ministry of Interior's database; however, the administrative database contains the birth settlements). For this reason, it was necessary to link both files². To this end, we employed a multistage key system using sex, year and month of birth, name of settlement, public domain and house number information. Where necessary, I used a rate estimate.

3. INTERNATIONAL MIGRANTS LIVING IN HUNGARY

a) Quantities and nationalities

The current global migration tendencies have been experienced in Hungary: the foreign population living in the country is composed of people from 175 different countries. The proportion of people coming from Europe is steadily decreasing: while 89% of foreigners arrived from within the continent in 1995, this ratio decreased to 65% by 2017.

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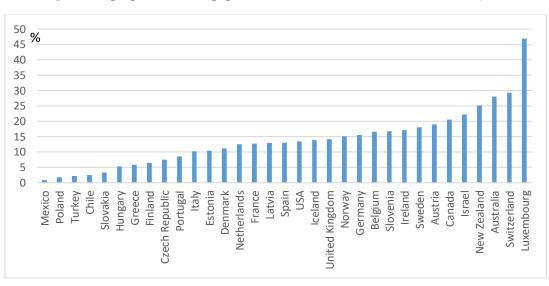
¹ Just a few examples:

⁻ The village of yore of Székelyhidegkút (*Vidacutu Român* in Romanian, *Kaltenbrunnen* in German) is today a village in Romania, in Harghita County. It emerged from the unification of Magyarhidegkút and Oláhhidegkút in 1926. The northern part of the village is Hungarian -, the western part of Oláhhidegkút, currently a part of the Hidegkút settlement. - Hidegkút (*Vidăcut* in Romanian) is a village in the Romanian Harghita County. It belongs administratively to Székelyandrásfalva.

⁻ Horthyvára: Máriamajor (*Cmenaновићево/Stepanovićevo* in Serbian, between 1941 and 1944 Horthyvára; in 1941it was called Bácshadikfalva for a short period), today belongs to the Újvidék township in Serbia, in Vojvodina, in the Southern-Bácska district.

² Marcell Kovács, Director of the Population Census and Demographic Statistics Department, and his experts, Zita Ináncsi and János Novák, provided essential assistance to this work. I sincerely thank them for their support here.

At the same time, Hungary is not considered a typical host country in a global sense (Hatton et al. 2005; Krugman et al. 1996). On the one hand, the volume of migration and its proportion to the resident population is considerably smaller than it is in larger host countries; on the other, the prevailing global trends in migration have only had a minor impact. Hungary (albeit to a decreasing extent) continues to be a target for Europeans, but this rather a feature of short-distance international migration.



1. Figure: The proportion of the population born abroad in individual countries, 2017*

Source: OECD, SOPEMI, 2018; *: For Poland data is only available for the year 2011

Within Europe, the importance of the neighboring countries is tied to cross-border linguistic and cultural relations. Thus, the consequences of the peace treaties that brought an end to World War I and World War II are still decisive in the migration processes of the Carpathian Basin today (Tóth 2005). As such, one can distinguish between two layers of international migration to Hungary: global and Carpathian Basin origin-based movements, each covering migration groups of different characteristics.

Often times, international migrants living in Hungary are examined in simplified terms as foreign citizens residing in Hungary. Nevertheless, the population involved in migration is much larger and its structure much more nuanced.

If we examine the previously population only, we find that the number of foreign nationals in 2011, 143,197, increased by only 5.5% by 2017, when 151,132 foreign nationals lived in Hungary. Thanks to global migration trends, in 2017, for example, more Chinese citizens resided in Budapest than Romanians. However, this data needs further explanation.

When examining the effects and extent of immigration, we must not forget the effects of naturalization: Hungarian citizens who were born abroad but already reside in Hungary. Their number significantly exceeds that of foreign nationals. Together, the two groups mentioned cover the target population to be examined: the population of foreign origin living in Hungary (the group is composed of foreign citizens and Hungarian citizens born abroad). Within this group, the number of foreign citizens is showing steady decrease: from 37% in 2011 to 29% in 2017.

In 2017, the 'population of foreign origin' living in Hungary was already 521,258 (a 33% increase since 2011). Those emigrating Hungarians who returned to live to Hungary (127,000 people) are not included in this figure of the target population. These figures counter the statement that Hungary's international migration balance is negative (Melegh 2015; Juhász et al. 2017).

At the same time, it is important to note that the majority of the naturalized migrants arrive from neighboring countries. In 2011, 288,024 people living in Hungary had arrived from the Carpathian Basin countries. In 2017, their numbers increased by 22% (to 352,506 people, of which 313,000 were Hungarian). Today, the number of people born in Romania living in Hungary is higher than the total population of Debrecen, the second largest settlement in the country. During the period under review the neighboring countries saw a dynamic rise in numbers, the largest share of which was in the case of Ukrainian migrants, at 81%.

1. Table: Hungarian citizens born abroad and foreign nationals by major countries

Country of citizenship/place of birth		2011		2017				
	Foreign citizens	Hungarians born abroad	Total of population of foreign origin	Foreign citizens	Hungarians born abroad	Total population of foreign origin		
Romania	38 574	139 093	177 667	24 040	182387	206 427		
Germany	16 987	7 294	24 281	18 627	16039	34 666		
Slovakia	8 246	25 195	33 441	9 5 1 9	17376	26 895		
Austria	3 936	2 897	6 833	4 021	7102	11 123		
EU28	85 414	183 761	269 175	76 270	248524	324 794		
Ukraine	11 820	23 953	35 773	5 774	59272	65 046		
Serbia	7 752	21 306	29 058	2 312	37497	39 809		
Europe total	112 522	237 785	350 307	99 194	350756	449 950		
China	8852	939	9791	19 111	415	19 526		
Asia total	22 304	4 760	27 064	39 937	6539	46 476		
America total	4 743	3 785	8 528	5 397	9149	14 546		
Africa total	2 853	1 190	4 043	5 985	2398	8 383		
Australia and Oceania	775	360	1 135	619	1284	1 903		
Total	143 197	247 870	391 067	151 132	370 126	521 258		

Source: HCSO

b) Demographic, educational and labor market characteristics

Most studies point out that in Hungary, the foreign population is younger than the autochthon, indigenous population (Gödri 2012); and therefore, migration has a rejuvenating effect. This statement is true of foreign citizens (38.8 years of average age), particularly for women. However, Hungarian nationals born abroad are older (43.9 years old) than local residents (41.7 years). During the years under review, the average age of the foreign-born population decreased significantly (from 47.1 in 2011 to 42.6 years old). Behind this is the gradual loss (caused by death) of the immigrants who arrived after the regime change and who have since grown old. The population not born in Hungary has fewer children, and overall they have a higher proportion of people at an economically active age. This holds particularly true for foreign citizens.

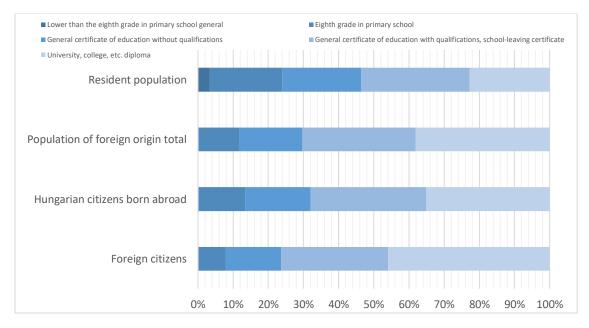


2. Figure: The resident population and the population of foreign origin by age groups, January 1, 2017.

Source: own calculation, based on the database of HCSO

The education levels of the population of foreign origin is higher than that of those born in Hungary: in 2017, the population of foreigners 24 years old and older living in Hungary is almost 46%; more than one third of Hungarian citizens born abroad had a higher education diploma. There are significant differences in education levels, which can be largely traced back to differences in age structure.

3. Figure: Resident and population of foreign origin (25 years and older) by education level, January 1, 2017.



Source: own calculation, based on the database of HCSO

An association can be made between education levels and the high employment rate of international migrants since the change of regime in Hungary. The tendency in recent years has been that the economic activity of the resident population approaches that of the population of foreign origin, their unemployment rate being already more favorable than those of the other two groups examined. Within the group of dependents, one tenth of the population are full-time students, while the rate for international migrants is significantly higher, ranging from 14 to 23%.

2. Table: The distribution of 25–64 year old international migrants and residents by economic activity, 2017

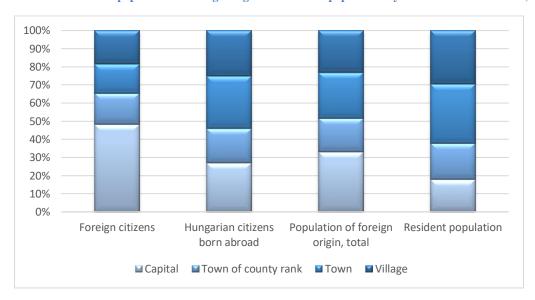
Economic activity	Foreign citizens	Hungarian citizens born abroad	Total of population of foreign origin	Resident population
Employed	81,3	80,2	80,5	75,1
Unemployed	3,8	3,7	3,8	3,5
Total, economically active population	85,1	83,9	84,3	78,6
Economically inactive	7,6	11,0	10,0	17,3
Dependent	7,3	5,1	5,7	4,1
Total, economically inactive population	14,9	16,1	15,7	21,4
Total	100,0	100,0	100,0	100,0

Source: HSCO

c) Territorial characteristics

In the case of internal migration, it is true that social groups with better labor market positions migrate to regions that feature higher economic indicators, better image, and higher positions in the settlement hierarchy (Bálint et al. 2017).

These findings are only partially characteristic of international migration. In addition to income opportunities, a more important role is played by the territorial location of the destinations and the natural environment (Dövényi 2011). Therefore, the spatial distribution of the population of foreign origin is different than the distribution of the Hungarian-born population; thus, their influence is higher in the areas they prefer than in the national context.



4. Figure: Distribution of the population of foreign origin and resident population by current residence status, 2017

Source: own calculation, based on the database of HCSO

Looking through the lens of migration, three regions stand out in which the examined migration groups are present, permanently and generally in a larger numbers and proportion in Hungary: Central Hungary, the areas near the border and the Lake Balaton region.

Budapest and the Pest County attract people from a greater distance, and the majority of non-European foreigners live here. Many of them are employed, younger on average, and have higher education. It is primarily economically active, highly qualified foreign citizens who settle down here. Over the past ten years, Budapest has become a global destination for migration.

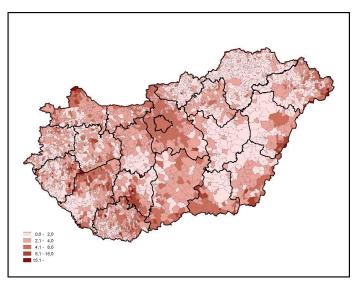
In Hungary, where the majority of foreign citizens still continue to arrive from neighboring countries, the location of the target areas also plays a decisive role in the distribution of the foreign population. Therefore, in making a choice of a new place of residence the *border* regions also play an important role, in addition to the economic centers. In these settlements,

the composition of citizenships is not as diverse; rather, most of the foreigners simply arrive from the other side of the border.

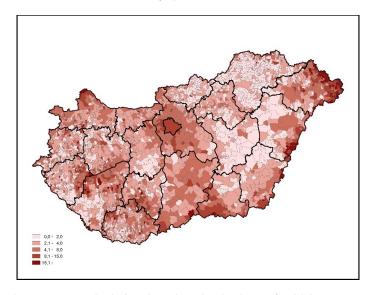
The region of *Lake Balaton* is chosen mainly by German, Austrian, Dutch, and Swiss pensioners; older people usually choose this area because their pensions provide them with higher purchasing power, as well as for the recreational opportunities and the value of a natural environment. In many cases, foreigners come as tourists before migrating (Kincses et al. 2014) and then arrive having already detailed information about the target areas. The volume of elderly migration increased significantly in the period under review.

5. Figure: Proportion of population of foreign origin per 100 inhabitants





2017



Source: own calculation, based on the database of HCSO

4. THE CARPATHIAN BASIN'S TERRITORY SOURCES OF INTERNATIONAL MIGRATION TO HUNGARY

a) Identifying the source territories

Using official statistics, the data links and classifications described in point 2 allow the elimination of this omission to examine the wider migration processes, since the demographic processes are not worth examining only within the current borders of the country. Since the examination of the effects of emigration is not relevant, if someone is a foreigner, or already lives in Hungary as a Hungarian citizen, I deal with the foreign origin population collectively.

The migration processes are examined below according to the original place of birth and the demographic, sociological and labor market variables of the migrants. The territory level of the study is the county (NUTS3). The latter territorial classification is available in most neighboring countries, with the exception of Ukraine, where no such classification exists. The *oblast* level is more integrated, while the *rajon* is more detailed than this (Mezencev 2010). Since within Ukraine Transcarpathia has the most notable role, I used the finest classification.

In 2017, the population of foreign origin from Hungary's neighboring countries living in Hungary was 352,506. Of these, 7,131 were born in Hungary, and 560 of them had never seen daylight in their country of nationality (for example, Romanian citizens born in Germany, or Serbian citizens born in Sweden). Thus, a total of 344,815 people who were born in one of the neighboring countries (regardless of nationality) lived in Hungary in 2017. This represents a 24% increase compared to 2011.

On January 1, 2011, the majority of the population born abroad but now living in Hungary had been born in the counties of Maros³ (27,879 persons), Bihar (27,374 persons), Hargita (26 439 persons), Kolozs (21,667 persons), Szatmár (17,102 persons), in the district of Nyitrai (13,742 persons), Kovászna county (10,821 persons), Beregszász district (9,301 persons), Northern Bácska district (8 877 persons), Ungvári district (7,958 persons) and the Northern Bánság district (7,668 persons). These are the Romanian, Transcarpathian, Vojvodina and Slovak areas where the proportion of Hungarian nationals is high (Kapitány 2015).

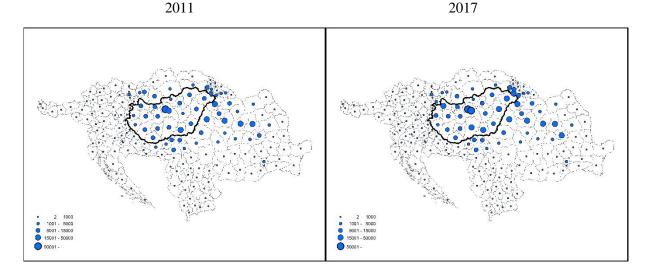
By 2017, only the order of the five major Transylvanian counties had changed (Hargita 35,613, Maros 32,433, Bihar 31,587, Szatmár 20,075, and Kolozs 19,540). The rest of the major source

³ For the purpose of simplicity and coherence in terminology, throughout the paper I refer to geographical locations by their Hungarian names.

areas were Beregszász district (19,429 persons), Kovászna County (17,021), Northern Bácska district (12,769), Ungvári district (12,410), Northern Bánát district (11,687), Nagyszőlős district (11,628) and the Nyitrai region (10,286)⁴.

From the major source regions, the areas where the 'emitting' role was strengthened for the years under review were Transcarpathia (Nagyszőlős district: 259%, Beregszász district: 209%, Munkács subregion: 177%, Huszt district: 159%, Ungvári district: 156%, Técső district: 131%), as well as the Bákó (243%) and Kovászna (157%) counties.

 $6. \ Figure: \ Population \ of foreign \ origin \ from \ the \ neighboring \ countries \ living \ in \ Hungary \ by \ birth \ regions \ ^5$



Source: own calculation, based on the database of HCSO

For the following, more detailed, examinations, I have organised the regions of the surrounding countries into groups. I divided Romania's counties into three parts. The first group is located near the border (essentially Partium and Bánság) counties (Arad, Bihar, Krassó-Szörény, Máramaros, Szilágy, Szatmár, Temes); the second group is composed of the Transylvanian regions (Fehér, Beszterce-Naszód, Brassó, Kolozs, Kovászna, Hargita, Maros, Hunyad, Szeben), and the third is composed of other individual territories.

I have distinguished between three different groups in the case of Ukraine, covering all the Ukrainian settlements in a complete but disjointed mode. In the first class, I categorized the districts near the border: rajons of Beregszász, Munkács, Nagyszőlős and Ungvár. The second

 4 Table 3 of the study contains the number of Hungarians living in the Carpathian Basin by county.

⁵ The map displays the places of birth in the neighboring countries of citizens living in Hungary, while in the Hungarian parts, one can see those who live in a given county but were born in nearby countries (I have used this solution on all the following maps of this paper).

group is the Carpathian mountainous area, the mostly inhabited by Rusyn districts of Lemkó-Nagyberezna and Perecseny, and the region of Bojkó – including the districts of Szolyva, Volóc, Ilosva and Ökörmező –, in addition to the Hucul region – Rahó district – and the Maramures Basin – the Huszt and Técső districts. The third group consists of Ukraine's internal territory, beyond the Carpathian Mountains.

I also divided Serbia into three units. The first category covers Northern Bácska, Northern Bánság and West Bácska, all near the border; the second includes the areas of Southern Bácska, Southern Bánság and Syrmia, while the third group consists of other territories, namely Serbian territories outside of Vojvodina.

I divided the residences in Slovakia into two parts. The first includes the districts near the border (Besztercebánya, Nyitrai, Nagyszombat and Kassa); the second covers the rest of the areas (Eperjes, Pozsony, Trencsén, Zsolna).

I distinguished three categories in Austria. The first is Burgenland, the second covers the regions near the border (Vienna, Lower Austria and Styria), and the third includes the rest of the territory (Tirol, Salzburg, Vorarlberg, Carinthia and Upper Austria). I used two categories for Croatia and Slovenia, respectively. In Croatia, the first group included the border counties (Eszék-Baranya, Kapronca-Körös, Muraköz, Verőce-Drávamente, Vukovár-Szerémség), and the second the rest of the territory. In Slovenia, the first group included the Muramenti County by the border, while the second included the rest of the territory.

b) Demographic, labor market and sociological characteristics of population of foreign origin in relation to birth regions

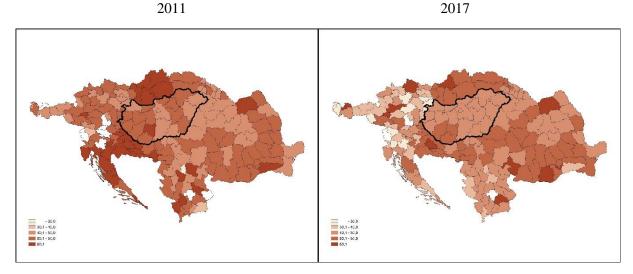
The data for both 2011 and 2017 confirm that the average age of foreign citizens living in Hungary from western Slovakia, southern Serbia, and Romania (not including Transylvania) are among the highest, in many cases well above the 50 years average.

The proportion of people over the age of 65 is highest in those arriving from Slovakia, Romania (not including Transylvania), and the western provinces of Austria. The latter case is due to the higher purchasing power of pensions and the search for a more natural living environment (for example, in Hévíz) (Illés 2008). Behind the other cases is the aging of immigrants, as well as the possibility of higher social and health care in Hungary. Those 65 years or older population arriving from Ukraine is over 8,000. According to Hungarian law, they are eligible to receive their pension according to the Hungarian calculation, which is higher than what they would receive in Ukraine (Gellérné et al. 2005). The highest proportion of young people arrive from

Austria, Ukraine and Slovenia. This is partially explained by education-oriented migration. In the case of Austria, it is important to mention that the statistics are likely to detect the immigration of Hungarian children born abroad whose families had previously emigrated from Hungary, and later returned with their young children.

The proportion of working age people, from 25 to 64 years old, is highest for those arriving from Transcarpathia, Transylvania and Northern Vojvodina. It is generally true that among the migrants born near the border, more tend to be retired or young, while migrants arriving from larger distances are more typically of working age.

7. Figure: Population of foreign origin from the neighboring countries living in Hungary by birth regions and average ages



Source: own calculation, based on the database of HCSO



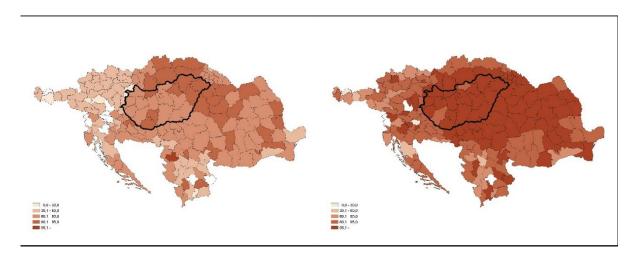


Source: own calculation, based on the database of HCSO

The main feature of international migration to Hungary is that the majority of the immigrating population is either of Hungarian nationality or is a native speaker of Hungarian. In 2011, the proportion of non-Hungarian native speakers from the countries of the Carpathian Basin was 14%; in 2017, this figure was at around 3%. Behind this change may be the assimilation of non-Hungarian ethnic groups (namely, some of those who were already living in Hungary in 2011 did not declare themselves ethnically Hungarian at that time, but did so in 2017). It is possible to identify the demographic processes behind the phenomenon in the period before 1918. The proportion of non-Hungarian native speakers is higher in those arriving from Ukraine (not including the Transcarpathian regions), Northern Slovakia, Serbia (not including Vojvodina), as well as in Austria, Croatia and Slovenia. In the case of Ukraine, the prominent value can be linked to the Russian-Ukrainian conflict that has been protracted since 2014, the economic and social crisis, and uncertainty (Karácsonyi et al., 2014).

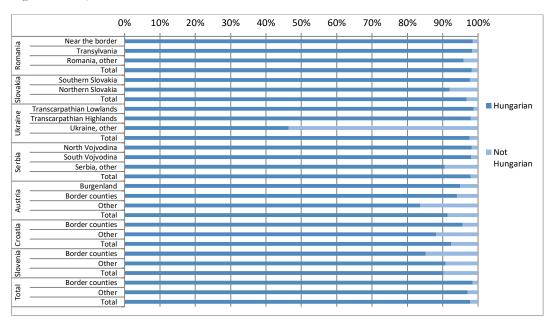
9. Figure: Population of foreign origin from the neighboring countries, living in Hungary, by region of birth and the proportion of Hungarian native speakers

2011 2017



Source: own calculation, based on the database of HCSO

10. Figure: Population of foreign origin from the neighboring countries, living in Hungary, by native language and region of birth, 2017



Source: own calculation, based on the database of HCSO

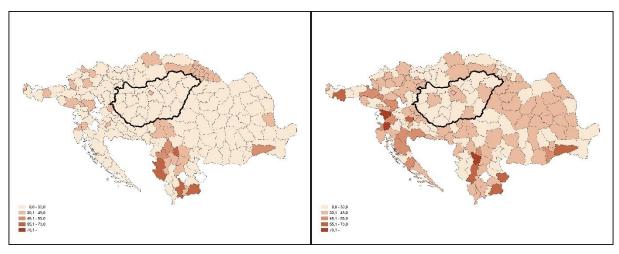
In Hungary, international migrants have, on average, a higher education level than the resident population (Rédei 2007). This is equally true for the citizens of the neighboring countries. In 2011, more than half of the resident population aged 25 or older in Hungary had at least graduated high school; this proportion was 68% for those arriving from the neighboring countries. Educational qualifications are on a constant increase; meanwhile, there are no major territorial differences in the regional distribution of degrees.

Today, it seems that the decades-old rule that the potential impact area of migration increases along with education has been partly overthrown (Rédei 2007). Nowadays, in the case of

longer-distance migration, those with the lowest levels of education participate in a higher proportion compared to their counterparts who migrate from a smaller distance.

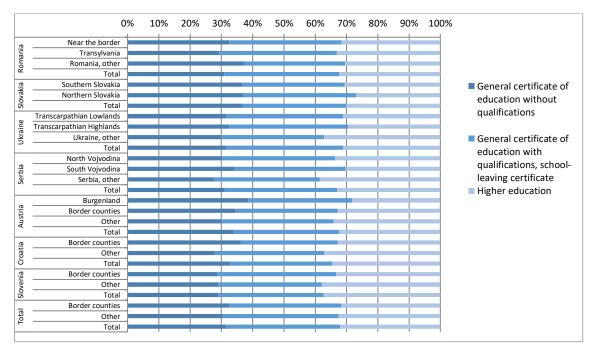
11. Figure: Population of foreign origin from the neighboring countries living in Hungary, of age 25 or older, by higher education and region of birth





Source: own calculation, based on the database of HCSO

12. Figure: Population of foreign origin from the neighboring countries living in Hungary, of age 25 or older, by education level and region of birth, 2017



Source: own calculation, based on the database of HCSO

Educational qualifications also have a decisive impact on labor market characteristics. The employment rate for 25 to 64 year old residents in Hungary born in the neighboring countries

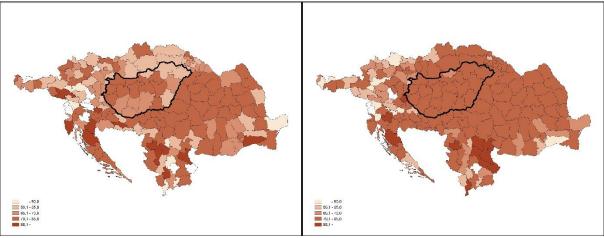
was 79% in 2017. That is to say, the citizens of the neighboring countries work at a higher proportion than the resident population (75.1%).

According to birth regions, the regions with highest employment rates are Serbia and Romania, which are furthest from the border, and the border regions of Croatia and Slovenia. This can be partly attributed to their higher education levels.

The highest inactivity rates are seen in people originating from Austria and Ukraine (not including Transcarpathia). Many from the former group are still students, or they live off their own assets, while in the case of the latter country, many not have been able to enter the labor market force, or perhaps are not legally employed.

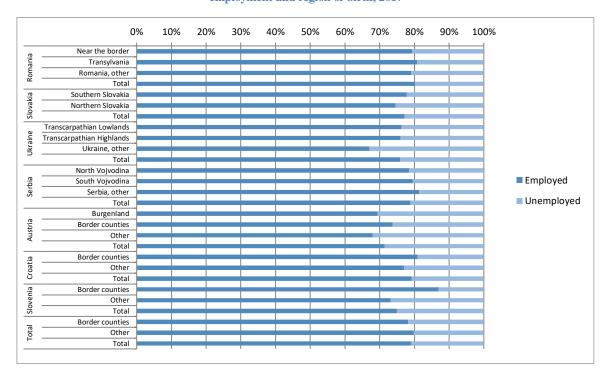
13. Figure: Population of foreign origin from the neighboring countries living in Hungary, aged 25–64 years old, by employment rate and region of birth





Source: own calculation, based on the database of HCSO

14. Figure: Population of foreign origin from the neighboring countries living in Hungary, aged 25-64 years old, by employment and region of birth, 2017



Source: own calculation, based on the database of HCSO

c) The impact of migrations to Hungary on the population numbers of Hungarians in the source areas

The third demographic disaster⁶ was a turning point in the population development of Hungarians in the Carpathian Basin. After the Great War, due to the artificial intervention in the domestic population principles, what had been until the organic processes of population development were halted (Tóth 2018). In fact, the population development of Hungarians in the Carpathian Basin is interrelated; it was a mutually supportive dual process. One element of this process was the continuous population development determined by the fertility of the now ethnically unified Hungarians, and modified by mortality. The other element of the process consisted of members of other populations assimilated to the Hungarians. Within the framework of the "Hungarian Empire", the results of both processes ensured the thriving growth of the

⁶ The first demographic disaster was the Tatar invasion; the second was the Turkish occupation; and the third was the Trianon Peace Treaty, the "Great War"; while the fourth was caused by the loss of World War II. Following the 1956 Revolution there was also a significant loss of population, but it is not measurable as in the four demographic catastrophes above.

Hungarian population beyond the natural rate, which enabled Hungarians to overcome their demographic disasters by 1918.

The role of international migration in population replacement changed after 1918. As a result, the majority of "foreigners" migrating to the country (namely, the migration of Hungarians living in neighboring countries to Hungary) did not increase the number of Hungarians, but only the number of Hungarians living in Hungary (Tóth 2010, 2018).

My aim is to explore how migration into Hungary has and continues to shape the Hungarian ethnic spatial structure, the territorial composition of the Hungarian ethnic population, and its proportions in the Carpathian Basin. On the one hand, on the basis of the 2011 population census, I make an estimate at a regional level for those ethnic proportions, without which, the migrants to Hungary would have been in the neighboring countries in 2011. On the other hand, I calculate how the migration trends between 2011 and 2017 shaped the ethnic structure of Hungarians abroad. I provide an estimate for the changes in the 2017 regional ethnic percentages (assuming the other ethnicities remain unchanged in numbers), which took place solely due to migrations to Hungary.

The analysis does not cover the migration of Hungarians to neighboring countries; it focuses solely on the migration of the population of those with foreign origins. The 2011 census data of the surrounding countries was the starting point for the estimate. No census has been carried out in Ukraine since 2001; therefore, only information from 2001 was available. Instead of all of Ukraine, only Transcarpathia was included in the analysis. The set of questions on ethnicity is not mandatory in the censuses of any of these countries (in Austria and Slovenia no such questions are even asked at all), which makes it difficult to draw an accurate picture of the situation. The territorial distribution of the ethnic Hungarian population of the Carpathian Basin in 2011 – the starting point of my estimates – has been calculated according to the calculations of the literature (Molnár et al. 2005; Kiss et al. 2012; Kapitány 2015; Tóth 2018). I relied on the method by Balázs Kapitány (Kapitány 2015) for the 2011 rates of ethnic minorities. The essence of this method is to adjust the number of people who declare their nationality by classifying non-respondents proportionately in the given area according to the proportion of those declaring their ethnicity. This process refines the underestimation of proportions of Hungarians in the censuses of the neighboring countries, but even then, the results are still lagging behind the real values of Hungarians abroad.

The usability of the results of the process is also limited by several factors. On the one hand, methodological differences can be observed in the practice of census taking in individual states. On the other, Hungarian censuses may overestimate the proportion of Hungarian ethnic population within the numbers of the population of foreign origins (in Hungary it is perhaps easier for them to declare themselves Hungarian). Thus, in the areas of emigration, it is possible to detect a higher number of Hungarian ethnic emigration than what is actually real. We do not have a precise picture of the assimilation process in Hungary (for example, if someone belonging to the Romanian ethnic group came to Hungary and later became Hungarian).

3. Table: Territorial ethnic proportions and changes in the Carpathian Basin, 2011, 2017

Country, county, district	Population (2011)	Number of Hungarian nationals (2011)	Proportion of Hungarian nationals (2011)	People living in Hungary who were born in the given area, 2011	People living in Hungary who were born in the given area, 2017	Theoretical proportion of Hungarian nationals, 2011*	Territorial differences, 2011 (percentage points)**	Proportion of Hungarian nationals, 2017 (changes due to emigration between 2011 and 2017)	Territorial differences, 2017 (percentage points)***
Romania									
Arad	430 629	39 298	9.1	4680	6028	10.1	1.0	8.8	0.3
Beszterce-Naszód	286 225	15 091	5.3	815	1119	5.5	0.2	5.2	0.1
Bihar	575 398	147 607	25.7	21936	31160	28.4	2.7	24.4	1.3
Brassó	549 217	42 880	7.8	2847	4177	8.3	0.5	7.6	0.2
Fehér	342 376	15 969	4.7	1601	2123	5.1	0.4	4.5	0.2
Hargita	310 867	268 555	86.4	21055	35102	87.3	0.9	85.7	0.7
Hunyad	418 565	16 976	4.1	3283	4411	4.8	0.7	3.8	0.3
Kolozs	691 106	111 420	16.1	17362	19218	18.2	2.1	15.9	0.2
Kovászna	210 177	157 062	74.7	8488	16740	75.7	1.0	73.7	1.0
Krassó-Szörény	295 579	3 297	1.1	275	440	1.2	0.1	1.1	0.0
Máramaros	478 659	34 945	7.3	4199	5276	8.1	0.8	7.1	0.2
Maros	550 846	212 801	38.6	22458	31875	41.0	2.4	37.6	1.0
Szatmár	344 360	121 161	35.2	13922	19790	37.7	2.5	34.1	1.1
Szeben	397 322	11 683	2.9	1374	1643	3.3	0.4	2.9	0.0
Szilágy	224 384	53 011	23.6	5219	8337	25.4	1.8	22.5	1.1
Temes	683 540	38 812	5.7	3387	3806	6.1	0.4	5.6	0.1
Transylvania, Partium, Bánát	6 789 250	1 290 568	19.0	132901	191245	20.6	1.6	18.3	0.7
Romania, other	19 897 257	17 339	0.1	8182	10814	0.1	0.0	0.1	0.0
Romania total	20 121 641	1 307 907	6.5	141083	202059	7.2	0.7	6.2	0.3
				Slovakia					
Besztercebánya	660 563	72 752	11.0	3192	3181	11.4	0.4	11.0	0.0
Eperjes	814 527	695	0.1	259	318	0.1	0.0	0.1	0.0
Kassa	791 723	80 444	10.2	3927	3980	10.6	0.4	10.2	0.0
Nagyszombat	554 741	129 997	23.4	4694	4302	24.1	0.7	23.5	-0.1
Nyitra	689 867	182 386	26.4	11369	10056	27.6	1.2	26.6	-0.2
Pozsony	602 436	25 710	4.3	2860	2861	4.7	0.4	4.3	0.0
Trencsén	594 328	858	0.1	344	310	0.2	0.1	0.2	-0.1
Zsolna	688 851	595	0.1	83	191	0.1	0.0	0.1	0.0
Slovakia total	5 397 036	493 437	9.1	26728	25199	9.6	0.5	9.2	-0.1
Serbia									
Northern Bácska	186906	80242	42.9	6247	12530	44.8	1.9	40.9	2.0
Northern Bánát	147770	72511	49.1	5330	11510	50.8	1.7	46.8	2.3
Southern Bácska	615371	50347	8.2	4086	6222	8.8	0.6	7.9	0.3

Central Bánát	187667	24779	13.2	1144	2027	13.7	0.5	12.8	0.4
Western Bácska	188087	18493	9.8	2076	3313	10.8	1.0	9.2	0.6
Southern Bánát	293730	13882	4.7	494	843	4.9	0.2	4.6	0.1
Szerémség	312278	3987	1.3	43	99	1.3	0.0	1.3	0.0
Vojvodina	1931809	264241	13.7	19420	36544	14.5	0.8	12.9	0.8
Serbia, other	5255053	2763	0.1	495	1513	0.1	0.0	0.0	0.1
Total Serbia	7186862	277004	3.9	19915	38057	4.1	0.2	3.6	0.3
				Transcarpathia					
Beregszász	80616	53948	66.9	6440	19200	69.4	2.5	60.7	6.2
Huszt	128824	5511	4.3	1019	2446	5.0	0.7	3.2	1.1
Ilosva	100905	114	0.1	216	650	0.3	0.2	-0.3	0.4
Munkács	183080	19846	10.8	2630	7199	12.1	1.3	8.6	2.2
Nagyberezna	28211	15	0.1	74	126	0.3	0.2	-0.1	0.2
Nagyszőlős	117957	30874	26.2	3035	11503	28.0	1.8	20.5	5.7
Ökörmező	49890	8	0.0	161	223	0.3	0.3	-0.1	0.1
Perecseny	32026	78	0.2	90	175	0.5	0.3	0.0	0.2
Rahó	90945	2929	3.2	298	653	3.5	0.3	2.8	0.4
Szolyva	54869	383	0.7	167	327	1.0	0.3	0.4	0.3
Técső	171850	4991	2.9	1161	2252	3.6	0.7	2.3	0.6
Ungvár	189967	32794	17.3	5396	12257	19.5	2.2	14.2	3.1
Volóc	25474	25	0.1	88	162	0.4	0.3	-0.2	0.3
Transcarpathia total	1254614	151516	12.1	20775	57173	13.5	1.4	9.4	2.7
				Austria					
Burgenland****	286215	10000	3.5	336	2188	3.6	0.1	2.9	0.6
Austria, other	8349150	7270	0.1	1945	7581	0.1	0.0	0.0	0.1
Austria total	8635365	17270	0.2	2281	9769	0.2	0.0	0.1	0.1
				Croatia					
Northern Baranya	305032	8532	2.8	764	762	3.0	0.2	2.8	0.0
Croatia, other	3879775	5516	0.1	1469	1476	0.2	0.1	0.1	0.0
Croatia, total	4184807	14048	0.3	2233	2238	0.4	0.1	0.3	0.0
				Slovenia					
Mura region	118988	4000	3.4	16	46	3.4	0.0	3.3	0.1
Slovenia, other	1955192	2243	0.1	354	417	0.1	0.0	0.1	0.0
Slovenia total	2074180	6243	0.3	370	463	0.3	0.0	0.3	0.0
				Hungary					
Hungary total	9937628	9741112	98.0	-	-	98.0	-	-	
Carpathian Basin									
Total Carpathian Basin (the former Hungarian Kingdom, without the former Croatian Kingdom)	26 020 572	11 963 406	46.0	200 940	313 157	46.0	-	-	-

- *: The theoretical rates are those ethnic proportions that would be reality in a given place if migration to Hungary were non-existent.
- **: The difference in the proportions without emigration and the actual ethnic situation.
- ***: The differences in ethnic proportions between 2011 (adjusted) and 2017, taking emigration into account.
- ****: The study focuses solely on the migration of the population of foreign origin. It does not cover the migration of Hungarian-born Hungarians migrating to neighboring countries. The figures listed here are the calculations by Kapitány Balázs (2015).

In 2011, 26 million people lived in the Carpathian Basin (in the territory of the historic Hungarian Kingdom, not including the former Croatian Kingdom); among them, 12 million - 46% of the people living here – declared themselves Hungarian. In 2011, 201,000 and in 2017, 313,000 (13% of Hungarians living abroad) individuals of Hungarian ethnicity lived in Hungary, who were born in the other countries of the Carpathian Basin.

If we look at the entirety of the international migration movements in Hungary in what was the country's territory prior to the Treaty of Trianon, we find that about half of the movements would count as internal migration. The consequences of the peace agreements that ended World War I and World War II, and the cross-border linguistic and cultural relations are still dominant in the migration processes of the Carpathian Basin (Tóth 2005). The data confirms that the migration trend taking place before World War I was continued, whereby movements from the periphery to the center of the country were characteristic.

It is important to emphasize that migrations from abroad to Hungary do not change the total number of Hungarians in the Carpathian Basin in the short term. However, they are reduced over the long term due to their significant influence on the ethnic spatial structure: locally, in the areas of emigration, schooling, labor market, cultural and social opportunities decrease together in proportion with the numbers of Hungarians; ethnic relationships may narrow, and with scattering, assimilation may appear in parallel or become accelerated (Kocsis 2002, 2003, 2006, 2015; Kocsis et al., 2015; Tóth 2018).

According to 2011 data, the proportion of Hungarian ethnicity in Transcarpathia decreased mostly due to migration to Hungary (the 12.1% ethnicity proportion would have been 13.5%, had 21,000 people not chosen to leave the region). In Transcarpathia, the rajons of Beregszász and Nagyszőlős were the most affected (the proportion of Hungarian ethnicity was reduced by 2.5 and 1.8 percentage points, respectively).

According to the previous census, without migrations to Hungary, 21% of Transylvania's population would be Hungarian; taking into account migration activities, this rate is 19%. The most affected counties are Bihar (a 2.7 percentage point difference), Szatmár (2.5), Maros (2.4), and Kolozs (2.1). 46% of Transylvania's Hungarians live in these territories.

In Slovakia in 2011, the proportion of Hungarians in the previous census was 9.1%; without emigration, we would have seen a half-percentage point increase bringing the percentage to 9.6%. Here the biggest drop was in the Nyitrai region (by 1.2 percentage points). In 2011, already 11,000 people born there were living in Hungary.

In the cases of Austria, Slovenia and Croatia, there has been no significant change in the ethnic spatial structure linked to the migration of the born-abroad Hungarian population. At the same time, nearly 100,000 Hungarians work for our neighbor in the West, according to Austrian social security data⁷. A minority of this group emigrated from Hungary, while a larger portion were daily commuters. Thus, the overall presence of Hungarian nationals in Austria increased in the period under review.

Examining the period since 2011, it can be concluded that the decline of Transcarpathian Hungarians in the Carpathian Basin as a result of emigration has become the fastest in proportion. In 2017, the proportion of Hungarians is estimated at 9.4%, 2.7 percentage points lower than the previous figure. The proportion of Hungarians in the district stayed barely above 60%, in comparison to 66.9% in 2011, if we assume the numbers of other ethnicities remained unchanged. At the same time, the relatively favorable demographic situation of Hungarians living in Transcarpathia and emigration in general tend to dampen the ethnic structural shift (Karácsonyi et al., 2014).

In Romania, according to estimates for 2017, the proportion of Hungarians decreased to 6.2% from 6.5% in 2011. This process mostly affected Bihar county, where the proportion of Hungarians became 24.4%, while according to the 2011 census, their proportion went over 25.7%.

Due to the steady emigration flow from Northern Bácska and Northern Bánát, the proportion of ethnic Hungarians in Vojvodina may have decreased from 13.7% in 2011 to 12.9% in 2017.

At the same time, the movements of Hungarians from Slovakia into Hungary stopped; instead, return migrants were characteristic of this period. As such, the ethnic structure remained unchanged for 2017. The same holds true to the other analyzed countries that have not been mentioned so far.

5. SUMMARY

International migration into Hungary is markedly differentiated into two levels: the global migration effect, and the processes flowing between Hungary and its neighboring countries, which date back a long time. The main characteristic of international migration in Hungary is that the largest part of the immigrant population is of Hungarian nationality or speaks Hungarian

7 http://www.hauptverband.at/cdscontent/?contentid=10007.754024&viewmode=content

as a native language. The strength of the linguistic and cultural relations extending beyond the border are the outcome of the peace treaties that ended World War I and World War II.

The reproduction of minorities living in the neighboring countries is not just a matter of natural demographic processes. Migration also plays a significant role. Those arriving to Hungary reduce the numbers of the Hungarian population in the place of emigration, where in most cases, regardless of this, population loss takes place due to natural demographic causes. In turn, where the number of Hungarians could grow, migration in those cases removes them, in part. On the other hand, migration, as an age-specific process, influences the socio-economic progresses of the source territories through indirect effects (through dependency rates, mean age, economically active rates, etc.). Migration to Hungary from abroad does not change the total number of Hungarians in the Carpathian Basin in the short term. However, in the long term this number declines, since they have a significant influence on the ethnic spatial structure, and locally, in the regions of emigration, with the number of Hungarians, schooling, labor market, cultural and social opportunities decrease; ethnic relations may narrow, and together with the scattering, assimilation may appear to or even accelerate.

Population movements in the late 1980s and early 1990s made it clear that the demographic processes taking place in the Hungarian linguistic community – despite the fragmentation occurring in 1918, and the nearly 100 year old 'distributed development' – can only fully understood if we examine them together, as a single process. It is important to recognize that demographic processes within and outside of the current border are similar in nature. Therefore, what we see happening in demographic processes in Hungary is only a part of the wider demographic processes of the Hungarian language community, but not the same. The target might not only be stopping the downsizing of the Hungarian population in Hungary, but also in the Carpathian Basin too. The realization of this is not an easy task, as it may not be in line with the national interest of the neighboring countries.

The migration processes described in this study would have a significant impact on the ethnic spatial structure and numbers of Hungarians of the Carpathian Basin, if the numbers of other ethnic groups did not decrease in a similar fashion to the Hungarians. Strengthening the numbers of people staying in their home country, increasing the number of return migrations, and increasing the fertility rates of local Hungarians could all be part a solution to the problem. Thus, it would be a reachable goal to increase the proportion of Hungarians in the Carpathian Basin to over 50% again. Currently, the biggest barrier to this process is the loss of population,

which affects the Hungarian population of the Carpathian Basin due to low fertility and high mortality rates.

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