POPULATION STRUCTURES

The dynamically changing structure of the population in space and time has been shaped by past and present demographic, cultural, economic and political processes. As demographic processes and structures are changing very slowly – apart from unexpected social and political crises (e.g. epidemics, wars, forced migrations) – the current structure of the population can be assessed as the effect of processes in the past. And the current situation very much determines future conditions for the same reasons.

The various characteristics of the population structure are usually divided into three major groups and presented accordingly: 1. biological (demographic) characteristics (e.g. sex, age, family), 2. cultural characteristics (e.g. ethnicity, language, religion, education, qualifications), 3. socio–economic characteristics (e.g. economic activity, occupation, social structure).

SEX AND AGE COMPOSITION

Laura Szabó, Károly Kocsis, Dóra Gábriel, László Kulcsár, Csilla Obádovics

Population structure according to sex

Humanity can be divided, according to the anatomical and biological differences between men and women, into *biological sexes* and *sociological (social) sexes* resulting from a later gender socialisation 1. Concerning the former, there are spatial data from demographic and geographical surveys conducted around the world. The distribution of the population according to sexes is of high importance in the study of fertility and childbearing, but its role is also crucial in the gender analysis of labour market conditions.

Sex distribution is generally studied through several indicators. Although it is possible to express the ratio of each sex to the total population as a percentage, the most common indicator is the number of women per thousand men, the so-called *femininity index*. Its reversed version is the *masculinity index* (number of men per thousand women). It is also possible to analyse these indicators by the main age groups (0–14 years, 15–64 years and 65 years and older). These are all justified by the fact that the sex ratio is basically determined by the *male birth surplus* and the *difference in mortality of the sexes*. It is recognised that more boys are born than girls worldwide and that the mortality rate of men compared to women increases with age. However, the change in the sex ratio – in addition to certain cultural and economic factors (e.g. the status of women, one-child families) – has also been significantly influenced by the fact that voluntary migration and wars disproportionately affect working-age men.

Globally, the ratio of the two sexes is almost balanced: there were 3,865 million women for 3,930 million men in 2020, resulting in a femininity index of 983. In most European countries, however, there is now a surplus of women. In Europe, a male surplus can only be observed in areas with high fertility and thus significant childhood male surplus (e.g. in countries largely inhabited by Albanians: Albania, Kosovo, North Macedonia, and in countries with large immigrant populations: Sweden, Luxembourg, Malta). As a result of African-Asian immigration, which is still characterised by a high proportion of young men, the femininity index in Europe is likely to fall from 1,070.7 to 1,016.6 between 2020 and 2100, thereby approaching a sex balance.

The population of the Carpathian Basin was characterised by an almost perfect sex balance 150 years ago, at which time there were 1,002 women per 1,000 men. As a result of the disproportionate loss of males through international migration, the femininity index increased to 1,019 in 1910. By 2019, it had risen to 1,067, owing to the losses of the world wars, mass emigration and accelerated aging in the wake of declining fertility. In the present-day area of Hungary, the sex ratio imbalance in 1910 was even smaller (1,007 women/1,000 men) than the aforementioned value for the Carpathian Basin as a whole (1,019). This discrepancy reflects the fact that male-dominated emigration particularly affected the peripheral areas of the Carpathian Basin VI. 1. 1.. In the last century, for the reasons stated above and the early occurrence of natural decrease (it first occurred in Hungary in 1981) and accelerated aging, the value of the femininity index in Hungary increased above the average of the Carpathian Basin and reached its current maximum (1,105.2) in 2010. Since then, mainly due to the improvement in male mortality rates (cf. life expectancy at birth, 2), the sex ratio has also become more favourable (1,087.2 women/1,000 men in 2020, VI. 1. 1.).

The upset of the sex balance has several negative consequences: the chances of choosing a partner and of marrying decline, reproduction is reduced, the number of singles increases, and workforce shortages may occur in either sex. In addition, the male/female balance may be upset in certain age groups as well, laying a heavy burden on the state and its social welfare system. The 0–14 age group was always characterised by a surplus of boys, as among newborns boys outnumber girls VI. 1. 2.. The 15–39 age group has only been characterised by a male surplus since 1970, while among those aged 40–59, the same occurred only once, in 1910. However, there were always more women than men in the population aged 60 and over, and the rapid rise in the value of the index since 1970 reflects the higher mortality of men in old age. The improvement in sex ratios over the past decade and the decline in the femininity index are striking primarily among older age groups.

The femininity index in the *Carpathian Basin* is close to the European average (1,067) but conceals remarkable spatial differences. The European average sex ratio is exceeded significantly in Hungary (1,090) and considerably in Pannonian Croatia and in Zakarpattia (1,081 and 1,079 respectively). The figure (1,048) for Slovakia and for Transylvania is relatively favourable; only in the 1930s was a comparable figure recorded in the present-day area of Hungary. Apart from a few dozen districts, urbanised districts in the Carpathian Basin are characterised by a surplus of women. The femininity index is particularly high in the major cities, from which in recent decades young families with children in male surplus moved in large numbers to the neighbouring suburbs (in the course of so-called suburbanisation migration) VI. 1. 3.. The capital cities and regional centres are also at the forefront: Budapest (1,149), Uzhhorod (1,147), Zagreb (1,136), Bratislava, Cluj-Napoca/Kolozsvár, Sibiu (1,125), Timişoara (1,119) and Novi Sad (1,111). In some rural areas however, a relatively more favourable sex ratio and even a male surplus can be observed. In such areas, a male surplus resulting from the high fertility of the local population has not been balanced by a female surplus resulting from male emigration (VI. 1. 3. and 5). This favourable phenomenon can be observed in the north-eastern mountainous regions of the Carpathian Basin. Albeit located in this northeastern zone, Zakarpattia, despite its traditionally high fertility rates, has a large surplus of women, owing to high emigration, which affects predominantly men. A similar situation can be observed throughout western Ukraine.

The aforementioned study of sex ratios *in Hungary* also supports the above. Due to suburbanisation, a highly significant surplus of women has arisen in all major and medium-sized cities (VI. 1. 4. cf. 15 16 17). A similarly high femininity index can be observed in the target areas of old-age migration, which often involves foreigners (e.g. the Lake Balaton region, 6), and in rural areas hit by out-migration (mostly of young men), which have been left with ageing populations (e.g. in Northern Hungary and in the inner peripheries of the Alföld). However, it is also a fact that in almost a third of settlements in Hungary – especially in small and tiny villages – the number of men exceeds that of women. In some of these cases, the phenomenon may be caused by the above-average fertility of the Roma population. In Hungary, in most villages with a Roma majority a male surplus was registered VI. 1. 4., cf. VI. 3. 8.). In this regard, it should be noted that in many villages with an ethnically mixed population, a male surplus in the Roma population is balanced by more women in the aging local non-Roma population.

Age composition of the population

Almost all demographic structures and processes are fundamentally determined by the age (and sex) distribution of the population, which is of particular importance in ascertaining the chances of marriage, of establishing a household or a family, and of having children. It also facilitates the estimation of the care requirements of children and the elderly and assists in forecasting demand for kindergarten and primary school places, the number of jobseekers entering employment, and more general analyses of the labour market situation.

The age structure of the population is mainly the result of live births and deaths (i.e. it is determined by the natural population change) and it is strongly influenced by cultural factors. At the same time, the voluntary migration of the working age population, which mainly involves young people, also plays an important role in this respect, resulting in a younger age structure of the population in the target areas and amplifying the ageing process in the areas of origin. Migration in old age can have an opposite effect, contributing to an ageing of the local population in the target areas.

When speaking of age, humans are usually divided – fundamentally on a biological basis – into children, adults and the elderly. In statistics, these categories

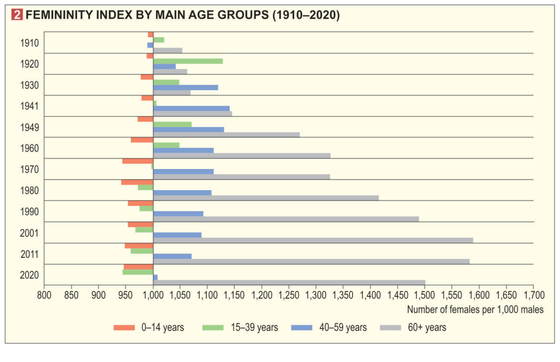


1 *Distribution of the population by sex*

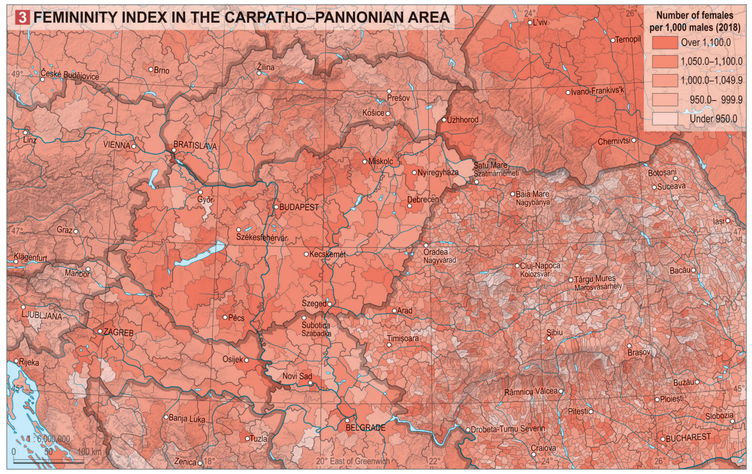
1 CHANGES OF SELECTED INDICATORS OF SEX AND AGE STRUCTURE (1910–2020)

Year	Main age groups (%)			Average age			Women per 1,000 men
	0–14	15–64	65–	Male	Female	Total	
1910	34.8	60.3	5.0	27.2	27.3	27.2	1007.2
1920	30.6	63.8	5.6	28.5	28.9	28.7	1061.6
1930	27.5	66.1	6.3	29.3	30.2	29.8	1044.3
1941	26.0	67.0	7.0	31.0	32.1	31.6	1042.6
1949	24.9	67.6	7.5	31.5	33.3	32.4	1080.9
1960	25.4	65.7	8.9	32.5	34.8	33.6	1073.5
1970	21.1	67.4	11.5	34.3	37.0	35.7	1062.9
1980	21.9	64.6	13.5	34.6	37.7	36.2	1064.0
1990	20.5	66.2	13.2	35.5	39.0	37.3	1081.2
2001	16.6	68.3	15.1	37.1	41.1	39.2	1102.7
2010	14.7	68.6	16.6	38.7	43.0	40.9	1105.2
2011	14.6	68.7	16.7	38.9	43.2	41.1	1105.0
2012	14.5	68.6	16.9	39.3	43.5	41.5	1102.1
2013	14.4	68.4	17.2	39.5	43.7	41.7	1101.1
2014	14.4	68.0	17.5	39.7	43.9	41.9	1100.1
2015	14.5	67.6	17.9	39.9	44.1	42.1	1098.8
2016	14.5	67.2	18.3	40.0	44.2	42.2	1096.7
2017	14.5	66.8	18.7	40.2	44.4	42.4	1095.6
2018	14.5	66.5	18.9	40.3	44.5	42.5	1093.2
2019	14.5	66.1	19.3	40.5	44.7	42.7	1090.1
2020	14.5	65.6	19.9	40.6	44.8	42.8	1087.2

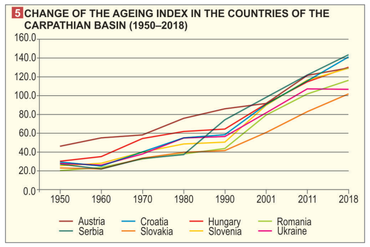
2 FEMININITY INDEX BY MAIN AGE GROUPS (1910–2020)



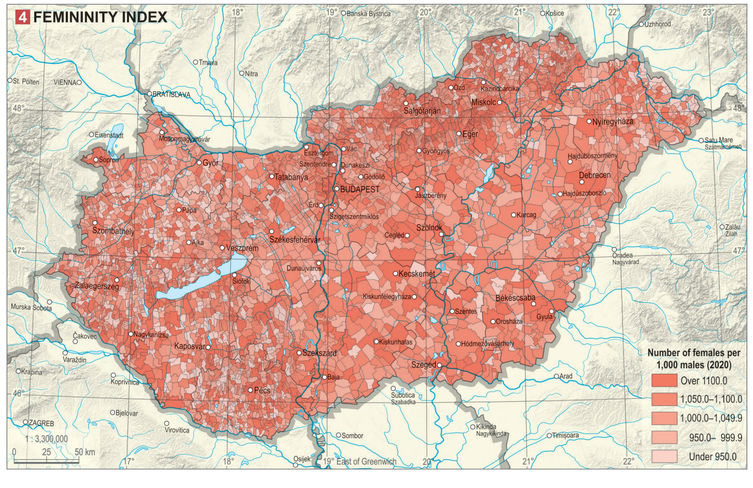
3 FEMININITY INDEX IN THE CARPATHO–PANNONIAN AREA



5 CHANGE OF THE AGEING INDEX IN THE COUNTRIES OF THE CARPATHIAN BASIN (1950–2018)



4 FEMININITY INDEX





2 *The meeting of three generations*

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Average age: *arithmetic mean of the age of the population in a given area.*
Median age: *the age that divides the studied population into two exactly equal groups.*
Billeter index: *where P is the number of the population. The numbers in the subscript indicate the population that is not yet fertile (0–14), no longer fertile (50+) and in fertile age (15–49 years). The index provides information on the ratio of generations relative to each other and the expected development trends of the population according to the age structure. The higher the value of the index, the younger the population. A negative value indicates that the number of those aged 50 and over is higher than that of those aged under 15 years.*

Dependency (age-dependency) ratio: *the ratio of people of non-working (unproductive) age to the working (productive) age population. Since the non-working age population consists of two components (children and the elderly), the dependency ratios of children (0–14 years) and the elderly (65+ years) can be distinguished.*
Ageing index: *the ratio of the elderly to children. It measures the ageing process, so it is also used to predict future trends.*
Population pyramid: *a bar chart showing the age structure of the population by sex. A detailed population pyramid can also be seen as a joint imprint of the fertility, mortality and migration processes of recent decades. A pyramid shape represents a young population. Bell-shaped population pyramids represent a stagnant population characterised by a relative increase in the number of older people. An urn or onion-shaped population pyramid refers to a decreasing population with a low number of children.*
Ratkó era: *a period of population policy (1950–1956) named after Anna Ratkó (1903–1981), weaver, communist union leader, and Minister of Welfare and Health between 1949 and 1953. Strict prohibitions on pregnancy termination (induced abortion) and the introduction of a tax on childless people in the first half of the 1950s, led to a significant increase in the number of births in Hungary. Those born at that time are usually called Ratkó children, and those born in the first half of the 1970s are called Ratkó grandchildren.*

correspond to the groups of 0–14, 15–64 years, and 65 years and older [2]. In sociological research, additional categories include people of working age (15–64), of childbearing age (women aged 15–49) and of conscription age (men aged 18–50/60).

For the spatial and temporal research of age structure, several simple and more complex data, metrics, indices, and representations are used, which can be classified into three groups. The first includes the simplest, easily accessible data and single-component indices (e.g. the ratio of people belonging to each age group as a percentage). More complex, multi-component indices are classified in the second group (e.g. average age, median age, the Billeter index, the age-dependency ratio, and the ageing index). The third – and visually most spectacular way of presenting the age structure – is the so-called population pyramid.

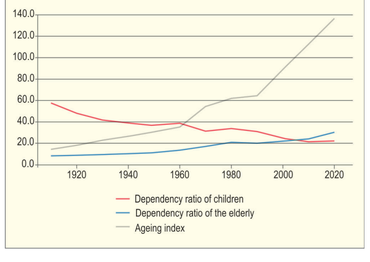
The negative consequences of a distortion of the age structure include a gradual increase in the ratio of the elderly. This, in turn, results in labour shortages in ageing societies, such as those experienced in most European countries. As a result, there is considerable pressure on the pension, health and social care systems, with increases in the cost of maintaining such systems. Ageing also significantly distorts the sex ratio – due to higher male mortality – resulting in an increasing surplus of women. These negative consequences force the governments of ageing societies to reorganise pensions and the healthcare system, to review employment laws, financial services and family policy, and, in some cases, to take measures to increase fertility.

Due to declining fertility and increasing life expectancy, the ageing of the population – to varying degrees – is being observed worldwide. As a result, the ratio of children fell from 34.3% to 25.4% between 1950 and 2020, in parallel with the increase in the ratio of the elderly from 5.1% to 9.3%. In the case of Europe, the ratio of 0–14 year-olds fell from 26.3% to 16.1%, and that of those aged 65 and over rose from 8.4% to 19.1% over the seven decades. The rate of ageing in the Carpathian Basin between 1910 and 2018 was similar to that in Europe: the ratio of children was 35.5% in 1910 and 15.0% in 2018, while the ratio of the elderly was 5.0% in 1910 and 17.5% in 2018. The global average of the dependency rate for children is currently much higher (39) than for the elderly (14.3). In Europe, the situation is reversed (children 24.8, elderly 29.5). Other demographic indicators also show a particularly high rate of ageing relative to the global average: median age (2020: world 30.9, Europe 42.5), Billeter index (in 2020: world 2.5, Europe –53.1), ageing index (2020: world 36.7, Europe 119).

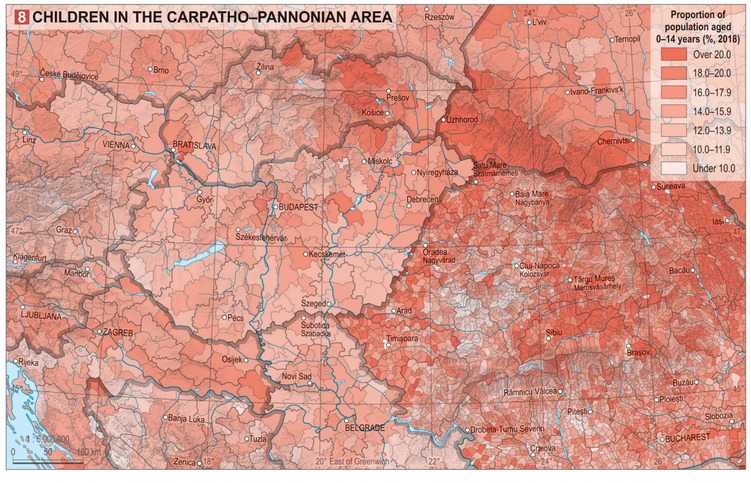
6 AGE STRUCTURE OF POPULATION (1949, 1990, 2020, 2070)



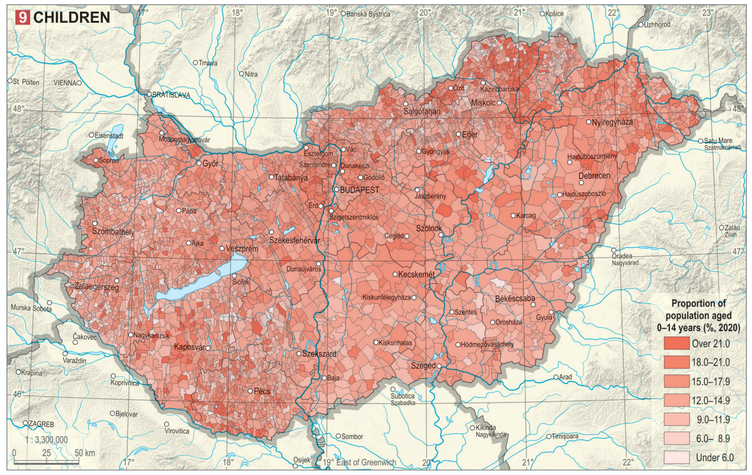
7 DEPENDENCY RATIOS, AGEING INDEX (1910–2020)



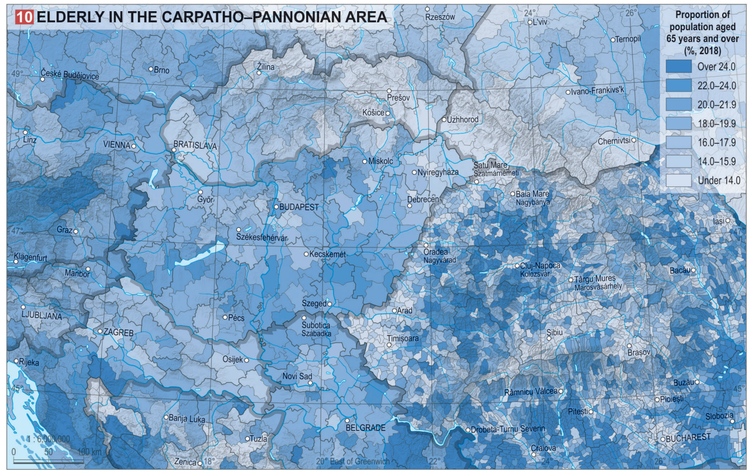
8 CHILDREN IN THE CARPATHO–PANNONIAN AREA



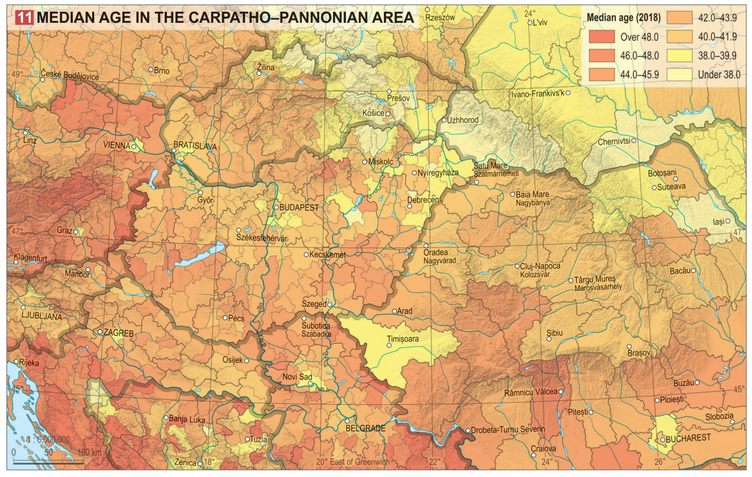
9 CHILDREN



10 ELDERLY IN THE CARPATHO–PANNONIAN AREA



11 MEDIAN AGE IN THE CARPATHO–PANNONIAN AREA



In the *Carpathian Basin* in 1910, only 16.7% of the population was aged over 50, while 35.5% was 14 years old or younger, resulting in a Billeter index of 39.5, far better than in 2018 (–46.3). The dependency rate of children fell from 59.9 to 22.3 between 1910 and 2018, while that of the elderly increased from 8 to 25.9. Accordingly, the striking increase in the ageing index (from 14.2 to 116) points to the changes that have taken place in the age structure of the Hungarian population over the past 100 years.

In terms of ageing there are significant differences among the countries and regions of the Carpathian Basin. The ratio of children is highest and that of the elderly is lowest in Zakarpattia (20% and 11.8% respectively) and in Slovakia (15.7% and 16% respectively). Compared to them, the indicators in Vojvodina, Hungary and Pannonian Croatia are much less favourable (14.4–14.8 and 19.2–19.7). The median age in the countries of our region has generally increased at the same rate as in Europe over the last seven decades, with the difference being that in the third quarter of the 20th century the rate of ageing still lagged behind the European level due to an influx of guest workers (e.g. in Austria) and population policy interventions (e.g. in Romania, Hungary and Slovakia). The value of this indicator is currently the lowest in Slovakia and Ukraine, which have the youngest age structure (41.2 in 2020), while in Slovenia and Croatia, the median age is 44.5 and 44.3 years, respectively. Similar differences are reflected in the change of the ageing index between 1950 and 2018 VI. 1. 5.. Until the 1980s, the indicator showing the ratio between the elderly and child populations reached its highest value in Austria and Hungary, while Serbia, Croatia and Slovenia subsequently caught up with those countries as a result of the Yugoslav Wars in the 1990s.

Hungary's population pyramid was clearly pyramidal in 1910, but the census in 1920 already showed the lack of births associated with World War I. This deficit can be seen even in the population pyramid of 1949, where the number of those aged 30–33 years is conspicuously low VI. 1. 6.. A further observation in Hungary is that, in contrast to the trend in World War I, the number of births hardly decreased during World War II 1, and thus the number of children did not shrink significantly. The effects of accelerated ageing in the second half of the 20th century and the state population policy interventions of the 1950s (the so-called Ratkó era) are reflected in the population pyramid of 1990. The large numbers of Ratkó children born in the 1950s and of their children, born in the 1970s, are particularly striking. The deficits of World War I are still visible here at the top of the population pyramid, among those aged 70–73 years. Yet, these signs have disappeared from the population pyramid of 2020. The shape of the population pyramid of 2020 is clearly an imprint of a declining population. According to population projections, the Hungarian population pyramid will become urn-shaped by 2070. This shape is typical of a declining and ageing population with a low number of children.

Changes in the above mentioned indicators on the present-day territory of Hungary in the last century are quite similar to the averages for the whole population of the Carpathian Basin. The share of children fell from 34.8% to 14.6% between 1910 and 2019, thereby reducing the dependency ratio of children from 57.7 to 22 during this time VI. 1. 7.. At the same time, however, the share of the elderly increased from 5% to 19.4%, and the dependency ratio of the elderly increased from 8.3 to 29.3. According to a 2018 forecast issued by the Hungarian Demographic Research

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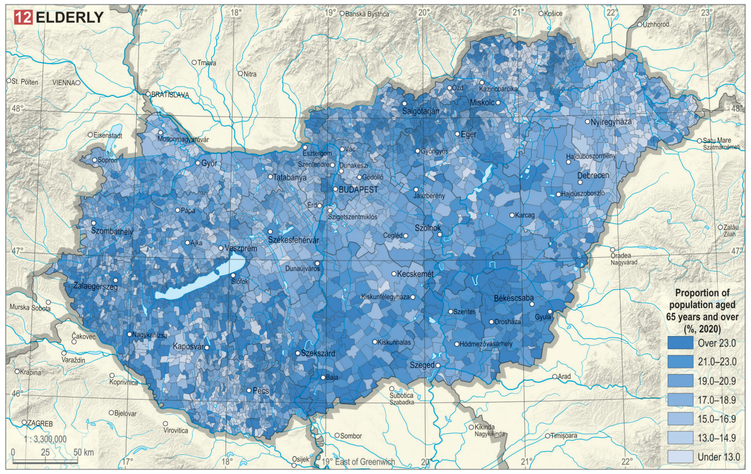
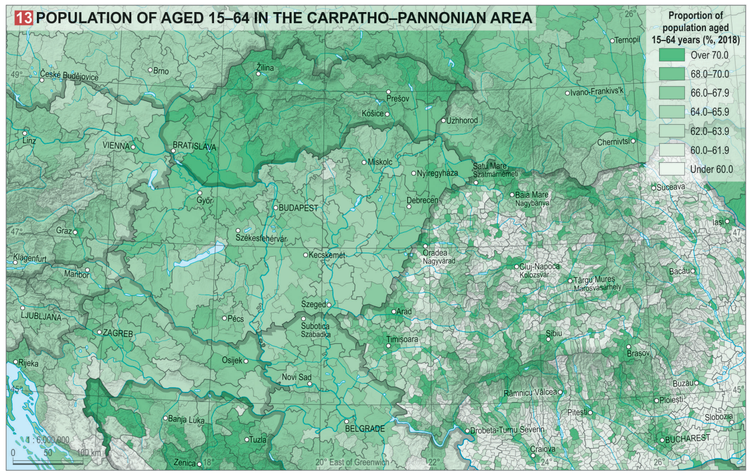
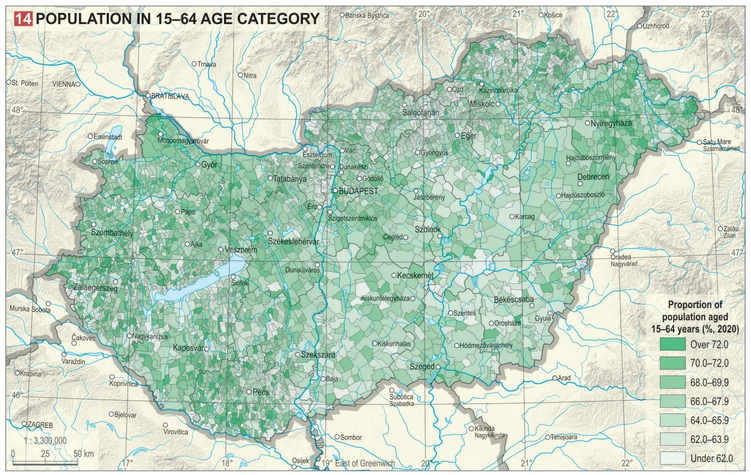
3 *Children, the hope of the future*







Institute of the Central Statistical Office, whereas in 2011 four working-age people supported an elderly person, in 2070 two working-age people will support an elderly citizen. According to the forecast, the dependency ratio of children will not change significantly; the number of children will be about a quarter of the (adult, active) middle-aged group. As the more populous group of the Ratkó era is currently leaving middle age and their children will reach retirement age in 30 years, this will lead to a significant change in the ratios. Indeed, another demographic ageing wave will reach Hungary in the next 50–60 years. The Billeter index, which examines large age groups on a fertility basis, also indicates similar age structure changes: its value decreased from 37.6 to –52.4 between 1910 and 2019. The value of this indicator has been in the negative range since 2001, which means that the number of people older than fertile age is higher than that of those before fertile age. During this time, the average age of the population in the present-day area of the country increased from 27.2 to 42.8 years, and the value of the ageing index, which compares the ratios of children and the elderly in relation to each other, increased from 14.4 to 133, thereby even exceeding the average for the Carpathian Basin (116).

The age structure of the population in the *Carpathian Basin* also shows a characteristic regional pattern. The ratio of *children* (0–14 years old, 3) to adults and the age-dependency ratio, as well as the crude live birth rate have a broadly similar spatial distribution VI. 1. 8 5. In areas with persistently high fertility and above-average birth rates, the ratio of the population aged 0–14 and the associated financial burden are naturally high. Such areas can be found – as a historical heritage – in the northern and northeastern areas of the Carpathians inhabited by Slovaks, Rusyns and Romanians, in the Croatian Međimurje region, in Eastern Slavonia, and in areas inhabited by poorly educated (often Roma) populations (e.g. in Eastern Slovakia, northeastern Hungary, the Central Tisza Region, the Transylvanian Basin and Partium). The proportion of children is similarly high in the vicinity of certain major cities (e.g. Budapest, Bratislava, Košice, Oradea/Nagyvárad, Arad, Timişoara, Cluj-Napoca/Kolozsvár, Sibiu, Braşov, Novi Sad and Zagreb). In 24 settlements in *Hungary* (mostly with a Roma majority) the ratio of children is more than 30%, or twice as high as the national average (14.6%). At the same time, however, seven villages do not have any children at all, and their ratio is less than 5% in 43 villages. According to the settlement-level map VI. 1. 9., the ratio of those aged 0–14 years is above average in areas inhabited by large numbers of disadvantaged and poorly educated Roma (e.g. Northeastern Hungary, Central Tisza Region, and southwestern Transdanubia), in the agglomeration of Budapest and around county centres.

The *ratio of the elderly population* (65 years and older, 4) per 100 people, the elderly dependency ratio, and the *median age* (which divides the population into two equal parts) show almost the same regional picture VI. 1. 10. VI. 1. 11.. The value of these indicators is particularly high in the inner peripheries and border regions, which are particularly hit by the out-migration of young people (e.g. Burgenland, Prekmurje, the Dinarides, the Transdanubian Hills, Northern Hungary, the Körös–Maros Midland, southern and eastern

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4 *In Hungary, elderly people have outnumbered children since the turn of the millennium*

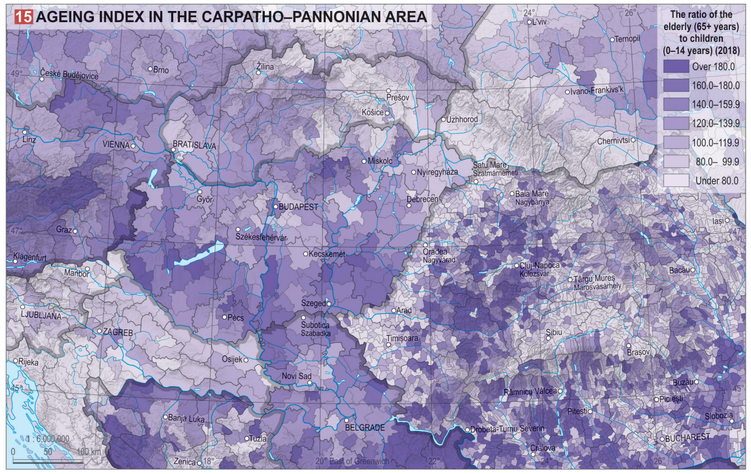
Banat and the Apuseni Mountains). The ratio of the elderly is more than twice the national average (2018: 18.9%) in 26 villages in *Hungary*, but it remains below 5% in 20 settlements with a young age structure. The map with settlement-level details VI. 1. 12. shows the peripheral areas affected by out-migration, where the ratio of people aged 65 and over is above average: remote villages in the North Hungarian Range inhabited by fewer Roma people, in the Körös–Maros Midland, in the southern part of the Danube–Tisza Midland, in the common border regions of Baranya, Tolna and Somogy and in southwestern Zala. In addition, the ratio of the elderly population is much higher than average in the popular target areas of migration in old age (e.g. near Lake Balaton and in the Buda Mountains: districts I, II, XII).

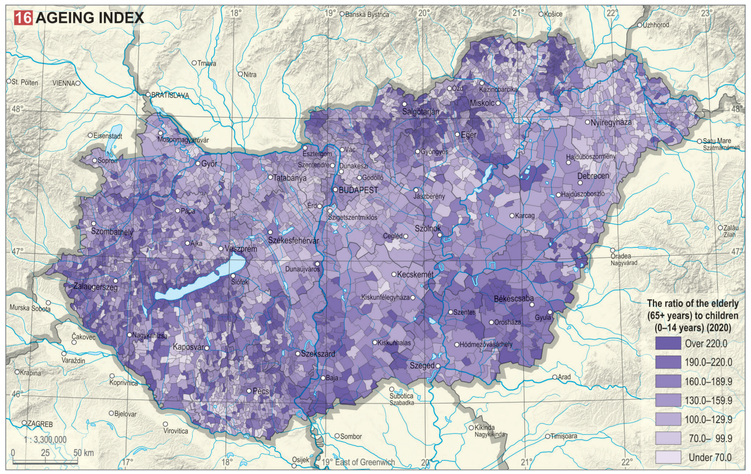


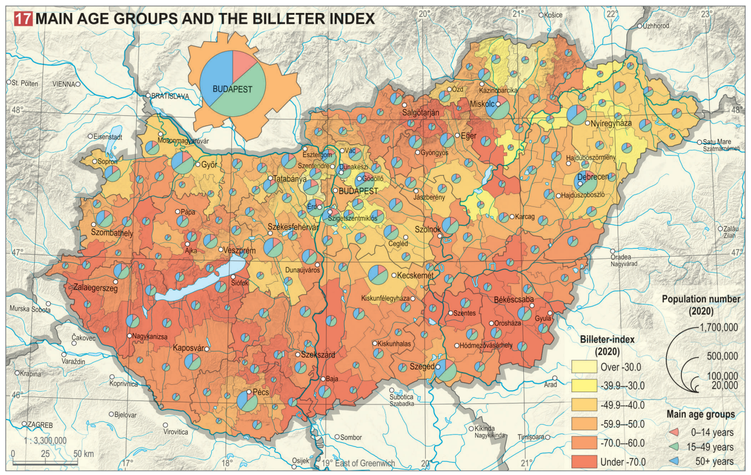
5 *People aged 15–64 have made up two-thirds of the population for a century*

In line with the above, the ratio of the population *aged 15–64* (young and active adult population, 5) is high in less youthful and less ageing regions, as well as in the target areas of recent migration and the core areas of urbanisation (i.e. in major cities, county centres and their vicinity) VI. 1. 13. VI. 1. 14..

The *ageing index* is lowest where the ratio of those aged 0–14 years and the birth rate are the highest VI. 1. 15. VI. 1. 8. 5. Such areas can be found in the eastern part of Slovakia, in the agglomerations of Bratislava and Budapest, in the northeastern periphery of Hungary, in the Central Tisza Region, in southern Transylvania, in the major cities of the Banat and Partium regions (e.g. in Timişoara, Arad, Oradea/Nagyvárad and Satu Mare/Szatmárnémeti). A high degree of ageing is indicated by a high value of this index, similarly to the particularly high proportion of the elderly in some northwestern, mountainous parts of Slovakia, in Burgenland in Austria, in Budapest, in Northern Hungary, in the peripheral areas of the southern Alföld of Hungary, as well as in the southwestern half of Transdanubia VI. 1. 16.. There are 790 settlements in *Hungary* where the number of children exceeds that of the elderly, so the value of the ageing index is below 100. At the same time, in 263







villages ageing is so severe that this indicator is more than double the national average (133).

The *Billeter index*, which compares those of fertile age to the difference between the numbers of people younger and older than the fertile age, is negative throughout Hungary, which means that the number of people beyond their fertile age exceeds those who are still before their fertile age everywhere. The most favourable values are observed in the northeastern districts of Abaúj, Zemplén and Szabolcs, which are mostly inhabited by Roma people, as well as in certain parts of the Budapest agglomeration VI. 1. 17..

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MARITAL STATUS AND HOUSEHOLDS

Laura Szabó, Károly Kocsis, Gabriella Branyiczkiné Géczy, Zsuzsanna Makay, Judit Monostori

Family is the primary community in which a person matures and develops as a human being. It influences our daily lives and constitutes the basic institution of social reproduction [1]. Unsurprisingly, therefore, the defining processes and events in family life – marriage, divorce, moving in together, widowhood – are the subject of keen interest in many disciplines, including demography, sociology, law, economics, and political science. The composition of the population according to marital status and family structure reveals both a transformation of the framework of our everyday lives and changes in the process of population reproduction. It is worth noting that the composition of the population by marital status in the first three quarters of the 20th century reflected the main trends in family relations. However, since the mid-1970s and the spread of cohabitation and single-parent families, it has become less feasible to interpret the familial status and relationships of women, men and their children solely on the basis of marital status.

20th century: the heyday of marriage, then the decline of its popularity and the rise of single-person households

Until of the late 1970s and early 1980s, most people wanted and were able to get married. The propensity of unmarried people to marry increased steadily until 1960, thereafter stabilising at a high level. Indeed, the share of married people in the population aged 15 and over increased to two thirds by 1960 and remained at this high level for two decades VI. 2. 1.. The proportion of women who were married or who had been married peaked in 1980 at more than 85%. Subsequently, the proportion of people living in marriage began to decline rapidly. This development was mainly due to an increase in the number of people cohabitating and, latterly, to an increase in the number of young people remaining in the parental home for longer periods.

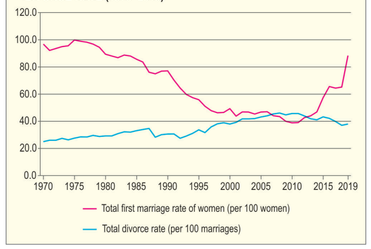
However, a questioning of the 'universal nature' of marriage began earlier, as the number of divorces increased and remarriage became less common. Although divorces already occurred in the early 20th century and their number generally increased after the wars, their growing prevalence can be attributed to extensive industrialisation, the flow of labour into cities, and women's employment. Remarriage at the beginning of the century mostly followed widowhood, and until the 1960s remarriage was common, subsequently becoming rarer. Divorced people no longer looked for new bonds; they mostly lived together without marriage. Cohabitation started to become widespread as a post-marital relationship. Since the late 1980s, however, more and more people have lived together in cohabitation. Although these relationships are lasting ones and often lead to marriage, they are still relatively fragile. Consequently, an increase in the instability of relationships can be observed.



1 *Families are the foundation of society*

In addition to the above processes, changes in family and household structure are also related to changes in life prospects. On the one hand, the expansion of employment and growing prosperity create an opportunity for younger people to move out and start a family away from their parents. On the other hand, an increase in life expectancy also increases the proportion of those who live long enough to see all their children leave home. Many later remain alone as widows. Therefore, the 20th century brought an increase in the number of single-person households for a variety of reasons. Due to the growing instability of relationships – divorces and the break-up of cohabitations – more and more children experience a single-parent family situation for longer or shorter periods of time.

2 TOTAL FIRST MARRIAGE RATE OF WOMEN AND THE TOTAL DIVORCE RATE (1970–2019)



1 NUMBER AND DISTRIBUTION OF POPULATION AGED 15 AND OVER ACCORDING TO MARITAL STATUS (1910–2021)

Year	Unmarried	Married	Widows	Divorced	Total	Unmarried	Married	Widows	Divorced
	Number					Proportion (%)			
1910	1,430,782	3,067,101	449,927	18,818	4,966,628	28.8	61.8	9.1	0.4
1920	1,710,202	3,239,457	561,753	29,154	5,540,566	30.9	58.5	10.1	0.5
1930	1,895,443	3,738,476	601,885	57,060	6,292,864	30.1	59.4	9.6	0.9
1941	1,963,548	4,195,034	660,386	76,705	6,895,673	28.5	60.8	9.6	1.1
1949	1,825,967	4,264,765	736,423	87,554	6,914,709	26.4	61.7	10.7	1.3
1960	1,507,418	5,037,514	737,145	149,514	7,431,591	20.3	67.8	9.9	2.0
1970	1,692,100	5,432,347	773,517	247,628	8,145,592	20.8	66.7	9.5	3.0
1980	1,478,789	5,637,611	856,420	395,470	8,368,290	17.7	67.4	10.2	4.7
1990	1,671,462	5,041,676	923,920	607,216	8,244,274	20.3	61.2	11.2	7.4
2001	2,306,929	4,459,438	989,407	752,527	8,508,301	27.1	52.4	11.6	8.8
2011	2,809,413	3,837,264	953,029	928,806	8,528,512	32.9	45.0	11.2	10.9
2021	2,919,000	3,525,000	861,000	1,009,000	8,314,000	35.1	42.4	10.4	12.1

Marriages and divorces recently and today

The most accurate impression of people's propensity to marry and to divorce can be obtained by examining the *total first marriage rate* (TFMR) and the *total divorce rate* (TDR). These rates show, in simple terms, the chances of getting married and of marriages ending in divorce. The TFMR in Hungary declined sharply from the 1980s until 2010 (i.e. the probability of a woman marrying during her life decreased). By 2010, this rate declined to a minimum value VI. 2. 2.. It then started to increase, reflecting an increasing propensity to marry. Since 2016, its value (calculated for one hundred women) has been over 60 [2]. The probability of divorce increased until 2008, when the total divorce rate (related to one hundred marriages) was 46 (i.e. almost one in two marriages could be expected to fail). Since 2011, there has been a significant decline in this index.

The negative trends affecting marriage rates stemming from a decline in the propensity to marry and an increase in the number of divorces were accentuated by a decrease in the number of *remarriages*. In the past, only widows remarried, reflecting the unfavourable mortality conditions. Following World War II, it was less common, and from the 1950s, the remarriage of those divorced became more common due to the increasing number of divorces. In the first half of the 1960s, three-quarters of divorced men, and more than two-thirds of divorced women, could hope to remarry within 20 years of their divorce. By the 1970s, however, the first signs of a reluctance to remarry were already evident, especially among divorced men. The main reason for a decline in the number of remarriages was the spread of cohabitations.

There have also been significant changes in the average age of women and men at the time of marriage. In 2018, the *average age of women at first marriage* was 30.1, while among men the average age was 32.8. Twenty-five years earlier, however, these values were nearly



2 *The number of marriages almost doubled in Hungary in the past decade*

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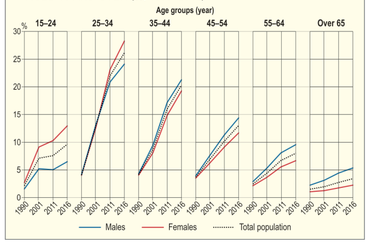
Total first marriage rate *(TFMR) shows the proportion of people over the age of 15 who will marry by the age of 50 if all age groups of the generation married in the future at the same rate as they did in the considered year.*
Total divorce rate *(TDR) shows the percentage of marriages that shall end in divorce if the probabilities observed in a given year for each marriage cohort remain unchanged.*

8 years lower. Indeed, in 1993, women entered their first marriage at the average age of 22.2, while men did so at the average age of 24.9. Between the two dates, the average age at marriage increased by about 3.5-4 months each year. Therefore, the age structure of those getting married changed significantly. After more than two decades of increase, the average age at first marriage essentially stagnated between 2014 and 2017. Since 2017, however, a further increase has been observed.

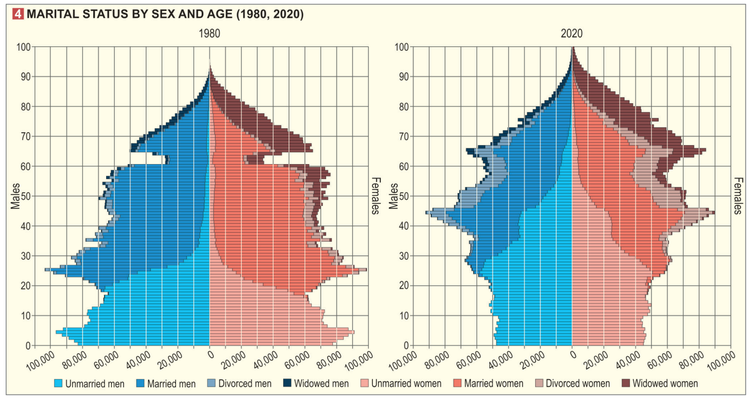
Emergence of new types of relationships

In Hungary, *cohabitation* spread initially among those who had been married (i.e. widows and divorced people). In 1984, for example, 60% of women in cohabitations had once been married and had then divorced. In the late 1980s, new trends emerged in cohabitation: the proportion of people living in cohabitations increased dramatically among the younger age groups. One type of cohabitation entails the first relationship, while another follows the dissolution of marriage. Cohabitation, in the form of an alternative to marriage as a first partnership, appeared only in the second half of the 1980s; however, it soon gained widespread popularity. It became a feature of life in many former communist countries, including Hungary. The proportion of people in cohabitation multiplied among young adults and young middle-aged people between 1990 and 2016 VI. 2. 3.. Today, nine-tenths of first relationships start as cohabitations, and only in the case of one in ten of first relationships do those involved move in together at the time of marriage. The first cohabitation is mostly temporary, but there are lasting ones that can also be interpreted as an alternative to marriage. Their transience is indicated by the fact that this life situation is most common among those aged 25–34 and 35–44.While in the 1990s an increase in cohabitation was dominant, after the turn of the millennium the growing proportion of *single people* without *a permanent relationship* was the most typical trend. This life situation may occur at any age; some singles have never had a permanent relationship, while others are divorced or widowed. Some of them cannot be considered literally single, as they can have a permanent partner with whom they do not cohabit. They live in the form of a *visiting partnership*. This type of separation can be voluntary or forced, and it may also be temporary or permanent. Several reasons can be behind this: a higher proportion of young people study in higher education, complete their studies at an older age, enter the labour market later and, consequently, move out of their parents' home at an older age. Often shown in the media but numerically a small group are the 'singles' who consciously chose a lifestyle free from family obligations.

3 PROPORTION OF COHABITANTS IN THE POPULATION AGED 15 AND OVER (%, 1990–2016)



4 MARITAL STATUS BY SEX AND AGE (1980, 2020)



*An **unmarried** person has not yet married. A **married** person is in a marriage that has not been dissolved legally, regardless of whether the person is living with his/her spouse. A **widow** is a person who has not remarried after the death of his/her spouse. Finally, a **divorced** person is someone whose marriage has been legally dissolved and has not remarried. The marital status of those **living in cohabitation** is also determined on the basis of the legal situation. On 1 July 2009, a new category of marital status was introduced in Hungary, namely the registered partnership.*

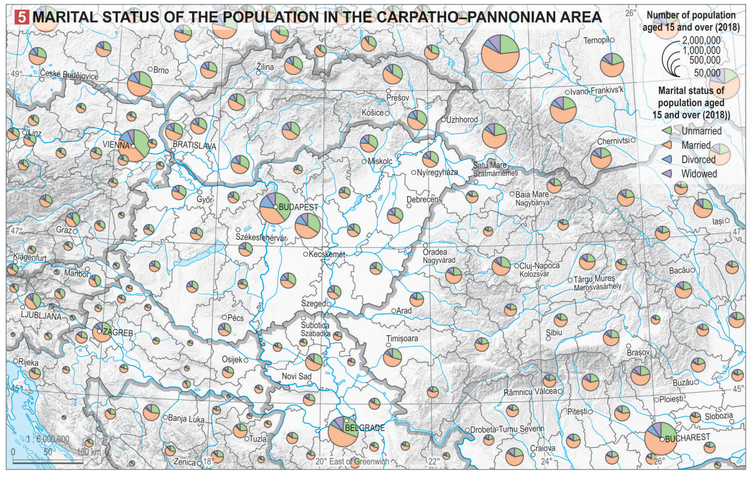
All these processes shape the distribution of the population of a given area according to marital status at a given time. While this is mainly reported in the censuses, civil registers also play an important role in recording life events (marriages, divorces, deaths). Such records can be used to track changes in the marital status of the population between two censuses. The classification of the population by marital status reflects the legal situation at the time of the censuses.

Several conclusions can be gleaned from a comparison of the population age structures for 1980 and 2020 showing the marital status of the population by sex and age VI. 2. 4.. On the one hand, we see that married people constitute the majority in both time periods. It can also be seen that the proportion of married men decreased more than that of married women during the period under review. The rise of unmarried people is also striking. While in 1980 their number and proportion decreased significantly from the age of 25, in 2020 they account for a significant share even among 40-year-olds. Another striking change is that in 2020, more men are unmarried at an older age than was the case in 1980; however, this trend is less evident among women. The number of widows has hardly changed, but the number of divorcees all the more so: their number in 2020 among both sexes is much higher than it was in 1980. More detailed analyses have shown that divorced men are more likely to find a new partner than women, but more than half of women live with a new partner within a relatively short period of time.

Spatial differences of marriage habits

In his study of the marriage habits of the European population, John Hajnal, an English demographer of

5 MARITAL STATUS OF THE POPULATION IN THE CARPATHO–PANNONIAN AREA



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Hungarian descent, divided Europe into two distinct areas, separated by a line (1965). What became known as the *Hajnal Line* runs from Trieste to Saint Petersburg. Marital behaviours to the west and east of the line differ. Hajnal characterised the Western European pattern as a tendency towards a late (first) marriage with a high proportion of people who never marry. In contrast, to the east of the Hajnal Line, people typically marry at a young age and in high proportions; unmarried people are relatively few. Hungary lies just to the east of the Hajnal Line. The country has long been characterised by people having a family at a younger age than is typical for the Western European countries and by a higher rate of marriage. In many areas east of the line, however, this trend was even more explicit than in Hungary. However, the historical picture has undergone a significant change with the spread of marriage and relationship patterns in Western Europe in recent decades, thus redrawing the map of Europe. All this is well illustrated by the maps depicting the population of the Carpatho–Pannonian Area according to marital status. Among the categories describing marital status, the predominance of *married* people in the Carpathian Basin is striking. With few exceptions, married people outnumber other groups, with their proportion of the population ranging from 40% to 63% VI. 2. 5.. Only in Hungary and in most of Slovakia do married people form less than half of the population. In both countries the proportion of unmarried people is particularly high. The share of divorced people and widows does not show as much variability as that of married and unmarried people. Their respective proportions in the Carpathian Basin are 7% and 11% on average. Overall, it can be stated that the composition of the population according to marital status depends, on the one hand, on the local historical acceptance of different forms of relationships and, on the other hand, on the age structure of the population. The proportion of unmarried people is naturally higher among populations with a young age structure, that of widows is higher in the case of an ageing population, and that of divorced people is higher in urbanised areas.

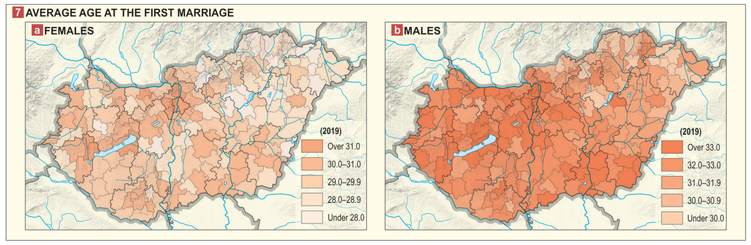
Marriage habits having a significant impact on the composition of the population by marital status (especially its past composition) differ significantly in terms of territory. The first marriage rate of women is particularly high in the northern and northeastern peripheries of Hungary, in the Central Tisza Region and in some parts of Southern Transdanubia VI. 2. 6.. The lowest average age of married people is also found here VI. 2. 7.. These areas coincide with a high concentration of disadvantaged and poorly educated people with low incomes including many Roma. The first marriage rate of women is low, and marriages also take place at an older age, in the most developed, central and western parts of Hungary. In 2017, in some parts of Budapest (mainly in the elite districts of Buda), women married for the first time at an average age of 32, while the corresponding average figure for men was as high as 34.1.

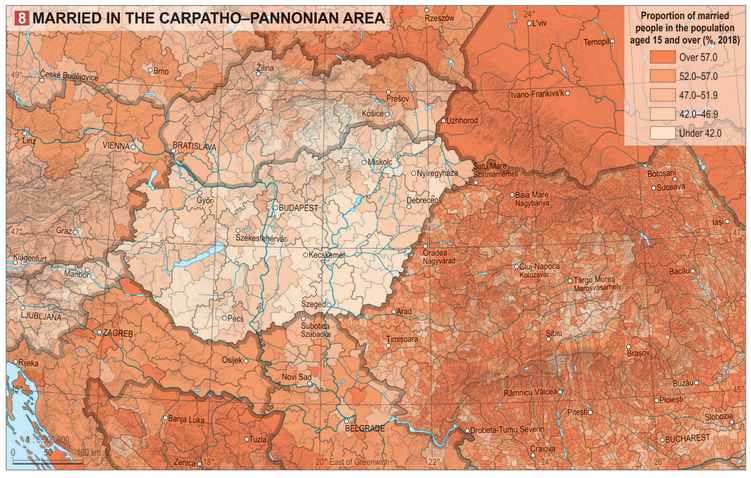
The majority of the population is married in the *Carpathian Basin* VI. 2. 8.. Compared to the neighbouring Croatian, Serbian, Romanian and Ukrainian regions, the *proportion of married* people is, however, relatively low in Hungary and most of Slovakia. Within Slovakia, the proportion of married people is relatively high in the most religious northern and northeastern peripheral regions VI. 4. 6.. As a large number of families with children have moved to the agglomeration belt of Bratislava, the proportion of people living in marriage is relatively high there, too. Transylvania is generally characterised by a high proportion of married people, but there are also significant areas where their proportion is below average, including the region at the intersection of the counties of Sibiu, Brașov, Harghita/Hargita and Mureș/Maros, where the proportion of the young Roma population (and consequently that of unmarried people) is particularly high VI. 3. 9.. However, the phenomenon may also be explained by the ageing non-Roma populations living in this area, with a significant number of elderly widows. For similar reasons, areas can be found in Hungary (e.g. in the northern peripheries, the Central Tisza Region, and southwestern parts of Transdanubia) where – even compared to the Hungarian average – the proportion of married people is particularly low. At the same time, there are other areas in the country where the proportion of people living in marriage is remarkably high VI. 4. 7.. Explanatory factors may include the greater degree of religious attachment of the local population and greater societal esteem for the institution of marriage. Such areas include northwestern Transdanubia, the vicinity of Lake Balaton, eastern Baranya, southern Tolna, the Kalocsa region, and the northern and northeastern peripheral regions VI. 2. 9..

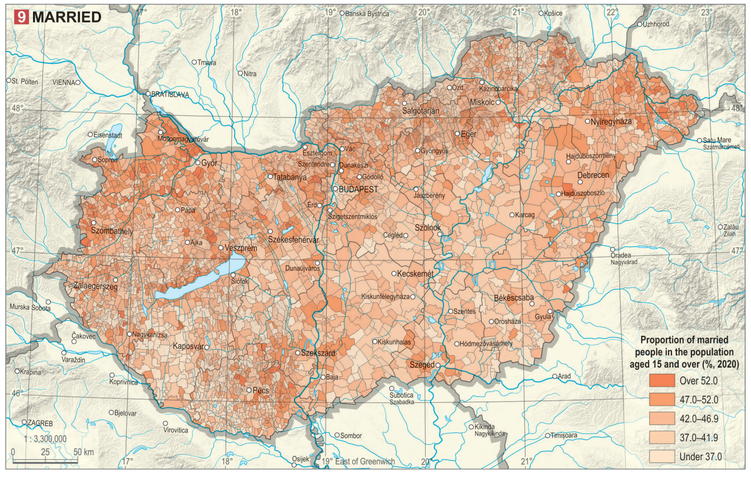
The regional distribution of the *proportion of unmarried people* is the opposite of that of married people VI. 2. 10.. Spatial variance is due not only to differences in the prestige of marriage as a form of partnership and in the relative acceptance of cohabitation VI. 2. 11. but also to discrepancies in the demographic and age structure. The proportion of unmarried people is higher in areas inhabited by more fertile and youthful (often Roma) populations (e.g. the southwestern parts of Somogy and Baranya, the peripheries of Nógrád, Gömör and Abaúj, the Bodrogköz, Szatmár and the Central Tisza Region) VI. 2. 12.. Examining the proportion of unmarried people by gender, we find that the ratio of men among them is higher than that of women in all counties. Nationwide, 1.4 times more men remain unmarried than women.

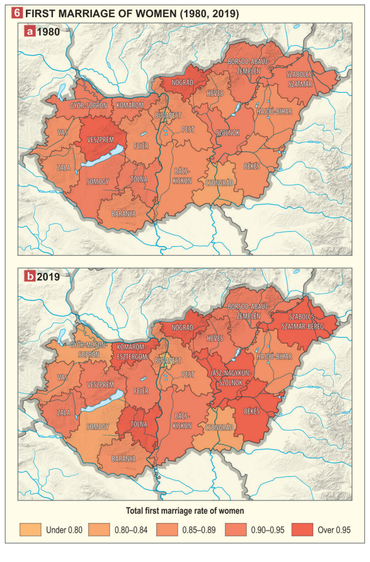
The *proportion of divorced people* in the Carpathian Basin is the highest in the Hungarian, Slovak and Austrian areas and – in terms of settlement type – in the cities VI. 2. 13.. The differences between the countries reflect such factors as the religiosity of the local population, social acceptance of divorce and the legal regulation of divorce. In Hungary, the proportion of divorced people is particularly low in the northeastern areas and in western Transdanubia with their relatively religious populations. Meanwhile, it is high in the capital and in some parts of the southern Alföld VI. 2. 14.. The proportion of divorced people is particularly high (above 15%) in industrial cities such as Dunaújváros, Komló, Tiszaújváros, Salgótarján, Miskolc, Tatabánya, and districts X, XV and XX of Budapest. The proportion of divorced women is slightly higher than that of men in all counties, which can largely be explained by the more frequent remarriage of the latter [3].

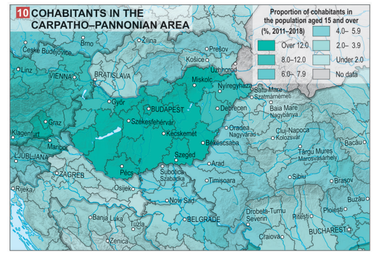
Among certain categories of marital status, the *proportion of widows* shows the smallest spatial differences in the Carpathian Basin VI. 2. 15.. Nevertheless, there are areas where the proportion of widows is





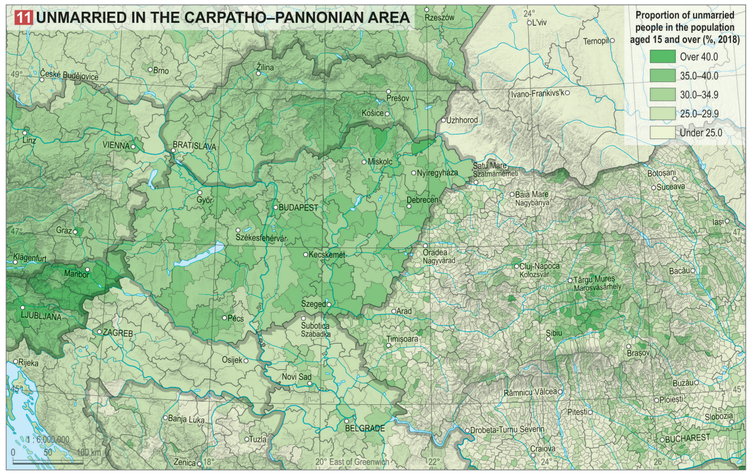




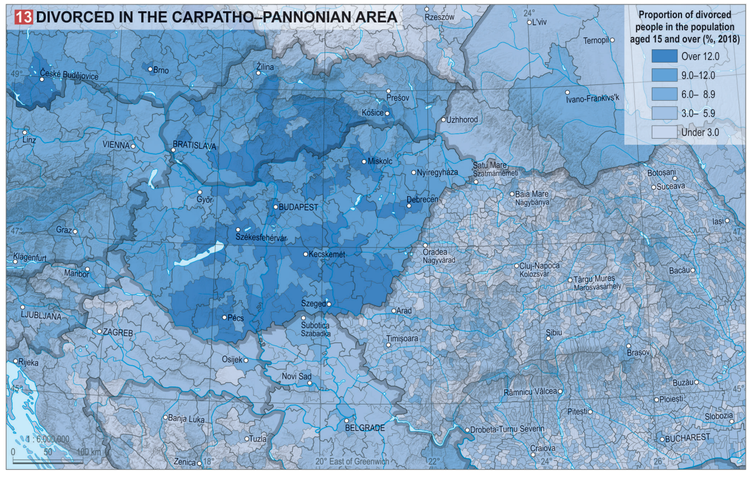




3 *A divorced mother and her child*







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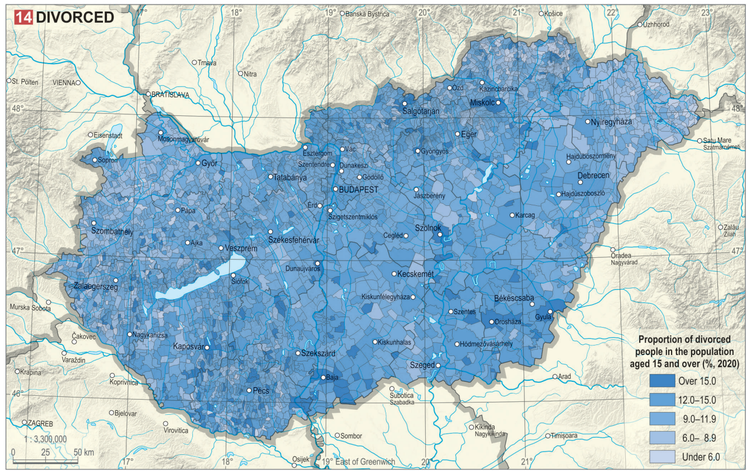
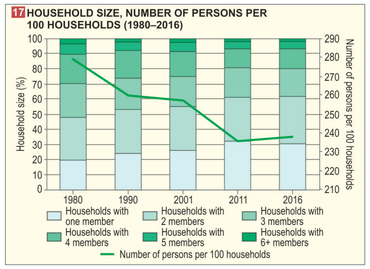
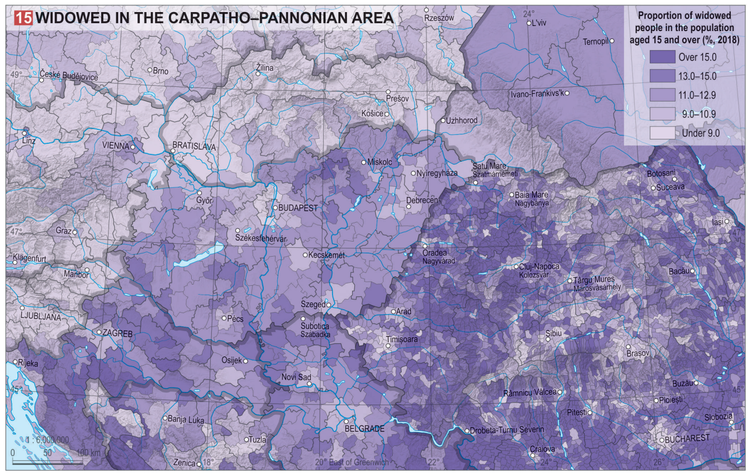
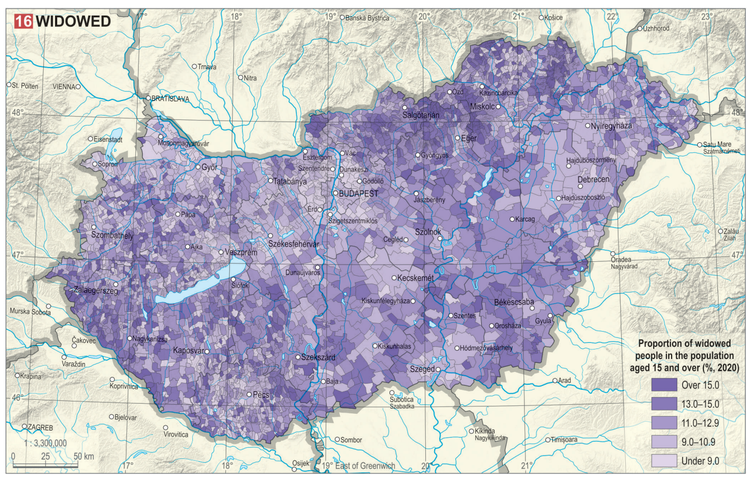








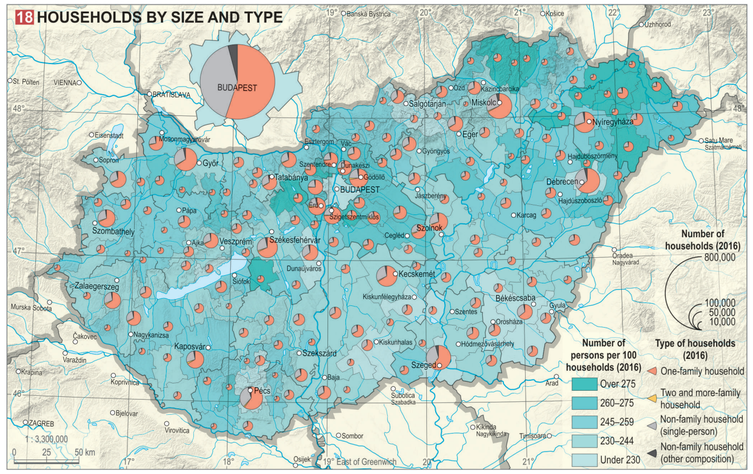
well above average due to the ageing of the local population and high mortality (e.g. Apuseni Mountains, Someşan Plateau, Banat Mountains, Western Slavonia, Dinarides and Northern Hungary). The number and proportion of widows is influenced by mortality and age structure, which vary from country to country and from gender to gender. In countries with higher life expectancy, the gender gap is smaller, so the proportion of widows is somewhat lower 18 VI. 2. 15.. However, it should not be forgotten that while *cohabitation* can also be an alternative to remarriage after both widowhood and divorce, it does not affect the legal category of marital status. Acceptance of cohabitation is high in Austria, Hungary and Slovenia but significantly lower in Croatia, Romania, Ukraine and Slovakia.

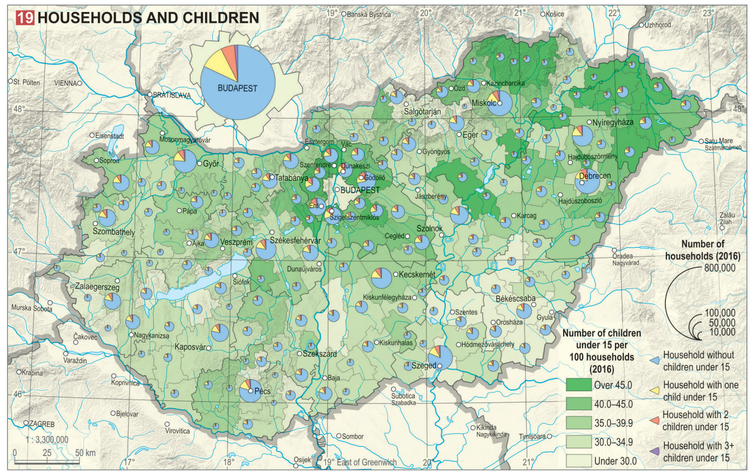
In Hungary, the proportion of widows is also high, especially in regions with ageing populations, including rural areas in the North Hungarian Range, the Southern Alföld and the Transdanubian Hills VI. 2. 16.. The difference among the genders is very marked: the proportion of widows among women is more than 4.5 times that of the proportion among men. The main reason for this is the shorter life expectancy of men. In general, counties with high proportions of widowed women (e.g. Nógrád) also exhibit the largest differences in life expectancy between the two sexes.

Structure of households

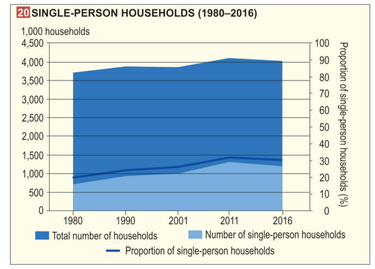
As much as 98% of the population in Hungary lives in private households. While the population has been steadily declining since 1981, the number of households has tended to grow. This also means that households have become gradually smaller in recent decades. In 1980, the *average household size* was 2.79 people, yet in 2016 it was only 2.38 VI. 2. 17.. This process can be traced back to several factors. One is the ageing of the population, which contributes significantly to an increase in the proportion of *one-* and *two-person households*, as the elderly typically live in such households. The decrease in the average household size also reflects the fact that the proportion of households without children has been steadily increasing, and there are fewer children in families with children. Another factor in the reduction of household size is the decrease in the number of people living in three- or multi-generational households, where grandparents, parents and children form a cohabiting community. In recent years, however, there have been only small changes in the number and size of households. This suggests that past trends are reversing or not continuing at the same pace as before. Between 2011 and 2016, the average household size increased slightly. This was due to a slight decline in the number of one-person households and an increase in the proportion of households with two or, to a lesser extent, 4-5 people.

In the areas with the most ageing population, such as Budapest and many major cities (e.g. Szeged, Békéscsaba, Pécs and Debrecen), the average household size (2.06–2.26) is significantly below the national value (2.38 persons/household) VI. 2. 18.. At the same time, in the Budapest and other metropolitan agglomerations, as well as in the regions with multiple disadvantages inhabited by populations (often Roma) with typically high fertility and a young age structure, the size of households is particularly large (exceeding 2.75). The cohabitation of three- or multi-generational families is also more common in these areas.





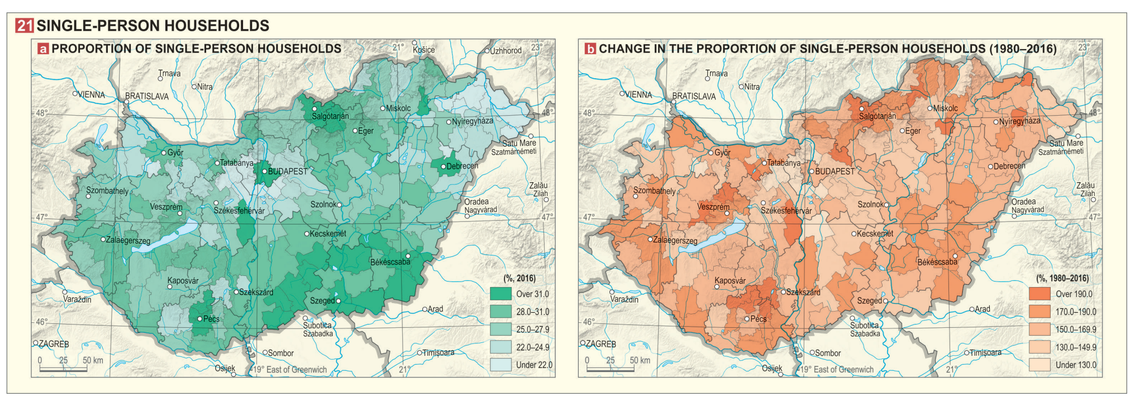
One of the most important social phenomena of recent decades has been the decline in fertility, which has also led to a decline in the proportion of *families and households with children*. The younger the age group of the children, the stronger the decline will be. This is explained by the fact that children remain in their parents' home for longer periods, with some doing so until the end of their 20s or even into their 30s. Consequently, the proportion of people living in a household with their older offspring has not decreased as much as that of people with young children. In 1980, 46% of families were raising children under 15 years of age, while in 2016 the corresponding figure was just 32%. The decline in fertility has resulted not only in a decline in the proportion of families raising children but also in lower numbers of children. The consequences of this can be seen in changes in family structure. In 1980, the proportion of single-child families was 51% among those raising children under the age of 15, while in 2016 it was



57%. Spatial differences in fertility also determine differences in cohabitation forms. Areas where the size of households is above average also have a particularly high proportion of families with many children VI. 2. 19..

The increase in the number of *one-person households* is a decades-long process that seems to have stalled in recent years, although it is not yet clear whether a lasting decline can be detected in the proportion of people living alone. Around 30% of the population lived in a single-person household in 2016 VI. 2. 20.. However, people living alone cannot be regarded as a homogeneous group: they are at different stages of their lives, their social-demographic situations vary, and they also differ in terms of the reasons for living alone and in how long they have been living alone (whether this status is temporary or permanent). The largest group of one-person households comes from the older generations. Among the elderly living alone, women are significantly overrepresented, as their male companions typically die first. This is because male life expectancy is lower than that for women and because men are typically a few years older in relationships. In recent years, the proportion of divorced people among the elderly living alone has also risen, following the breakdown of even decades-old relationships. As relationships become more fragile, such fragility will certainly play an increasingly important role in the changing forms of coexistence among older age groups.

The proportion of one-person households is highest in Budapest (50.4%) where population ageing is particularly acute, but such households are also remarkably common (33%-35%) in many other major cities (e.g. Szeged, Pécs, Salgótarján and Debrecen) VI. 2. 21.. In several inner districts of Budapest (I, V, VI, VII) the proportion of single-person households is well above 50%, but in many districts of the Southern Alföld and in Northern Hungary a high proportion of single people and the associated problems are noteworthy as well.



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ETHNICITY, LANGUAGE

Károly Kocsis, Patrik Tátrai

Ethnicity and language are particularly important cultural characteristics of the composition of the population, since ethnic affiliation is a characteristic that signifies the natural connection of the individual to his family, kinship, clan and ethnic community. As a result of various migrations and geopolitical changes, few countries are homogeneous from an ethnic and linguistic point of view. Nevertheless, three-quarters of countries around the world – and all of those in the Carpathian Basin – define themselves as nation-states. Only 12 countries in Europe can be regarded as having societies that are relatively uniform ethnically and linguistically, with the titular nation constituting more than 90% of the population (e.g. Albania, Hungary, Iceland, Poland and Portugal). There are more than 7,000 living languages worldwide, eight of which are spoken by more than 1% of the population of the Carpathian Basin (Hungarian, Romanian, Slovak, Croatian, Serbian, Ukrainian, German and Romani).

As a result of its central location, the Carpathian Basin is the meeting place of Finno-Ugric, Slavic, German and Romance languages. As a result, its population is characterised by an almost unique ethnic-linguistic diversity in Europe. In the last millennium, the ethnic composition of the population was radically transformed several times in close connection with the natural, economic and social environment.

Ethnic processes over the last century

Hungary, which was one of the most ethnically and linguistically diverse countries in Europe until 1918, lost 71.4% of its area and 33% of its Hungarian-speaking population under the Treaty of Trianon of 1920. It thus became one of the most homogeneous European countries in terms of language and ethnicity. Between the autumn of 1918 and 1924, 426 thousand ethnic Hungarians from the annexed areas (half of them from Transylvania) fled to the remaining territory of Hungary, mainly to Budapest and its surroundings. In the territories occupied by the neighbouring states, the previously mostly Magyarised Jewish and Roma populations were classified as independent groups in the subsequent ethnic statistics of the successor states. In Zakarpattia, Slovakia and Transylvania, this led to significant falls in the numbers of persons declaring a Hungarian ethnic affiliation, in relation to the Hungarian native language statistics of 1910. For these reasons, the proportion of Hungarians in the Carpathian Basin decreased from 48.1% to 46.3% between 1910 and 1930 VI. 3. 1..

As a result of migrations from the successor states and assimilation, the proportion of people in Hungary identifying themselves as Hungarian native speakers increased from 88.4% to 92.1% between 1910 and 1930 VI. 3. 2.. Concurrently, the loss of the national minorities was striking in all respects. Reflecting the nationalistic policies of the era and the mass settlement of Hungarians from beyond the new borders, the national minorities in Budapest nearly disappeared, according to the native language statistics. Thus, whereas the population in 1880 comprised 156 thousand non-Hungarians and 201 thousand Hungarians, in 1930 there were no more than 57 thousand non-Hungarian native speakers living among nearly one million Hungarians in the capital.

The rapid statistical decrease in the number of Hungarian minorities in the Carpathian Basin in the 1920s and 1930s was halted by territorial revisions between 1938 and 1941 (mainly the First and Second Vienna Awards). Areas inhabited by ethnic Hungarians that had been annexed in 1920 (present-day southern Slovakia, Zakarpattia, northern Transylvania, Bačka, Croatian Baranya and Međimurje, and Slovenian Prekmurje) were returned to Hungary. In these regions, the arrival of Hungarian public servants, the self-determination of the bilingual population, and the decision of the majority of Jews to self-identify as Hungarians, resulted in a striking increase in the number of people professing to be native Hungarian speakers. The trend was especially evident in Zakarpattia, Slovakia and Transylvania. As a result, almost one in two of the Carpathians Basin's inhabitants declared themselves to be Hungarian in 1941.

1 DEVELOPMENT OF THE ETHNIC–LINGUAL STRUCTURE OF POPULATION IN THE CARPATHIAN BASIN (1495–2011)

Year	Total population	Hungarian	Romanian	Slovak	Croatian	Serbian	Rusyn, Ukrainian	Roma	German	Slovenian	Other	Not willing to declare ethnicity
	Number (thousand people)											
1495	3,100	2,050	180	170	340	100	30	—	200	10	20	—
1787	9,362	3,250	1581	1432	1003	620	278	—	928	37	233	—
1840	12,877	4,822	2206	1687	1313	828	443	—	1270	41	267	—
1880	15,642	6,445	2404	1865	1460	892	356	—	1954	62	204	—
1910	20,886	10,051	2949	1968	1928	1106	473	121	2037	93	160	—
1930	22,723	10,526	3283	2508	1932	1096	595	178	1855	120	630	—
1941	24,305	11,953	3434	2582	2043	1071	641	172	1854	103	452	—
1960	26,335	12,508	4133	3709	2488	1487	784	107	682	115	322	—
1990	30,200	12,843	5764	4624	2686	1560	1084	465	393	95	613	73
2001	29,456	11,822	5464	4717	2833	1497	1119	576	367	82	257	722
2011	28,540	10,402	4874	4456	2738	1446	1131	762	422	67	300	2368
	Proportion (%)											
1495	100.0	66.1	5.8	5.5	11.0	3.2	1.0	0.0	6.5	0.3	0.6	0.0
1787	100.0	34.7	16.9	15.3	10.7	6.6	3.0	0.0	9.9	0.4	2.5	0.0
1840	100.0	37.4	17.1	13.1	10.2	6.4	3.4	0.0	9.9	0.3	2.1	0.0
1880	100.0	41.2	15.4	11.9	9.3	5.7	2.3	0.0	12.5	0.4	1.3	0.0
1910	100.0	48.1	14.1	9.4	9.2	5.3	2.3	0.6	9.8	0.4	0.8	0.0
1930	100.0	46.3	14.4	11.0	8.5	4.8	2.6	0.8	8.2	0.5	2.8	0.0
1941	100.0	49.2	14.1	10.6	8.4	4.4	2.6	0.7	7.6	0.4	1.9	0.0
1960	100.0	47.5	15.7	14.1	9.4	5.6	3.0	0.4	2.6	0.4	1.2	0.0
1990	100.0	42.5	19.1	15.3	8.9	5.2	3.6	1.5	1.3	0.3	2.0	0.2
2001	100.0	40.1	18.5	16.0	9.6	5.1	3.8	2.0	1.2	0.3	0.9	2.5
2011	100.0	36.4	17.1	15.6	9.6	5.1	4.0	2.7	1.5	0.2	1.1	8.3

2 DEVELOPMENT OF THE ETHNIC–LINGUAL STRUCTURE OF POPULATION ON THE PRESENT TERRITORY OF HUNGARY (1910–2016)

Year	Total population	Hungarian	Roma	German	Romanian	Slovak	Croatian	Serbian	Rusyn, Ukrainian	Slovenian	Other	Not willing to declare ethnicity
	Number											
1910	7,612,114	6,730,299	9,799	553,179	28,491	165,317	62,018	26,248	—	6,915	29,848	—
1920	7,986,875	7,155,979	6,989	550,062	23,695	141,877	58,931	17,132	—	6,087	26,123	—
1930	8,685,109	8,000,335	7,841	477,153	16,221	104,786	47,332	7,031	996	5,464	17,950	—
1941	9,316,074	8,918,868	27,033	302,198	7,565	16,677	4,177	3,629	—	2,058	33,869	—
1949	9,204,799	9,104,640	37,598	2,617	8,500	7,808	4,106	4,190	—	666	34,674	—
1960	9,961,044	9,837,275	56,121	8,640	12,326	14,340	14,710	3,888	—		13,744	—
1980	10,709,463	10,638,974	6,404	11,310	8,874	9,101	13,895	2,805	—	1,731	16,369	—
1990	10,374,823	10,142,072	142,683	30,824	10,740	10,459	13,570	2,905	—	1,930	19,640	—
2001	10,198,315	9,416,045	189,984	62,105	7,995	17,693	15,597	3,816	6,168	3,025	12,187	570,537
2011	9,937,628	8,314,029	308,957	131,951	26,345	29,647	23,561	7,210	8,956	2,385	64,086	1,455,883
2016	9,803,837	9,445,436	299,342	101,662	24,178	22,510	18,483	8,239	9,947	2,311	93,426	158,161
	Proportion (%)											
1910	100.0	88.4	0.1	7.3	0.4	2.2	0.8	0.3	0.0	0.1	0.4	0.0
1920	100.0	89.6	0.1	6.9	0.3	1.8	0.7	0.2	0.0	0.1	0.3	0.0
1930	100.0	92.1	0.1	5.5	0.2	1.2	0.5	0.1	0.0	0.1	0.2	0.0
1941	100.0	95.7	0.3	3.2	0.1	0.2	0.0	0.0	0.0	0.0	0.4	0.0
1949	100.0	98.9	0.4	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.4	0.0
1960	100.0	98.8	0.6	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0
1980	100.0	99.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.0
1990	100.0	97.8	1.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.0
2001	100.0	92.3	1.9	0.6	0.1	0.2	0.2	0.0	0.1	0.0	0.1	5.6
2011	100.0	83.7	3.1	1.3	0.3	0.3	0.2	0.1	0.1	0.0	0.6	14.7
2016	100.0	96.3	3.1	1.0	0.2	0.2	0.2	0.1	0.1	0.0	1.0	1.6

Remark: native language data in 1910–1930, ethnic (nationality) data in 1941–2016. Possibility of declaration of multiple identities in 2001–2016, when the sum of the parts exceeds 100%.

In general, in the four decades of communism, the number of Hungarians increased steadily, both within and outside the country's present-day borders. The increase continued until the early 1980s (to 10.6 million and 2.8 million respectively). It then decreased significantly, reflecting a strong decline in natural increase and assimilation in areas beyond the border. The extent of the Hungarian ethnic territory did not change significantly between 1945 and 1990, and a considerable transformation occurred – due to accelerated internal migration and assimilation – only in the case of the cities and language islands. Both in Hungary and in the neighbouring countries, the changes in such areas were to the benefit of the majority nation. In line with the goals of communist urbanisation with its nationalistic connotations, major cities with formerly Hungarian majorities (e.g. Nové Zámky/Érsekújvár, Levice/Léva, Lučenec/Losonc, Rimavská Sobota/Rimaszombat, Košice/Kassa, Uzhhorod/Ungvár, Mukachevo/Munkács, Satu Mare/Szatmárnémeti, Cluj-Napoca/Kolozsvár and Oradea/Nagyvárad) soon had Slovak, Ukrainian or Romanian majorities. In these cities, the indigenous Hungarian populations mostly retained a significant foothold in the historical city centres, while the majority ethnicity moved from other areas into housing estates established around the city core (e.g. Cluj-Napoca/Kolozsvár, Târgu Mureș/Marosvásárhely VI. 3. 3. VI. 3. 4.).

Under communism, the number of Hungarians living in Vojvodina, Croatia and Prekmurje initially increased significantly but then stagnated from the 1960s onwards. The favourable natural increase of Hungarians in Transylvania was balanced by a nationalistic policy that favoured the construction of a homogeneous Romanian nation-state. In Slovakia, as the shocking experiences of the 1940s faded from public memory, the number of people who were willing to profess Hungarian ethnicity increased rapidly, but this growth, which was supported by natural increase, came to a halt in the 1970s. Overall, the number of Hungarians in the Carpathian Basin increased only modestly (by 7.4%) between 1941 and 1990. This was radically different from the growth experienced by the neighbouring nations, whose populations increased significantly, owing not only to higher rates of natural increase, but also to immigration from beyond the Carpathians and from the Balkans (Slovaks +79.1%, Ukrainians +69.1%, Romanians +67.9%, Serbs +45.7%, Croats +31.5%).

The homogenisation processes affecting Hungary after World War II were counterpointed only by an increase in the number of Roma people. Improvements in the living conditions of Roma significantly reduced their mortality. The estimated number of Roma people in Hungary increased by 3.2 times, and their national proportion rose from 1.2% to 3.7% between 1941 and 1985, due to a rate of natural increase that was well above the average. Communist policies were aimed both at improving the social conditions (housing, employment) of Roma and at assimilating and educating them. Despite this, prejudice against Roma and the low socio-economic status of Roma relative to the majority population were not substantially diminished.

After 1989, the previous trend (i.e. the decline in traditional minorities) largely continued in the countries of the region. The total population of the Carpathian Basin decreased from 30.2 million in 1990 to 28.2 million in 2011. This meant that the proportion of Hungarians in the total population of the Carpathian Basin decreased from 42.5% to 36.4% between 1990 and 2011. This decrease was partly due to the increasing proportion of those who do not answer ethnic questions in surveys (0.2→8.3%) and to an increase in those who claim to be Roma (1.5→2.6%).

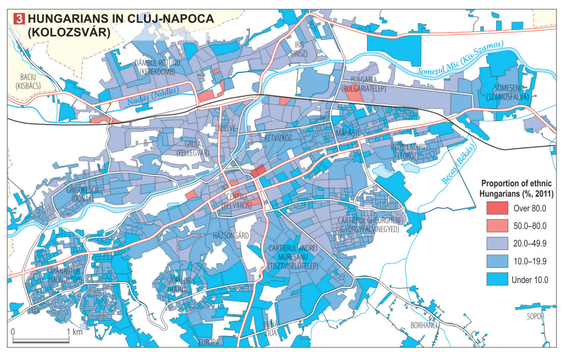
Studying the 10 years between 2001 and 2011, we may conclude that the decrease in the number of Hungarians accelerated compared to the 1990s. In addition to increasingly unfavourable demographic indicators (natural decrease, increasing emigration), this development was caused by increased assimilation and a substantial increase in the number of people choosing not to declare their nationality. As in previous decades, so also in the 2000s the decrease in the number of Hungarians was naturally higher in the case of those living as minorities (-13.1%) than in the case of those living in Hungary (-11.7%).

The decrease in the number of Hungarians was regionally differentiated: in the case of the minority Hungarian communities, it can generally be concluded that smaller decreases occurred where the local proportion of Hungarians was higher. The number of diaspora Hungarians in Slovakia, Transylvania and Vojvodina decreased by nearly a quarter, while the number of those living in blocks in these regions decreased by only 8% in the period between 2001 and 2011.

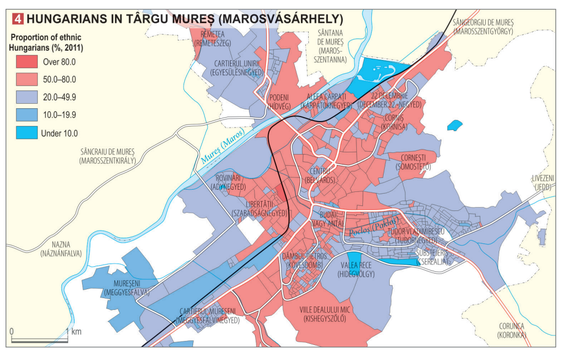
Turning to the other relatively populous ethnic groups in the Carpathian Basin, we find that between 1990 and 2011 the significant decrease in the number of people claiming to be Hungarians was mirrored – largely due to migration losses – by decreases in the number of Romanians (–15.4%) and Serbs (–7.3%). Due to the more favourable fertility indicators and assimilation gains, the numbers of Ukrainians, Slovaks and Croats stagnated or decreased only slightly. As a result of a relatively high natural increase and growing ethnic consciousness, the number of those claiming to be of Roma ethnicity increased by 63.9% over these decades. After 1990, the number of people in Hungary claiming to be neither of Hungarian nationality nor a native speaker increased significantly VI. 3. 2., reflecting changes favourable to minorities (e.g. the Minorities Act of 1993, the possibility of admitting multiple ethnic ties in censuses).

In the Carpathian Basin, in the past century there were several developments that favoured ethnic homogenisation at the expense of the national and eth-

3 HUNGARIANS IN CLUJ-NAPOCA (KOLOZSVÁR)



4 HUNGARIANS IN TÂRGU MUREȘ (MAROSVÁSÁRHELY)



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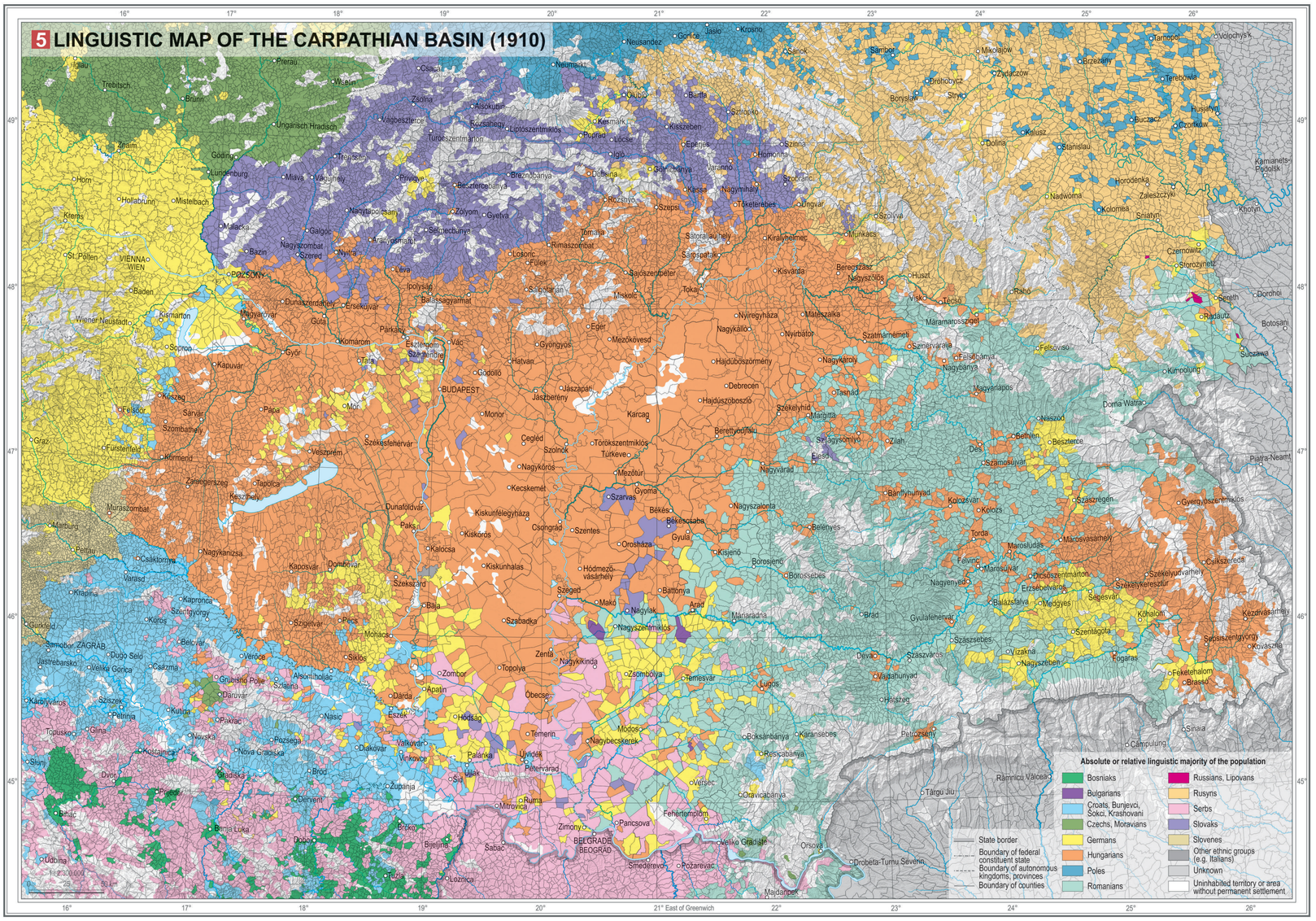
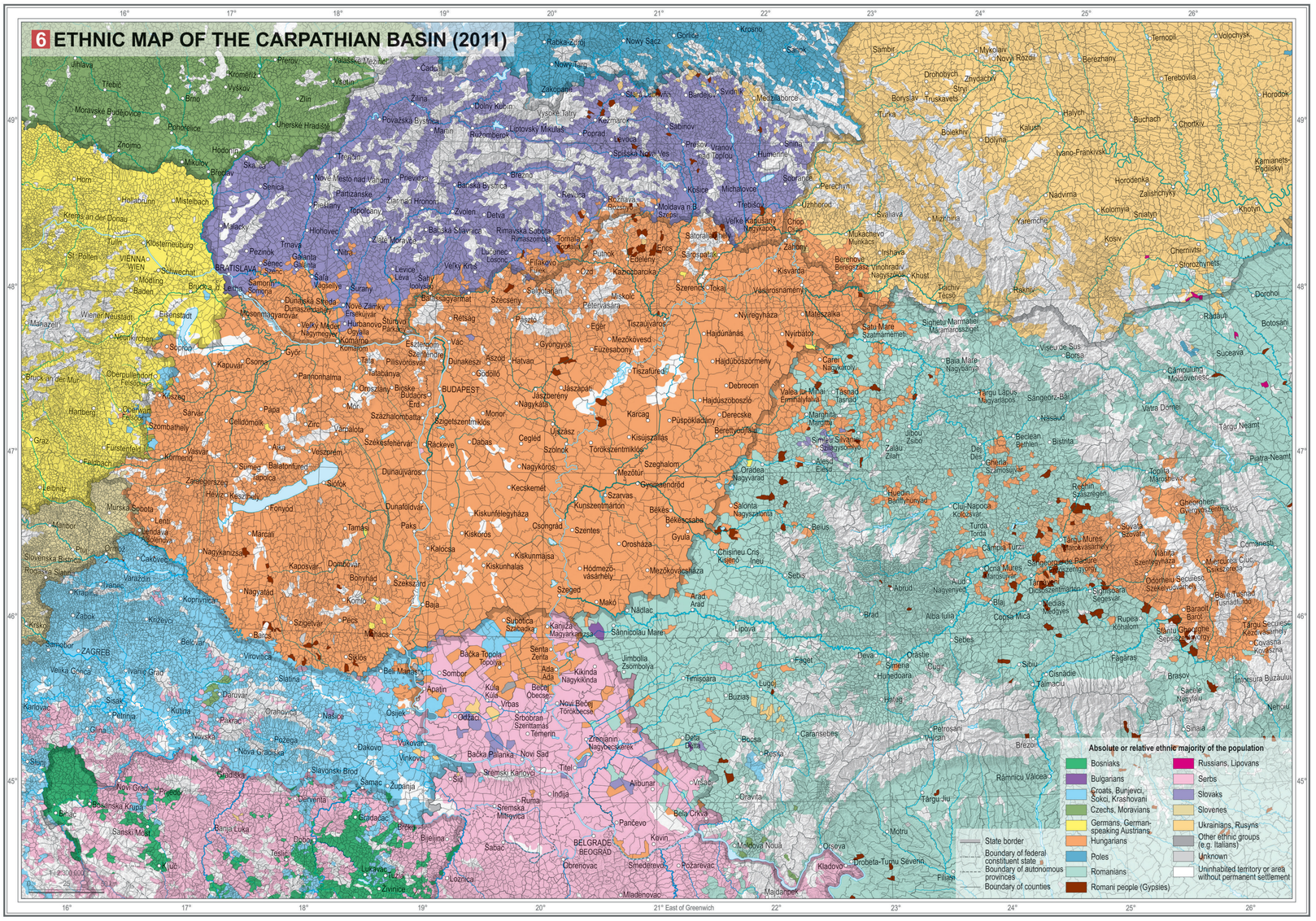
5 LINGUISTIC MAP OF THE CARPATHIAN BASIN (1910)



6 ETHNIC MAP OF THE CARPATHIAN BASIN (2011)



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nic minorities VI. 3. 5. VI. 3. 6.. As a result of forced and voluntary mass migration after 1944, Burgenland in Austria is the only area in the Carpathian Basin that has retained a German majority. Many towns on the language boundary (that had possessed a Hungarian majority in 1910 between Bratislava and Arad) were transformed into cities with majorities of the titular nations (Slovak, Ukrainian and Romanian). A similar trend was observed in the major cities of Transylvania. As a result of the colonisation programmes, individual language boundaries are now increasingly aligned with state borders. However, in parallel with the homogenisation of historically established language areas, the size and proportion of the Roma minority increased dynamically everywhere in the second half of the 20th century.

Current ethnic-linguistic spatial structure

In most countries of the Carpathian Basin, the most recent censuses have asked respondents about their ethnicity and native language. In the following, the characteristics of the current ethnic spatial structure are described based. In some cases, however, native language data are the only records available.

At the time of the censuses in 2011, 10.4 million of the 28.5 million inhabitants of the *Carpathian Basin* claimed to be of Hungarian ethnicity, while 4.9 million people identified their ethnicity as Romanian, 4.5 million as Slovak, 2.7 million as Croatian, 1.4 million as Serbian and 1.1 million as Ukrainian VI. 3. 1.. The number of people who did not declare any ethnic affiliations was strikingly large (2.4 million), particularly so in Hungary.



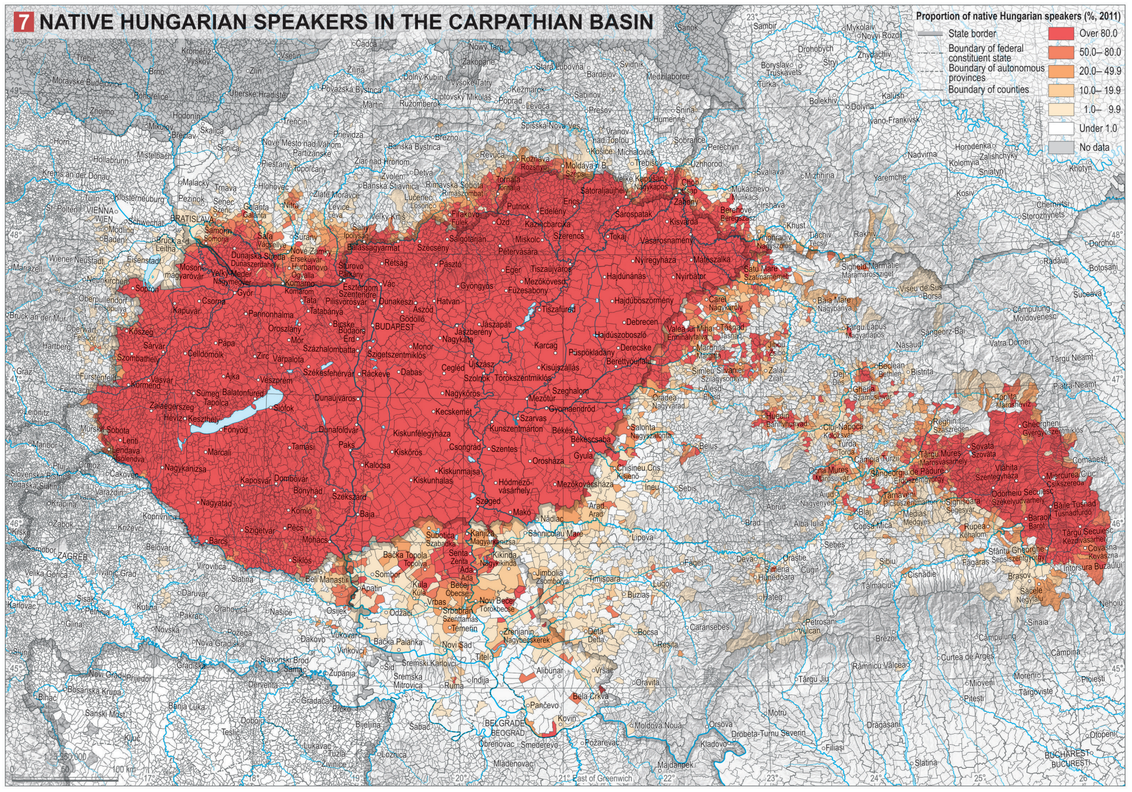
1 *Palóc people, one of the largest ethnographic groups of Hungarians in Hungary*

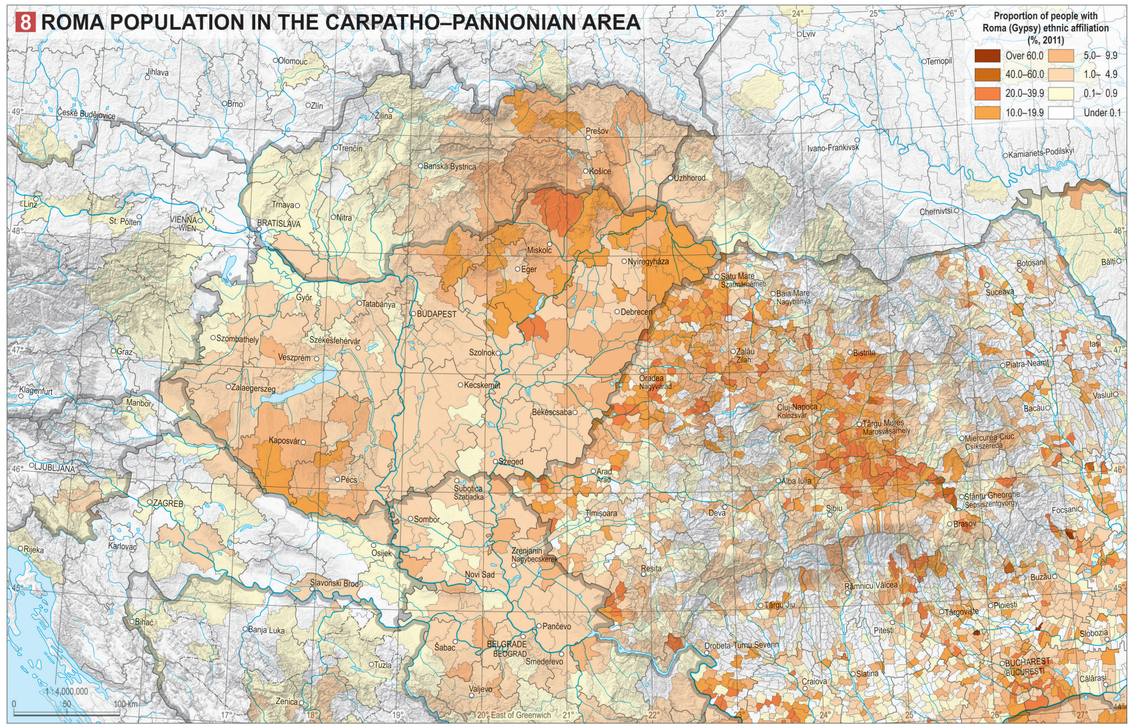
The relative majority of the population of the Carpathian Basin remains *Hungarian*, most of whom live on the present territory of Hungary (2016: 9.4 million ethnic Hungarians [e.H.], 9.5 million native Hungarian speakers [n.H.s.]) 1. The others live in Transylvania, Partium and the Romanian part of the Banat (1.2 million) 2. Slovakia (458 thousand e.H., 509 thousand n.H.s.), Vojvodina in Serbia (251 thousand e.H., 241 thousand n.H.s.), Zakarpattia (152 thousand e.H., 159 thousand n.H.s.), Pannonian Croatia (13 thousand e.H., 9 thousand H.s.), Prekmurje in Slovenia (5 thousand e.H., 7 thousand H.s.) and Burgenland in Austria (7 thousand speaking the Hungarian colloquial language). In 2011, native Hungarian speakers formed the absolute majority of the population in 4,509 municipalities in the Carpathian Basin, of which 3,146 were in Hungary, 771 in Romania, 408 in Slovakia, 81 in Ukraine, 72 in Serbia, 19 in Slovenia, 10 in Croatia and 2 in Austria VI. 3. 7.. These settlements are located near the border in countries neighbouring Hungary, as well as in central Transylvania and in Székely Land. Beyond the borders of Hungary, 23 cities with more than 10 thousand native Hungarian speakers can be found in the Carpathian Basin. Of these, 15 are in Romania (Târgu Mureș/Marosvásárhely, Cluj-Napoca/Kolozsvár, Oradea/Nagyvárad, Sfântu Gheorghe/*Sepsiszentgyörgy*, Satu Mare/Szatmárnémeti, *Odorheiu Secuiesc/Székelyudvarhely*, Brașov, *Gheorgheni/Gyergyószentmiklós*, Arad, *Târgu Secuiesc/Kézdivásárhely*, Timișoara, Baia Mare/Nagybánya, *Carei/Nagykároly*, *Salonta/Nagyszalonta*), 4 in Slovakia (*Komárno/Komárom*, *Dunajská Streda/Dunaszerdahely*, Bratislva, Nové Zámky/Érsekújvár), 3 in Serbia (Subotica/Szabadka, *Senta/Zenta*, Bečej/Óbecse) and one in Ukraine (*Berehove/Beregszász*), out of which only the 10 cities in *italics* have a Hungarian majority.

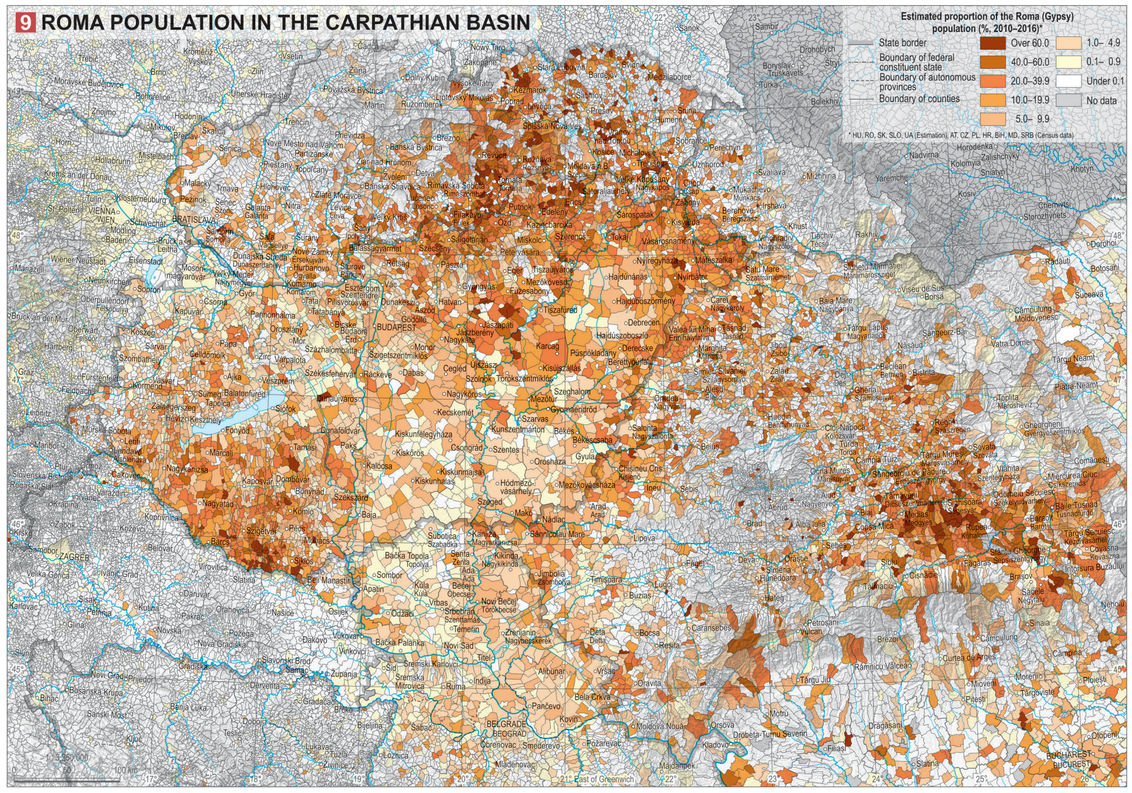
The second most populous ethnic group in the Carpathian Basin are the *Romanians,* the number of whom increased by 70% during the communist decades of the 20th century. That increase was due to the resettlement of people from beyond the Carpathians in addition to natural increase. After the collapse of the regime in 1989 and the opening of the national



2 *Székelys, the most homogeneous Hungarian community in Transylvania*







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VI. 3.

borders, the number of Romanians in Transylvania decreased by nearly 900 thousand people to 4.8 million. The decline was mainly due to the mass emigration of people to the 'west'. Romanians currently predominate in all counties of Transylvania (except for Harghita/Hargita and Covasna/Kovászna, which have Hungarian majorities), with their population share exceeding 90% in the Southern Carpathians, the Banat Mountains, the Apuseni Mountains and northern Transylvania. As a result of forced urban growth driven by Romanian national political goals, more than three-quarters of the Transylvanian urban population is now ethnic Romanian (the figure was 34% in 1941).

In 2011, 4.4 million inhabitants in the Carpathian Basin (2.6 million in 1940) claimed to be of *Slovak* ethnicity, nearly 98% of whom lived in Slovakia, where their proportion was 80.6% (1940: 65%). Slovaks represent an absolute majority in all regions and districts of the country (except for Dunajská Streda/Dunaszerdahely and Komárno/Komárom). This is due in part to the nationalistic reform of administrative divisions (in 1996). The areas of almost homogeneous Slovak ethnicity lie along the upper and middle sections of the rivers Váh, Nitra and Hron in the northwestern, mountainous part of Slovakia. After the Ottoman Turkish occupation and particularly during the 18th century, tens of thousands of Slovaks left their homeland in Upper Hungary (today Slovakia) and moved chiefly to the Alföld (Great Hungarian Plain). Most of the descendants of these Slovak settlers currently live in Vojvodina (50 thousand), Hungary (30 thousand) and Romania (14 thousand).

As many as 96% of the 2.7 million *Croats* of the Carpathian Basin, including the ethnographic groups of Bunjevci, Šokci and Krashovani, now live in Pannonian Croatia, where their proportion of the population reached 91.3% in 2011 (79% in 1991). The percentage increase reflects the ousting of most Serbs and their replacement by Croatian refugees from Serbia and from Bosnia and Herzegovina. During the recent years of war, the population of Croats, Bunjevci and Šokci living in Serbia's Vojvodina region fell from nearly 100 thousand to 64 thousand, mainly due to the ousting of the vast majority of Croats in Serbian Syrmia.

As many as 89% of *Serbs* in the Carpathian Basin (1.4 million people) live in Serbia's Vojvodina region, where the population of Serbs increased by 15% between 1991 and 2002, owing to the arrival of more than a quarter of a million Serbian refugees from the Balkans between 1991 and 1996. At the same time, the war-torn Croatian territories lost nearly two-thirds of their Serbian inhabitants. As a result, the proportion of Serbs in Vojvodina increased to 66.8% (1.3 million), while in Pannonian Croatia it decreased to 4.5% (131 thousand). In the latter region, Serbs could survive the war events of the 1990s in greatest number in those areas that border Serbia (e.g. Vukovar-Syrmia and Osijek-Baranja counties).

The number of *Ukrainians* (including *Rusyns*, who are officially considered an ethnographic group in Ukraine) in the Carpathian Basin has doubled since the annexation of Zakarpattia to Soviet Ukraine in 1945, rising to more than 1.1 million. 90% of Ukrainians and Rusyns in the Carpathian Basin live in Zakarpattia. At the time of the last census, 42 thousand people in Transylvania (mainly in Maramureș and Banat), 41 thousand in Slovakia (mostly in Zemplín and Šariš), 18 thousand in Vojvodina (mainly in Bačka) and 11 thousand in Hungary (mainly in Budapest and northeastern Hungary) claimed to be Rusyn or Ukrainian.



3 *Roma people, the largest ethnic minority in the Carpathian Basin*

The number of *German-speaking* people in the Carpathian Basin (1.6 million in 1941) has decreased to 422 thousand today. This decline reflects forced emigration between 1944 and 1948 and voluntary emigration in the period until the mid-1990s. At present, 58% of native German speakers are found in Burgenland in Austria, one-third (132 thousand) in Hungary and 8% (33 thousand) in Transylvania.

As many as 86% (58 thousand people) of the 67 thousand *Slovenians* in the Carpathian Basin live in Slovenia's Prekmurje region, while 5 thousand live in Croatia, 2 thousand in Serbia's Vojvodina region and 2 thousand in Hungary.

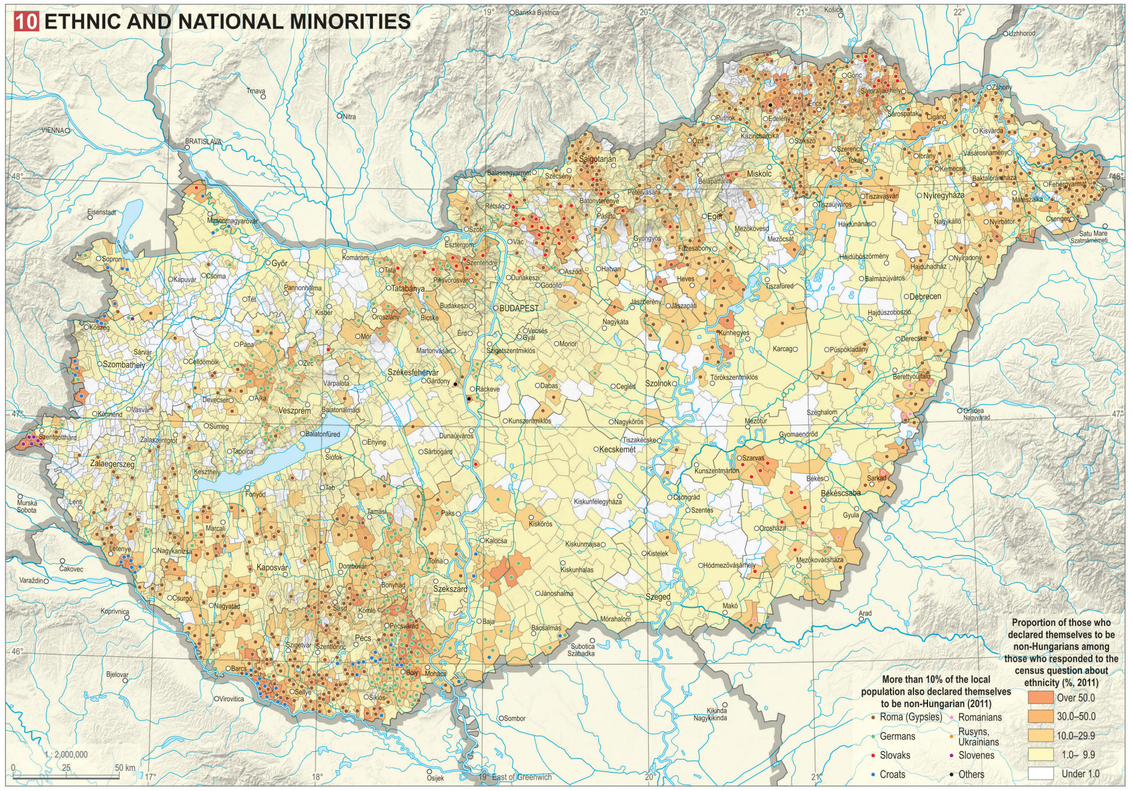
A third of the world's *Roma population* lives in the Carpathian Basin, where, according to recent censuses, 762 thousand people (2.7%) claim to be of Roma ethnicity, and 318 thousand (1.1%) native speakers of one of the Roma languages 3. People identifying as Roma are found in the greatest numbers in Hungary (309 thousand), Transylvania (271 thousand) and Slovakia (106 thousand). One of the Roma languages was given as the native language by 122 thousand people in Slovakia, 102 thousand in Transylvania, 54 thousand in Hungary, 27 thousand in Vojvodina and 13 thousand in Pannonian Croatia. Based on various estimates, it can be assumed that in the mid-2010s, the number of people who were regarded as Roma by others in the Carpathian Basin was 1.9 million, constituting 6.7% of the population of the region and thus the fifth most populous ethnic group.

The spatial concentration of Roma people is most noticeable in the northeastern and eastern hilly areas of the Carpathian Basin and on the edge of the Alföld VI. 3. 8.. In other areas of the region, the Roma population is significant in Southern Transdanubia, in the Serbian parts of the Banat, and in Belgrade, Budapest and Bratislava. Based on the estimates for 2013–2016, it can be assumed that people regarded as Roma form an absolute majority of the population in 417 municipalities in the Carpathian Basin VI. 3. 9.. Of these, 138 municipalities are found in Romania, 134 in Hungary, 134 in Slovakia, 4 in Zakarpattia, 4 in Croatia, 3 in Slovenia (Prekmurje). The number of settlements where the estimated proportion of Roma is between 20-50% (1,552) is also considerable (627 in Hungary, 544 in Transylvania, 336 in Slovakia, 25 in Zakarpattia, 12 in Prekmurje, 4 in Croatia and 4 in Vojvodina).

Regarding the native language and ethnic structure of the population on the present-day territory of *Hungary,* the latest data are provided by the so-called micro-census of 2016, a sample-based population enumeration. Of the estimated 9.8 million inhabitants at the time, only 1.6% (158 thousand people) did not report on their ethnic affiliation, a striking change from 2011, when the ethnic ties of 14.7% (1.5 million inhabitants) of the population remained unknown. Due to an increase in non-responses and the natural decrease since 1981, the number of people identifying as Hungarian decreased by 1.2 million between 1980 and 2016, notwithstanding the resettlement in Hungary of ethnic Hungarians from the neighbouring countries (mainly from Romania, Ukraine, Serbia). Since the 2001 Hungarian census, it has been possible to declare multiple ethnic-linguistic ties, resulting in a population of about half a million people with multiple ethnic ties. Increases in the size and proportion of the population with minority ties have been observed since the collapse of communism (1990: 2.6%; 2001: 5.2%; 2011: 7.7%). The most important of them are the above-mentioned methodological changes, which have resulted in the expression of dual ties and hybrid identities, immigration (e.g. in the case of Romanians, Serbs and Ukrainians), the existence of symbolic ethnic ties, and natural increase (in the case of the Roma population). All these factors counteracted the natural decrease and the continuing assimilation observed among most minorities.

In 2016, 96.3% (9.4 million) of the population of Hungary also declared of Hungarian ethnicity, while 3.1% (299 thousand) self-identified as Roma, 1% (102 thousand) as German, and 0.2% respectively as Romanian (24 thousand), Slovak (22 thousand) and Croatian (18 thousand). Based on *native language*, the population of Hungary seemed much more homogeneous, with 97.5% (9.6 million) identifying their native language as Hungarian, 0.6% (55 thousand) as German, 0.4% (40 thousand) as one of the Roma languages (Romani, Boyash), and 0.2% (18 thousand) as Romanian. Considerable differences in *social structures* can be observed between the major ethnic groups of Hungary. Roma have the youngest *age structure* in terms of the proportion of people under 14 years of age, with this indicator (31.3%) far exceeding that of Hungarians (14.5%) and in particular that of the Romanian, Croatian, Slovak and German minorities (7.1-8.1%). Similar differences can be observed in terms of the *fertility* of women (the number of live-born children per 100 women): Roma people 210, Hungarians 144, and the Romanian, German, Slovak and Croatian minorities 129-153. In terms of *education*, the Roma population is in a particularly disadvantaged situation: among them, the proportion of people over the age of 15 who left school with fewer than 8 grades of primary education is very high (17.3%). The same indicator is 3.1-3.3% among Hungarians, Slovaks and Croats and 1.7% for Germans. Among active earners aged 15–64, the *unemployment* rate is also highest among Roma people (18.2%), thus being significantly higher than in the case of the Hungarians (5.3%) and the Croatian, German, Slovak and Romanian minorities (4.0-7.8%).

The distribution of the population by ethnicity at municipal level can be outlined on the basis of the census in 2011 VI. 3. 10.. Despite the growing number of people with minority ties, the ethnic spatial structure of Hungary is dominated by Hungarians; minority concentrations are mainly observed in peripheral areas along the national border. Due to the increase in the number of Roma, the populations of the northeastern and southwestern areas are increasingly considered mixed. The number of people claiming to be of Hungarian ethnicity (too) was less than 50% of the population reporting ethnicity in only 12 municipalities. At the same time, because of the possibility of reporting *multiple ethnic and linguistic affiliations* the combined proportion of non-Hungarians constituted the absolute majority in 98 villages (rather than in just 12). In 37 of them, the proportion of Roma exceeded 50%, while ethnic Germans formed the absolute majority in 20 villages, Croatians in 15 villages, Slovenians in 4 villages, Rusyns in two villages, and Slovaks, Romanians and Serbs in one village each. Dual identity is typical for almost all minorities in Hungary. In 2011, 436 thousand people, nearly three-quarters of those with minority affiliations claimed to belong to two ethnic groups at the same time. However, it is important to note that the vast majority (about 80%) of those declaring two ethnic affiliations nominated Hungarian as their first ethnicity.



The number of *Romani* people, the largest ethnic minority, increased by nearly 60% between 2001 and 2016, reaching 300 thousand. In Hungary three major groups of Roma can be distinguished: Hungarian Roma (Romungros), Vlach Roma and Boyash. In Hungary, as in all countries of the region, the number of people self-identifying as ethnic Roma and that of people considered by others to be Roma (mainly on the basis of certain anthropological features, skin colour, way of life and social behaviour) differ considerably. These differences are a consequence of social conditions in the period and the extent of discrimination, stigmatisation and racist public discourse. According to various surveys, the number of people considered Roma was estimated at 325 thousand in 1978, 468 thousand in 1993, 570 thousand in 2003 and 877 thousand in 2010–2013. On average, these figures are 2.5-3 times higher than the number of Roma in the census statistics. Roma people tend to live in less urbanised areas on the margins of society. According to census data, only 37 villages had an absolute Roma majority, most of which lay in Borsod-Abaúj-Zemplén and Baranya counties. Nearly two-thirds of Roma live in highly segregated conditions, where in many cases ethnic ghettos are present. This process occurs not only in cities, but also in entire regions, resulting in a gradual separation of Roma in spatial terms from the other larger part of society. The districts most abundant in Roma (10–25%) can be found in northeastern Hungary, in the Central Tisza Region and in the southern part of Transdanubia VI. 3. 8.. Of the cities, Budapest, Miskolc, Ózd and Pécs are home to the largest number of Roma inhabitants.

Although the number of inhabitants claiming to be of *German* ethnicity increased significantly between 1990 and 2016 from 31 thousand to 102 thousand (mainly due to the introduction of dual ethnic affiliations in the censuses and surveys), their population is far smaller than before the deportations of 1946–1948 (1941: 302 thousand). Today, Germans live in higher concentration in three areas (in the Bakony Mountains near Veszprém, in the Danube Bend Region and in the hills of Baranya and Tolna counties) and in a few scattered settlements. Despite their significant number, they are the majority of the population in only 20 municipalities. Most Germans live in Budapest, Pécs, Pilisvörösvár, Bonyhád and Mohács.

The original area of *Slovak* settlement, which arose in the 18th century and affected three major regions (Békés, Dunazug, Pest–Nógrád) and four smaller mountainous areas (Zemplén, Bükk, Mátra, Bakony) has been reduced to several scattered districts and language islands. At present, only one village (Csővár) has a Slovak majority. The decline in the ethnic Slovak population is a result of assimilation and the Czechoslovak–Hungarian population exchange of the period 1946–1948. Owing to the still significant process of assimilation, the number of Slovak native speakers has stagnated since 1990.

The *Croats* can be divided into Šokci (residing in southeastern Baranya), Bosnians (southern Baranya), Bunjevci (Bácska), Croats living near the Croatian and Austrian border. They form an ethnic majority in 15 villages in Hungary along the border. The largest Croatian community can be found no longer in their traditional settlement area, but in Budapest. Further, most Croats live in Pécs, Kópháza and Szentpéterfa.

The number of *Romanians* increased by 2.5 times over the past decade to 24 thousand, mainly due to large-scale immigration. Third of them live now in the counties along the Hungarian–Romanian border, while half of them live in the central part of Hungary. A large increase in their numbers can also be observed in the latter region, while the number of Romanians in their traditional settlements – despite the cross-border suburbanisation of such Romanian cities as Oradea/Nagyvárad and Arad – decreases. Accordingly, by far the largest number live in Budapest, although their communities in Méhkerék, Kétegyháza and Gyula are also significant.

The number of *Serbs*, like Romanians, nearly doubled – primarily due to immigration – between 2001 and 2016. The vast majority of them live near the Danube and in the southeastern border region. Of the 13 minorities recognised as autochtonous in Hungary by the Minorities Act of 1993, only the *Slovenians* have declined significantly in number over the past three decades, mainly due to ongoing assimilation. The vast majority of them remain in the area between the Austrian and Slovenian borders, where their largest communities are found in the centre of the region, in Szentgotthárd and Felsőszölnök. Owing to enhanced ethnic consciousness and the introduction of dual ethnic affiliations in the censuses, there are again settlements with a *Rusyn* majority on the present-day territory of Hungary for the first time since the 19th century. Most Rusyn people reside in the Abaúj and Zemplén regions, but their largest community lives in Budapest.

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RELIGION

Károly Kocsis, Patrik Tátrai

Religion, which can be viewed as a system of religious consciousness and behaviour, is a cultural element of paramount importance in the composition of the population. Only 13.9% of the 8 billion people on Earth are not religious, while the rest are mainly Christians (29.8%), Muslims (24.6%), Hindus (14.3%), Buddhists (6.5%) and followers of Chinese folk religion (4.9%). The proportion of non-religious people varies significantly around the world due to secularisation. The proportion of people who have turned away from religion is particularly high in Europe and in East Asia (e.g. Japan, Vietnam, Korea and China). According to the Eurobarometer survey of 2019, the combined proportion of non-religious and atheist people in the EU reached 27%, with above average proportions being found in the central and northwestern parts of Europe (e.g. among the Czechs, Dutch, Swedes, French, British, Belgians and Germans). In contrast, the most religious and often Catholic and Orthodox populations of Europe live in the southwestern and southeastern countries. According to the above 2019 survey, the proportion of the population who clearly regard themselves as non-religious or atheist is below the European average throughout the Carpathian Basin (e.g. 1% in Romania, 11% in Slovakia and Croatia, and 16-20% in Austria, Slovenia and Hungary).

Secularisation: *a decline in the social role of religion and churches. It may manifest in a weakening of the religious faith of the population, a mass turning away from the Church, a decrease in participation in religious activities, a decline in the acceptance of religious beliefs, the transfer of past Church duties to other social organisations (laicisation), and the weakening of the organisation of the Church. A characteristic feature is the complete separation of the role of the Church and the state.*

Religion and the Church were an integral part of Hungarian statehood and society until the mid-20th century. The Carpathian Basin has been the scene of rivalry between Rome and Byzantium, and western and eastern Christianity since the 9th century. In the last half-millennium it has been a place of the meeting and mixing of Catholicism, Protestantism, Orthodoxy and Judaism. Despite the conversion of the Hungarians in the 10th-11th century and its accession to the Latin Church of Rome, the Roman Catholic Church – in view of the extraordinary successes of the Reformation in Hungary in the 16th century – could not play an influential role in nation-building, as it did in the neighbouring nations of the Croats and Poles. Even so, once Hungary had become a part of the Habsburg Empire, the Roman Catholic Church was able to benefit from the counter-reformation of the 17th and 18th centuries. Indeed, it kept its privileged position until the end of the Kingdom of Hungary (1946), becoming closely intertwined with state institutions. In 1949, the official separation of the Hungarian state and churches took place, and this was followed by the atheist and anticlerical policies of the communist dictatorship (until 1989). Secularisation was curbed after the collapse of communism, with a revival of religious belief in certain rural areas.

1 DEVELOPMENT OF THE RELIGIOUS STRUCTURE OF POPULATION IN THE CARPATHIAN BASIN (1910–2011)

Year	Total population	Population reporting their relationship to religion	Religious population	Roman Catholic	Greek Catholic	Lutheran	Reformed (Calvinist)	Unitarian	Orthodox	Jewish	Muslim	Other	Non-religious	Atheist	Population not reporting their relationship to religion
	Number (thousand people)														
1910	20,449	20,449	20,447	10,595	2017	1335	2628	74	2843	929	——	26	2	——	——
1930	22,782	22,778	22,753	12,034	2190	1407	2782	68	3236	919	5	112	25	——	4
2001	29,487	27,962	25,203	13,120	902	836	2542	79	7054	18	47	605	2756	4	1525
2011	28,553	24,675	21,970	10,818	774	662	1972	64	6829	15	64	772	2550	155	3878
	Proportion (%)														
1910	100.0	100.0	100.0	51.8	9.9	6.5	12.8	0.4	13.9	4.5	0.0	0.1	0.0	0.0	0.0
1930	100.0	100.0	99.9	52.8	9.6	6.2	12.2	0.3	14.2	4.0	0.0	0.5	0.1	0.0	0.0
2001	100.0	94.8	85.5	44.5	3.1	2.8	8.6	0.3	23.9	0.1	0.2	2.1	9.3	0.0	5.2
2011	100.0	86.4	76.9	37.9	2,.7	2,.3	6.9	0.2	23.9	0.1	0.2	2.7	8.9	0.5	13.6

2 DEVELOPMENT OF THE RELIGIOUS STRUCTURE OF POPULATION ON THE PRESENT TERRITORY OF HUNGARY (1910–2011)

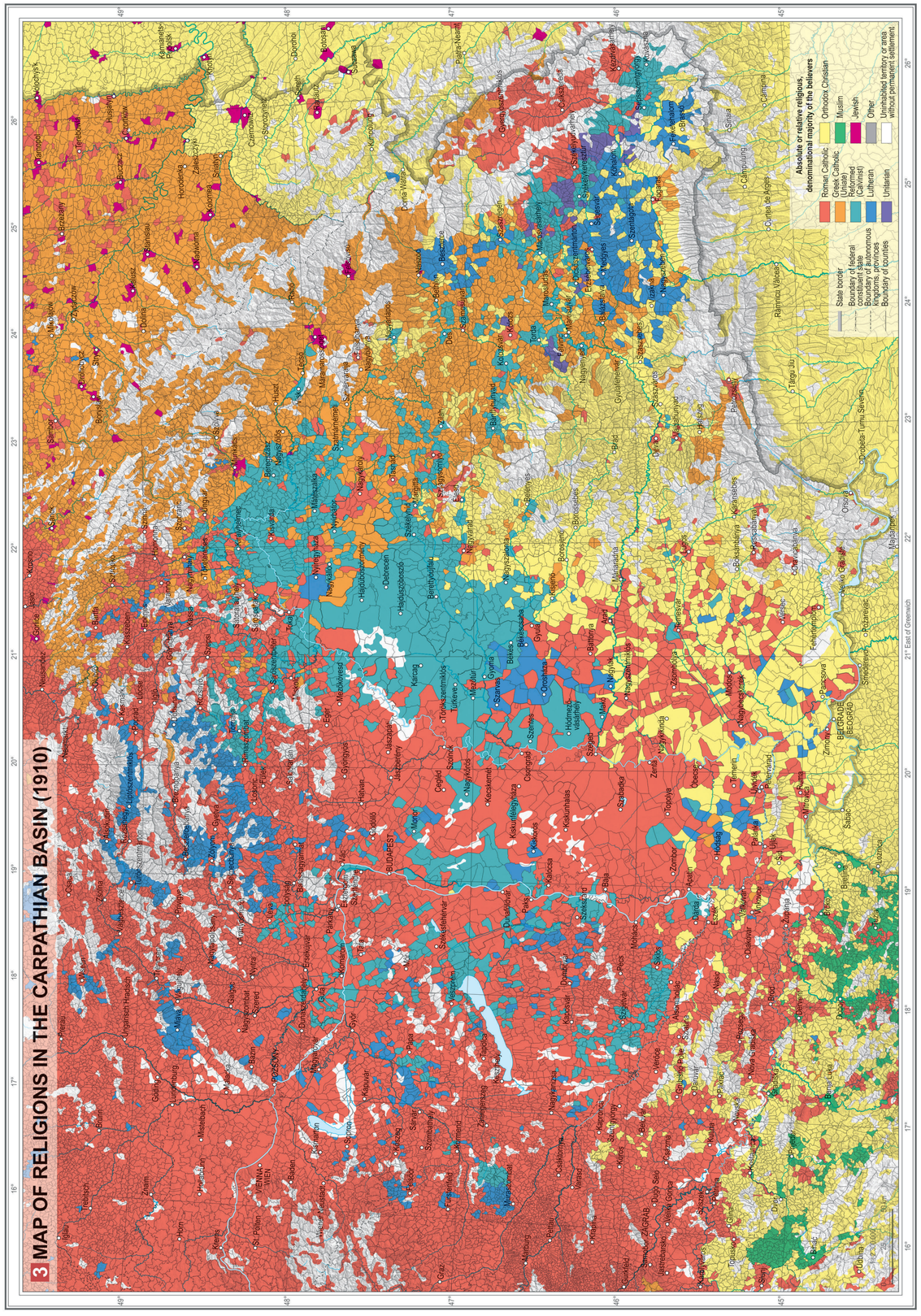
Year	Total population	Population reporting their relationship to religion	Roman Catholic	Greek Catholic	Lutheran	Reformed (Calvinist)	Unitarian	Orthodox	Jewish	Other	Non-religious	Atheist	Population not reporting their relationship to religion
	Number												
1910	7,612,114	7,612,114	4,774,485	165,389	484,221	1,632,588	5,101	61,012	471,370	17,948	——	——	——
1920	7,986,875	7,986,875	5,102,466	175,653	496,799	1,670,990	6,225	50,917	473,329	10,496	——	——	——
1930	8,685,109	8,685,109	5,631,246	201,092	533,746	1,813,144	7,300	39,839	444,552	14,190	1,959	——	303
1941	9,316,074	9,316,074	6,119,600	233,659	557,310	1,934,851	8,465	38,318	400,978	22,893	3,841	——	1,674
1949	9,204,799	9,190,990	6,240,399	248,356	482,157	2,014,718	9,449	36,015	133,861	26,035	12,287	——	1,522
2001	10,198,315	7,610,613	5,289,521	268,935	304,705	1,622,796	12,000	15,298	12,871	84,487	1,483,369	——	1,104,333
2011	9,937,628	5,432,375	3,691,389	179,176	215,093	1,153,454	6,820	13,710	10,965	161,768	1,659,023	147,386	2,698,844
	Proportion (%)												
1910	100.0	100.0	62.7	2.2	6.4	21.4	0.1	0.8	6.2	0.2	0.0	0.0	0.0
1920	100.0	100.0	63.9	2.2	6.2	20.9	0.1	0.6	5.9	0.1	0.0	0.0	0.0
1930	100.0	100.0	64.8	2.3	6.1	20.9	0.1	0.5	5.1	0.2	0.0	0.0	0.0
1941	100.0	100.0	65.7	2.5	6.0	20.8	0.1	0.4	4.3	0.2	0.0	0.0	0.0
1949	100.0	99.8	67.8	2.7	5.2	21.9	0.1	0.4	1.5	0.3	0.1	0.0	0.0
2001	100.0	74.6	51.9	2.6	3.0	15.9	0.1	0.2	0.1	0.8	14.5	0.0	10.8
2011	100.0	54.7	37.1	1.8	2.2	11.6	0.1	0.1	0.1	1.7	16.7	1.5	27.2

Religion over the last century

In the aftermath of World War I and under the terms of the Treaty of Trianon (1920), Hungary lost 98% of its Orthodox population, 91.9% of its Greek Catholics, 63.9% of its Lutherans, 56.2% of its Roman Catholics and half of its adherents to Judaism. In the period between 1918 and 1924, large-scale migrations took place in consequence of the new national borders. Yet these did not significantly change the denominational structure VI. 4. 1. VI. 4. 2..

As in other countries in Europe, religious freedom was repeatedly violated in the interwar period, which saw restrictions on the human and civil rights of Jews. Then, under the 'Second Jewish Law' (1939), anyone who had at least one Jewish-born parent or two Jewish-born grandparents was defined as a Jew. Of the approximately 825 thousand (490 thousand on the present-day territory of Hungary) inhabitants treated as Jews (more than 80% of whom identified themselves as native Hungarian speakers), 435 thousand (180 thousand from the present-day territory) were deported to the death camps after the German occupation of 19 March 1944. At the end of 1945, there were estimated to be no more than 255 thousand Jews who had survived deportation and the other horrors of the Holocaust within the 1941–1944 borders (or 195 thousand on the present-day territory of Hungary). After 1938, Jews were disenfranchised in other areas of the Carpathian Basin too (Austria 1938, Slovakia 1940–1942, Croatia 1941). Except for those in Southern Transylvania, most of them were deported and killed.

After World War II and in the wake of the political and territorial changes between 1945 and 1948, forced migrations affecting hundreds of thousands of inhabitants altered the religious structure of the population. Owing to deportations and war losses among the Roman Catholic ethnic German and Hungarian population, the number of Roman Catholics in Transylvania decreased by nearly 100 thousand people between 1930 and 1948, and in Vojvodina by 180 thousand between 1931 and 1953. However, 230 thousand Reformed and Catholic Hungarians fled from the annexed (now Romanian, Slovakian, Serbian and Ukrainian) territories



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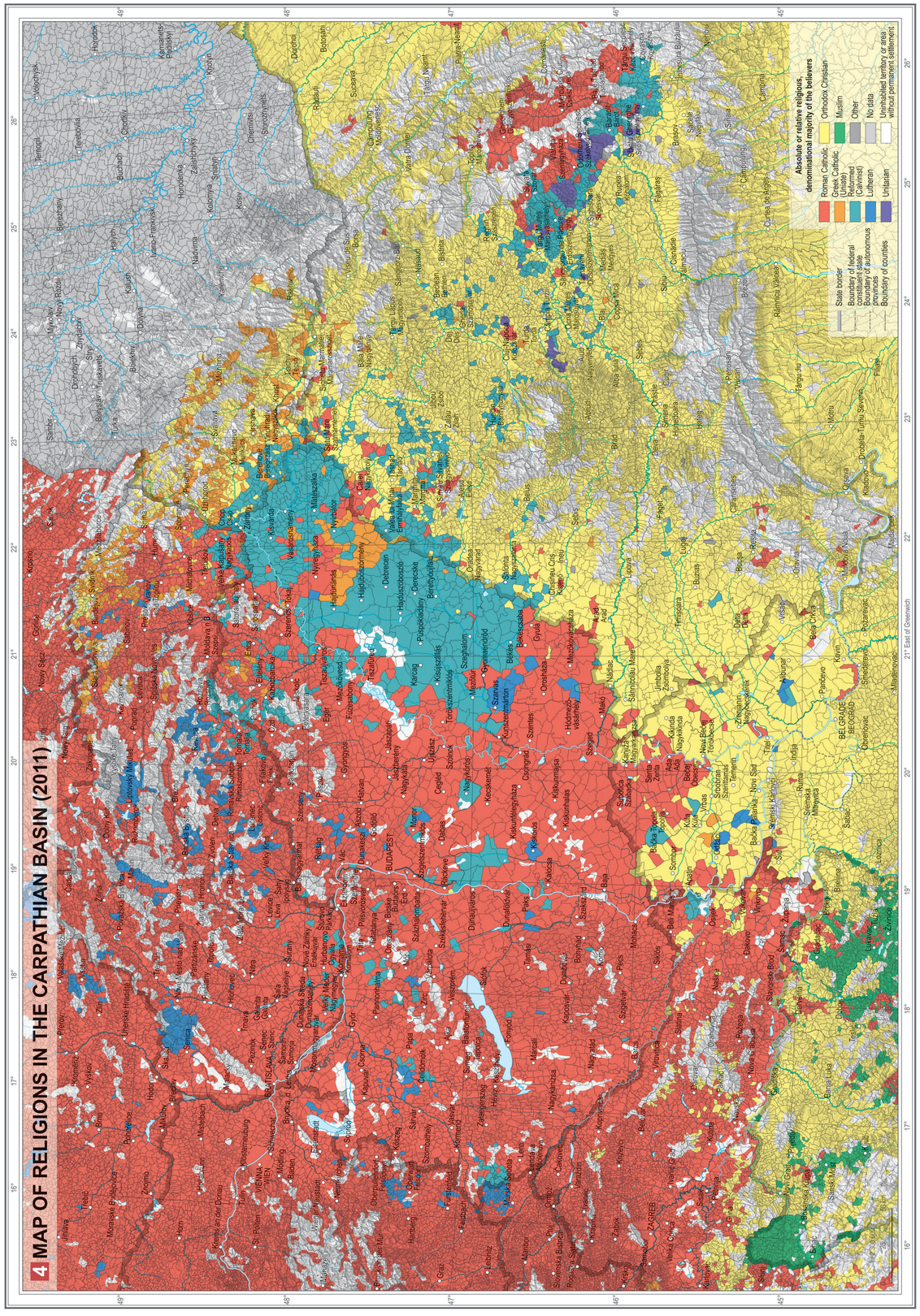

4 MAP OF RELIGIONS IN THE CARPATHIAN BASIN (2011)

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to the present-day territory of Hungary between 1944 and 1948. The vast majority of the (mainly Calvinist) Hungarian refugees and Hungarian agrarian colonists from the Alföld were settled in areas that had been emptied by the emigration of Catholic and Lutheran Germans and Slovaks. The exodus of Jewish survivors of the war continued with their emigration to Palestine (Israel), causing the number of Jews in Hungary to decline from 195 thousand to 134 thousand between late 1945 and 1949. In addition to the Holocaust, similar waves of emigration resulted in the Jewish population share declining from 3.5% to 1.7% in present-day Transylvania, from 5.1% to 1.5% in Hungary, from 14.1% to 3.1% in Zakarpattia, and from 4.1% to 0.2% in Slovakia between 1930 and 1948/51.

The significance of the migrations described above was nearly matched by the effects of offensives on the Rusyn and Romanian Greek Catholic churches between 1946 and 1950. The aim was to achieve national (Ukrainian, Romanian) and religious (Orthodox) 'unity'. The offensives sought the elimination of the Greek Catholic churches, which, around 1950, had 1.2 million followers in Transylvania, 450 thousand in Zakarpattia and 225 thousand in Slovakia. Their followers were declared Orthodox. Forced conversions and the mass settlement of Orthodox Russians and Ukrainians in Zakarpattia and of Orthodox Serbs in Vojvodina created Orthodox majorities in these areas by 1950 VI. 4. 3. VI. 4. 4.

After the waves of colonisation ended, the proportion of people identifying themselves as non-religious or as atheists increased, reflecting the atheistic policies of the communists who had seized power. The spatial religious structure did not change substantially in the decades of communist rule. Internal migration and communist urbanisation policies did, however, result in the loss of Calvinist or Lutheran majorities in several formerly predominantly Protestant towns.

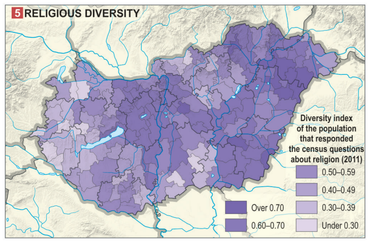
In the former communist countries of Europe, the collapse of the Soviet economic and military alliance system was coupled with the fundamental political, economic and social changes of the period 1989–1991. These changes transformed the church-state relationship. A religious revival strengthened small free churches and other minor religious groups, resulting in growing religious pluralism. The emergence of Buddhism and Islam reflected the arrival of legal immigrants mainly to Budapest, adding a spot of colour to the diversity described above.

Current spatial structure of religions

The diversity of religions on the present-day territory of Hungary can be explained by historical factors (e.g. the Reformation and counter-reformation), by migration and ethnic differences dating back to the 16th and 17th centuries. Religious diversity is greatest in the northeastern and central parts of Hungary and in the southern Tiszántúl region. In the most Catholic areas (e.g. western Transdanubia, Northern Hungary, Jászság and Kiskunság) it is much more modest VI. 4. 5..

According to the census of 2011, 40.6% of the 28.5 inhabitants of the *Carpathian Basin* identified as Catholic (37.9% Roman Catholic, 2.7% Greek Catholic), 9.4% as Protestant (of which 6.9% as Calvinist), 23.9% as Orthodox and 3.1% as followers of other religions VI. 4. 1.. More than 2.7 million people (9.4%) considered themselves *non-religious or atheist*, while 3.9 million (13.6%) did not wish to report a religious affiliation. In the case of Hungary, these latter indices are particularly high: 18.2% and 27.2% VI. 4. 2.. According to the census of 2011, the proportion of the population belonging to a religion or denomination is significantly lower in Hungary (54.6%) than in the neighbouring regions and countries: Zakarpattia 98.1%, Pannonian Croatia 94.5%, Transylvania 93.9%, Vojvodina 92.2% and Slovakia 76.0% VI. 4. 6..

A large-scale degree of secularisation is especially common among young people, and in terms of spatiality, in Budapest and in the other Hungarian and Slovak major cities (e.g. Bratislava, Košice and Banská Bistrica), in the former heavy industrial centres and in the Protestant majority areas of the central Tiszántúl region VI. 4. 7. VI. 4. 8.. Only 30-40% of the population declared a religious affiliation in these latter regions, which had once been predominantly Calvinist and Lutheran. These are the areas in the Alföld where



poorer peasants became susceptible to socialist ideas as early as the first half of the 20th century, where (besides the industrial areas) the Hungarian Communist Party achieved particular success in 1945, and where the Protestant churches were the least able to counter secularisation.

Since the mid-20th century, the spatial structure of religion has changed significantly only in the cities and towns. In the predominantly Catholic countries (Hungary, Slovakia and Croatia) Catholic dominance remains intact, while in those with Orthodox majorities (Romania, Serbia and Ukraine) Orthodox dominance is similarly unbroken VI. 4. 3. VI. 4. 4..

Almost half of religious believers in the Carpathian Basin (37.9% of the total population, or 10.8 million people) are *Roman Catholics*; they form the majority in Pannonian Croatia, Austrian Burgenland, Slovakia, Slovenian Prekmurje and Hungary 1. Their population share is particularly high in Croatia, northwestern Slovakia and the northeastern half of Székely Land, in the western-southwestern part of Transdanubia, in Bácska, in the southeastern areas of Kiskunság, in Jászság and in certain regions of Northern Hungary VI. 4. 9.. According to the census of 2011, most Roman Catholics live in the following cities (given in thousands): Zagreb (656), Budapest (501), Bratislava (214), Košice (108), Osijek (91), Pécs (62), Szeged (61), Győr (58). Since the collapse of communism, historical sites of pilgrimage have attracted ever larger crowds, reflecting the growing importance of religious tourism. In the Carpathian Basin, the most important Roman Catholic pilgrimage sites are found at Levoča, Staré Hory,

6 RELIGIOUS STRUCTURE OF POPULATION IN THE REGIONS OF THE CARPATHIAN BASIN (2011)

Region	Total population	Population reporting their relationship to religion	Religious population	Roman Catholic	Greek Catholic	Lutheran	Reformed (Calvinist)	Unitarian	Orthodox	Jewish	Muslim	Other	Non-religious	Atheist	Population not reporting their relationship to religion
	Number														
Hungary	9,937,628	7,238,784	5,432,375	3,691,389	179,176	215,093	1,153,454	6,820	13,710	10,965	5,579	156,189	1,659,023	147,386	2,698,844
Slovakia	5,397,036	4,825,599	4,100,237	3,347,277	206,871	316,250	98,797	——	49,133	1,999	——	79,910	725,362	——	571,437
Zakarpattia	1,259,570	1,247,570	1,235,570	58,000	226,000	3,000	100,000	——	810,000	——	——	38,570	12,000	——	12,000
Transylvania	6,789,250	6,394,745	6,374,985	632,948	142,862	30,711	598,167	57,485	4,464,058	1,178	3,416	444,160	12,452	7,308	394,505
Vojvodina	1,931,809	1,806,864	1,780,958	321,691	15,000	47,378	16,651	——	1,357,137	254	14,206	8,641	25,906	——	124,945
Pannonian Croatia	2,872,954	2,807,843	2,714,096	2,496,170	4,535	2,420	3,437	——	133,232	423	35,060	38,819	93,747	——	65,111
Prekmurje	80,550	71,050	66,050	52,000	——	11,690	210	——	120	——	180	1,850	5,000	——	9,500
Burgenland	284,581	282,381	265,381	219,000	——	35,000	1,600	——	2,000	——	6,000	1,781	17,000	——	2,200
Carpathian Basin	**28,553,378**	**24,674,836**	**21,969,652**	**10,818,475**	**774,444**	**661,752**	**1,972,106**	**64,305**	**6,829,390**	**14,819**	**64,441**	**769,920**	**2,550,490**	**154,694**	**3,878,542**
	Proportion (%)														
Hungary	100.0	72.8	54.7	37.1	1.8	2.2	11.6	0.1	0.1	0.1	0.1	1.6	16.7	1.5	27.2
Slovakia	100.0	89.4	76.0	62.0	3.8	5.9	1.8	0.0	0.9	0.0	0.0	1.5	13.4	0.0	10.6
Zakarpattia	100.0	99.0	98.1	4.6	17.9	0.2	7.9	0.0	64.3	0.0	0.0	3.1	1.0	0.0	1.0
Transylvania	100.0	94.2	93.9	9.3	2.1	0.5	8.8	0.8	65.8	0.0	0.1	6.5	0.2	0.1	5.8
Vojvodina	100.0	93.5	92.2	16.7	0.8	2.5	0.9	0.0	70.3	0.0	0.7	0.4	1.3	0.0	6.5
Pannonian Croatia	100.0	97.7	94.5	86.9	0.2	0.1	0.1	0.0	4.6	0.0	1.2	1.4	3.3	0.0	2.3
Prekmurje	100.0	88.2	82.0	64.6	0.0	14.5	0.3	0.0	0.1	0.0	0.2	2.3	6.2	0.0	11.8
Burgenland	100.0	99.2	93.3	77.0	0.0	12.3	0.6	0.0	0.7	0.0	2.1	0.6	6.0	0.0	0.8
Carpathian Basin	**100.0**	**86.4**	**76.9**	**37.9**	**2.7**	**2.3**	**6.9**	**0.2**	**23.9**	**0.1**	**0.2**	**2.7**	**8.9**	**0.5**	**13.6**

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1 *The majority of religious Hungarians are Roman Catholic*

Šaštín and Marianka in Slovakia; at Mátraverebély, Máriabesnyő, Máriaremete, Máriagyüd, Andocs and Csatka in Hungary; at Marija Bistrica and Aljmaš in Pannonian Croatia; at Şumuleu/Csíksomlyó 2 and Radna in Transylvania and the Partium; and at Doroslovo/Doroszló in Vojvodina.



2 *Şumuleu (Csíksomlyó) Pilgrimage has become a major Christian event for all Hungarians*

Since the collapse of communism, the *Greek Catholic Church,* which again operates legally in Ukraine and Romania, has been able to lure back from the Orthodox Church only 774 thousand of its 2.5 million believers prior to 1950. Greek Catholics partly of Rusyn or Romanian origin can be found mostly in Zakarpattia (226 thousand), in the mostly mountainous and remote Rusyn areas of Eastern Slovakia (207 thousand), in northern Transylvania (143 thousand), and in the border areas of Hajdú and Szabolcs and the inner Cserehát region in Hungary (179 thousand) VI. 4. 10.. Their most important pilgrimage sites are Máriapócs and Nicula (Transylvania).



3 *Majority of religious Hungarians east of the River Tisza are Calvinists*

The most powerful Protestant Church in the Carpathian Basin is the *Reformed (Calvinist)* Church, with its 2 million adherents representing 6.9% of the total population. In the Carpathian Basin, 58% of Calvinists live in Hungary, 30% in Transylvania, 5% in Slovakia and 4% in Zakarpattia. This is the dominant denomination among Hungarians living east of the Tisza–Fehér-Körös line VI. 4. 11. 3. Nearly two-thirds of Hungarians in Zakarpattia, a half in Transylvania, a sixth in Hungary and a tenth in Slovakia claim to be Reformed. In the second half of the 20th century, the Calvinist Church was least able to keep its believers in the Central Tiszántúl region. The highest numbers of Calvinists (the figures are given in thousands) were found in Budapest (147), Debrecen (52), Târgu Mureș/Marosvásárhely (36), Cluj-Napoca/Kolozsvár (32), Oradea/Nagyvárad (27) and Miskolc (25).

The number of *Lutherans* halved to 662 thousand – due to the departure of Lutheran Germans and secularisation. In 2011, 48% of Lutherans lived in Slovakia and 32% in Hungary. The Lutheran settlements and areas are mainly located in peripheral areas of Central Slovakia, in the White Carpathians, in the vicinity of Oberwart in Burgenland, in the northern part of Prekmurje, in the vicinity of Pápa, in Békés County, along the border of Nógrád and Pest counties in Hungary, and in the Slovak language islands of the Vojvodina region VI. 4. 4. VI. 4. 10.. Lutherans are most numerous (the figures are given in thousands) in Budapest (30), Bratislava (22), Banská Bystrica (9), Martin (9), Nyíregyháza (8) and Békéscsaba (8).

The main base of the *Unitarians* (64 thousands), is to be found among the Transylvanian Székelys, with local Unitarian majorities in the vicinity of Odorheiu Secuiesc/Székelyudvarhely and south of Turda/Torda. Unitarians live in the greatest number in Odorheiu Secuiesc/Székelyudvarhely, Budapest, Târgu Mureș/Marosvásárhely and Cluj-Napoca/Kolozsvár.



4 *The Orthodox Church is the main denomination in the southeastern half of the Carpathian Basin*

During the last half century, the *Orthodox* churches doubled the number of their adherents (to more than 6.8 million in 2011), thereby increasing their population share in the Carpathian Basin from 14% to 24%. This was a consequence of the incorporation of the majority of Greek Catholics and the arrival of hundreds of thousands of Orthodox believers from beyond the Carpathians and from the Balkans (Romanians, Serbs, Ukrainians and Russians) in the second half of the 20th century. As a result, 76% of religious believers in Vojvodina, 70% in Transylvania and 66% in Zakarpattia are now Orthodox 4. At the same time, Orthodoxy has been on the decline in the predominantly Catholic countries of the region (mainly due to assimilation and emigration: e.g. in Croatia during the war of 1991–1995). The most populous Orthodox communities can be found in the following cities (the figures are given in thousands): Timișoara (239), Cluj-Napoca/Kolozsvár (213), Brașov (205), Novi Sad (181), Sibiu (117), Oradea/Nagyvárad (110) and Arad (109).

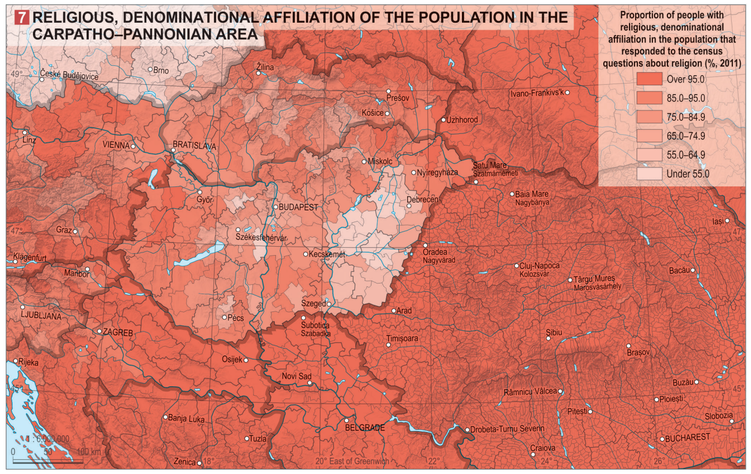


5 *Jewish people made up almost a quarter of the population of Budapest in the early 20th century. Synagogue on Dohány Street*

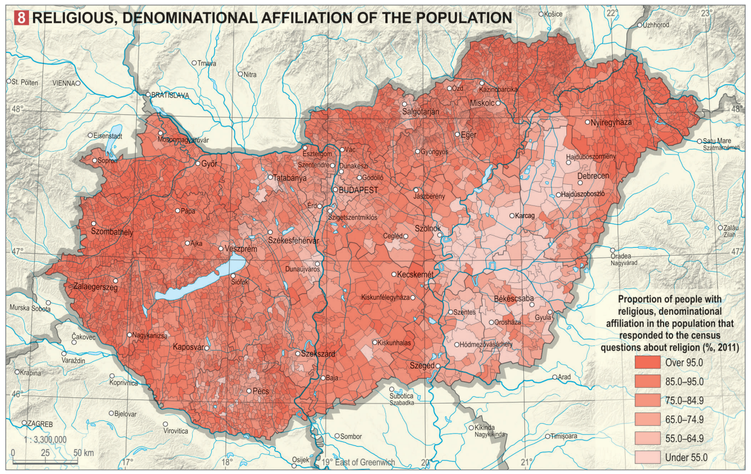
In the northeastern areas of the Carpathian Basin, between 1910 and 2011 the number of *Jews*, whose population share had been particularly high a century ago VI. 4. 12. 5, decreased from 929 thousand to 15 thousand (11 thousand in Hungary or, based on cultural identity, between 64 thousand and 120 thousand) due to the Holocaust, emigration and finally the gradual loss of religious identity. Two-thirds of them live in Budapest, while the others mainly live in Bratislava, Košice, Szeged, Debrecen and Miskolc.

Free churches and other *minor religious groups* have emerged in the Carpathian Basin since the second half of the 19th century. Their growth reflects disturbances in the religious activities of the historical churches, foreign missionary activities, and church renewal movements (e.g. Pentecostalists, Baptists, Jehovah's Witnesses, Adventists and the Faith Church).

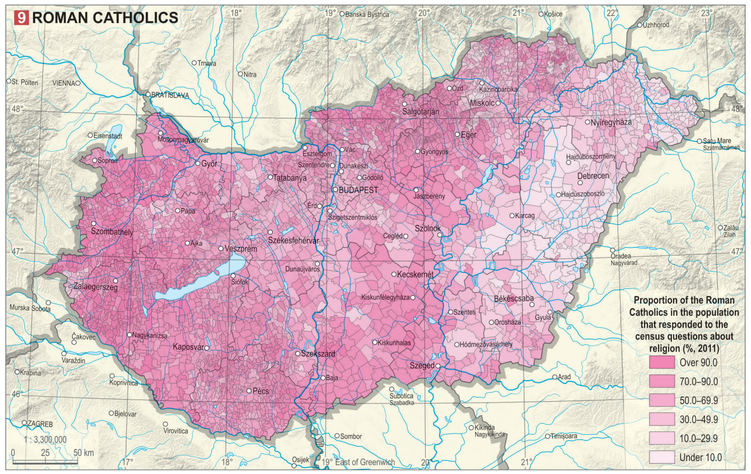
7 RELIGIOUS, DENOMINATIONAL AFFILIATION OF THE POPULATION IN THE CARPATHO–PANNONIAN AREA



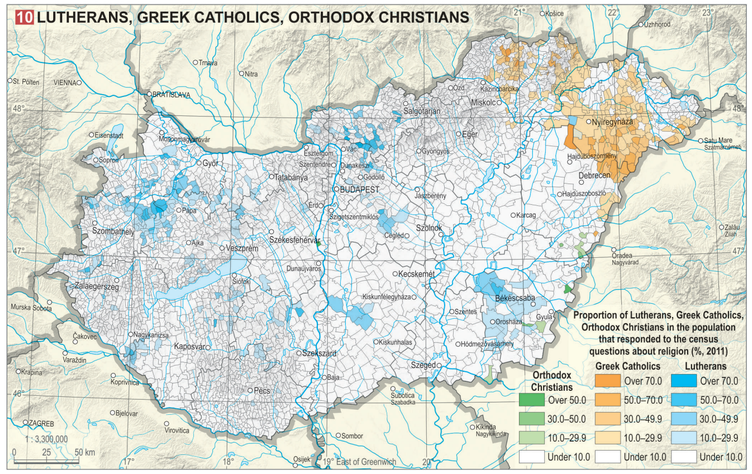
8 RELIGIOUS, DENOMINATIONAL AFFILIATION OF THE POPULATION



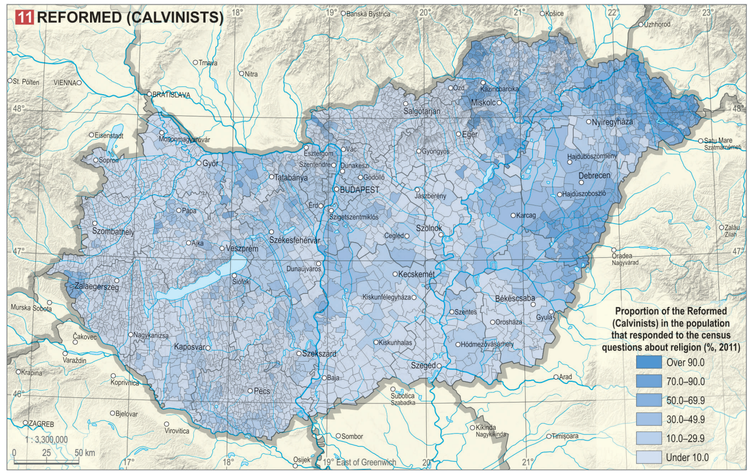
9 ROMAN CATHOLICS



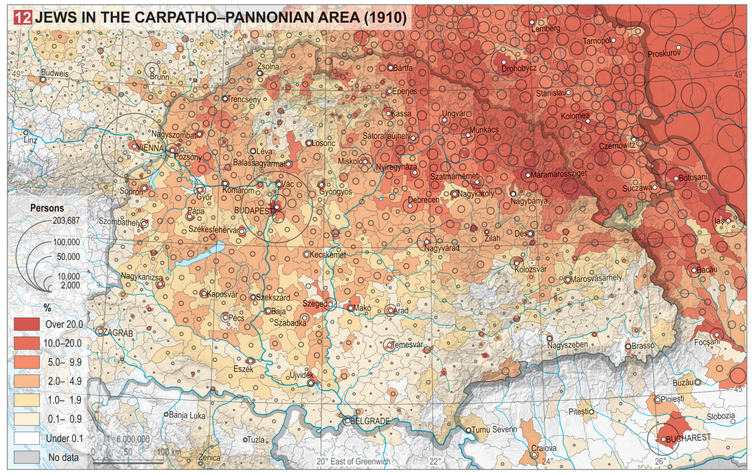
10 LUTHERANS, GREEK CATHOLICS, ORTHODOX CHRISTIANS



11 REFORMED (CALVINISTS)



12 JEWS IN THE CARPATHO–PANNONIAN AREA (1910)



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EDUCATIONAL STRUCTURE

Zoltán Dövényi

'The power of a nation lies in the multitude of cultivated human minds,' István Széchenyi (1791–1860), the great Hungarian statesman once wrote. The quality of human resources is still of great importance even today. An important indicator in each country is the level of education of the population, which entails not only the number and proportion of higher education graduates but also the rate of literacy (i.e. the reading and writing skills of the general population).

The level of education of the population improved considerably in Hungary at the time of the Austro-Hungarian Monarchy: whereas more than two-thirds of the population had been *illiterate* in 1869, by 1910 68.7% of the population over the age of 6 in the Kingdom of Hungary (and as much as 80.3% in the post-Trianon territory) was able to read and write. This basic education indicator had marked regional differences within the Carpathian Basin, and a definite west–east gradient arose VI. 5. 1. Literacy also differed greatly among the various ethnicities and religious denominations. In terms of knowledge of reading, the Germans were at the forefront in the Kingdom of Hungary (1910: 73%); they were followed by the Hungarians (1910: 70%), with the Romanians and Rusyns at the bottom (1910: 35% and 26%, respectively).



1 *An important milestone for young people: secondary school graduation*

One of the greatest accomplishments of the interwar period was that literacy became almost universal. Indeed, whereas 15.2% of the population aged over seven years was illiterate in 1920, the figure fell to less than 5% in 1949. Another important development in this period was the diminishing gap between men and women in terms of literacy.

The number and proportion of illiterate people have been declining ever since. By 2016, less than 1% of the population was illiterate. This meant, however, that the problem still affected more than 83 thousand people. Albeit at a low level, the legacy of illiteracy remains present in society VI. 5. 2.

Knowledge of reading and writing is the basis of education; more knowledge can be obtained on this foundation. A long-term view reveals that the general population is reaching ever higher levels of educational attainment. Considering the level of education of the population aged over seven years, in 1920 the largest group were those who had completed six or seven grades of primary school, and this remained so for decades. The census of 1980 recorded an improvement, with the largest group being those who had completed eight grades of primary school. By 2011, secondary school graduates formed the largest group, and this remained the case in 2016 1. It should be noted that in 2016 there was little difference between the numbers and proportions of graduates of primary school, vocational training and higher education.

Even so, the proportion of the population aged over seven years *who failed to complete eight grades of primary school* was as much as 11.0% in 2016 VI. 5. 3. The situation is significantly better and the impression more realistic if we look at the proportion of the population aged 15 or over that has failed to complete seven grades: in this case the proportion is only 3.2%. This group still comprises more than 270 thousand people, some 100 thousand of whom are of working age, resulting in problems in the labour market. Women are more likely than men to have a low level of education: whereas 4.2% of women aged 15 and over lack a basic level of education, the corresponding figure among men is just 2.1%.

2 NUMBER AND PROPORTION OF ILLITERATES (1910–2016)

Year	Population older than 7 years of age	Illiterate persons	
		Number	Proportion (%)
1910	6,467,787	1,276,788	19.7
1920	7,197,923	1,092,850	15.2
1930	7,619,071	734,853	9.6
1941	8,225,493	523,849	6.4
1949	8,095,733	400,353	4.9
1960	8,737,124	334,957	3.8
1970	9,347,226	224,636	2.4
1980	9,512,019	161,430	1.7
1990	9,513,243	187,139	2.0
2001	9,487,187	164,163	1.7
2011	9,264,462	109,673	1.2
2016	9,165,428	83,284	0.9

3 NUMBER AND PROPORTION OF THE POPULATION OLDER THAN 7 YEARS OF AGE BY HIGHEST EDUCATIONAL ATTAINMENT (1920–2016)

Year	Not completed the first year of primaey school	Primary school				Secondary school without graduation, with vocational certificate	Graduation	University, college, etc. with diploma	Total
		Grade							
		1–3.	4–5.	6–7.	8.				
	Number								
1920	667,940	1,156,556	1,934,149	2,866,493	551,315	——	190,024	84,774	7,451,251
1930	593,072	1,023,964	1,963,146	3,590,798	788,145	——	179,279	87,089	8,225,493
1941	458,924	974,364	1,608,481	3,598,114	1,099,272	——	263,343	93,235	8,095,733
1949	348,130	950,017	1,440,439	3,489,551	1,893,360	——	445,982	169,645	8,737,124
1960	224,636	743,600	1 ,145,110	2,953,210	2,662,178	446,338	877,605	294,549	9,347,226
1980	161,430	674,013	876,612	2,189,493	2,821,456	922,004	1,382,165	484,846	9,512,019
1990	187,139	530,697	659,759	1,588,852	3,046,077	1,233,732	1,543,951	723,036	9,513,243
2001	164,163	431,701	413,235	888,372	2,911,369	1,581,315	2,162,996	934,036	9,487,187
2011	109,673	316,651	272,917	449,959	2,319,319	1,805,051	2,551,276	1,439,616	9,264,462
2016	83,284	327,311	250,894	351,807	1,987,418	1,749,792	2,699,261	1,715,661	9,165,428
	Proportion (%)								
1920	13.5	15.6	26.9	34.8	6.1	——	1.9	1.0	100.0
1930	9.0	15.5	26.0	38.5	7.4	——	2.6	1.1	100.0
1941	7.2	12.4	23.9	43.7	9.6	——	2.2	1.1	100.0
1949	5.7	12.0	19.9	44.4	13.6	——	3.3	1.2	100.0
1960	4.0	10.9	16.5	39.9	21.7	——	5.1	1.9	100.0
1980	1.7	7.1	9.2	23.0	29.7	9.7	14.5	5.1	100.0
1990	2.0	5.6	6.9	16.7	32.0	13.0	16.2	7.6	100.0
2001	1.7	4.6	4.4	9.4	30.7	16.7	22.8	9.8	100.0
2011	1.2	3.4	2.9	4.9	25.0	19.5	27.5	15.5	100.0
2016	0.9	3.6	2.7	3.8	21.7	19.1	29.5	18.7	100.0

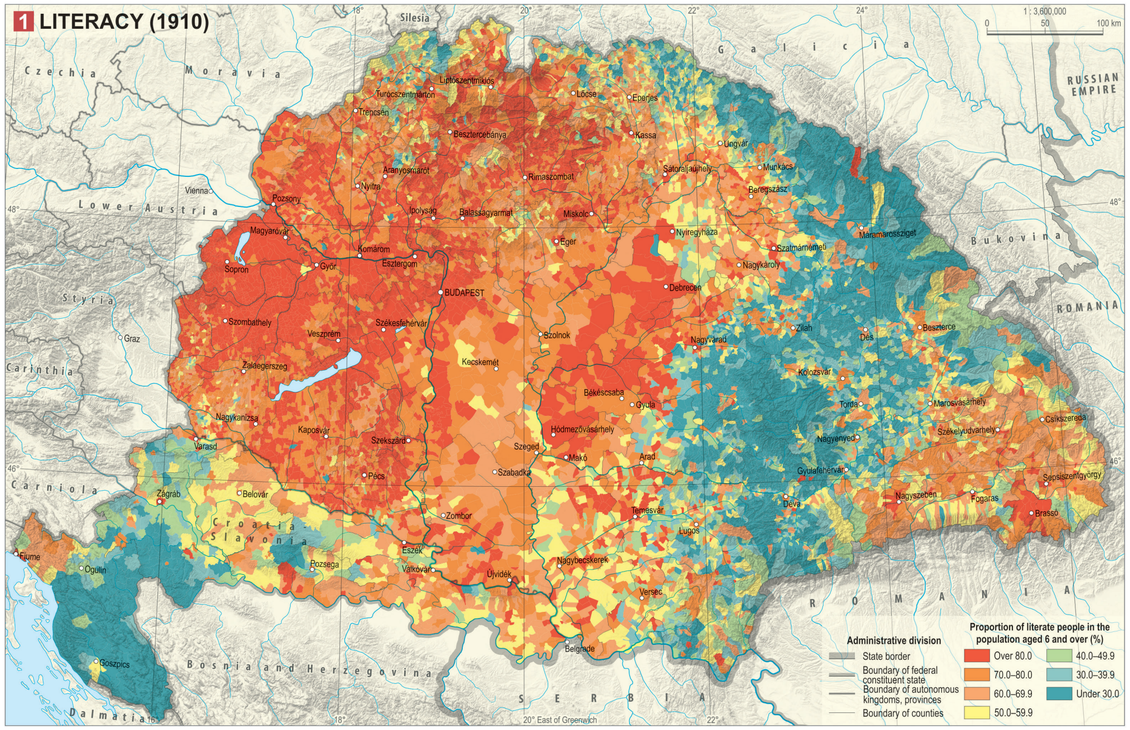


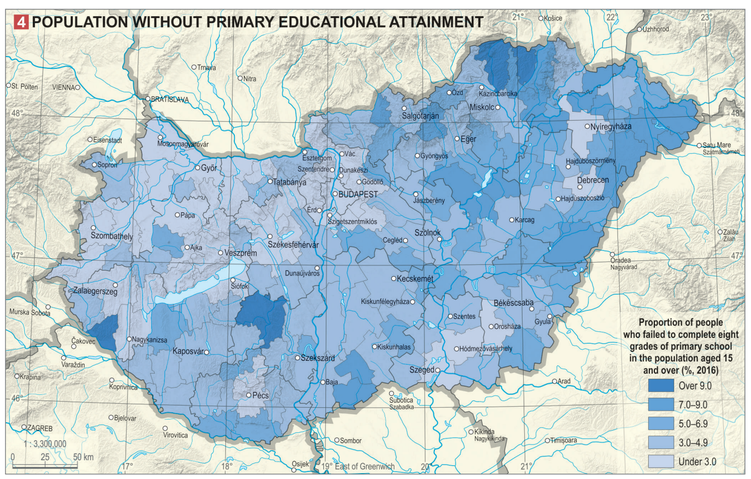
2 *Students at a university graduation ceremony*

The traditional method for assessing the level of education of the general population is to examine the successful completion of each type of school (i.e. to analyse data for completed school grades and obtained higher education degree). However, such analysis ignores uncompleted education and training, even though these also contribute to the 'polishing' of individuals and the broader education of the population. The statistics can, however, record some of these 'lost years', facilitating the creation of an indicator expressing education in terms of the number of years spent (and successfully completed) at the school desk. In this case, it is still worth limiting the analysis to people aged 15 and over. At the settlement level, we can then show spatial differences in more detail. This, however, is only feasible using census data, so it is only possible to present the conditions in 2011.

The census of 2011 recorded that the nearly 8.5 million people aged 15 and over had successfully completed more than 97 million school grades (i.e. 11.4 grades on average). This is very close to the 12 grades needed for secondary school graduation.

Like so much else, the level of education (in this case the *number of school grades completed*) is not evenly distributed in space, for there are significant regional differences. The spatial variation at settlement level is high, with the average figure ranging from 6.2 in Csenyéte (a village in northeastern Hungary inhabited entirely by Roma) to 14.1 in Telki (a village in the Budapest agglomeration). As with higher education graduates, there is a marked dichotomy between villages and towns: the lower level of education in rural areas





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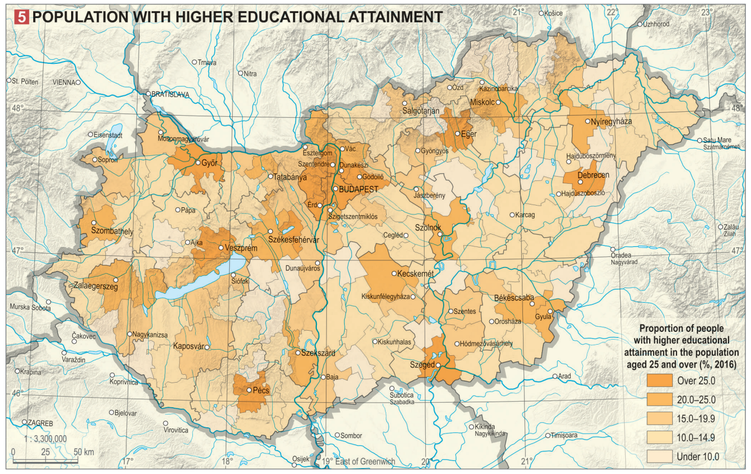


lying between areas with higher urbanisation is evident. Using the data for the average number of grades completed, we can identify areas with structural problems (and a high Roma population share), such as the Cserehát Hills, the Central Tisza Region, southern Transdanubia and some areas adjacent to the border.

At settlement level, there were 17 municipalities where the average number of completed grades did not even reach eight. Most of them have a high Roma population share, as is the case with Csenyéte, which had the lowest value (6.2). The number of settlements with noticeably higher than average figures is much greater. In some cases, the suburbanisation processes of recent decades account for the favourable figures. This is true in several municipalities in the Budapest agglomeration, to which people with a higher level of education have moved. This has led to much higher than average figures for completed grades in municipalities with relatively small populations (e.g. Nagykovácsi: 13.4, Remeteszőlős: 13.9, Telki: 14.1). The same phenomenon is evident in the suburban zones of other major cities, including Győrújbarát and Győrújfalu (12.3 and 12.4 respectively) near Győr, Kozármisleny (12.3) in the agglomeration of Pécs.

Suburbanisation, moving out of the capital to its agglomeration, has made the education indicators of Budapest only slightly worse, as the compensating effect of immigration also emerged. Behind the average for the capital (12.8), differences among the districts can also be found, yet these are far less significant than in the case of higher education graduates: the frontrunner is District XII (14.5) while districts XXI and XXIII are at the tail end (11.7) VI. 5. 6.

As mentioned before, specific characteristics pertain to the *education of men and women*. Some of these features are considered almost traditional, but others are the consequence of changes over the past few decades. Among the former is the fact that the level of educational attainment is lower among women than among men. This was confirmed by data from the micro-census of 2016, at which time the proportion of women aged 7 or over with no more than 8 completed grades of education was 35.5%, while the corresponding figure for men was just 29.6%. The different schooling habits and strategies of men/boys and women/girls reflect the fact that a much higher proportion of men complete their secondary school education without a graduation certificate (26.1% compared with 12.8% of girls). Under communism, boys tended to attend vocational training, while girls went to grammar school instead. However, it has taken longer for women to overtake men in terms of the proportion with a secondary school graduation certificate. Consequently, even in 2016 the difference between the two sexes in this field was not substantial (31.6% and 27.1% respectively). Moreover, among higher education graduates, the shift towards women is even more recent (20.1% and 17.2% respectively).

Evidently, there are significant regional differences behind the national averages. However, there is little or no regional difference in terms of the higher proportion of men with vocational qualifications; women, however, lead in all other groups.

This indicator also reflects the low level of education of the general population in *underdeveloped areas*. In such areas, the proportion of people aged seven and older with no more than 8 completed grades of education is much higher than the national average, with the share being around 50% for men and even higher for women, sometimes even exceeding 60%. The proportion of those with skilled worker qualifications is the closest to the national average, which applies to both men and women. For secondary school graduates, the differences between men and women are roughly the same as the national value, but the percentages are noticeably lower. This applies even more to higher education graduates: in both cases, their proportion is below 10% (Sellye District: 4.4% and 6.9%).

A completely different picture unfolds in the *highly urbanised districts* and, of course, in Budapest. In the case of the capital, the proportions of the two lower categories are well below the national average, but the share of secondary school and higher education graduates is high above it. The proportion of people with at least a secondary school graduation certificate in the population aged seven years and older is 66.5% for men and 71.6% for women. By comparison, it is worth noting that in the districts of underdeveloped areas, the share is generally less than 30% VI. 6. 7.

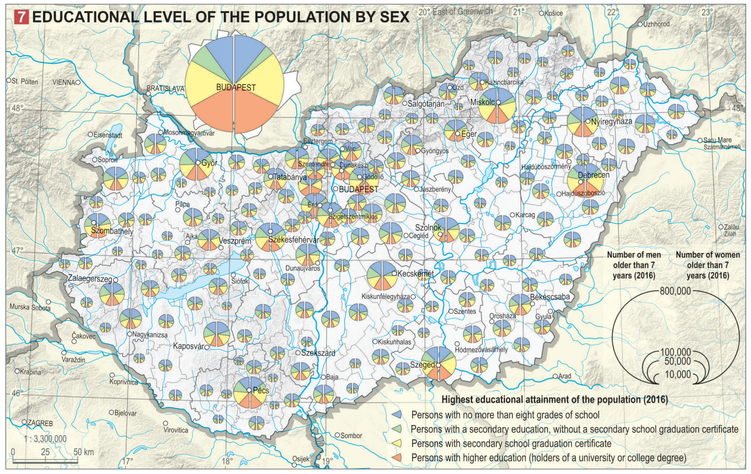
In every country, the *school system* has a significant impact on social attitudes to education, on educational efforts and even on whether it is worth studying at all. The general experience is that participation in organised education lasts until about 30 years of age. Thus, it is worth examining the proportion of individuals participating in education at each stage of life up to this age. The following overview was based on data from the 2016/2017 academic year.

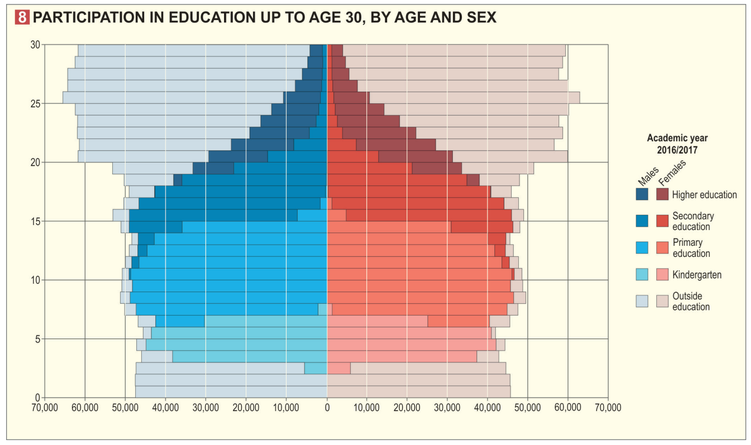
Participation in the Hungarian education system is mandatory from three years to 16 years of age, above which it is voluntary. In Hungary, kindergarten is part of public education, and the age group concerned exhibits a high attendance rate of 96%. Equally high (94-97%) is the participation in primary school education. The rate among those aged 18, is only 77.3%. Less than 50% of those aged 20, and 22.8% of those aged 25 are in formal education, and the percentage declines to 6% among those aged 30, indicating the process of participants gradually leaving higher education.

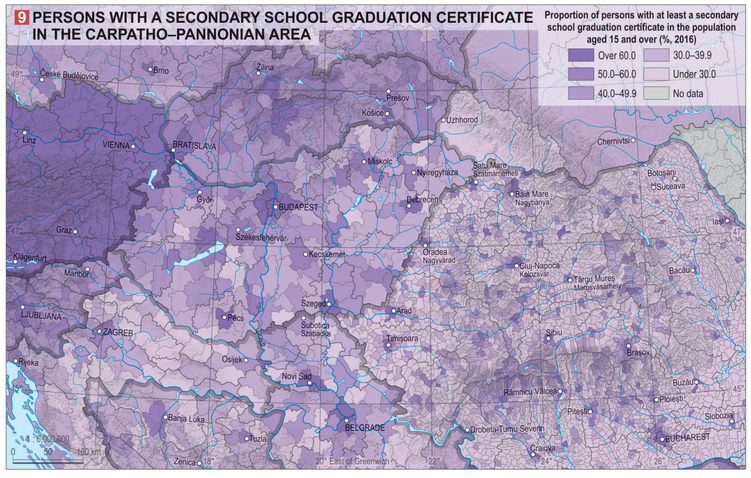
Until the age of 29 men were the majority in each age group, covering kindergarten, primary and even secondary education. Women, on the other hand, are the majority in higher education, indicating their stronger demand for education.

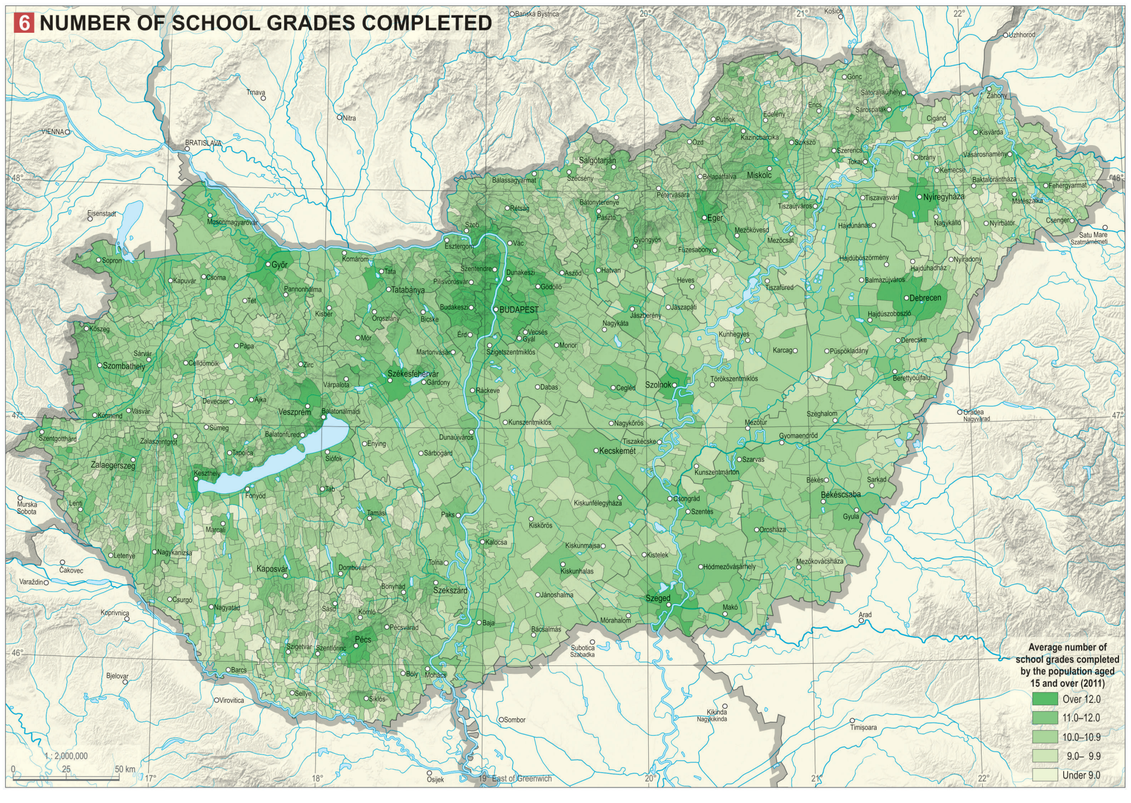
In addition to the high participation rates in primary and secondary education, it should also be mentioned that, for various reasons, several thousand people are absent from education in each academic year. This is partly what leads to what is called early school leaving. This category includes those who leave the education system aged 18-24 with no more than eight completed grades of education. In 2018, their proportion was higher than the EU average in Hungary (12.5%), which amounts to around 95 thousand people VI. 6. 8.

Among the indicators characterising the *spatial differences in education in the Carpathian Basin* as a whole, the proportion of the population aged 15 and over *with at least a secondary school graduation certificate* was available. It can be stated – as is also evident from other indicators – that Hungary is somewhere in the middle in terms of this level of education. Indeed, the share of people with a secondary school education in Hungary (52.7%) resembles the proportions in Slovakia and Slovenia (both 53.1%), but it is significantly below that of Austria (73.8%). At the same time, the general level of education is significantly higher in Hungary and Slovakia than in Zakarpattia (29.2%), Vojvodina (36.6%) and Transylvania (44.5%). Regional differences are also significant here: a mosaic impression is formed everywhere except for in Austria, and a rural-urban dichotomy is also typical in this field VI. 6. 9. . The Austrian average is attained by such major cities in the region as Budapest, Cluj-Napoca/Kolozsvár and Bratislava (72-75%). Meanwhile, Timişoara, Braşov, Szeged, Debrecen, Košice, Novi Sad, Pécs and Zagreb (60-69%) are not far behind.









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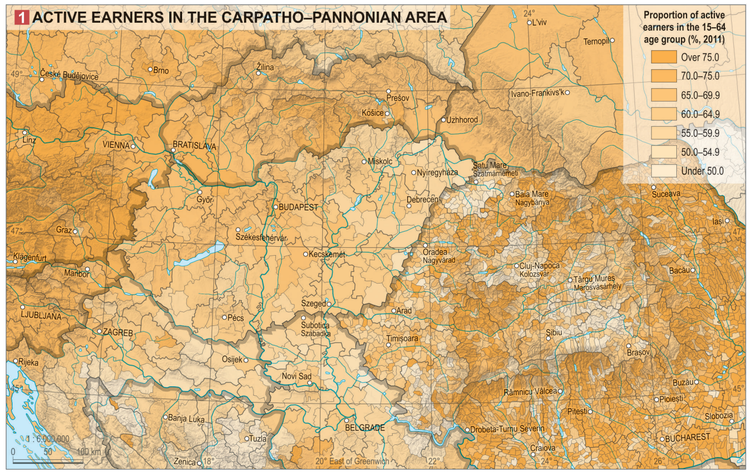
ECONOMIC ACTIVITY

Zoltán Dövényi

Work is one of the most important human activities; without it the survival of society is unimaginable. Work is the foundation of the economy, and labour is a major factor of production. Therefore, knowledge of the labour market situation of different social groups and their attitudes towards work is essential.



Basic terms and categories

The population can be divided into two main groups from the point of view of the labour market, the *economically active* and the *economically inactive population*. The economically active population is made up of the *employed* and the unemployed. The first category includes people aged 15 and older with a job providing income. The largest group within the first category is active earners (including e.g. working pensioners and people who are working while receiving childcare allowance). *Unemployed* people comprise those who did not work in the week before the survey but were actively looking for work and were ready to work.

The proportion of the above groups is sometimes compared with the total population, but the working-age population (aged 15–64) is usually the basis for comparison. The proportion of the economically active population is expressed by the activity rate, that of the employed by the employment rate and that of the unemployed by the unemployment rate, usually based on the economically active population.

The economically inactive population is made up of *inactive earners* and *dependants*. The first group includes those who do not carry out activities with earnings but have an income. Pensioners make up the largest proportion of this group, which also includes, however, those receiving childcare support, social care benefits and even those living on their wealth. Dependants are people who cannot be classified in any of the categories listed above. Their largest group is full-time students attending educational institutions, but housewives also belong in this group.

Economically active population

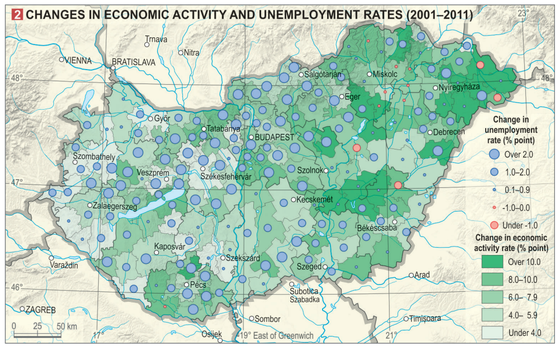
In the EU, the combined share of employed and unemployed people among 15–64-year-olds increased from 71.1% to 73.7% between 2011 and 2018. A similar change in economic activity was observed in most countries of the Carpathian Basin, except for Hungary and Slovakia, where growth reached 9.5 and 4.0 percentage points, respectively. As a result, in 2018 the value of this indicator in these two countries (H: 71.9%, SK: 72.4%) approached the EU-28 average (73.7%).

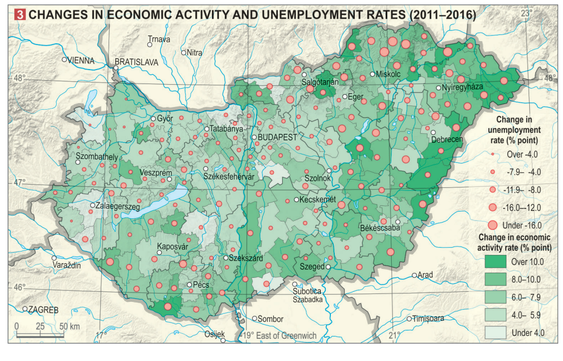
In the Carpathian Basin, spatial differences in *economic activity* can be discerned on the basis of data from around 2011 VI. 6. 1.. At that time, the rate in Hungary (62.4%) was closest to that in Romania (64.1%) or Croatia (64.1%). In the region, a northwest–southeast gradient could be observed for the 2011 activity rate. Accordingly, the highest proportions of economically active people were registered in the northwest (Austria, Slovenia, Slovakia, Hungary), as opposed to the areas in Croatia (mainly Slavonia) and Serbia (Vojvodina), which had been greatly affected by the Yugoslav Wars and by emigration. Like them, low economic activity and the associated high proportion of dependants and inactive earners were observed among the severely disadvantaged populations of the eastern and northeastern peripheral areas of Hungary, the northwestern part of Romania and the Transylvanian Basin. In all these areas, the Roma population share is significant.

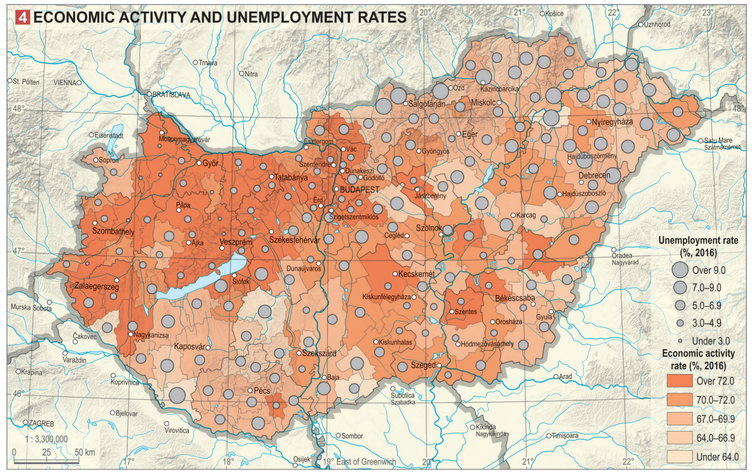
The activity rate increased throughout Hungary between 2001 and 2011. Accordingly, the rather low national activity rate of 59.6% in 2001 increased modestly to 62.4% in 2011. Above-average increases during this period were observed in the less developed and underdeveloped areas (e.g. the eastern border area and the inner periphery of the Alföld). Such increases evidently reflected the very low activity rate in these areas in 2001 VI. 6. 2..

The growth of the economic activity rate accelerated strongly after 2011 (2001: 59.6%, 2011: 62.4%, 2016: 70.1%, 2018: 71.9%). This development can be explained by the significant improvement in the economic situation and the associated positive changes in the labour market. During this period, activity rates increased to varying degrees throughout the country. While above-average improvements continued to occur in less developed areas, fewer districts were affected than in the previous period VI. 6. 3..

The current spatial differences in the proportion of the *economically active population* can be inferred from the data of the micro-census in 2016. Many of the districts with higher than average activity rates (at least 72%) lie in a contiguous area that includes the capital and its agglomeration as well as the northern part of Transdanubia VI. 6. 4.. There is a close correlation between the activity rate and the unemployment rate: a high activity rate is usually coupled with low unemployment, while a low activity rate correlates with high unemployment. The districts with the lowest activity rates lie in the northeastern and southwestern border regions and in internal peripheries. Yet they do not form a contiguous zone with characteristic features. In 2016, there were only nine districts where the activity rate was less than 65%.



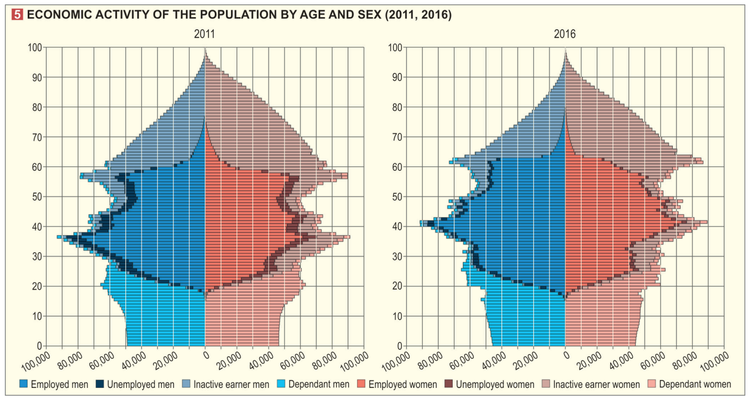


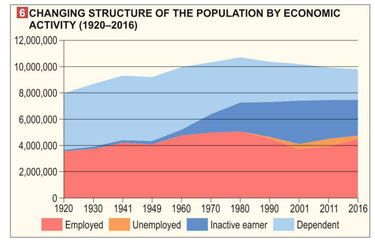


Employment

The first census in Hungary after the Treaty of Trianon in 1920 registered more than 3.5 million employees (i.e. 44.6% of the total population) VI. 6. 6.. Over the next six decades, the number of people employed increased by about one and a half million to slightly more than five million in 1980, a rate of 47.3%. Thereafter a decline occurred, which then accelerated after the collapse of communism, when about one and a half million jobs were lost in the space of a few years. As a result, just 3.7 million people were employed in the labour market in 2001 (36.2%). The subsequent period brought renewed growth, with 4.5 million employees (i.e. an activity rate of 45.9%) being recorded in 2016.

The severe labour market problems of the decade after the collapse of communism are reflected in the statistics. For instance, in 1998 53.6% of the working-age population was employed. The rate then improved to 57.4% in 2006, but the following economic crisis brought another decline (2010: 54.9%). Over the past few years, the labour market has expanded significantly, with the result that the employment rate has approached 70%. The number of people employed within the 15–64 age group exceeded 4 million in early 2014 and reached 4.5 million in 2019. Accordingly, whereas Hungary had once been at the tail end within the EU, by the late 2010s it had advanced to the middle. In 2010, the employment rate was 64.1% in the EU and 54.9% in Hungary. By 2018 the figure in Hungary had increased to 69.2%, while the EU av erage in that year was 68.6%.





The employment rate of men exceeded 60% in 1998, while that of women was 47.3%. Subsequently, the value of the indicator slowly began to improve for both sexes, but the process was temporarily halted by the economic crisis of 2008. Later, the male activity rate in the labour market increased more rapidly, with the employment rate rising to 76.3% in 2018. Meanwhile, the employment rate for women increased to only 62.3%. At that time, nearly 55% of employees were men and about 45% were women.

The number of people employed increased in almost every age group between 2011 and 2016, which clearly indicates an improvement in labour market conditions. In 2016, the highest number of employees was in the category of those aged 40–44, with more than 700 thousand people, or a fifth of the total number of employees. These 'Ratkó grandchildren' born between 1972 and 1976 make up the last more populous age group in the labour market of Hungary. Their parents, the so-called 'Ratkó children' born in the first half of the 1950s, are already inactive VI. 6. 5..

Areas with developed urban networks can provide jobs for a greater than average number of employees. Examples include the agglomeration of Budapest and northern Transdanubia. Districts with smaller populations are disadvantaged in the field of employment as well, especially if the district centre is also in decline. Such districts can be found in such traditionally underdeveloped areas as parts of northeastern Hungary, the Alföld and Southern Transdanubia VI. 6. 7.. The employment rate exhibits even more pronounced territorial disparities, with considerable deviations from the national average in some districts. The employment rate was less than 40% in 14 districts in 2016. Most of them have long had structural problems, but two former bastions of communist heavy industry (Ózd and Salgótarján) also belong here, indicating ongoing problems in the labour market VI. 6. 7..

Another important feature of employment is the *educational level of employees*. The number of people employed in Hungary increased significantly between 2011 and 2016, rising from 3.76 million to 4.5 million. Yet the composition of employees by level of education hardly changed: in 2016, more than a tenth of employees had completed no more than eight grades of school, more than a quarter had a skilled worker qualification, more than a third had graduated from secondary school, and more than a quarter were higher education graduates.

A positive change in the labour market is the significant increase in the number and proportion of higher education graduates. Even so, in the same five years the number of workers with the lowest level of education also increased by more than 60 thousand. Between 2011 and 2016, the number of unemployed people with no more than eight completed grades of school fell by more than 100 thousand. In this half-decade, therefore, a significant proportion of the poorly educated unemployed found their way back into the world of work. While this is a positive development,

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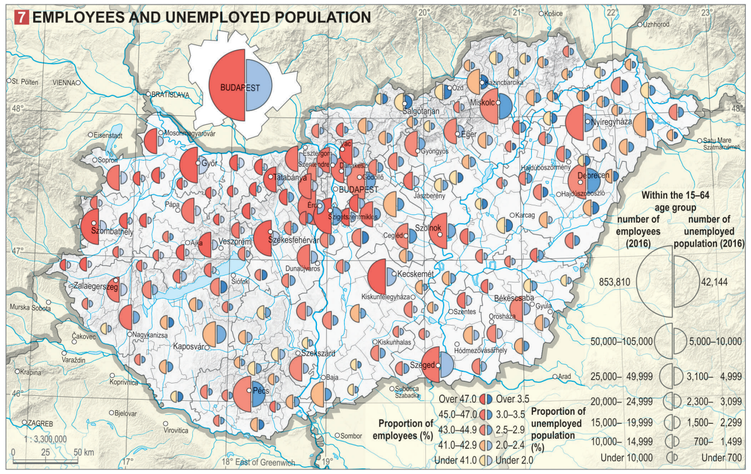
VI. 6.

7 EMPLOYEES AND UNEMPLOYED POPULATION



Employment structure

As a result of Hungary's belated industrial revolution, the transformation of the employment structure (i.e. the social and occupational re-stratification) in the country was also delayed. This is indicated by the fact that 59.7% of employees were working in agriculture in 1920. At that time, more people worked in the service sector of the economy than in industry, which remained so for four decades to come. This suggests that the occupational restructuring in Hungary did not follow the classic Western European model (i.e. the population leaving agriculture did not primarily go to industry but was divided between services and industry).

After 1920, the number and proportion of agricultural employees decreased only slowly. Therefore, the agricultural sector's share exceeded 50% (53.8%) even in 1949 VI. 6. 10.. In this field, the economic policy of the first half of the 1950s (i.e. the forced development of heavy industry and mining, and the compulsory collectivisation of agriculture) made a significant difference. While agriculture still had the greatest number of workers even in 1960, by that time it was barely ahead of industry. The latter became the leading sector at the time of the censuses in 1970 and 1980. Based on the above, occupational restructuring was a protracted and relatively slow process in Hungary.

The number of people employed decreased by about half a million in the decade before the collapse of communism. Even so, this decrease only affected agriculture and industry, while in the service sector the number continued to increase. Thus, in 1990, this latter sector had the highest number of people employed (46.5%). And this sector was the winner of the economic transition, with its share of employment rising above 60% (2001: 61.5%). Restructuring continued in the first decade of the 21st century. Indeed, by 2011, the proportion of agricultural employees had declined to less than 5% and proportion of those working in industry had fallen below 30%, while the proportion of people employed in services rose to 67.2%. This structure appears to be rather resilient because in 2016 there were roughly the same proportions.



1 *The largest employment sector in Hungary is trade*

When assessing the share of services, it should be noted that this sector is extremely complex; it is no surprise that statisticians break it down into more than a dozen sub-fields. The largest employer is trade; one in seven employees worked in this sector in 2011 1. However, the service sector also includes public administration, education and health, each with around 300 thousand employees.

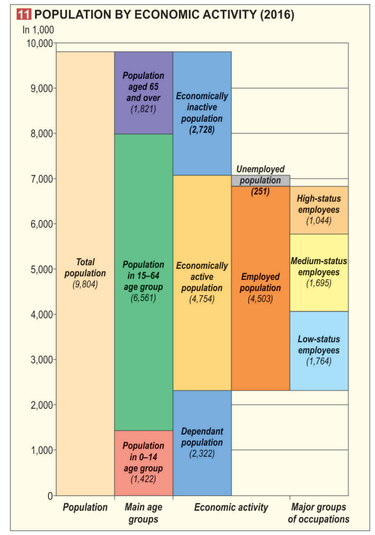
Significant regional differences lie behind the national rates of employment, as reflected in the figures at the settlement level VI. 6. 12.. To illustrate the regional and settlement differences, *settlement types* were identified *on the basis of the employment structure*; the classification was based on the percentage of the three sectors of the economy. In total, four main types were distinguished as follows:

- Settlements with a *predominant employment structure*: municipalities where the proportion of one sector exceeded 75% were classified here. This was true of just one agricultural settlement and two industrial settlements. The situation was completely different for more than 200 settlements dominated by the service sector: this is a mixed category, including, for example, a significant part of the agglomeration of the capital as well as several settlements around Lake Balaton. Yet, according to their occupation structure, numerous declining villages, most of them inhabited by Roma people, also belong in this group.
- Settlements with a *dominant employment structure*: this group comprises municipalities where the proportion of one of the economic sectors is between 50.1% and 75%. Only five agricultural settlements could be classified here. The industrial type is of a greater importance, as this subgroup included nearly 250 settlements. Some of them are industrial centres and the rest are villages in their catchment areas. Municipalities in the service sector are again of paramount importance; there were almost 1,900 such towns and villages.
- Settlements with a *shared employment structure*: this group includes settlements where the proportion of none of the sectors reaches 50%, but those in first and second place account for the majority of employees. A total of six combinations can arise here, all of which include settlements, but in quite different numbers. The smallest is the number of combinations involving agriculture, while tertiary (service) and industrial combinations account for 750 settlements.
- Settlements with a *mixed employment structure*: in this group the proportion of none of the sectors reaches 50% and all three sectors have similar shares. In such municipalities, the employment structure is balanced. There were as many as 20 such settlements.

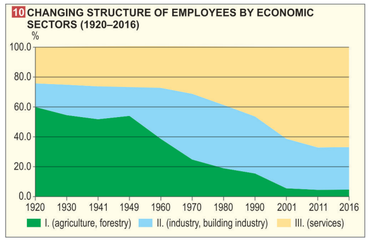
The database of map VI. 6. 12. showing the results is constituted by employees in the 15–64 age group who were registered during the census of 2011 (3.88 million people in total). The data refer to employees living locally rather than those working locally. The map does not show the functional type of settlements, since everyone was registered where they lived rather than where they worked.

In addition to classifying by economic sectors, it is also possible to undertake analysis by *major groups of occupations*. The groups are based on the ISCO used in statistics that places occupations in ten major groups. Contrary to the employment structure based on economic sectors, the emphasis here is on the *status of occupations*. As it was not possible technically to show all ten major occupation groups at the level of the districts, they were grouped into three categories of high, medium and low-status occupations. In 2016, 22.9% of those aged 15–64 were placed in the high-status, 37.7% in the medium-status and 39.4% in the low-status groups VI. 6. 11.. Regional differences were also significant in this respect: districts with a much higher than average rate of low-status occupations tend to be found in the multiply disadvantaged areas VI. 6. 13.. The proportion of employees in low-status occupations exceeded 60% in 22 districts in 2016. In these areas, therefore, a high proportion of residents work in less prestigious occupations requiring a low level of education and skills. One million employees belonged in the high-status group, a third of whom lived in Budapest. Evidently, therefore, the national average was significantly influenced by the situation prevailing in the capital (with 38.9% in high-status occupations). The proportion of people working in high-status occupations exceeded 30% in only a few districts near Budapest and in the Debrecen and Pécs districts.

11 POPULATION BY ECONOMIC ACTIVITY (2016)



10 CHANGING STRUCTURE OF EMPLOYEES BY ECONOMIC SECTORS (1920–2016)



9 ECONOMIC ACTIVITY OF THE POPULATION BY SETTLEMENT TYPES (2011, 2016)

Economic activity	Capital		Towns with county rights		Other towns		Villages		Total	
	2011	2016	2011	2016	2011	2016	2011	2016	2011	2016
	Number (thousand people)									
Employed	777.5	877.0	838.8	923.1	1,270.3	1,442.3	1,056.0	1,261.1	3,942.7	4,503.4
Unemployed	90.4	42.3	106.7	46.8	185.4	82.3	186.0	79.1	568.5	250.5
Inactive	474.5	449.1	569.7	540.2	967.6	903.4	937.9	835.7	2,949.7	2,728.3
Dependant	386.6	395.9	514.1	474.1	818.4	754.7	757.6	696.9	2,476.7	2,321.6
Total	1,729.0	1,764.3	2,029.4	1,984.2	3,241.7	3,182.7	2,937.5	2,872.8	9,937.6	9,803.8
	Proportion (%)									
Employed	19.7	19.5	21.3	20.5	32.2	32.0	26.8	28.0	100	100
Unemployed	15.9	16.9	18.8	18.7	32.6	32.9	32.7	31.6	100	100
Inactive	16.1	16.5	19.3	19.8	32.8	33.1	31.8	30.6	100	100
Dependant	15.6	17.1	20.8	20.4	33.0	32.5	30.6	30.0	100	100
Total	17.4	18.0	20.4	20.2	32.6	32.5	29.6	29.3	100	100

Unemployment

Unemployment constitutes a serious disturbance in the labour market: people who are ready and fit for work cannot find jobs. Unemployment is rooted in various economic and social factors. Consequently, there are several basic types. Cyclical unemployment develops when jobs are scarce due to an economic recession or crisis. Structural unemployment arises where the skills and qualifications of workers do not match the requirements of vacant jobs. Meanwhile frictional unemployment refers to the joblessness that occurs when a significant number of people are between jobs.

Unemployment as a social problem first appeared in Hungary at the time of the Austro-Hungarian Monarchy. Mass unemployment emerged in the interwar period, affecting both industry and agriculture.

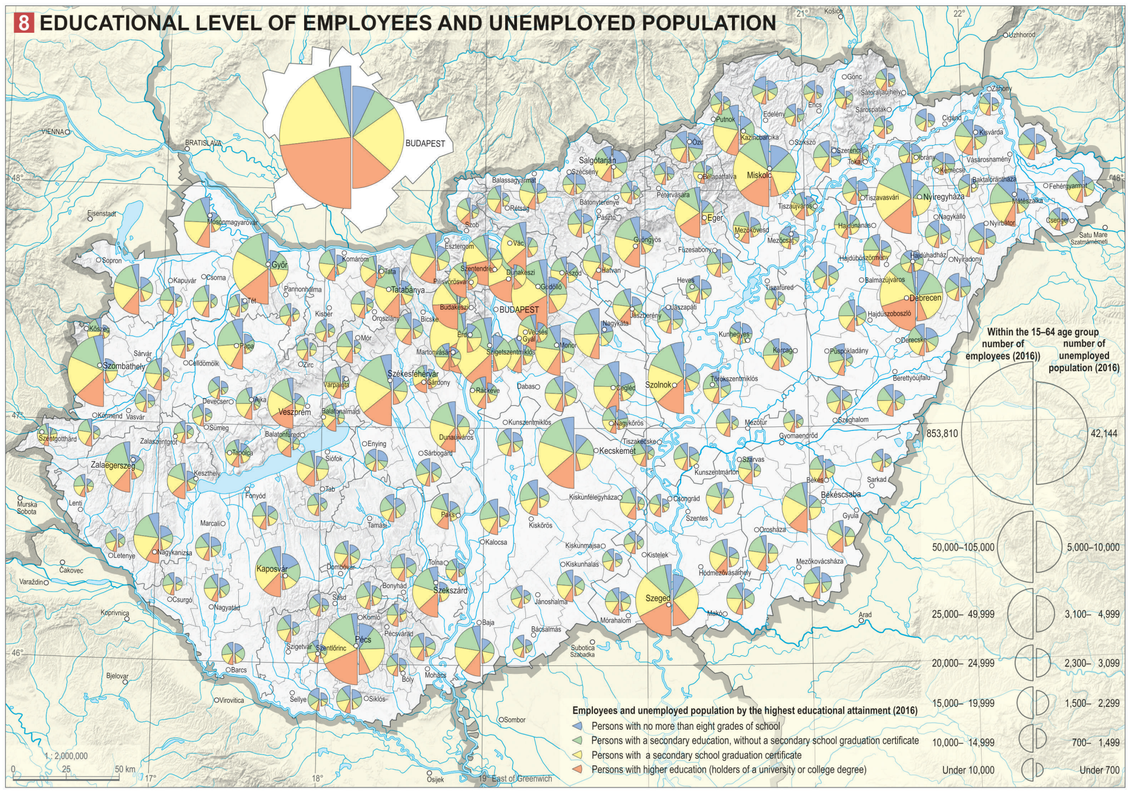
Between the late 1940s and the end of the 1980s, there was no official unemployment in Hungary, as according to the prevailing ideology, only full employment was possible *under communism*. Although there was indeed no overt unemployment, excess labour was hidden in the form of '*indoor unemployment*'. In other words, some people with jobs barely did any actual work. Concerning the late 1960s, for instance, it has been calculated that if there had been overt unemployment, there would have been around half a million unemployed people in Hungary.

the fact that a significant number of them initially found a new job in public works programme – although to a gradually decreasing extent – rather than in the competitive sector, is not so favourable.

There are significant regional differences in the level of education of the population, and this is necessarily reflected in the composition of the employed. In 2011, there were only two districts where the proportion of employees with no more than 8 completed grades of school exceeded 25%, but in 2016 there were 17 such districts. Meanwhile, the proportion of people with no more than 8 completed grades of school is extremely low in Budapest and in almost all the surrounding suburban areas, as well as in university towns and their districts. The same areas have the highest proportions of higher education graduate employees. The capital stands out among them, with nearly half of employees (46.3%) being higher education graduates in 2016 VI. 6. 8..

The number of people employed increased in all types of settlements between 2011 and 2016, which is also a positive development. In these five years, the share of urban areas in employment decreased somewhat, but the share of villages increased, which may be due – at least in part – to the public works programme VI. 6. 9..

8 EDUCATIONAL LEVEL OF EMPLOYEES AND UNEMPLOYED POPULATION



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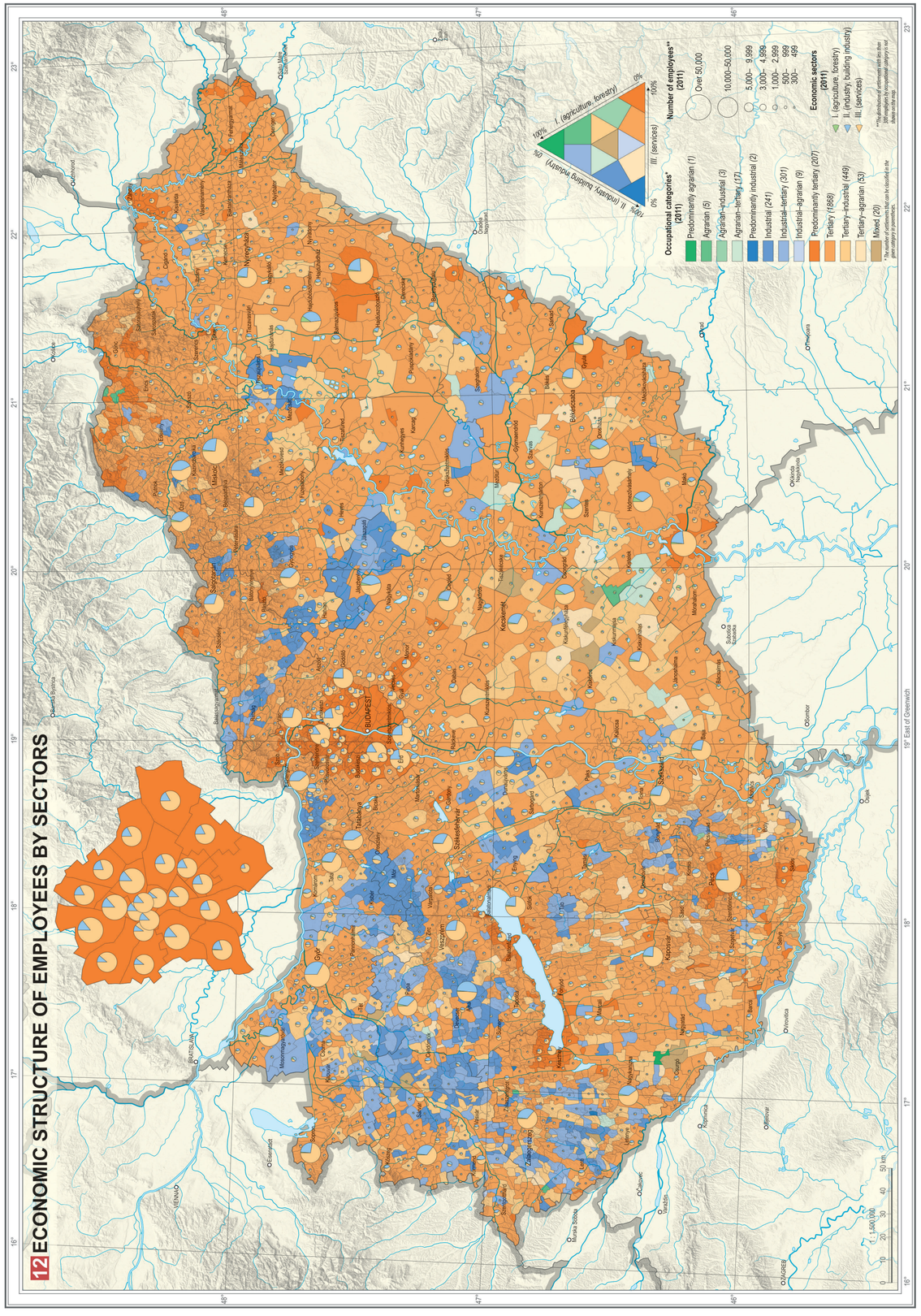

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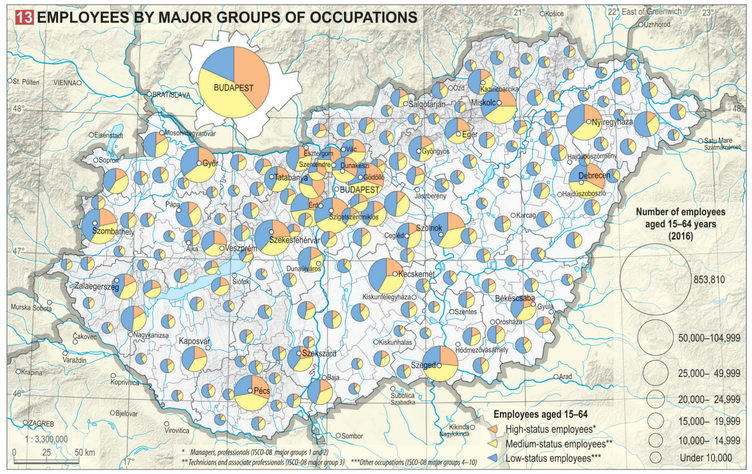


The *collapse of communism* triggered profound transformations in the Hungarian labour market. For instance, the hidden unemployment of the past became overt unemployment. The number of unemployed people was first recorded in the census of 1990 (126,227 people). The two following censuses reported rising unemployment, but there was a significant improvement between 2011 and 2016 VI. 6. 9.. In terms of unemployment the *most difficult period in Hungary* was between the autumn of *1990* and early *1993*, when the number of registered unemployed increased from 50 thousand to 519 thousand and the unemployment rate jumped from 1% to 12%. Thereafter the number of unemployed declined until 2002. The unemployment rate then gradually increased, with the problem amplified by the 2008 economic crisis. Hungary reached a new peak in 2012 (472 thousand unemployed), which was followed by a slight increase and then, *from 2014 onwards, by a sharp decline*. Consequently, by the summer of 2019 there were only 163 thousand registered unemployed people. The unemployment rate thus decreased from 11.1% to 3.5% between 2012 and 2019 VI. 6. 14.. This latter value represents almost full employment.

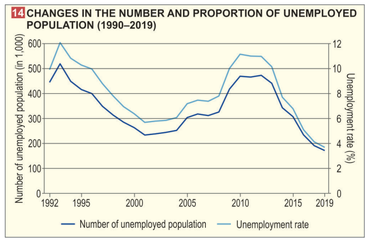
In recent years, the *unemployment rate* in the European Union has decreased significantly (to 6.3% in 2019). In the countries of the *Carpathian Basin,* the rate – apart from Serbia, Ukraine and Croatia– is below the EU's average unemployment rate everywhere. Between 2011 and 2019, both Hungary and Slovakia achieved significant progress in reducing the unemployment rate (by 7.5 and 7.8 percentage points respectively) 1. Even in Serbia, where the unemployment rate had been 23%, there was a decline to 10.5% (this was still the highest rate in the region). During the same period, the unemployment rate increased in Ukraine from 7.9% to 8.9% due to the war that erupted in 2014.

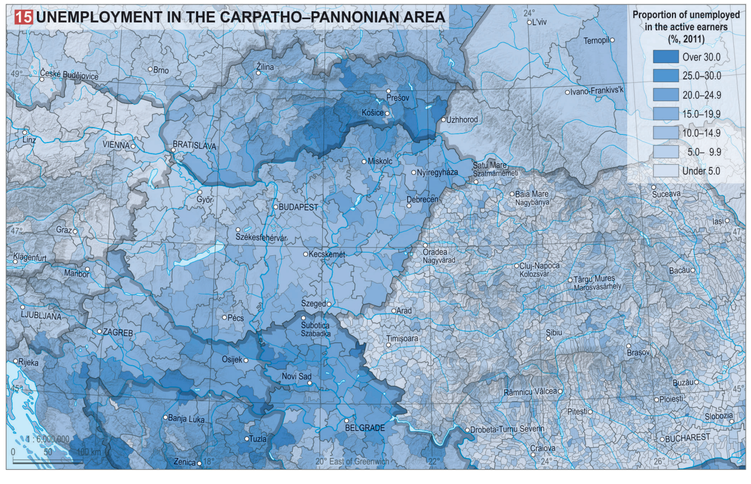
The ratio of the unemployed to the active population in the Carpathian Basin shows significant regional differences, which can only be presented in more detail based on data from 2011. In Hungary's southern neighbours, the areas with the highest unemployment include the Krajina, Slavonia and Vojvodina regions, all of which were affected by the devastation and economic problems associated with the Yugoslav Wars. Moreover these areas also saw forced migrations, with the resettlement of a significant proportion of people of working age and the mass immigration of unemployed refugees. In Slovakia, the unemployment rate exceeded the national average in certain southern and eastern regions largely inhabited by Hungarians and Roma people. These areas have received little support in the course of national regional development. In Hungary, unemployment was an acute problem in the particularly disadvantaged northeastern border regions and in the internal periphery regions of the Alföld VI. 6. 15..

In the case of Hungary, the above general outline can be further refined using data from the micro-census of 2016. As early as the 1990s, a spatial structural line was identified (the Balassagyarmat–Mezőhegyes line), separating areas of high unemployment from regions with lower unemployment rates. Since then, this line has shifted somewhat to the east, and can now be drawn between the towns of Szécsény, Heves, Kunhegyes and Karcag. In 2016, most districts where more than 3.5% of the working-age population was unemployed could be found to the east of this line (i.e. in the northeastern part of Hungary). The other pole is the contiguous area of northern Transdanubia and the agglomeration of Budapest, in which there was no single district with high unemployment VI. 6. 7..

A similar picture unfolds when the number of unemployed is compared with active earners rather than the working-age population. This can be done while determining and spatially analysing the rate. This unemployment rate was 5.3% nationally in 2016, with much higher rates (of at least 8%) being recorded in 17 districts. Their spatial distribution greatly resembles the pattern of the previous indicator VI. 6. 4.. The unemployment rate remained substantially unchanged in the period between 2001 and 2011 (2001: 8.8%, 2011: 8.6%), but the half decade from 2011 to 2016 brought a significant decline in unemployment. Stagnant unemployment in the first period can also be seen on the map showing the changes, as there were hardly any shifts at district level VI. 6. 2.. The *significant decline in unemployment between 2011 and 2016* manifests regional differences. In one third of the districts (57 districts), the rate of decline is more than three times the national average. Most of these districts lie in Eastern Hungary and in Southern Transdanubia. There are several factors behind the spectacular change, one being that many unemployed people were transferred to the public worker schemes VI. 6. 3..

The risk posed by unemployment to the working-age population varies. Among the most important risk factors is a *lack of qualifications and education*. In 2011, 57.6% of the unemployed had some kind of qualification, but in 2016, this decreased to 54.3% (i.e. the proportion of people without qualifications increased). Areas where a high proportion of unemployed people have some kind of qualification are most likely to occur in the more developed regions of Hungary and they are least likely in northeastern Hungary, where districts with a high proportion of unemployed people without any qualifications form contiguous areas VI. 6. 16.. It is worth approaching the problem in terms of education. It is no surprise that the unemployed are much less qualified and educated than those who are employed. According to data from 2016, the proportion of those with no more than eight completed grades of school was 11.4% among the employed and 29.9% among the unemployed. There was no meaningful difference between the two rates in the case of skilled workers (26.3% and 27.8%) and sec-





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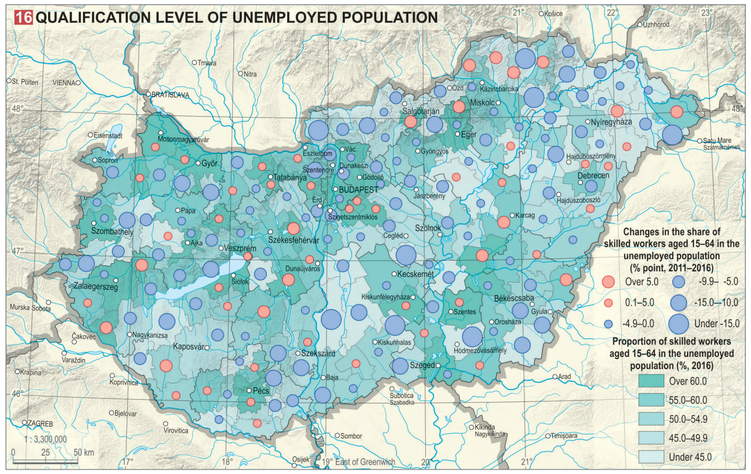
VI. 6.



ondary school graduates (32.5% and 32.8%). Among higher education graduates, however, the gap opened again (27.1% and 11.9%). These data also exhibit regional differences, which are particularly significant in the lower category (those with no more than eight completed grades of school). In 19 of the districts, the proportion of the least educated exceeded 45% (and in 10 of them it exceeded 50%). These districts lie in parts of Hungary that are disadvantaged in other aspects VI. 6. 8..

The possibility of returning to the world of work is influenced by the *length of time a worker is unemployed* – and by his or her qualifications. About a third of unemployed people are forced to stay out of the labour market for no more than six months. On the other hand, one in seven unemployed people have been looking for a job for at least four years. Many of these people have given up hope of becoming active earners. The statistics also record those who never worked before they became unemployed. Their share was only 9.2% in 2011, but by 2016 it had increased to 17.5% (i.e. one in six unemployed people had never worked in their lives). More than 43 thousand unemployed people were in this category in 2016. Some of them were among the so-called voluntary unemployed (i.e. people who do not officially take jobs but somehow make a living). There are also regional differences according to the duration of unemployment. Yet such differences confirm, for the most part, what has already been observed on the basis of other indicators, namely that it is easier to return to the world of work in economically more developed areas and that the process requires more time in underdeveloped regions VI. 6. 17..

It is worth noting that the distribution of unemployed people among the various types of settlements is the same as that of the employed VI. 6. 9..

The rapid rise in mass unemployment after the collapse of communism affected men more severely than women. One of the reasons for this is that women tended to be working in the service sector, where there was less risk of unemployment. In the 1990s, more than 60% of the unemployed were men. Since then, this gap has essentially disappeared, as only 51.2% of jobseekers were men in 2018. In the unemployment rate, a turnaround has taken place: in 2018, the male unemployment rate was 3.5% while the female rate was 4.0%.

A feature of unemployment in Hungary is that there are no outliers in the unemployment rates for each age group (i.e. unemployment affects each generation to a roughly equal extent). The 15–19 age group alone exhibits a much higher rate than the average. However, this is not a particularly acute problem because the absolute number of unemployed people in this group is low.

Economically inactive population

In Hungary, the number of people in this group has always exceeded the number of active earners. However, there is no sharp boundary between the two categories, which exhibit overlapping.

Pensioners make up a large proportion of *inactive earners.* Accordingly, the number of people in the group is significantly affected by the pension insurance system. Until the introduction of general coverage, inactive earners made up only a few percent of the population. This period lasted from 1920 to 1960 in Hungary. However, when social security and childcare were significantly expanded in the 1960s, the number of inactive earners rose rapidly, a development that was recorded in the census of 1970. Thereafter the number of inactive earners continued to increase, reaching its maximum in the early 2000s. The decline seen over the last decade is due to a gradual increase in the retirement age and a reduction in the scope or extent of certain social benefits, as well as the activation effect of the public works programme and an expanding labour market VI. 6. 6..

The age-group distribution of some 2.7 million inactive earners shows specific features. Among younger age groups, people caring for their children (mainly women) dominate, and there are hardly any 'real' pensioners. The number of inactive earners is smallest among those aged 40-55, as those with childcare support are mostly younger while retirement occurs at a later age. A big jump occurs from the age of 60, with a gradual increase in the number of people dropping out of the group of active earners VI. 6. 5..

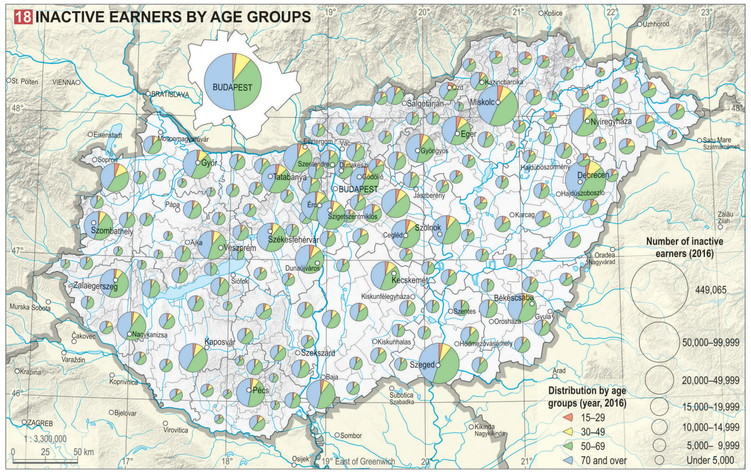
Regional differences can be found in the age structure of inactive earners in Hungary as well. Two of the reasons for such differences are particularly noteworthy. In many districts in northeastern Hungary, the proportion of people in the younger age groups is noticeably higher than average. This is related to the reproductive characteristics of the population living there and to the higher number of people who receive childcare support. In particular, the proportion of people aged over 70 is also lower than average in this region VI. 6. 18..

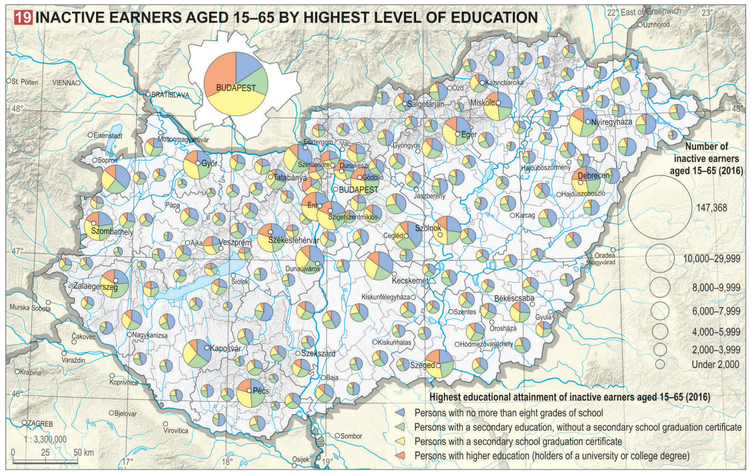
More than one million inactive earners of working age were recorded in Hungary in 2016. Since labour shortages became increasingly severe in the late 2010s, the question arises as to how the missing labour force should be replaced. One option would be to reactivate some of the inactive earners. However, for this it is worth considering the level of education of this group. If this is compared with similar indicators for the unemployed, a more polarised picture unfolds: indeed, among inactive earners people with no more than 8 completed grades of school and higher education graduates are overrepresented, while skilled workers and secondary school graduates are underrepresented. The regional differences are very similar to those described in respect of the level of education of the unemployed VI. 6. 19..

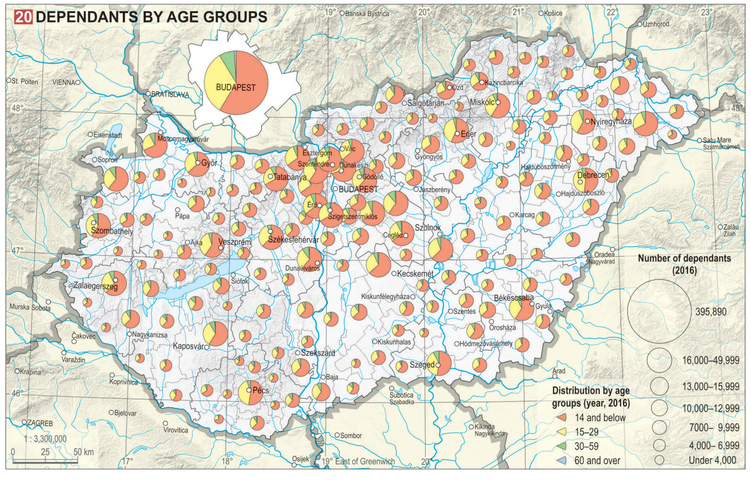
The number of *dependants* shows an opposite pattern to that of active earners, as there has been a mostly steady decline since 1920: in 1920, dependants formed a mass of 4.3 million people, which decreased to 2.3 million people hundred years later (i.e. dependants accounted for less than a quarter of the total population) VI. 6. 6..

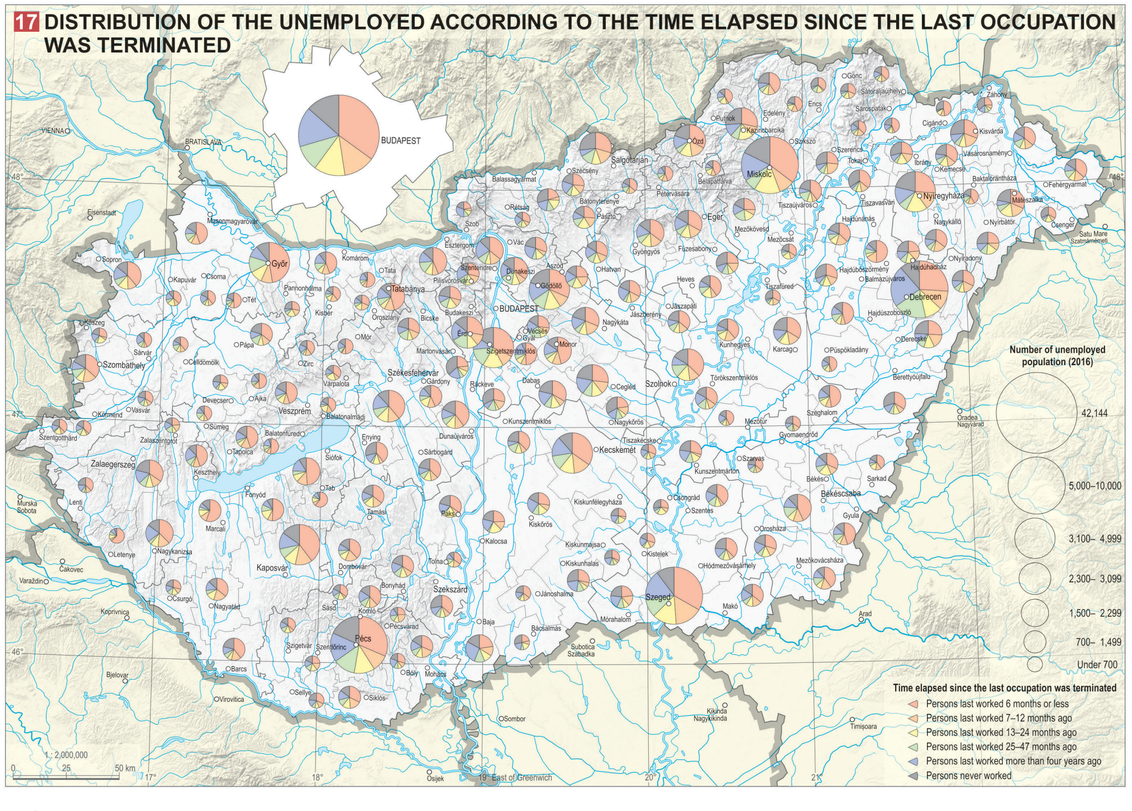
Students and pupils account for a majority of dependants, and this is reflected in the composition by age groups: more than 60% of dependants are aged under 15 and 90% of them are aged under 25. There are also dependants among older age groups, but for other reasons. The regional distribution of the age structure of dependants is mostly in correlation with the age composition of the population: in the case of a youthful population, the higher number of children signifies a higher than average proportion of age groups younger than 15. In 2016, the proportion of dependants under the age of 15 was close to or occasionally exceeded 70% – substantially higher than the national average (61.2%) – in several districts in northeastern Hungary VI. 6. 20..

A specific group of dependants (225 thousand people) who are no longer students as they are in the 25–64 age group. Although these people are of working age, they do not appear in the labour market and thus constitute a potential labour reserve.









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SOCIAL STRATIFICATION

Lajos Boros, János Pénzes, Ferenc Gyuris

Social inequalities and the stratification of the society are key fields of research in the social sciences up to this day. Social stratification is influenced and described by several factors that are presented in the maps of other chapters in this volume – in particular those showing demographic trends and the quality of life.

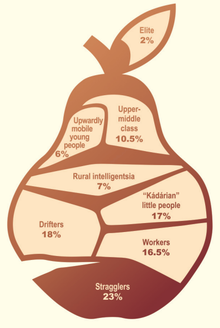
Although the concepts describing social stratification apply to a variety of social contexts, comparisons between countries are often difficult or even impossible. The difficulties stem from, among other things, differences pertaining to income categories and data collection systems. Many data are not even available in all countries. In Hungary too, research is constrained by deficiencies in the data available. Much information concerning social stratification (e.g. opportunities for the assertion of interests, friendships and consumption) is absent from the official statistical data; it can only be accessed by means of surveys of limited territorial usability (e.g. data collected by Central Bank of Hungary under the heading 'What do we live from' or research carried out by the Centre for Social Sciences, MTA, on 'Class size in 2014'). These can usually be interpreted only at national or regional level or they merely allow for comparisons between different types of settlements.

Studying social stratification

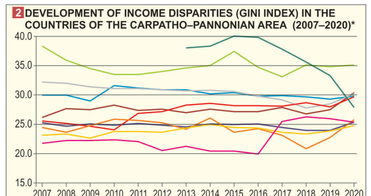
By social stratification, groups in society and their relationship to each other are meant. Researchers tend to analyse social stratification primarily on the basis of economic (income or wealth), cultural (knowledge, cultural activities and the consumption of culture) and social capital (number and social situation of acquaintances). Here, the main factors related to economic capital are presented. The role of social and cultural capital in social stratification is discussed primarily in the chapter on the quality of life. In this chapter, the data used to calculate personal income tax are employed (i.e. gross average incomes were applied to show income differences).

Of course, social stratification is not permanent; economic and social changes create new conditions, thereby impacting on stratification as well. Thus, such factors as legal regulations, the tax system, the available supports and benefits, as well as the availability of public goods and public services, shape, uphold or reduce social disparities. It is also increasingly important for people to become involved in the information society and to have the opportunity and the ability to do so. Maps and data pertaining to such involvement are presented in the chapter on the quality of life. Knowledge and lifelong learning have a similar role to play, thus helping to improve the situation of individuals in the labour market. Knowledge is also related to social mobility (i.e. how the position of individuals in society changes). The potential impact of the 2020 corona virus pandemic and the associated economic crisis is also linked to social stratification, as different groups are variously exposed to the adverse effects (e.g. health risks, job losses, depletion of savings, participating in education) and respond to them differently.

1 "PEAR MODEL" OF THE HUNGARIAN SOCIETY



2 DEVELOPMENT OF INCOME DISPARITIES (GINI INDEX) IN THE COUNTRIES OF THE CARPATHO–PANNONIAN AREA (2007–2020)*



Trends in Hungary

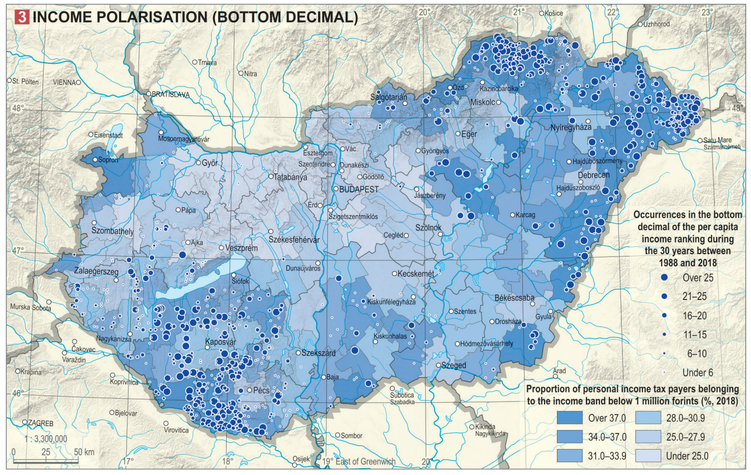
In recent decades, several domestic and international processes have affected the stratification of Hungarian society: the collapse of communism and the related economic changes; globalisation and the associated changes in the economy, employment and wage conditions; the economic crisis of 2008–2009; and changes in the taxation and welfare system.

The most recent research on social stratification (2014) identified eight major groups in Hungarian society. The findings showed that members of the *elite* live mainly in the major cities and their agglomerations; they are highly educated and in most cases their parents already belonged to this echelon. People in the *upper-middle class* lag behind the elite in terms of income and education, but their cultural and social capital is significant. *Upwardly mobile young people* also have relatively large amounts of cultural and social capital and thus have a chance of joining the best-positioned groups in society. Members of the *rural intelligentsia* have average but predictable incomes and a high demand for cultural goods. Another group is made up of the so-called *'Kádárian little people'* who live mainly in smaller settlements, were relatively better off under communism and now struggle on their income. The proportion of single people is highest among *the drifters*, whose level of education is low to medium. The low level of education of *workers* is coupled with a precarious financial situation. The *stragglers* have little social or cultural capital, and their parents were typically in a similar situation.

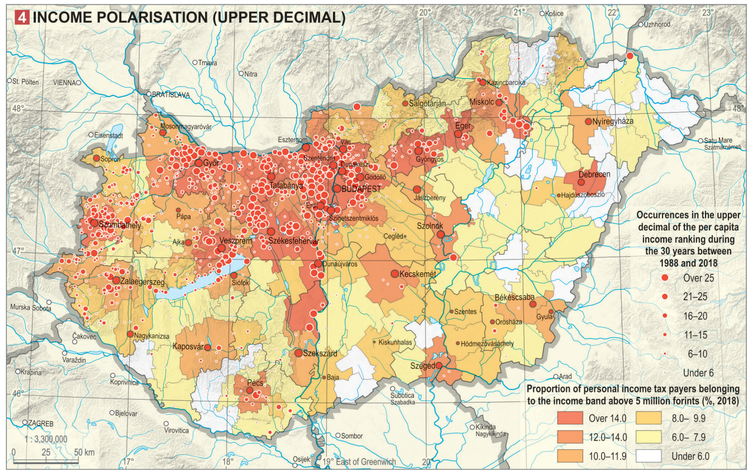
In light of the above, a conspicuous feature of Hungary's social structure is the weakness of the middle class VI. 7. 1.; no strengthening or widening of this group has occurred since the collapse of communism. At the same time, it is worth noting that Hungarian income differentials are moderate by international standards, although they have increased in recent years VI. 7. 2. VI. 7. 3. VI. 7. 4.. According to analysis by the European Commission, Hungary's current tax system stimulates social polarisation because it benefits those on higher incomes. The place of residence also plays a major role in the development of the social structure; people living in the major cities or their catchment areas are generally better off than those living in small towns and villages VI. 7. 5..

According to surveys by the Central Bank of Hungary, the wealth of Hungarian households increased between 2014 and 2017. This increase, however, was mainly due to an increase in the value of properties. Wealth growth mostly affected the layer of society with the most favourable conditions. There are also marked differences in savings: a significant proportion of families do not have substantial savings. If they were to lose their income, they would find it difficult to cover unexpected costs or maintain their previous

3 INCOME POLARISATION (BOTTOM DECIMAL)



4 INCOME POLARISATION (UPPER DECIMAL)





1 *The majority of Roma people in Hungary live in cumulatively disadvantaged conditions*

standard of living. They are also considered particularly vulnerable to deprivation in the crisis caused by the 2020 corona virus pandemic. Another problem is that while the path of social advance is difficult, downward mobility is easy. The role of education, including participation in higher education, is paramount in creating opportunities for social mobility. In this respect, there are significant differences between the different types of settlements. Moreover, in recent years access to higher education has become limited VI. 7. 6., reducing social mobility for those from the worse-off families. A higher level of education also positively impacts on income. For instance, in 2017, average income per capita among higher education graduates was more than 30% higher than that of secondary school graduates and almost double that of those with no more than primary education. The proportion of those at risk of poverty and social exclusion is also much lower among higher education graduates.

Regarding income and wealth, it is also important



2 *Managers are overrepresented in Budapest and in its agglomeration*

to highlight the role of household size. Single-person households are in the best situation, and single parents and families with three or more children are in the worst.

Regarding the situation and living conditions of the Roma population, it can be observed that although the risk of poverty and exclusion decreased in accordance with national trends, it was still three and a half times the national average in 2017 1. The positive changes were mainly due to an improvement in employment rates, but more than half of Roma still suffer from severe material deprivation, according to recent studies. Further, their housing conditions are worse than average.

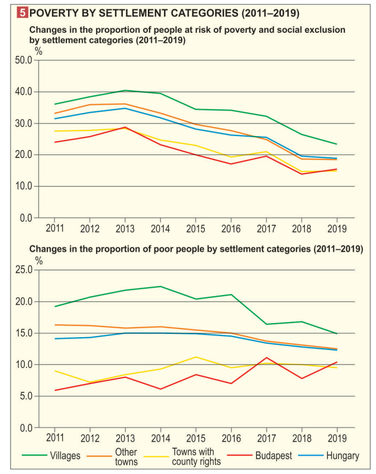
Social groups in favourable or improving conditions

The regions with the most favourable conditions are those that were the target of foreign capital investments following the collapse of communism: Central Hungary, Western and Central Transdanubia. In these regions, employment and income conditions are better than average VI. 7. 7. VI. 7. 8. VI. 7. 9.. Moreover, people's general level of education and knowledge of foreign languages are also above the Hungarian average.

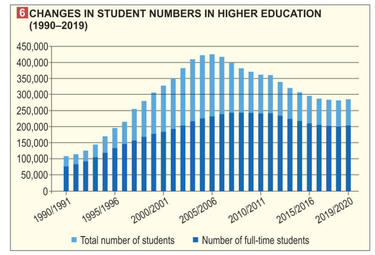
As employment rates are also more favourable in the above regions, the significance of public works programmes is mostly negligible VI. 7. 10.. Indeed, the market offers enough jobs, some businesses are even facing labour shortages. This is also reflected in a higher average income level. Naturally, the spatial distribution of managers (chief executives, senior officials, legislators and other managers) 2 is also greatly influenced by the spatiality of the economy and the system of institutions: they are concentrated where significant foreign capital was invested in recent decades and in settlements with key roles in public administration. As in other countries, so also in Hungary the capital city and its suburbs play a paramount role in this regard. Outside of Budapest, the proportion of senior managers is highest in the Budakeszi, Pilisvörösvár, Dunakeszi and Szentendre districts VI. 7. 11..

Stratification analyses agree that mobility chances are increased by higher educational attainment. In this field too, people living in or near the major cities are in a better position, with a generally higher proportion of university students VI. 7. 12.. The proximity of higher education institutions has a positive impact on the rate of participation in higher education (i.e. regional educational centres play a major role in creating and maintaining opportunities for mobility). Based on research in recent years, it can also be seen that the chil-

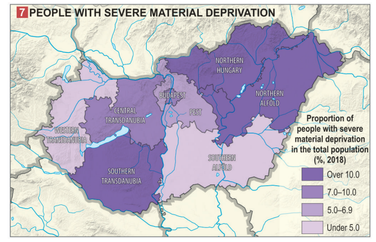
5 POVERTY BY SETTLEMENT CATEGORIES (2011–2019)



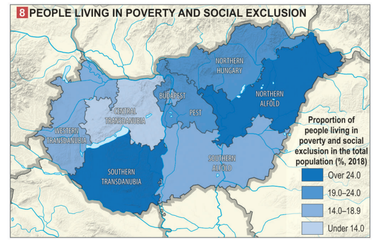
6 CHANGES IN STUDENT NUMBERS IN HIGHER EDUCATION (1990–2019)



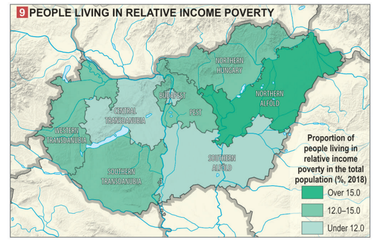
7 PEOPLE WITH SEVERE MATERIAL DEPRIVATION



8 PEOPLE LIVING IN POVERTY AND SOCIAL EXCLUSION



9 PEOPLE LIVING IN RELATIVE INCOME POVERTY



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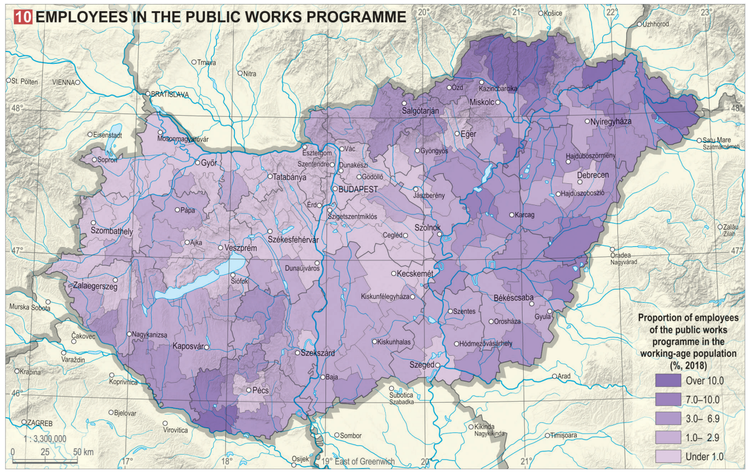


dren of those who are already better off and have higher educational qualifications are more likely to enter higher education, whereas poorer people and those living in peripheral areas are virtually excluded – which can lead to social ossification and even to increasing social disparities. The importance of education is also underlined by international evidence showing that at times of economic crisis people with less education are relatively more likely to lose their jobs.

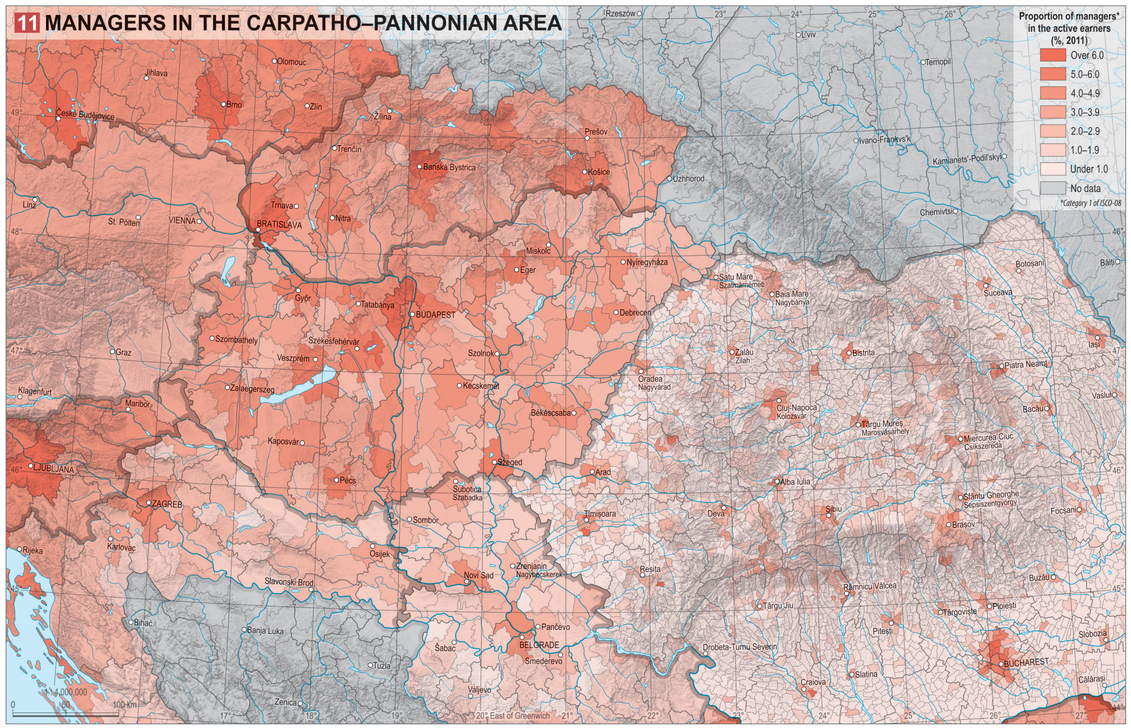
Real incomes increased in the vast majority of municipalities in the period between 2009 and 2017, partly due to economic growth, as the recovery from the 2008–2009 economic crisis improved the employment situation. The number of Hungarians working temporarily or permanently in other EU member states also increased significantly during this period. Their higher wage levels also raised income levels directly (and the incomes of many households). Moreover, in some sectors wages increased as a result of labour shortages caused by people working abroad. Changes in the Hungarian tax system had a similar effect; because minimum wages became taxable, the salaries of those with the lowest incomes had to be increased so that their net earnings would not be reduced in consequence of the new legislation. In addition, the introduction of a unified public works programme since 2011 has contributed to an improvement in income relations, since under this system official income was earned by those who had not previously had it VI. 7. 10. This explains why a significant proportion of municipalities with the highest average income growth are found in peripheral areas VI. 7. 13. The same processes have led to a reduction in various indicators of poverty. At the same time, differences between the types of settlements have remained. The proportion of people in the highest income categories is highest in the agglomeration of Budapest and in the vicinities of Győr and Székesfehérvár. In these areas, more than one-eighth of taxpayers had a personal income tax base of more than 5 million Hungarian forints. This is true of just 3-4% of taxpayers in the worst-off districts VI. 7. 15.

The more favourable situation of Western and Central Transdanubia and of central Hungary can also be seen in savings. In Budapest, for example, the proportion of households with private pension savings is almost three times higher than in the southern Alföld VI. 7. 14.

Poverty and disadvantageous conditions

In Hungary – as in other former communist countries – regional social inequalities increased significantly in the 1990s. The postcommunist transition plunged the country into economic crisis, whereby the illusion of full employment gave way to the reality of mass unemployment (peaking around 500 thousand in 1993). The problems were a result of processes that had partly begun well before the collapse of communism. The economic decline of the first half of the 1990s showed significant regional disparities.

In addition to the traditionally underdeveloped areas that had clearly existed under communism, the 1990s saw the emergence of industrial structural crisis areas in the former coal mining and heavy industrial regions. Over the course of a few years, long-term unemployment became a complex social problem, from which only a few more fortunate areas were able to emerge (e.g. Oroszlány and Várpalota).



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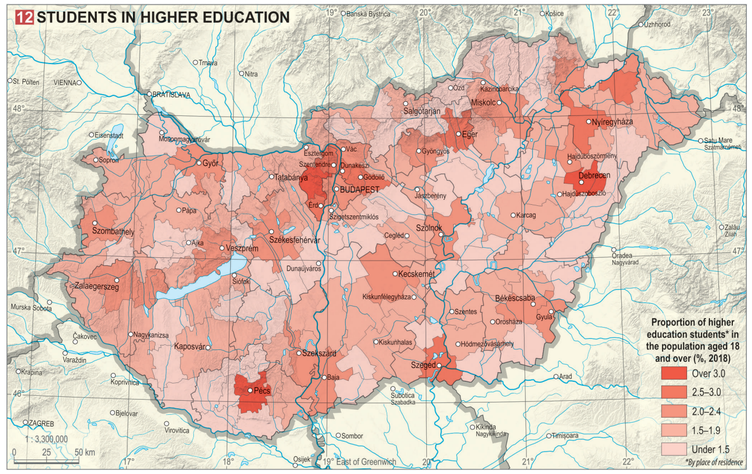
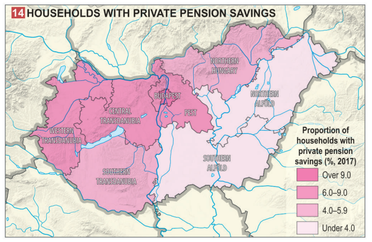


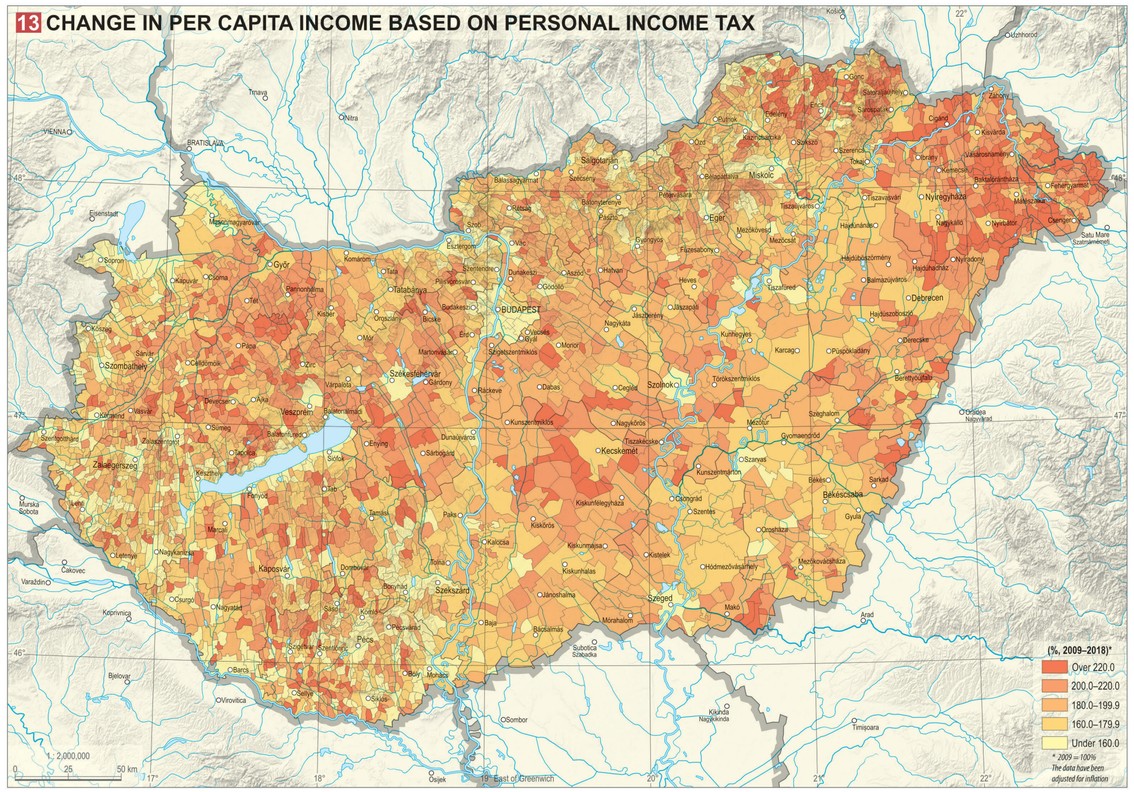


3 *Even in Budapest, many people in deep poverty live in ghettos*

A strong spatial separation of the underdeveloped areas was observed in the 1990s, with significant impoverishment among the population living there. After the turn of the millennium, the range of underdeveloped areas changed little, but many variables exhibited a further decline or only modest improvement. Such is the significantly low level of education and employment, which is reflected in *income* data VI. 7. 16. *Public works programmes* have become essential to people's livelihoods – especially among the inhabitants of groups of settlements farther from the commuting zones of major cities VI. 7. 10. In peripheral municipalities with small populations, the proportion of people receiving social assistance is also high as a result of being excluded from the labour market. The extremely high proportion of students with multiple disadvantages clearly indicates very limited opportunities for social mobility in several areas. The modest level of public services and the decline in institutional provision are in many cases coupled with the very limited presence of commercial undertakings. In addition to the significant migration loss, ethnic and demographic trends indicate the increasing regional proportions of the Roma population in underdeveloped settlement groups. Since the 2000s, signs of regional *segregation* have appeared in the northeastern and southwestern parts of Hungary (e.g. Cserehát, Ormánság) and in the internal peripheries (e.g. central Alföld). In addition, segregation within villages and towns has intensified in consequence of uneven development 3.



The statistical data do, however, show a modest improvement in the situation of the most underdeveloped groups of settlements, despite marked and persistent regional differences. Nevertheless, analysis based on various complex indicators reveals that spatial and



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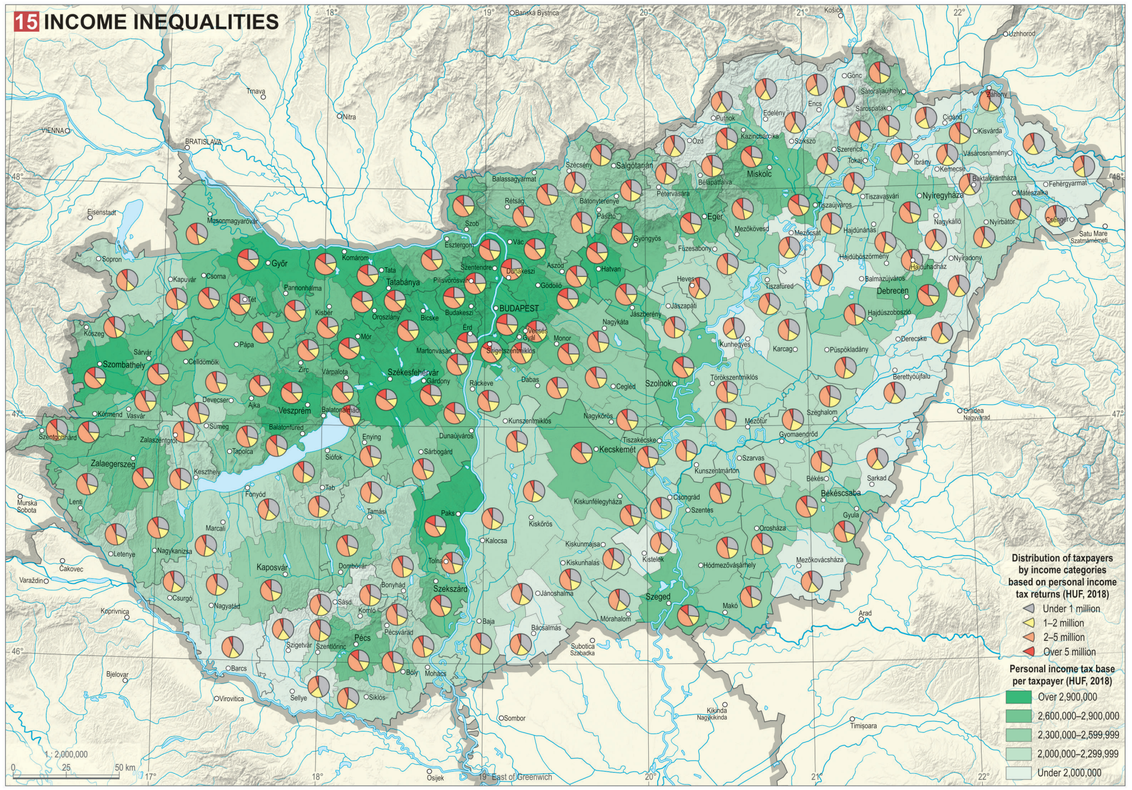
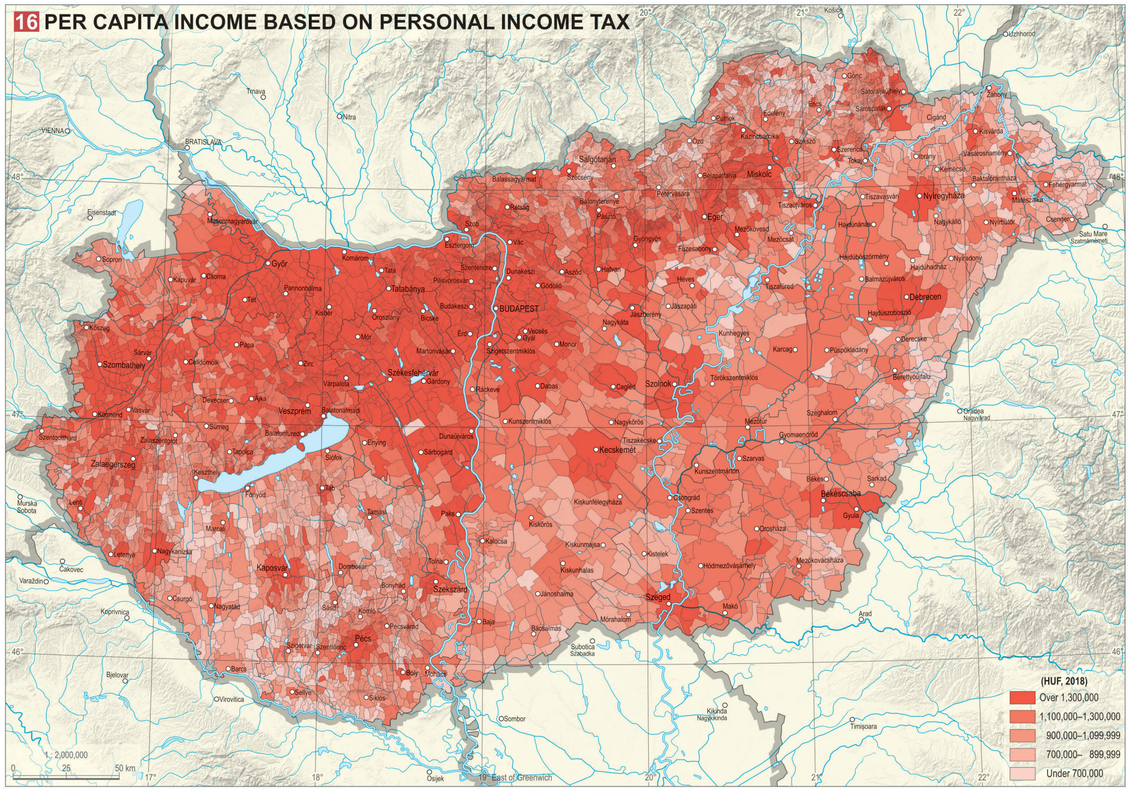
15 INCOME INEQUALITIES



16 PER CAPITA INCOME BASED ON PERSONAL INCOME TAX



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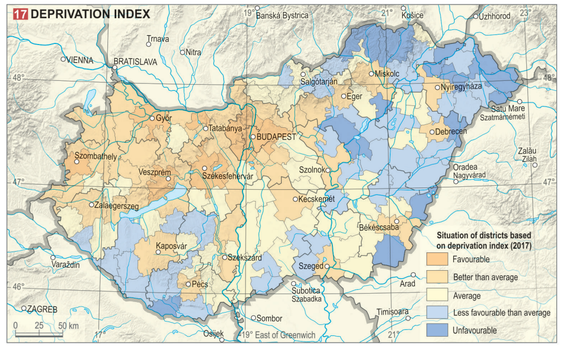
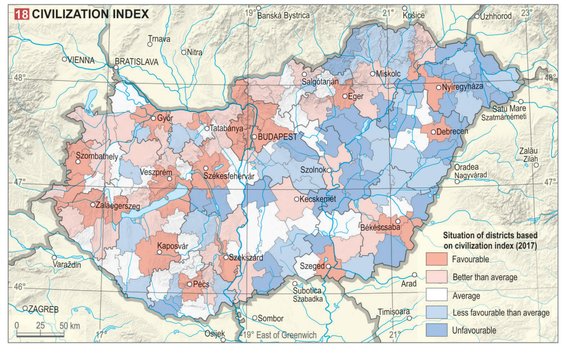
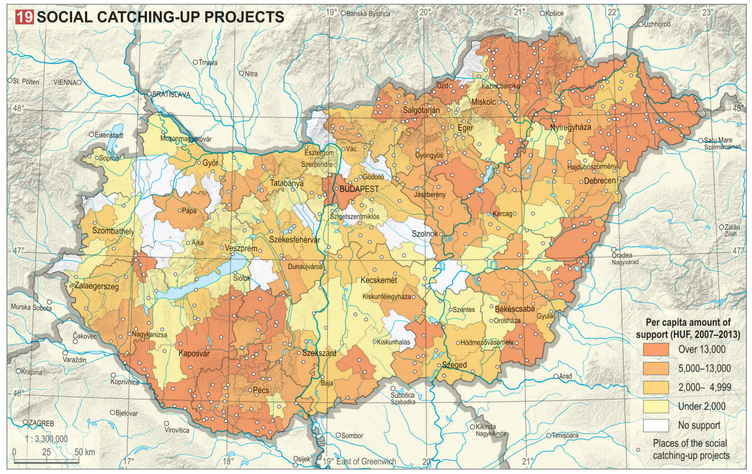
17 DEPRIVATION INDEX



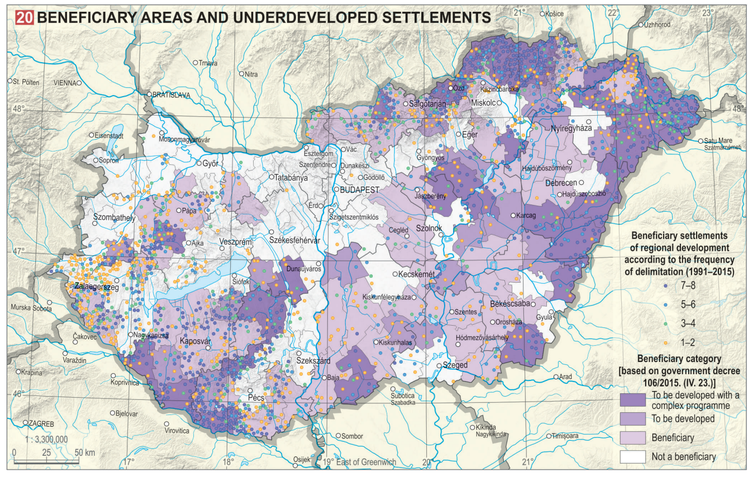
18 CIVILIZATION INDEX



19 SOCIAL CATCHING-UP PROJECTS



20 BENEFICIARY AREAS AND UNDERDEVELOPED SETTLEMENTS



social differences among the various districts are still significant. The *deprivation index* VI. 7. 17. is established by combining the indicators of employment (unemployment and public works programme participants), income, education (the proportion of those with at least secondary educational attainment), housing conditions (the proportion of homes without sanitary facilities) and consumption (number of new cars per one thousand people).

The *civilization index* VI. 7. 18. is based on the degree of social activity (activity in elections, the proportion of civil and non-profit organisations) and the level of foreign language knowledge, in addition to education (proportion of those taking part in higher education) and the situation in the labour market (percentage of managers). Using the two combined indicators, researchers can identify areas where the different dimensions of the favourable or disadvantageous situation are multiply displayed. In addition to northwestern Hungary and the Budapest agglomeration, the districts of the county centres have the best conditions. Districts with less favourable conditions are concentrated in the northeastern and eastern parts of Hungary and in the Central Tisza Region.

Responses in development policy

The purpose of identifying settlements that benefit from regional development is to enable their targeted support and thus enhance the development of the most underdeveloped municipalities. The compilation of the list of municipalities to be developed started before the collapse of communism (in 1986), and it was modified in 1991. Settlements and areas eligible for benefits from regional development funds were designated on several occasions in later years (employment districts in the early 1990s, then microregions based on changing criteria, and finally districts from 2014). A direct comparison is made difficult by the changing methodology and the range of indicators used. Even so, the eight municipal delineations from the collapse of communism to 2015 form a unified logical framework. A summary map of settlements that are socially, economically and infrastructurally underdeveloped (and thus eligible for benefits under regional development schemes) shows the underdeveloped, peripheral regions in Hungary VI. 7. 19. VI. 7. 20.

Settlements classified as underdeveloped form a characteristic geographical grouping. Most of these municipalities are typically concentrated in the northeastern and southwestern counties of Hungary, particularly in border areas. Since the collapse of communism there has been a spatial rearrangement of the underdeveloped settlements, entailing a clear shift from west to east and a more modest shift away from Budapest and the county centres. Delineations and other development studies of the beneficiary settlements indicate that the municipalities regarded as underdeveloped are concentrated in traditionally peripheral areas or in crisis regions which arose after the collapse of communism. Underdevelopment is reflected in an increasing number of social and economic indicators. This makes it more difficult to distinguish between the types of peripheral areas. The upgrading of the western–northwestern part of Hungary, as well as Budapest and the more developed county centres, also affected the spatial distribution of underdeveloped settlements. Overall, the territorial structure of the lagging settlements seems to have become more rigid since the turn of the millennium. Although there has been a more modest shift towards the east, the concentration of the most disadvantageous groups of settlements in the northeast and southwest remained. Catching-up programmes have also focused mostly on these areas VI. 7. 19., albeit with relatively little success. So far, these programmes have failed to significantly reduce inequalities in living standards, wealth and income.

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Revised by
Ferenc Probáld, Gábor Gercsák

English translation by
Richard William McIntosh

English translation revised by
Andrew Gane, Gábor Gercsák, Ferenc Probáld

Cover design
Geographical Institute, RCAES, Ildikó Kuti – Civertan Bt.

Design and typography
Ildikó Kuti – Civertan Bt.

Printing
Pannónia Nyomda Kft. (Budapest)

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Publisher: László Kiss (Director general)
Eötvös Loránd Research Network (ELKH), Research Centre for Astronomy and Earth Sciences (CSFK), www.csfk.org
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The publication is supported by:
Government of Hungary
Ministry for Innovation and Technology (ITM)
Eötvös Loránd Research Network (ELKH)
Hungarian Academy of Sciences (MTA)

Closing date of editing: 1st May 2021

ISBN 978-963-9545-58-8ö
ISBN 978-963-9545-64-9

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Authors
Péter Bajmócy
Lajos Bálint
Pál Beluszky
Lajos Boros
Gabriella Branyiczkiné Géczy
†Bálint Csatári
Zoltán Dövényi
Tamás Egedy
Szabolcs Fabula
Tamás Faragó
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Péter Szilassi
Patrik Tátrai
Géza Tóth
Pál Péter Tóth
András Trócsányi
Annamária Uzzoli
András Wéber

Authors of maps and figures
Norbert Agárdi
Erika Bácskainé Pristyák
Péter Bajmócy
Lajos Bálint
Dániel Balizs
András Balogh
Olga Baranyai
Zsombor Bartos-Elekes
Pál Beluszky
József Benedek
Zoltán Bertus
†András Bognár
Lajos Boros
Zsolt Bottlik
Gabriella Branyiczkiné Géczi
László Braun
Tamás Csapó
†Bálint Csatári
István Csernicskó
Gábor Demeter
Gyula Dézsi
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András Trócsányi
Annamária Uzzoli
†Árpád E. Varga
Gábor László Vasárus
András Wéber
Jernej Zupančič

Chief cartographers
Fanni Koczó
Anikó Kovács
Gáspár Mezei
Zsombor Nemerkényi

Contributors to cartography
Norbert Agárdi
Lajos Bálint
Zsombor Bartos-Elekes
Zsolt Bottlik
Gábor Demeter
Renáta Szabó

Technical staff
Margit Laczkó
Árpád Magyar

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