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MAIN DEMOGRAPHIC CHARACTERISTICS  
OF HUNGARIANS IN SLOVAKIA:  
INSIGHTS FROM THE 2021 CENSUS

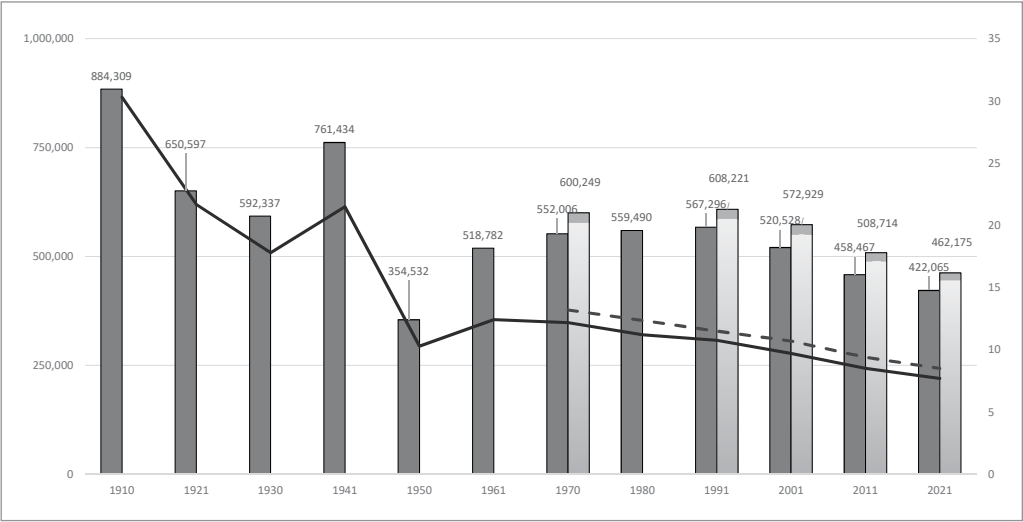
**Abstract:** According to the 2021 Slovak census, the drastic decrease in the number and population proportion of the Hungarians in Slovakia continues. In addition to the natural population decrease and assimilation, their demographic decline is also due to the internal migration of ethnic-Slovaks to their habitat. Given the aging population of Hungarians and their less favorable age structure compared to other ethnic groups, a further decline in both population size and proportion is expected. In Slovakia, a total of 496,000 persons are affiliated with Hungarians in some way, whether as their primary or secondary identity or through their mother tongue. 85% of them are nominally Hungarian and 74% belong to the so-called core group (i.e. Hungarian native speakers without any other ethnic identity). The higher the weighted average of local proportions (WALOP) of Hungarians within a district, the higher the proportion of core groups in the Hungarian-affiliated population, while the relationship is negative for other subgroups. Considering the observation that a higher local proportion of a minority group is favorable for its identity, this means that only the core group serves as an indicator of strong ethnic identity.

## Introduction and Historical Context

The 2021 Slovakian census highlights a continuing trend: the decline in the population size and proportion of Hungarians living in Slovakia, a pattern observed since the political transition of 1989. This study examines the changes in the population size of Hungarians in Slovakia between the last two censuses (in 2011 and 2021) and presents the key demographic characteristics—age structure, marital status, and fertility—based on cross-sectional data from 2021. These characteristics are also compared to the same indicators for the Slovak and Roma ethnic groups. A significant focus of the study is the analysis of subgroups connected to Hungarian identity at various levels, considering different ties to ethnic and linguistic affiliations.

To provide context, the study begins with an overview of the population trends and proportion of Hungarians in Slovakia since the first change in sovereignty (i.e., the establishment of Czechoslovakia). The starting point for this analysis is data recalculated from the 1910 Hungarian census for what is now Slovakia. This was the last census conducted when the region was part of Hungary, where Hungarians were the majority and not yet classified as an ethnic minority.

**Figure 1: Changes in the population size and percentage of Hungarians in Slovakia and in the territory of present-day Slovakia between 1910 and 2021**



Source: Gyurgyik (2001); Bárdi (2008); Statistical Office of the Slovak Republic  
Compiled by the author

Before World War I, nearly 900,000 Hungarians lived in what is now Slovakia, making up about 30% of the population. Today, their numbers have been cut in half, and their proportion in the entire population has fallen to less than 8%. The sharp drop of 26% in population size and an eight percentage point decline in proportion between the 1910 Hungarian and the 1921 Czechoslovak censuses can be attributed to the change in sovereignty. This shift triggered migrations and formal identity changes, compounded by practices such as classifying Hungarian-speaking Jews as a separate ethnic group in Czechoslovak censuses.<sup>1</sup> The relative rise in Hungarian population figures in 1941 resulted from the 1938 Vienna Award, which returned to Hungary the southern strip with a predominantly Hungarian population, reversing the mentioned unfavorable demographic processes.

1 Zsolt Horbulák, Gábor Demeter, “A szlovákiai magyar közösség létszáma és területi mintázata a 2021. évi népszámlálás alapján,” *Területi Statisztika* 63, no. 2 (2023): 233.

The dramatic 53% decrease in population size and 11 percentage point drop in proportion observed in 1950—an even steeper decline than during the interwar period—resulted from a series of oppressive measures imposed by the Czechoslovak state. These included the Beneš Decrees, forced resettlements, and re-Slovakization policies.<sup>2</sup> Following this period, population numbers recovered slightly during the decades of consolidation, but since the regime change in 1989, the trend of demographic decline has returned. According to Gyurgyík, 60% of the population decrease since the transition is due to assimilation, 25% to natural population decline, 10% to individuals concealing their ethnic identity, and 5% to hidden emigration.<sup>3</sup>

In the history of Czechoslovak censuses, 1970 marked the first time that questions about the mother tongue were included, a practice that has been regular since 1991. Notably, the number of Hungarian speakers has consistently exceeded the number of people identifying as Hungarian. This gap is explained by factors such as mixed marriages, the presence of Hungarian-speaking Roma, and, particularly during the communist era, a reluctance to declare ethnic affiliation.<sup>4</sup> Notably, the number of native Hungarian speakers closely aligns with the number of ethnic Hungarians, indicating that both groups follow the same demographic trends. Given this alignment and the relatively small numerical differences, the study focuses exclusively on Hungarian speakers when examining the previously mentioned subgroups. For broader demographic analysis, this distinction is not made.

The map below shows the district-level population proportions of Hungarians and Roma in Slovakia in 2021.<sup>5</sup> As the habitats of the two ethnic groups overlap significantly, Hungarian-affiliated Roma play a perceptible role in shaping the demographic indicators of Hungarians in Slovakia at a regional level.

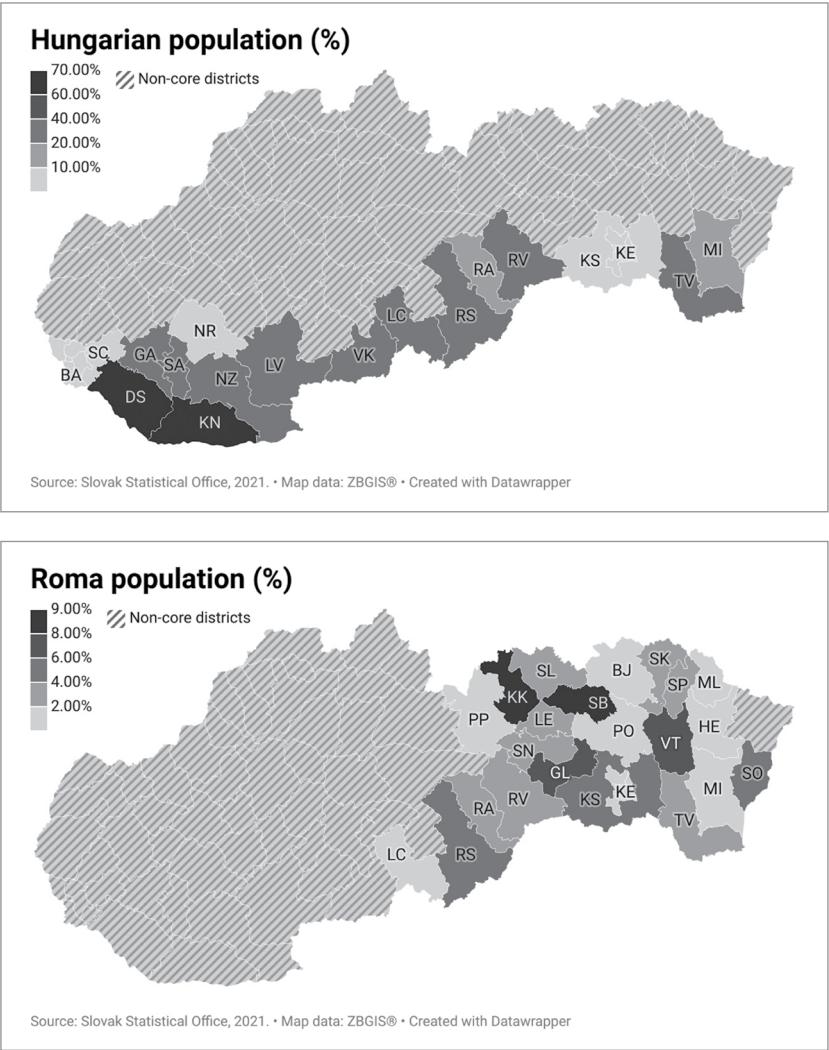
2 László Szarka, “Significance of Czechoslovakian-Hungarian Population Exchange in the History of Intended Elimination of Hungarian Minority in Czechoslovakia,” *Minorities Research* 10 (2008): 51–65.

3 László Gyurgyík, “The demographic trends of the ethnic Hungarian population of Slovakia in light of the 2011 census to the present,” *Minority Studies*, 15 (2013): 53–66.

4 László Gyurgyík, “Quo vadis? A szlovákiai magyarsághoz tartozók (száma) a 2021. évi népszámlálás nemzetiségi és anyanyelvi adatai alapján,” *Fórum Társadalomtudományi Szemle* 24, no. 3 (2022): 3–17.

5 In this study, the names of the settlements and districts are marked in both their official (Slovak-language) and original (Hungarian-language) versions.

**Figures 2–3: District-Level Percentage Proportions of Hungarian and Roma Populations in 2021**



*Source: Statistical Office of the Slovak Republic*

*Abbreviations of cities and districts: BA: Bratislava/Pozsony; BJ: Bardejov/Bártfa; DS: Dunajská Streda / Duna-szerdahely; GA: Galanta/Galánta; GL: Gelnica/Gölnicbánya; HE: Humenné/Homonna; KE: Košice/Kassa; KK: Kežmarok/Késmárk; KN: Komárno/Komárom; KS: Košice-okolie/Kassa-vidék; LE: Levoča/Lőcse; LV: Levice/Léva; LC: Lučenec/Losonc; ML: Medzilaborce/Mezőlaborc; MI: Michalovce/Nagymihály; NR: Nitra/Nyitra; NZ: Nové Zámky / Érsekújvár; PP: Poprad/Poprád; PO: Prešov/Eperjes; RA: Revúca/Nagyőrce; RS: Rimavská Sobota / Rimaszombat; RV: Rožňava/Rozsnyó; SB: Sabinov/Kisszeben; SC: Senec/Szenc; SK: Svidník/Felsővízköz; SL: Stará Ľubovňa / Ólubló; SN: Spišská Nová Ves / Igló; SO: Sobrance/Szobránc; SP: Stropkov/Sztropkó; TV: Trebišov/ Tőketerebes; VK: Veľký Krtíš / Nagykürtös; SA: Šala/Vágsellye; VT: Vranov nad Topľou / Varannó*

*Prepared by Ildikó Nagy  
(Research Institute for Hungarian Communities Abroad).*

Hungarians primarily reside in Southern Slovakia, while the Roma population is concentrated in the eastern regions. Thus, the southeastern region, shaped by the presence of three distinct ethnic groups, has become one of Central Europe's most notable multicultural regions. The Hungarian-populated southern strip, the focus of this study, includes 16 districts and two major cities: Bratislava/Pozsony and Košice/Kassa. Among these districts, only Dunajská Streda / Dunaszerdahely and Komárno/Komárom have a Hungarian majority, largely due to the ethnopolitically motivated north–south administrative boundaries. The 54 districts located north of the Hungarian-inhabited region, where only 1.5% of Slovakia's Hungarian population resides, are collectively referred to as Northern Slovakia in the data presentations, forming a single ethnic region.

We begin by examining the key ethnic changes that occurred between 2011 and 2021. The processes discussed here pertain only to the 422,065 individuals who identified primarily as Hungarian in 2021. Those who reported Hungarian as a secondary ethnic identity or are linked to Hungarian ethnicity only through their mother tongue, will be discussed later. Incidentally, in Slovak statistical reporting, official population figures for ethnic groups are typically defined on primary identity. Most of the statistics presented are based on original calculations drawn from the public online census database of the Statistical Office of the Slovak Republic.

## General Trends Between 2011 and 2021

Beyond the broader factors contributing to the demographic decline of Hungarians in Slovakia since the fall of communism, it is also crucial to consider internal migration patterns that have locally reshaped ethnic proportions. Two significant trends stand out: nationwide migration toward Bratislava/Pozsony and its surrounding areas and suburbanization in the regions around the two largest cities. As a combined result of these two opposing trends, part of the Hungarian-majority region of Žitný ostrov (Csallóköz), located within the broader agglomeration of the capital, has recently experienced significant ethnic transformation.<sup>6</sup> Between 2011 and 2021, the population of Bratislava/Pozsony increased by 16%, the neighboring Senec/Szenc District saw a 46% rise, and the Dunajská Streda / Dunaszerdahely District—which includes the western parts of Žitný ostrov—grew by 7%. Similarly, suburbanization also increased the population of the district around Košice/Kassa by 8%.

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6 Horbulák and Demeter, “A szlovákiai magyar közösség létszáma”; Dániel Balizs, Kitti Somogyi, “Suburbanization in multi-ethnic area – conflicts and local strategies,” *Modern Geográfia* 19, no. 3 (2024): 117–138.

Let us first examine the district-level data for the period between the two most recent censuses. Population change is expressed as a percentage, while the change in population proportion is measured in percentage points and also as a percentage (i.e., the “percentage of a percentage”). This latter metric is particularly useful in highlighting demographic decline in cases of smaller population proportions, as it offers a more precise view of the extent of the loss than percentage points alone.

In addition to the traditional indicators, another is shown in the table below: the weighted average of local proportions (WALOP). This measure combines the settlement proportions of Hungarians at the district level into a single value. The significance of this indicator lies in the assumption that local ethnic proportions play a key role in certain social behaviors and phenomena. For example, the ethnic composition of settlements significantly influences the assimilation of indigenous minorities.<sup>7</sup>

WALOP is calculated as follows:

$$WALOP = \frac{\frac{g_1}{P_1} \cdot g_1 + \frac{g_2}{P_2} \cdot g_2 + \dots + \frac{g_{n-1}}{P_{n-1}} \cdot g_{n-1} + \frac{g_n}{P_n} \cdot g_n}{g_1 + g_2 + \dots + g_{n-1} + g_n} = \frac{\sum_{i=1}^n \frac{g_i^2}{P_i}}{\sum_{i=1}^n g_i}$$

where  $g$  represents the population of the studied ethnic group (here, Hungarians in Slovakia) in a settlement, and  $P$  denotes the total population of the settlement. The weighted local proportion (WLOP) is expressed with the formula  $g^2/P$ . In other words, WALOP gives each member of the ethnic group a score corresponding to the group's proportion in the settlement, and these scores are averaged at the district level.<sup>8</sup>

7 Patrik Tátrai, “Changing ethnic geography and changing assimilation patterns in the Nitra District, Slovakia.” In: *Social Geographical Challenges and Search for Adequate Answers in East-Central Europe of the 21st Century*. Beregszász: Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education, 2016. 236–243.

8 The maximum WALOP value is 1. Achieving this value does not necessarily imply a geographically compact separation but requires the studied group to be completely segregated within a given area, meaning they make up 100% of the population in every settlement they inhabit. The minimum WALOP value equals the group's territorial proportion, achieved in the case of perfect dispersion, where the group represents an equal share of the population in every settlement of the territory. Therefore, the group's WALOP can never be lower than its territorial proportion. Similarly, the local WLOP cannot exceed the population of the settlement but must always be greater than zero.

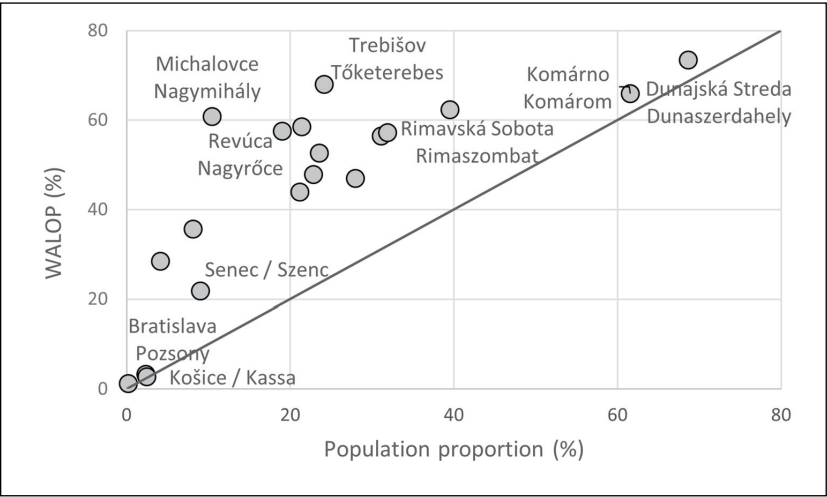
	Population size			Population proportion (%)				WALOP (%)			
	2011	2021	Change %	2011	2021	Change		2011	2021	Change	
						pp.	%			pp.	%
Bratislava/Pozsony	14,119	11,297	-20.0	3.4	2.4	-1.1	-30.8	5.7	3.3	-2.5	-42.8
Senec/Szenc	9,134	8,715	-4.6	13.8	9.0	-4.8	-34.6	41.9	21.8	-20.2	-48.1
Dunajská Sreda / Dunaszerdahely	87,349	85,586	-2.0	75.0	68.7	-6.3	-8.4	84.7	73.4	-11.3	-13.3
Galanta/Galánta	32,793	29,582	-9.8	35.0	31.1	-3.9	-11.2	68.4	56.4	-11.9	-17.4
Komárno/Komárom	66,356	62,166	-6.3	63.8	61.6	-2.2	-3.5	73.5	65.9	-7.6	-10.3
Levice/Léva	28,085	23,372	-16.8	24.3	21.2	-3.2	-13.1	52.9	43.9	-9.0	-17.0
Nitra/Nyitra	9,076	6,798	-25.1	5.7	4.1	-1.6	-27.7	43.4	28.1	-15.2	-35.2
Nové Zámky / Érsekújvár	48,483	44,066	-9.1	33.6	31.9	-1.7	-5.0	66.2	57.2	-9.0	-13.7
Šaľa/Vágsellye	16,717	14,385	-13.9	31.4	27.9	-3.4	-10.9	57.5	46.9	-10.6	-18.4
Lučenec/Losonc	17,338	16,580	-4.4	23.2	23.5	0.4	1.7	55.3	52.6	-2.7	-4.8
Revúca/Nagyrőce	7,738	7,355	-4.9	19.2	19.0	-0.1	-0.7	60.9	57.5	-3.3	-5.5
Rimavská Sobota / Rimaszombat	30,516	31,891	4.5	35.9	39.5	3.6	10.0	65.4	62.3	-3.1	-4.7
Veľký Krtíš / Nagykürtös	10,939	9,004	-17.7	24.0	21.4	-2.6	-10.7	66.9	58.5	-8.4	-12.6
Košice/Kassa	6,382	5,636	-11.7	2.7	2.5	-0.2	-7.3	4.4	2.8	-1.6	-36.2
Košice-okolie / Kassa-vidék	11,845	10,397	-12.2	9.9	8.1	-1.8	-18.5	48.0	35.6	-12.4	-25.9
Michalovce/ Nagymihály	12,122	11,371	-6.2	10.9	10.4	-0.5	-4.6	68.8	60.8	-8.0	-11.6
Rožňava/Rozsnyó	16,103	13,559	-15.8	25.4	22.8	-2.6	-10.1	58.1	47.9	-10.2	-17.6
Trebišov/Töketerbes	28,145	25,034	-11.1	26.5	24.1	-2.4	-9.0	75.0	67.9	-7.1	-9.4
Northern Slovakia	5,227	5,271	0.8	0.2	0.2	0.0	1.4	1.8	1.2	-0.7	-35.6
Slovakia	458,467	422,065	-7.9	8.5	7.7	-0.7	-8.8	64.8	57.4	-7.4	-11.5

*Table 1: Number, percentage, and WALOP of ethnic Hungarians in the districts of Southern Slovakia (2011 and 2021)*

*Source: Statistical Office of the Slovak Republic  
Author's calculations*

The findings suggest that the extent of decline between 2011 and 2021 varies significantly across regions. The highest rates of population loss, ranging between 20% and 28%, occurred in Bratislava/Pozsony and the Nitra/Nyitra District, areas with relatively small Hungarian populations. In contrast, the decline was minimal in the two Hungarian-majority districts, Komárno/Komárom and Dunajská Streda / Dunaszerdahely. Regarding population proportion, the most significant decrease in percentage points was observed in Dunajská Streda / Dunaszerdahely District, while the other metric highlights the substantial loss of the Hungarian population in Bratislava/Pozsony and the Senec/Szenc District, reflecting the demographic pressures faced by ethnic Hungarians in and around the capital. Interestingly, despite the unfavorable ethnic environment, there was a slight increase in the number of Hungarians in Northern Slovakia. Since this occurred alongside a decrease in the number of native Hungarian speakers in the area,<sup>9</sup> it suggests that the phenomenon is likely due to dissimilation rather than internal migration from the Hungarian-inhabited region. Within Southern Slovakia, population growth was only observed in the Rimavská Sobota / Rimaszombat District. The reason for the latter phenomenon is that several Roma individuals living in the area declared themselves Hungarian in the last census.<sup>10</sup> The scatter plot below shows the district-level population proportion and WALOP of Hungarians in Slovakia.

**Figure 4: Population proportion and WALOP (%) of Hungarians in Slovakia by district (2021)**



*Note: The diagonal line shows the solution to the equation  $y=x$ .*  
*Source: Statistical Office of the Slovak Republic*  
*Author's calculations*

<sup>9</sup> Source: Statistical Office of the Slovak Republic.  
<sup>10</sup> For a Hungarian-language report on the topic, see: <https://ma7.sk/aktualis/gorcso-alatt-a-nepszamlalas-roma-eredmenyei>; accessed 30 October, 2024.



Most districts show a significant gap between the axis values, meaning that in many cases, a low district-level proportion of Hungarians is paired with a strong presence in specific settlements. The largest gaps can be observed in the Michalovce/Nagymihály District (population proportion: 10%, WALOP: 61%) and the Trebišov/Tőketerebes District (24% vs. 68%).

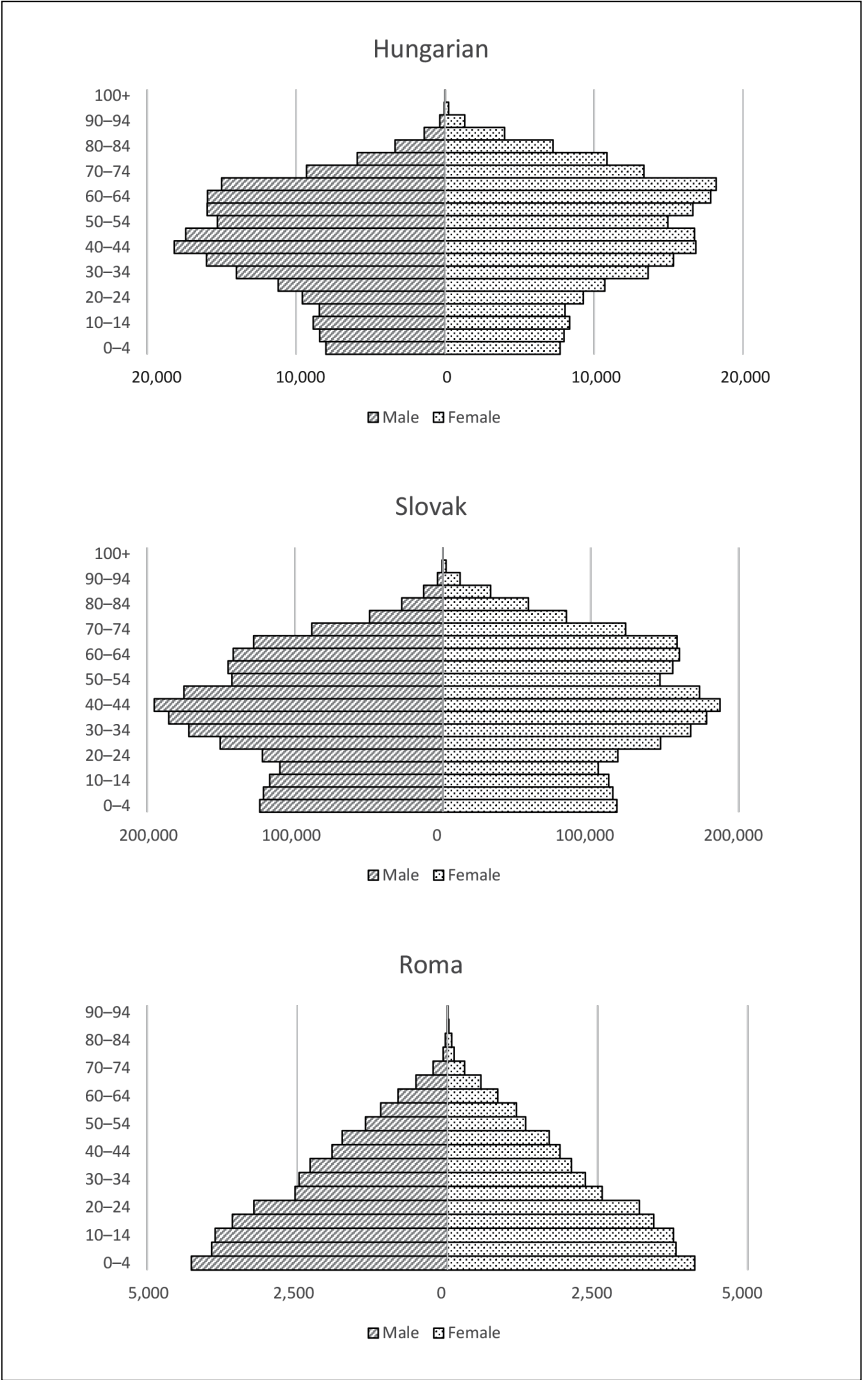
## Age Characteristics

The following section explores the cross-sectional data from 2021, beginning with the age distribution of Hungarians. This will be compared to the age profiles of the two other major ethnic groups in Slovakia—the Slovak majority and the Roma population. A population pyramid, the most effective tool for visualizing such differences, is used for this analysis.

The age pyramid of Hungarians is starting to take on the shape typical of declining populations, resembling a mushroom. The largest age group is between 40 and 70 years old, while younger generations show a sharp and almost continuous decrease in population: the number of births in the past 15 years is only half that of the largest cohorts. Aging is also observed among Slovaks, but moving toward the youngest, the cohort size increases again in the under-20 age groups. The Roma population, however, has a very different age pyramid, showing consistent and steady growth, which promises a long-term shift in the country's ethnic composition in their favor.

Next, we compare the age distribution of ethnic groups at the district level, using dependency ratios that are more suited for large-scale comparisons and include data for both genders. The youth dependency ratio (YDR) shows the ratio of children (0–14 years old) to the working-age population (15–64 years old), while the old-age dependency ratio (ODR) reflects the ratio of people aged 65+ to the working-age population. The first indicator is almost entirely based on the reproduction rate of the population, with mortality having only a minor impact on its value, whereas the second indicator is significantly influenced by elderly mortality.

*Figures 5–7: Age group distribution of Hungarians, Slovaks, and Roma in Slovakia*



Source: Statistical Office of the Slovak Republic  
Compiled by the author

**Table 2: YDR and ODR of Hungarians, Slovaks, and Roma in the districts of Southern Slovakia**

	Youth dependency ratio (%)			Old-age dependency ratio (%)		
	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>
Bratislava/ Pozsony	9.9	23.3	14.4	55.6	29.1	4.6
Senec/ Szenc	13.6	33.9	–	37.9	17.7	–
Dunajská Streda/ Dunaszerdahely	17.5	27.7	39.3	27.1	17.1	8.1
Galanta/ Galánta	15.5	22.5	18.1	31.6	22.8	8.6
Komárno/ Komárom	17.1	19.1	51.6	30.9	25.5	3.0
Levice/ Léva	13.2	20.8	35.8	38.9	25.5	7.1
Nitra/ Nyitra	8.6	21.4	–	48.9	26.6	–
Nové Zámky/ Érsekújvár	14.4	19.8	37.8	35.4	25.8	6.7
Šaľa/ Vágsellye	14.5	21.1	17.4	36.2	22.5	13.4
Lučenec/ Losonc	21.3	21.6	52.8	28.9	25.7	6.9
Revúca/ Nagyőrce	24.1	24.5	31.5	29.2	23.0	6.7
Rimavská Sobota / Rimaszombat	31.5	22.2	42.9	23.5	24.6	7.1
Veľký Krtíš / Nagykürtös	12.9	20.6	30.1	35.0	23.4	8.8
Košice/ Kassa	12.2	20.4	49.4	66.6	28.3	4.0
Košice-okolie/ Kassa-vidék	20.4	28.0	76.6	36.2	19.6	3.0
Michalovce/ Nagymihály	23.5	24.0	45.4	24.6	23.4	5.8
Rožňava/ Rozsnyó	15.2	25.9	53.5	34.6	22.8	5.5
Trebišov/ Töketerebes	19.4	25.4	68.6	26.4	22.3	2.5
<b>Southern Slovakia</b>	<b>17.6</b>	<b>23.3</b>	<b>53.8</b>	<b>31.9</b>	<b>25.3</b>	<b>5.0</b>

*Note: For districts where the percentage base (here: the population of the 15–64 age group within the given ethnic group) did not reach 100, the rate values are not provided.*

*Source: Statistical Office of the Slovak Republic*

*Author's calculations*

The data reinforce the observations about the age pyramids, particularly emphasizing the stark differences in age structure between Hungarians and Roma. The interethnic differences in the YDR—for example, in Southern Slovakia 18% versus 54%; in the Trebišov/Tôketerebes District 19% versus 69%; and in the Košice-okolie/Kassa-vidék District 20% versus 77%—suggest that the Roma population is not only on track to become the second-largest ethnic group but also likely to drive a significant shift in the balance between Roma and non-Roma segments within Slovakia's Hungarian population, favoring the Roma. Additionally, the low ODR among the Roma stands out, likely attributable to their distinct age structure and higher-than-average mortality rates.<sup>11</sup>

At the district level, the YDR for both Hungarians and Slovaks is highest in eastern districts with a significant Roma presence. This trend may reflect either an adaptation by these ethnic groups to the demographic behavior patterns of the Roma and/or a less visible presence of Roma. Such a hidden presence could appear in census data through secondary Roma identities or the use of Romani as a mother tongue but could also remain entirely unrecorded.

The outstanding YDR value for the Slovak population in the Senec/Szenc and Dunajská Streda / Dunaszerdahely districts is noteworthy. This is likely linked to the strong suburbanization trends in these areas and the young age composition of those involved in the suburbanization process. Supporting this interpretation is the observation that the YDR advantage of Slovaks compared to Hungarians decreases progressively with greater distance from the capital (Senec/Szenc District: 20 pp.; Dunajská Streda / Dunaszerdahely District: 10 pp.; Komárno/Komárom District: 2 pp.). A similar suburbanization dynamic likely contributes to the elevated YDR among Slovaks in the Košice-okolie/Kassa-vidék District, alongside the interethnic effects observed in the eastern districts. In the Hungarian context, it is important to highlight the significant aging of populations in the two major cities and the Nitra/Nyitra District.

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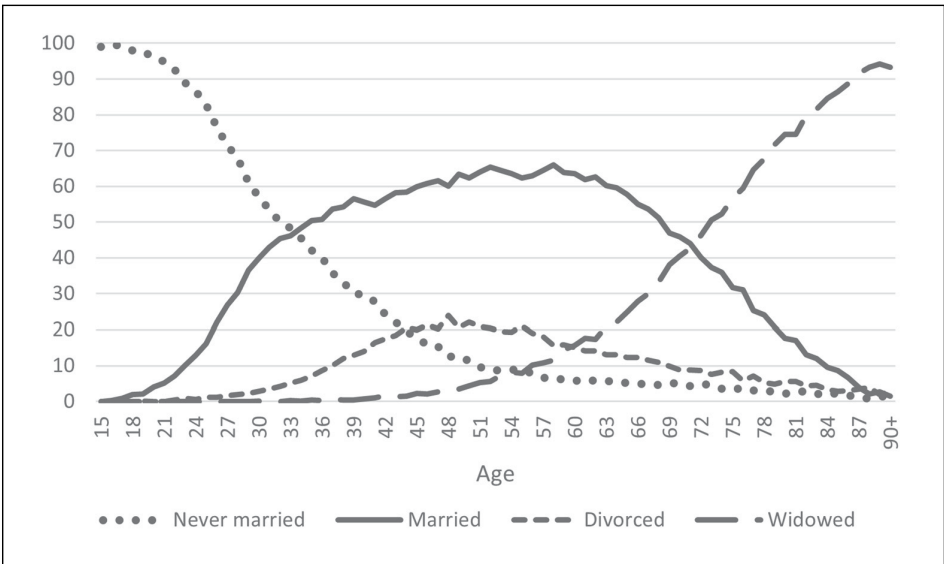
11 Ilona Koupilová, Helen Epstein, Jan Holčík, Steve Hajioff, and Martin McKee, "Health needs of the Roma population in the Czech and Slovak Republics," *Social Science & Medicine* 53, no. 9 (2001): 1191–1204. Katarina Rosicova, Sijmen A. Reijneveld, Andrea Madarasova Geckova, Roy E. Stewart, Martin Rosic, Johan W. Groothoff, and Jitse P. van Dijk, "Inequalities in mortality by socioeconomic factors and Roma ethnicity in the two biggest cities in Slovakia: a multilevel analysis," *International Journal for Equity in Health* 14, no. 1 (2015): 1–10.

# Marital Status and Fertility

The 2021 Slovak census questionnaire consists of four marital statuses: never married, married, divorced, widowed, although the spread of cohabitation as an alternative to marriage significantly reduces the importance of these categories. Following international demographic standards, which analyze nuptiality (frequency of marriage) from the start of women's fertility age, we also examine marital status census data for women aged 15 and older.

In Southern Slovakia, there are 192,474 ethnic Hungarian women in the 15+ age group, making up 98.5% of the total number of ethnic Hungarian women in this age group across the country. The number of women with an unknown marital status is insignificant (only 66), making it impractical to analyze or distribute them across the different marital status categories. Let us first examine the distribution of marital statuses by age group.

*Figure 8: Distribution of marital status among ethnic Hungarian women aged 15 and older in Southern Slovakia by age group (%)*



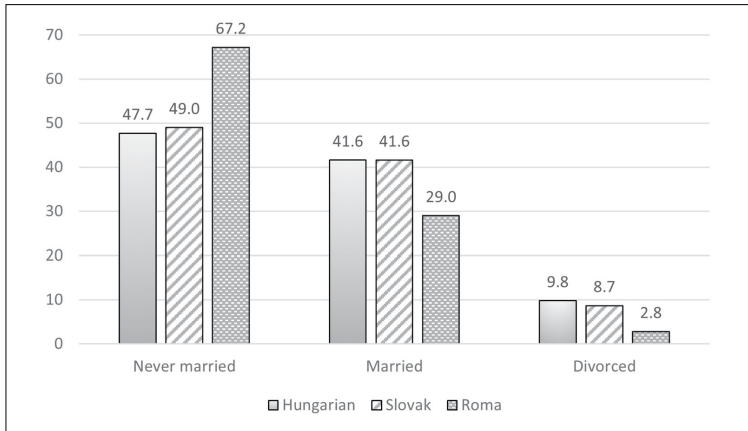
*Source: Statistical Office of the Slovak Republic  
Compiled by the author*

The graph shows a population that is generally pro-marriage, with the number of married individuals primarily affected by widowhood, while the impact of divorces is less significant. However, due to the trend of delayed marriage in Slovakia, which has been observed

for two decades,<sup>12</sup> the proportion of married individuals only exceeds that of never-married women at age 34.<sup>13</sup>

The following section compares marital status data with the Slovak and Roma data. To analyze nuptiality as an attitude—reflected in the proportions of never-married, married, and divorced individuals—the focus will be on women of reproductive age (15–49 years), excluding widows and those with unknown status, as they represent a small portion of this age group.

**Figure 9: Distribution of marital status among ethnic Hungarian, Slovak, and Roma women aged 15–49 in Southern Slovakia**



*Note: Widows and individuals with unknown marital status are not included in the chart due to their low numbers*

*Source: Statistical Office of the Slovak Republic*

*Author's calculations.*

The distribution of family status is almost identical among Hungarians and Slovaks, but significant differences appear in the Roma ethnic group. While only half of the women in the Hungarian and Slovak groups are single, more than two-thirds of Roma women are in this status. This difference is clearly due to the traditional Roma cultural view that marriage is an institution legitimized by the local community rather than the state, a phenomenon also observed in Hungary.<sup>14</sup>

- 12 Magdaléna Piscová, "Marital and parental start and demographic behaviour in Slovakia (and in Europe) at the turn of the centuries," *Sociológia – Slovak Sociological Review* 34, no. 3 (2002): 251–268.
- 13 Eurostat's annual data from 2015 to 2021 show a slow but steady increase in the average age of women at first marriage in Slovakia. Eurostat, <https://ec.europa.eu/eurostat>; accessed 30 October, 2024.
- 14 Michaela Potančoková, Boris Vaňo, Viera Pilinská, and Danuša Jurčová, "Slovakia: Fertility between tradition and modernity," *Demographic Research* 19, no. 25 (2008): 973–1018.; István Kemény, "A magyarországi cigány népesség demográfiája," *Demográfia* 47, no. 3–4 (2004): 335–346.; Hungarian Central Statistical Office. "A hazai nemzetiségek demográfiai jellemzői," *Statisztikai Tükör* 82, (2015) [https://www.ksh.hu/docs/hun/xftp/stattukor/nemzetiseg\\_demografia.pdf](https://www.ksh.hu/docs/hun/xftp/stattukor/nemzetiseg_demografia.pdf); accessed 30 October, 2024. It is worth noting that, according to census data, the proportion of Roma women officially in a single status is exceptionally high even among those over 30 (i.e., beyond the average age for starting a family). This indicates that the phenomenon is not simply a result of a youthful age distribution.

The interethnic fertility characteristics are compared below. In the census database, the highest value for live births (1, 2, 3, 4, 5+) represents the minimum value in a number set, which is a common procedure. However, since the total number of live births is unknown, the average number of live births per woman cannot be calculated. As a result, the 2021 Slovak census statistics only allow for the distribution of women by the number of births. The following table shows the proportions of women from the three ethnic groups, with separate calculations for women of reproductive age and those who have completed their fertility.

*Table 3: The number of live births and their distribution by number for Hungarian, Slovak, and Roma women aged 15–49 and 50+ in Southern Slovakia*

Number of live births	15–49 years old			50+ years old		
	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>
Population size						
0	33,246	154,657	1,623	6,835	28,161	109
1	23,011	88,241	1,091	15,911	52,062	135
2	24,420	101,468	1,448	53,699	155,848	341
3	5,199	23,822	1,008	18,783	60,371	428
4	1,399	5,740	635	4,563	15,794	366
5+	1,323	4,939	1,245	2,327	8,436	706
Unknown	847	2,917	448	919	1,612	17
<b>All</b>	<b>89,445</b>	<b>381,784</b>	<b>7,498</b>	<b>103,037</b>	<b>322,284</b>	<b>2,102</b>
Population proportion (%)						
0	37.2	40.5	21.6	6.6	8.7	5.2
1	25.7	23.1	14.6	15.4	16.2	6.4
2	27.3	26.6	19.3	52.1	48.4	16.2
3	5.8	6.2	13.4	18.2	18.7	20.4
4	1.6	1.5	8.5	4.4	4.9	17.4
5+	1.5	1.3	16.6	2.3	2.6	33.6
Unknown	0.9	0.8	6.0	0.9	0.5	0.8
<b>All</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: Statistical Office of the Slovak Republic  
Author's calculations*

In the 15-49 age group, the proportions of Hungarian and Slovak women are quite similar. However, significant differences appear among Roma women, with lower proportions having live births up to two, while those with five or more live births are more than 10 times higher. In the completed fertility group, Hungarian and Slovak women again show similar patterns. For both childless women and those with three children, these trends are consistent across all three ethnic groups. However, among Roma women, one-third have five or more live births, which is the most common pattern for them, while only 2–3% of Hungarian and Slovak women fall into this category. In the 50+ age group, around half of Hungarian and Slovak women have two children, while only 16% of Roma women follow this model.

Below is the district-level distribution of birth numbers for the three ethnic groups. To improve clarity, the percentages of women with live birth numbers below (0, 1) and above (3, 4, 5+) the reproduction level are grouped separately.

*Tables 4–5: The percentage of women with 0–1 and 3 or more live births among Hungarian, Slovak, and Roma women aged 15–49 and 50+ in the districts of Southern Slovakia*

	15–49 years old					
	0–1 live births			3+ live births		
	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>
Bratislava/Pozsony	66.0	69.3	–	5.7	5.6	–
Senec/Szenc	61.2	59.0	–	6.4	8.1	–
Dunajská Streda/Dunaszerdahely	66.1	63.4	45.8	5.9	7.9	28.9
Galanta/Galánta	63.6	62.6	–	6.3	7.6	–
Komárno/Komárom	65.5	67.3	37.3	7.9	7.6	44.0
Levice/Léva	63.1	63.3	47.2	8.1	9.8	31.8
Nitra/Nyitra	57.7	63.3	–	7.9	7.9	–
Nové Zámky/Ěrsekújvár	66.0	64.6	–	7.0	7.9	–
Šaľa/Vágsellye	63.8	61.4	–	6.1	9.0	–
Lučenec/Losonc	58.3	63.5	42.6	13.9	9.9	34.3
Revúca/Nagyróce	60.0	56.1	38.8	12.4	16.3	37.0
Rimavská Sobota/Rimaszombat	52.7	60.2	38.7	18.5	11.7	29.6
Veľký Krtíš/Nagykürtös	61.9	61.4	–	8.3	10.5	–
Košice/Kassa	62.6	65.3	23.9	7.3	7.1	39.3
Košice-okolie/Kassa-vidék	57.2	56.6	35.1	11.8	15.5	46.3
Michalovce/Nagymihály	57.2	58.7	37.4	14.5	14.7	33.8
Rožňava/Rozsnyó	61.8	57.4	38.7	9.3	15.1	42.6
Trebišov/Tökerebes	61.4	57.9	34.8	11.8	15.3	43.6
<b>Southern Slovakia</b>	<b>62.9</b>	<b>63.6</b>	<b>36.2</b>	<b>8.9</b>	<b>9.0</b>	<b>38.5</b>



	50+ years old					
	0–1 live births			3+ live births		
	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>	<i>Hungarian</i>	<i>Slovak</i>	<i>Roma</i>
Bratislava/Pozsony	33.1	35.0	–	18.0	16.1	–
Senec/Szenc	19.1	23.3	–	30.9	26.7	–
Dunajská Streda / Dunaszerdahely	21.0	24.4	12.9	25.8	27.4	63.3
Galanta/Gálánta	18.9	19.1	–	28.1	33.6	–
Komárno/Komárom	23.6	25.0	–	22.6	24.2	–
Levice/Léva	22.2	20.9	–	23.7	28.2	–
Nitra/Nyitra	17.0	21.1	–	32.8	31.2	–
Nové Zámky / Érsekújvár	23.7	21.1	–	20.7	29.3	–
Šaľa/Vágsellye	20.0	18.4	–	24.1	31.7	–
Lučenec/Losonc	25.5	23.4	15.0	24.7	24.2	60.0
Revúca/Nagyőrce	23.6	17.6	9.7	21.9	29.7	65.3
Rimavská Sobota / Rimaszombat	21.8	20.7	11.0	27.9	28.2	67.4
Veľký Krtíš / Nagykürtös	18.4	19.4	–	26.4	30.0	–
Košice/Kassa	31.5	26.9	14.6	15.7	23.7	74.8
Košice-okolie/Kassa-vidék	17.8	15.8	11.4	29.3	40.7	78.4
Michalovce/Nagymihály	17.9	16.9	7.9	30.6	35.7	72.8
Rožňava/Rozsnyó	21.6	17.9	8.8	21.2	27.4	76.6
Trebišov/Töketerebes	18.9	17.2	5.4	32.3	38.5	83.9
<b>Southern Slovakia</b>	<b>22.1</b>	<b>24.9</b>	<b>11.6</b>	<b>24.9</b>	<b>26.3</b>	<b>71.4</b>

*Note: In districts where the percentage base (here: the female population of the given ethnic and age group) did not reach 100, the rate values are not shown*

*Source: Statistical Office of the Slovak Republic*

*Author's calculations.*

In the Hungarian-Slovak context, there are no significant differences within the districts, and geographical or ethno-demographic patterns do not determine the direction and extent of the differences. However, notable disparities remain between Roma and non-Roma populations, particularly among women with three or more live births. In the 50+ age group, the proportion of Roma women following the large family model exceeds 70% in five southeastern Slovak districts, with the highest rate of 84% in the Trebišov/Töketerebes District, while the rate of women with 0–1 live births in the same district is only 5%.

In the inter-district comparison, the ratio for 0–1 live births among Hungarian and Slovak women aged 15–49 is lower, while the ratio for 3+ live births is higher in Roma settlement

areas than in other districts, similarly to the case of dependency ratios. Among Hungarians, the Dunajská Streda / Dunaszerdahely District has the lowest fertility rates for this age group, which is noteworthy because it accounts for 22% of all fertile-aged Hungarian women in Slovakia.

In the 50+ age group among Hungarians and Slovaks, a higher tendency to have children is no longer typical in the eastern districts. The difference in patterns between the two major age groups is likely due to the increasing regional proportion of the Roma population, accompanied by a rise in the proportion of Roma individuals with secondary identities or those who do not openly identify their Roma ethnicity within the younger age group of Hungarian and Slovak population. Furthermore, as the ethnic composition shifts, the demographic influence of the Roma population may have strengthened, impacting trends within the majority population.

Among Hungarian women with completed fertility, the share of those embracing the large-family model is strikingly high in the western districts of Senec/Szenc (31%) and Nitra/Nyitra (33%). Notably, the Nitra/Nyitra District also recorded the lowest youth dependency ratio among Hungarians, a seemingly paradoxical situation that may have several underlying causes.<sup>15</sup> For women with 0–1 live births, urban environments play a significant role for both Slovaks and Hungarians. Among women with completed fertility, Slovaks exhibited an unusually high proportion—around one-third—in Bratislava/Pozsony, while Hungarians showed similar figures in both Bratislava/Pozsony and Košice/Kassa.

## **The Model of Dual Ethnic Ties**

The inclusion of secondary ethnicity in the 2021 Slovak census questionnaire has added a new dimension to our understanding of the identity and acculturation of Hungarians in Slovakia. A total of 34,089 people identified Hungarian as their secondary identity, accounting for 8% of those who declared Hungarian as their primary ethnicity.

Previously, census data allowed us to group individuals with Hungarian ties into three main categories: Hungarians with a Hungarian mother tongue, non-Hungarians with a Hungarian mother tongue, and non-Hungarian speakers identifying as Hungarian. With the addition of secondary ethnicity, we can now distinguish seven subgroups. Among them is a newly recognized group: non-Hungarian speakers who identify as Hungarian solely as

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15 Among Hungarian women aged 15–49 in the district, fertility rates are notably low, indicating a decline in childbearing over time. This trend may also be shaped by intergenerational assimilation and youth migration, both of which could contribute to the district's low YDR.

a secondary ethnicity. This change also makes it possible to analyze individuals within the official Hungarian ethnic group who exhibit dual affiliations.

The seven subgroups are outlined in the figure below, with abbreviations for each attribute provided in parentheses.

*Figure 10: Subgroups of the population connected to Hungarians in Slovakia*

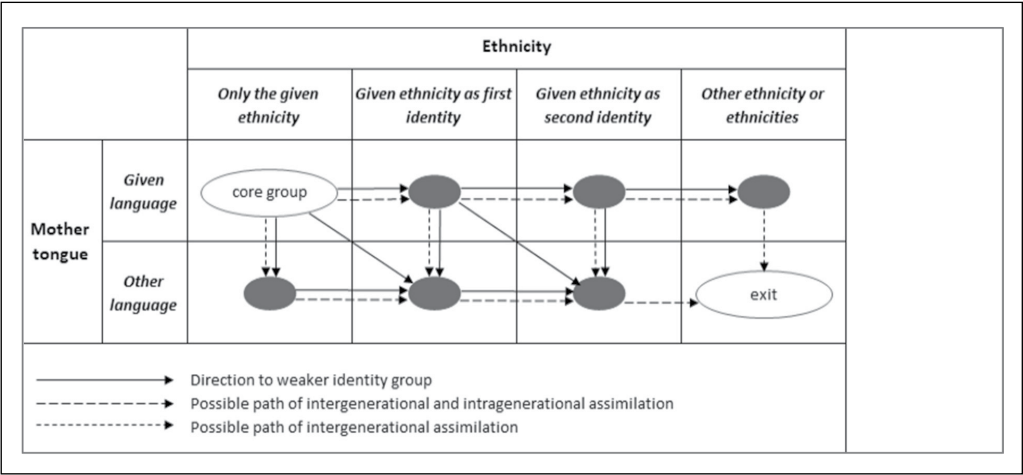
		Ethnicity			
		Only Hungarian (HU)	Hungarian as first ethnicity (HU 1)	Hungarian as second ethnicity (HU 2)	Non-Hungarian (nHU)
Mother tongue	Hungarian language (HUL)	1 (core group)	3	5	7
	Non-Hungarian language (nHUL)	2	4	6	–

*Compiled by the author*

The officially recognized Hungarian population consists of four subgroups (1–4). The core group includes individuals whose identity and mother tongue are exclusively Hungarian. Each subgroup represents a distinct type of identity. The core group exhibits the strongest ties, while Subgroups 6 and 7 are the furthest removed: Subgroup 6 has a secondary Hungarian identity and likely does not use the Hungarian language, and Subgroup 7 is fully detached from Hungarian identity, even though they have Hungarian as their mother tongue. These two subgroups can be considered pre-assimilation groups.

Since it is impossible to determine whether identity or mother tongue is the stronger indicator of ethnic connection, the subgroups cannot be ranked according to the strength of their ethnic ties. However, the lack of a clear linear sequence does not imply the absence of hierarchy. It can be stated that, within the subgroups defined by mother tongue, identity levels form ordinal scales, and within the same identity levels, a Hungarian mother tongue signifies a stronger level of attachment. This framework also reveals *potential* pathways of assimilation. The model’s name highlights the dual nature of ethnic affiliations, reflecting both identity and native language.

Figure 11: Identity relations and possible assimilation paths within the model of dual ethnic ties



Compiled by the author

Describing the possibility of exit helps clarify the peripheral or pre-assimilation nature of Subgroups 6 and 7. However, even with an understanding of the theoretical processes outlined in the figure, it is not advisable to treat the subgroups as mere acculturation/assimilation stages. In reality, dissimilation—where individuals move towards the core group—can also occur within the system. More importantly, a cross-sectional snapshot does not confirm a process; in other words, the presence of dual identity does not necessarily mean a transition from one homogeneous ethnic identity to another, whether within or across generations.

In addition to the two peripheral groups, it is also important to mention Subgroups 2 and 4. Despite having a non-Hungarian mother tongue, their members still identify with Hungarian ethnicity—without a secondary identity in the case of the former. According to Gyurgyík, this group may include Hungarians from ethnically mixed families or those socialized in a Slovak-speaking environment, as well as Roma, who speak Romani but identify as Hungarian.<sup>16</sup>

The following table presents the population size and proportion of the Hungarian-affiliated subgroups, offering a clearer picture of the identity structure of Hungarians in Slovakia.

16 Gyurgyík, “Quo vadis?”

*Table 6: Population size and proportion (%) of the subgroups affiliated with Hungarians in Slovakia*

	HU	HU 1	HU 2	nHU
Population size				
<b>HUL</b>	367,808	35,332	18,899	40,136
<b>nHUL</b>	14,916	4,009	15,190	–
Population proportion (%)				
<b>HUL</b>	74.1	7.1	3.8	8.1
<b>nHUL</b>	3.0	0.8	3.1	–

*Source: Statistical Office of the Slovak Republic  
Author's calculations*

The total number of individuals with Hungarian ties (496,290) exceeds the official count of Hungarians in Slovakia (422,065) by 18%. If we reverse the perspective and consider the total population as 100%, the core group constitutes three-quarters of this total, while the proportion of nominally Hungarian individuals is 85%, and those with Hungarian as their mother tongue represent 93%. Thus, the identity structure of the Hungarian-affiliated population in Slovakia is characterized by a relatively low proportion of non-Hungarian ethnic and linguistic ties.

The next section explores the distribution of specific ethnic affiliations across subgroups, excluding the homogeneous core group. To aid clarity, the table includes both subgroup numbers and their levels of ethnic and linguistic affiliation.

Table 7: Non-Hungarian ethnic affiliations in the subgroups

	HUL			nHUL	
	3 (HU 1)**	5 (HU 2)*	7 (nHU)*	4 (HU 1)**	6 (HU 2)*
Population size					
Slovak	16,473	15,537	34,794	3,062	14,300
Roma	11,017	3,116	4,507	385	476
Unknown	6,744	23	289	168	6
Other	1,098	223	546	394	408
All	35,332	18,899	40,136	4,009	15,190
Population proportion (%)					
Slovak	46.6	82.2	86.7	76.4	94.1
Roma	31.2	16.5	11.2	9.6	3.1
Unknown	19.1	0.1	0.7	4.2	0.0
Other	3.1	1.2	1.4	9.8	2.7
All	100.0	100.0	100.0	100.0	100.0

Note: \* Refers to the primarily identified ethnic identity. \*\* Refers to the secondarily identified ethnic identity.  
Source: Statistical Office of the Slovak Republic  
Author's calculations

Whether we examine the group of Hungarian native speakers or non-Hungarian native speakers, there is a sharp increase in Slovak ties both in absolute terms and as a proportion when moving from stronger to weaker identity groups. Another notable feature is the high proportion of Roma, approaching one-third, within Subgroup 3. The proportion of Roma decreases as the strength of Hungarian identity diminishes, meaning that within subgroups, the rates of Slovak and Roma affiliations change in opposite directions. In Subgroup 4, there is a relatively high proportion of individuals categorized as “other,” most of whom have ties with neighboring Slavic peoples (Czechs, Moravians, Rusyns, and Ukrainians).<sup>17</sup>

17 Source: Statistical Office of the Slovak Republic.

A notable and curious observation is the unusually high proportion—nearly 20%—of individuals with an unknown identity in Subgroup 3 compared to the minimal presence of such cases in other subgroups. This cannot be explained by a deliberate refusal to respond or a reluctance to declare an ethnic affiliation, as at least one nationality has already been indicated in these instances. The most likely explanation lies in a technical error: although the online census questionnaire offered a “no second nationality” option for the question about a secondary identity, if a respondent skipped the question entirely, the system—despite allowing them to proceed—recorded the response as “unknown.”<sup>18</sup> Consequently, Slovak residents who expressed their homogeneous identity by skipping what they considered an irrelevant question were inadvertently categorized in the statistics as having an unknown secondary identity.

The next section examines the distribution of linguistic affiliations, focusing specifically on individuals whose mother tongue is not Hungarian.

*Table 8: Non-Hungarian linguistic affiliations in each subgroup*

	<b>nHUL</b>		
	<b>2 (HU)</b>	<b>4 (HU 1)</b>	<b>6 (HU 2)</b>
<b>Population size</b>			
Slovak	12,648	3,317	14,286
Roma	554	308	475
Unknown	1,351	33	21
Other	363	351	408
<b>All</b>	<b>14,916</b>	<b>4,009</b>	<b>15,190</b>
<b>Population proportion (%)</b>			
Slovak	84.8	82.7	94.0
Roma	3.7	7.7	3.1
Unknown	9.1	0.8	0.1
Other	2.4	8.8	2.7
<b>All</b>	<b>100</b>	<b>100</b>	<b>100</b>

*Source: Statistical Office of the Slovak Republic  
Author's calculations*

18 Personal communication from political scientist Krisztián Rákóczi, for which I am grateful.

The key finding here is that Subgroup 2 largely comprises Slovak native speakers, though the relatively high proportion of individuals with an unknown mother tongue in this group remains unexplained. More broadly, non-Hungarian native speaker subgroups are marked by the exceptionally high prevalence of Slovak native speakers. Subgroup 6, as previously observed, is almost entirely Slovak in both language and dominant identity. In Subgroup 4, the “other” category also maintains a relatively high proportion, primarily linked to neighboring Slavic peoples, highlighting a notable overlap between secondary nationality and mother tongue in this group.

Given the unique demographic and sociological characteristics of the Roma population,<sup>19</sup> as well as the entirely different implications of acculturation and assimilation in their case,<sup>20</sup> it is appropriate to examine the numerical data of the Roma and non-Roma segments separately within the population affiliated with Hungarians in Slovakia. Considering that censuses in Central Europe typically underestimate the Roma population—reporting, for instance, only one-quarter to one-fifth of the actual figure in Slovakia<sup>21</sup>—the only reasonable way to quantify the Roma segment is to treat all census data as indicating a connection to the Roma population (whether through primary or secondary identity or Romani as a mother tongue) as an attribute of origin. Conversely, the non-Roma segment consists of individuals who, according to the statistics, exhibit none of these connections. The table below presents the results of this calculation.

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- 19 Boris Vaňo, “The Demographic Characteristics of Roma Population in Slovakia,” *INFOSTAT – Institute of Informatics and Statistics Demographic Research Centre* (2001); László Sípos, “A szlovákiai roma oktatási rendszer,” *Fórum Társadalomtudományi Szemle* 17, no. 1 (2015): 31–49.
  - 20 Jarmila Lajcakova, “The Uneasy Road towards Remedying the Economic and Cultural Disadvantage of the Roma in Slovakia,” *International Journal on Minority and Group Rights* 14 (2007): 59–83.
  - 21 László Gyurgyík, *A szlovákiai magyarság demográfiai folyamatai 1989-től 2011-ig - Különös tekintettel a 2001-től napjainkig tartó időszakra* (Somorja: Fórum Kisebbségkutató Intézet, 2014).



*Table 9: Distribution of the population affiliated with Hungarians in Slovakia across the Roma and non-Roma segments*

	HU	HU 1	HU 2	nHU
<b><i>Roma segment</i></b>				
<b>Population size</b>				
<b>HUL</b>	–	11,017	3,116	5,373
<b>nHUL</b>	554	434	548	–
<b>Population proportion (%)</b>				
<b>HUL</b>	–	52.4	14.8	25.5
<b>nHUL</b>	2.6	2.1	2.6	–
<b><i>Non-Roma segment</i></b>				
<b>Population size</b>				
<b>HUL</b>	367,808	24,315	15,783	34,763
<b>nHUL</b>	14,362	3,575	14,642	–
<b>Population proportion (%)</b>				
<b>HUL</b>	77.4	5.1	3.3	7.3
<b>nHUL</b>	3.0	0.8	3.1	–

*Source: Statistical Office of the Slovak Republic  
Author's calculations*

Accordingly, the total number of Roma individuals with ties to the Hungarian community is 21,042, accounting for 4.2% of the Hungarian-affiliated population. This figure represents just over a quarter of Gyurgyík's estimate of 80,000.<sup>22</sup> Even when broader criteria—such as weaker ties to the Roma community or Romani as a mother tongue—are fully recognized as markers of Roma ethnicity, their population remains significantly underestimated.

The data shows that over half of the Roma population with ties to Hungarians is concentrated in Subgroup 3, where their subgroup proportion is also the highest. Of this

<sup>22</sup> Ibid.

population, 54% identified primarily as Hungarian and 3% exclusively as Hungarian, while 17% reported Hungarian identity as a secondary affiliation. However, 26% do not identify as Hungarian at all, despite 93% having Hungarian as their mother tongue. It is important to note that these figures do not provide a basis for broad conclusions about the Roma population, as Roma individuals without Hungarian affiliation greatly outnumber those included in this analysis.

## The Relationship Between Ethnic Environment and Identity

The correlation described in the subtitle—the positive link between a higher local proportion of Hungarians and a stronger identity—is not merely theoretical but rooted in experience within the context of Hungarians in Slovakia. In the 2010, 2012, and 2016 parliamentary elections, the higher the proportion of Hungarians in a settlement, the more likely Hungarian voters were to support the ethnic party that emphasized strong identity perspectives over a multiethnic ideology.<sup>23</sup>

To study the relationship between ethnic environment and identity at the district level, WALOP—which reflects settlement-level ethnic proportions on a broader territorial scale—appears to be a suitable indicator of the ethnic environment. For identity, I suggest using the proportion of individuals in specific subgroups relative to the Hungarian-affiliated population (referred to as the internal proportion).<sup>24</sup> If this relationship is already validated by the electoral experiences mentioned earlier, its direction reveals which subgroup serves as an indicator of a strong or weak identity. Before delving into this, let us first examine the detailed district-level data.

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23 Gábor Harrach, Krisztián Rákóczi, *Külön utakon. Adalékok a felvidéki magyarság 2009 utáni politikátörténetéhez* (Budapest: L'Harmattan Kiadó, 2017).

24 In this case, the ideal methodological approach would have been to calculate the WALOP district values not only for those who exclusively and primarily identify as Hungarian (Subgroups 1–4), but also for all individuals with Hungarian ties. However, this was not possible within a reasonable timeframe, as the required data from the Statistical Office of the Slovak Republic public census database would only be accessible through individual and multi-step queries for each municipality. Considering that those who exclusively or primarily identify as Hungarian form a strong majority (61–93%) in all territorial units, it is reasonable to assume that the WALOP calculated for all individuals with Hungarian ties would show similar patterns to those in the scatter plots below.

*Table 10: Number and percentage of subgroups within the Hungarian-affiliated population across districts in Southern Slovakia*

	Ethnic subgroups							
	1	2	3	4	5	6	7	All
Population size								
Bratislava/ Pozsony	7,956	1,239	1,512	564	940	1,705	1,529	15,445
Senec/ Szenc	6,933	836	686	245	384	605	671	10,360
Dunajská Streda/ Dunaszerdahely	79,212	1,636	4,293	363	1,818	1,089	3,416	91,827
Galanta/ Galánta	26,419	1,274	1,596	262	633	729	1,657	32,570
Komárno/ Komárom	57,199	1,360	3,178	362	1,704	1,288	4,228	69,319
Levice/ Léva	20,586	1,021	1,518	217	841	816	2,167	27,166
Nitra/ Nyitra	5,459	521	679	131	465	529	900	8,684
Nové Zámky/ Érsekújvár	39,321	1,500	2,889	319	1,368	1,362	3,406	50,165
Šaľa/ Vágsellye	12,624	721	820	171	437	446	978	16,197
Lučenec/ Losonc	13,368	512	2,530	120	832	526	2,109	19,997
Revúca/ Nagyőrce	6,215	170	878	45	350	244	946	8,848
Rimavská Sobota/ Rimaszombat	24,580	755	6,295	174	2,404	551	3,299	38,058
Veľký Krtíš / Nagykürtös	8,006	224	666	59	543	389	1,326	11,213
Košice/ Kassa	4,332	392	740	156	1,057	1,103	1,487	9,267
Košice-okolie/ Kassa-vidék	8,711	277	1,264	114	1,314	834	3,528	16,042
Michalovce/ Nagymihály	9,369	259	1,626	94	952	296	1,401	13,997
Rožňava/ Rozsnyó	11,442	796	1,132	150	831	667	2,007	17,025
Trebišov/ Tőketerebes	22,467	382	2,050	96	1,301	601	3,568	30,465
Northern Slovakia	3,609	1,041	980	367	725	1,410	1,513	9,645
<b>Slovakia</b>	<b>367,808</b>	<b>14,916</b>	<b>35,332</b>	<b>4,009</b>	<b>18,899</b>	<b>15,190</b>	<b>40,136</b>	<b>496,290</b>

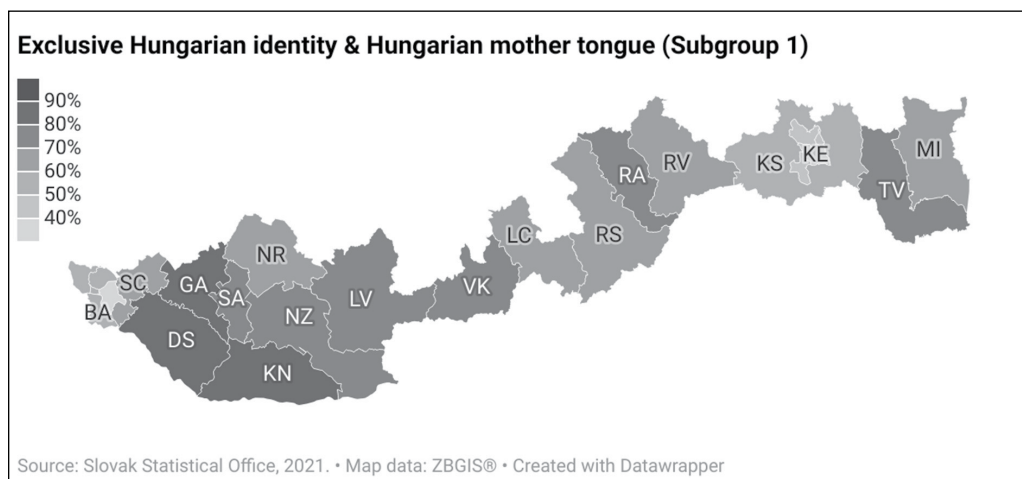
Internal proportion (%)								
Bratislava/ Pozsony	51.5	8.0	9.8	3.7	6.1	11.0	9.9	100.0
Senec/ Szenc	66.9	8.1	6.6	2.4	3.7	5.8	6.5	100.0
Dunajská Streda/ Dunaszerdahely	86.3	1.8	4.7	0.4	2.0	1.2	3.7	100.0
Galanta/ Galánta	81.1	3.9	4.9	0.8	1.9	2.2	5.1	100.0
Komárno/ Komárom	82.5	2.0	4.6	0.5	2.5	1.9	6.1	100.0
Levice/ Léva	75.8	3.8	5.6	0.8	3.1	3.0	8.0	100.0
Nitra/ Nyitra	62.9	6.0	7.8	1.5	5.4	6.1	10.4	100.0
Nové Zámky/ Érsekújvár	78.4	3.0	5.8	0.6	2.7	2.7	6.8	100.0
Šaľa/ Vágsellye	77.9	4.5	5.1	1.1	2.7	2.8	6.0	100.0
Lučenec/ Losonc	66.9	2.6	12.7	0.6	4.2	2.6	10.5	100.0
Revúca/ Nagyőrce	70.2	1.9	9.9	0.5	4.0	2.8	10.7	100.0
Rimavská Sobota/ Rimaszombat	64.6	2.0	16.5	0.5	6.3	1.4	8.7	100.0
Veľký Krtíš/ Nagykürtös	71.4	2.0	5.9	0.5	4.8	3.5	11.8	100.0
Košice/ Kassa	46.7	4.2	8.0	1.7	11.4	11.9	16.0	100.0
Košice-okolie/ Kassa-vidék	54.3	1.7	7.9	0.7	8.2	5.2	22.0	100.0
Michalovce/ Nagymihály	66.9	1.9	11.6	0.7	6.8	2.1	10.0	100.0
Rožňava/ Rozsnyó	67.2	4.7	6.6	0.9	4.9	3.9	11.8	100.0
Trebišov/ Töketerebes	73.7	1.3	6.7	0.3	4.3	2.0	11.7	100.0
Northern Slovakia	37.4	10.8	10.2	3.8	7.5	14.6	15.7	100.0
<b>Slovakia</b>	<b>74.1</b>	<b>3.0</b>	<b>7.1</b>	<b>0.8</b>	<b>3.8</b>	<b>3.1</b>	<b>8.1</b>	<b>100.0</b>

*Source: Statistical Office of the Slovak Republic  
Author's calculations*

The core group represents a modal value in every district, as well as in the two major cities and in Northern Slovakia. This confirms the stability of the identity structure among Hungarians in Slovakia, both at the national and regional levels. However, these modal values show considerable variation: in Hungarian-majority districts, the proportion ranges between 80% and 90%, around 50% in the two major cities, and below 40% in Northern Slovakia. This pattern itself supports the correlation mentioned in the subtitle.

Mapping the column data above indicates the geographical characteristics of the identity structure of Hungarians in Slovakia. Since data for Northern Slovakia represents a single macroregion and cannot provide insights into territorial patterns, the maps that follow focus exclusively on the districts of Southern Slovakia.

**Figure 12: Core group percentage within the Hungarian-affiliated population by district in Southern Slovakia**



*Source: Statistical Office of the Slovak Republic*

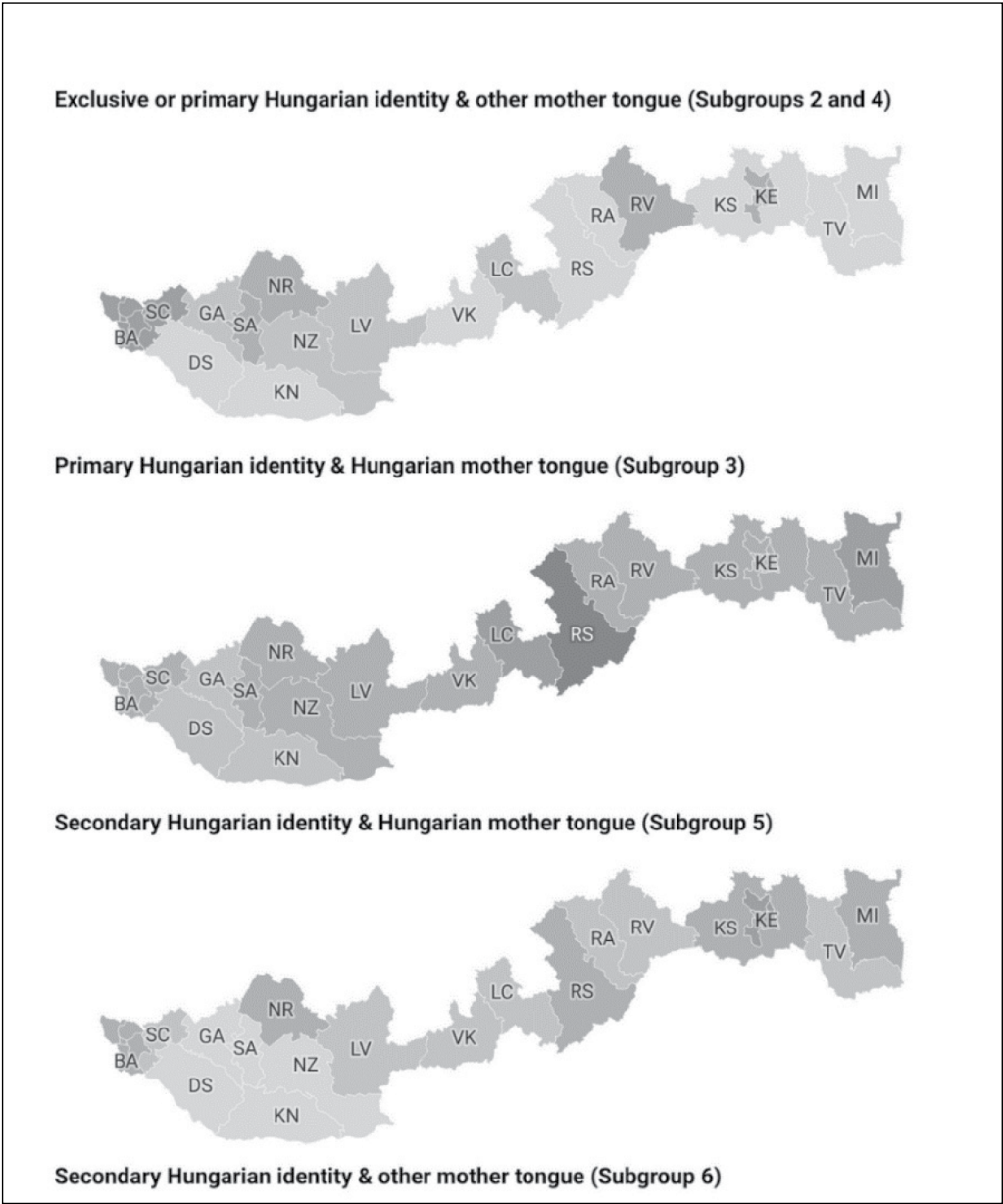
*Abbreviations of cities and districts: BA: Bratislava/Pozsony; DS: Dunajská Streda / Dunaszerdahely; GA: Galanta/Galánta; KE: Košice/Kassa; KN: Komárno/Komárom; KS: Košice-okolie/Kassa-vidék; LV: Levice/Léva; LC: Lučenec/Losonc; MI: Michalovce/Nagymihály; NR: Nitra/Nyitra; NZ: Nové Zámky / Érsekújvár; RA: Revúca/Nagyroce; RS: Rimavská Sobota / Rimaszombat; RV: Rožňava/Rozsnyó; SC: Senec/Szenc; TV: Trebišov/Töketerebes; VK: Veľký Krtíš / Nagykeresztös; SA: Šaľa/Vágsellye*

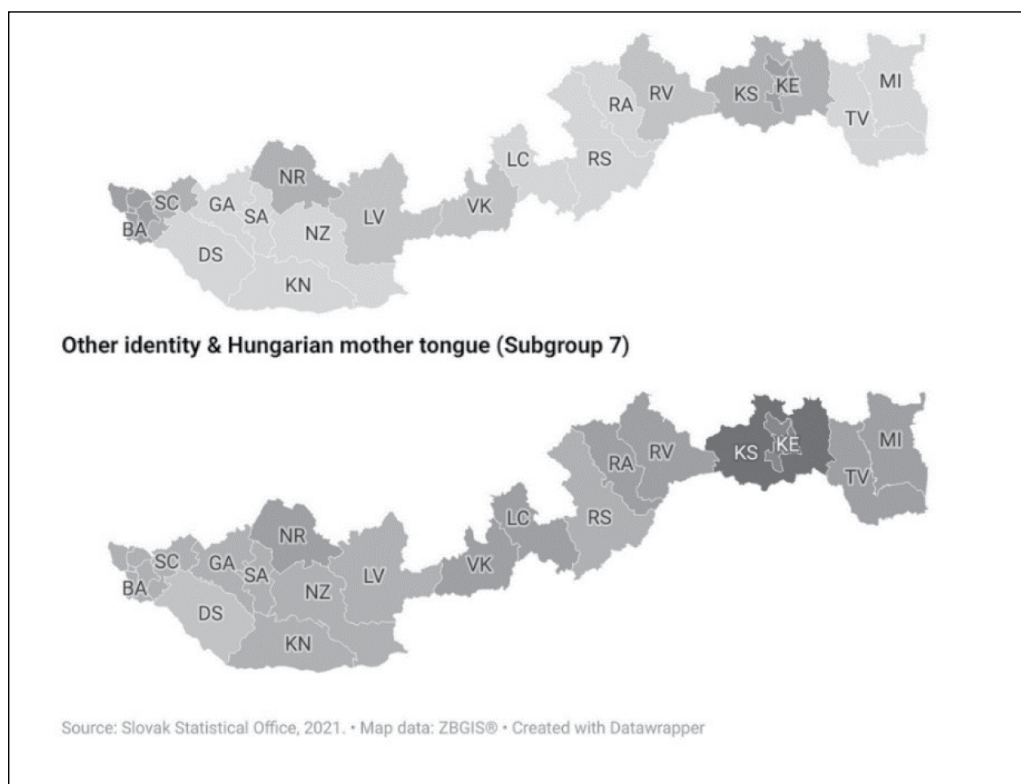
*Prepared by Ildikó Nagy*

As previously noted, the dominance of the strongest identity type is evident in every district. However, the internal proportion of the core group is generally higher in western districts compared to eastern ones. Particularly notable values are found in the two districts with majority Hungarian population and the neighboring Galanta/Galánta District, where Hungarians make up a smaller ethnic proportion. The city of Košice/Kassa has the lowest proportion.

The next figures show maps of the other subgroups. Data for Subgroups 2 and 4—individuals with exclusively or primarily Hungarian identity but without Hungarian as their mother tongue—are combined due to their small population size and similar characteristics.

**Figures 13–17: *Percentage share of subgroups outside the core group within the Hungarian-affiliated population by district in southern Slovakia***





Source: Statistical Office of the Slovak Republic

Abbreviations of cities and districts: BA: Bratislava/Pozsony; DS: Dunajská Streda / Dunaszerdahely; GA: Galánta/Galánta; KE: Košice/Kassa; KN: Komárno/Komárom; KS: Košice-okolie/Kassa-vidék; LV: Levice/Léva; LC: Lučenec/Losonc; MI: Michalovce/Nagymihály; NR: Nitra/Nyitra; NZ: Nové Zámky / Érsekújvár; RA: Revúca/Nagyroce; RS: Rimavská Sobota / Rimaszombat; RV: Rožňava/Rozsnyó; SC: Senec/Szenc; TV: Trebišov/Töketerebes; VK: Veľký Krtíš / Nagykeresztös; SA: Šala/Vágsellye

Prepared by Ildikó Nagy

The territorial patterns differ, but a common trend is the lower values in regions with a Hungarian majority population, which reflects the stronger presence of the core group in those areas. Subgroups 2 and 4 have the highest internal proportions in Bratislava/Pozsony and the Senec/Szenc District, a suburban area of the capital, where the rate of mixed marriages involving Hungarians is also exceptionally high.<sup>25</sup> This suggests that the primary social context for this unique identity group is mixed-ethnicity families.

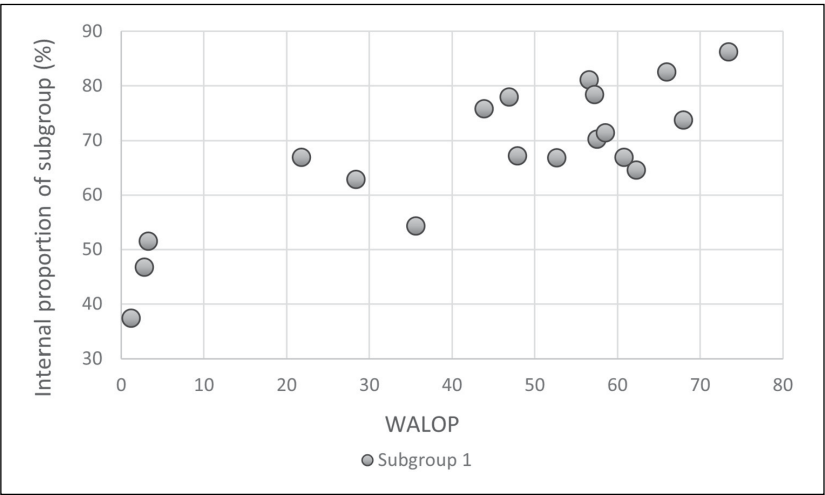
25 Branislav Šprocha, "A családszerkezet etnikai sajátosságai és az exogám házasságok mintázatai Szlovákiában," *Kisebbségi Szemle* 4, no. 3 (2019): 37–81.

For Subgroup 3, the higher values in the east, particularly in the Rimavská Sobota / Rimaszombat District, can largely be attributed to the significant presence of Roma ethnic affiliation. Hungarian as a secondary identity is also predominantly characteristic of the eastern districts. Among the two pre-assimilation subgroups, Subgroup 6 has the strongest embeddedness in the two major cities, while Subgroup 7 is most prominent in Košice/Kassa and its surrounding areas.

If we combine the internal proportions of Subgroups 5, 6, and 7—those with the weakest ties to Hungarian identity—Košice/Kassa and its surrounding district emerge as the main assimilation hubs for Hungarians in Slovakia (Košice/Kassa: 39%, the surrounding district: 35%). Bratislava/Pozsony also stands out, with a significant proportion (27%).

The following section explores the relationship between ethnic environment and identity, focusing first on the core group and then on the other subgroups, categorized by mother tongue.

**Figure 18: Relationship between WALOP and the core group's internal proportion**

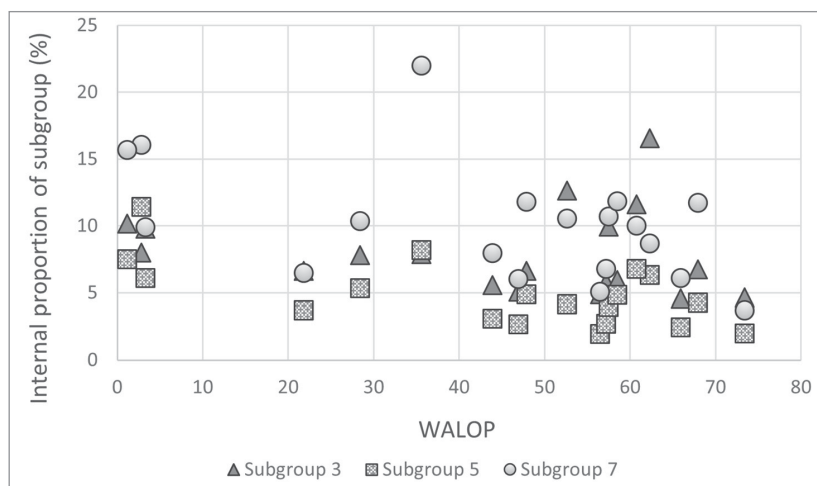


Source: Statistical Office of the Slovak Republic  
Author's calculations

The arrangement of the diagrams clearly shows a positive relationship. It is also noticeable that in some districts, the proportion of individuals belonging to the core group approaches or even reaches 50%, even with a relatively low WALOP. This indicates that a strong, homogeneous ethnic identity persists even in less favorable ethnodemographic conditions.

The following figure demonstrates the relationship between these variables for the three other subgroups of Hungarian native speakers.



**Figure 19: Relationship between WALOP and the internal proportions of Subgroups 3, 5, and 7**

*Source: Statistical Office of the Slovak Republic*

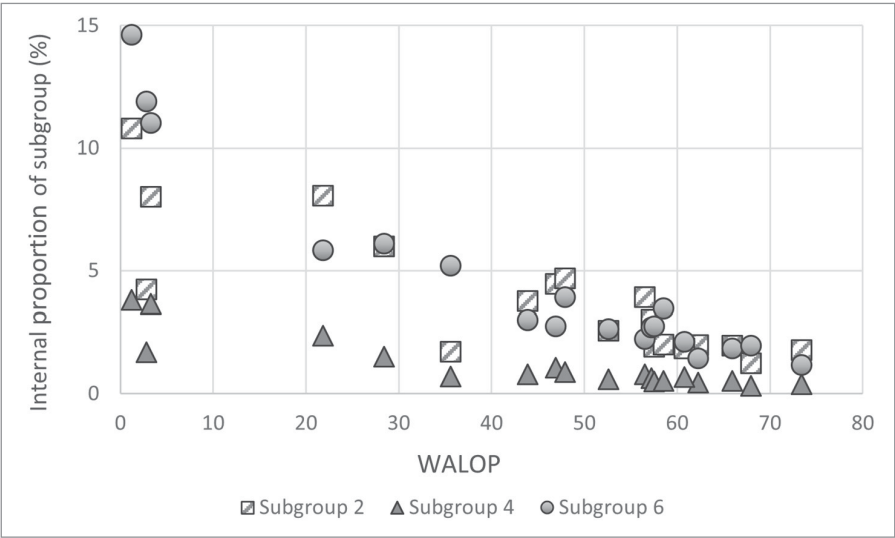
*Author's calculations*

For all three subgroups, the pattern contrasts sharply with that of the core group, with the peripheral Subgroup 7 showing the highest values along the y-axis. Even in Subgroup 3, which is theoretically associated with a stronger identity, a slight negative relationship is observed, indicating a weaker identity group.<sup>26</sup>

Lastly, we analyze the relationship between the ethnic environment and the internal proportions of the three subgroups comprising non-Hungarian native speakers.

26 For Subgroup 3, this phenomenon might be explained by the fact that many individuals chose the second ethnicity option simply due to the dual identity framework, thereby expressing their connection and/or loyalty to the majority. According to Patrik Tátrai, “declaring one’s nationality [...] may serve as a ‘pledge of allegiance’ expected by the majority towards the state, which can lead some members or groups of minorities to identify themselves with the majority, keeping their perceived or actual interests in mind.” Patrik Tátrai, “Anyanyelv és nemzetiség mint az interetnikus kapcsolatok mutatója Erdély magyar lakosságának példáján,” *Tér és Társadalom* 25, no. 2 (2011): 48. However, for the population with mixed Hungarian–Roma ties, which makes up nearly a third of the subgroup, this pattern cannot be assumed by definition.

**Figure 20: Relationship between WALOP and the internal proportions of Subgroups 2, 4, and 6**



*Source: Statistical Office of the Slovak Republic  
Author's calculations*

The negative relationship is even more noticeable among non-Hungarian native speakers, including Subgroup 2, which has a homogeneous ethnic identity. As anticipated, the peripheral Subgroup 6 displays the steepest curve among the three groups.

Based on the direction of the relationships, only the core group serves as an indicator of strong ethnic identity. The distance of the other subgroups from the core group (see the model of dual ethnic ties) influences the strength of the negative correlation, but not its direction.

### Summary

Between 2011 and 2021, the Hungarian population in Slovakia decreased unevenly across different regions, with the rate of decline showing a negative correlation to the local proportion of Hungarians. The number of people identifying as Hungarian only increased in the Rimavská Sobota / Rimaszombat District and north of the Hungarian settlement belt. In the former, this was due to favorable self-identification among some Roma, while in the latter, it was due to dissimilation.

Given the aging population of Hungarians and their less favorable age structure compared to other ethnic groups, a further decline in both population size and proportion is expected. Due to the high fertility rate among Roma, they are likely to soon become the second-largest ethnic group in Slovakia, which will likely result in a higher proportion of Roma within the Hungarian community, potentially impacting the adaptation of fertility patterns.

According to the 2021 census, 496,000 people in Slovakia are affiliated with Hungarians in some way, whether as their primary or secondary identity or through their mother tongue. Of this group, 85% are nominally Hungarian and 74% belong to the core group, defined by a homogeneous Hungarian identity and Hungarian as their mother tongue. The higher the WALOP of Hungarians within a district, the higher the proportion of core groups with a strong ethnic identity in the Hungarian-affiliated population, while the relationship is negative for other subgroups. Additionally, each subgroup shows a distinct geographical concentration, meaning that the Hungarian identity groups in Slovakia exhibit specific ethno-demographic characteristics.

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