From the 10th century to the end of the 15th century

Hungarians, led by Árpád, arrived at the end of the 9th century in the sparsely populated Carpathian Basin, in the buffer zone between the Kingdom of the East Franks and the Bulgarian Empire, which had a Slavic and partially Slavicised Avar population of about 200,000 to 300,000 people. The second wave of this migration seems to have been a mixture of peoples. The group of Hungarians arose from cohabiting and merging members between assorted populations. Notwithstanding the uncertainties of population estimates, it can be stated that the population of the Carpathian Basin was made up of three tiers. The first consisted of Hungarians and the non-Hungarians who arrived with them. The second was formed by fragments of the people living in the Carpathian Basin. The third included immigrants, the newcomers. From a demographic point of view, it has to be noted that the occupants of the territory, the Hungarians, represented such a critical mass and power that was enough to occupy the Carpathian Basin, to settle the region and to preserve the language up to now.

In the view of most historians, the population of the Carpathian Basin was between 300 and 600 thousand people at the time of the Hungarian conquest. Gy. Györffy estimated the population already living in the basin at around 200 thousand people and the population of the Hungarians taking part in the conquest at around 60 thousand. Natural increase in the medieval and early modern periods was slow despite high fertility. Life expectancy at birth must have been below 30 years. Thus, natural increase was small even in favourable periods. Besides the above, several major demographic events were hit the Carpathian Basin. Catastrophes were partly due to wars and partly by pandemics. Based on analogous events in subsequent periods, it seems that the destruction of pan-demics significantly exceeded that of wars. In this regard, however, periods of continuous war (such as the Ottoman occupation in the 16th and 17th centuries) were the exception. Slow natural increase and the effects of demographic catastrophes could be counterbalanced by migration. Still, the population of the Carpathian Basin probably did not exceed 1 million at the beginning of the 12th century and it may have been between one and two million before the Mongol (Tartar) invasion. The extent of destruction is reflected in low population growth in the subsequent period. Even in the early 14th century the population was only slightly higher. According to recent research, the population of Hungary at the end of the Middle Ages was around 3 million. Population density was low and uneven in distribution; it may have approached ten people per square km by the beginning of the 16th century.

During the 11th century Hungarians settled in the forested steppe areas, along river valleys that were important transport corridors, and in gently undulating terrain. Such areas were suited to the semi-nomadic lifestyle and were reminiscent of the natural environment of their former homeland. Hungarian migration to the Carpathian Basin from the east had been in contact with the Greek Orthodox Church of the Byzantine Empire since the 6th century. After the conquest in the 9th century and until the mid-10th century, the Hungarians were under the influence of this Church. In 925, the religious structure of the population of the Carpathian Basin is known more accurately from the beginning of the 12th century and it may have been between one and two million before the Mongol (Tartar) invasion. The extent of destruction is reflected in low population growth in the subsequent period. Even in the early 14th century the population was only slightly higher. According to recent research, the population of Hungary at the end of the Middle Ages was around 3 million. Population density was low and uneven in distribution; it may have approached ten people per square km by the beginning of the 16th century.

In the 16th and 17th centuries, the Ottoman conquest turned much of the country into a battlefield. The demographic consequences of this turn of events are almost impossible to assess but are critically dependent on catastrophic. Although there is human material and material destruction uneven in time and space, it is known that the population of Hungary grew only minimally during these two centuries. Indeed, according to the most optimistic estimates, it could not have been more than 4 million at the beginning of the 18th century. The western and northern peripheral areas of Hungary were somewhat more protected. From the second half of the 17th century on, the most serious consequences derived from military events – the liberation wars and Rakoczi’s War of Independence – and from the recurrent epidemics, especially that of 1679-1713, which killed hundreds of thousands of people.

During the two centuries between the Battle of Mohács (1562) and the suppression of Rakoczi’s War of Independence (1711), the ethnic-religious (Hungarian and Catholic-dominated) spatial structure of the Late Middle Ages was finally broken up. The Hungarian population displaced almost entirely from the southern areas, and most of the surviving Hungarian population settled in the Transylvanian Basin, the central parts of the Abdal (Great Hungarian Plain) and the southern parts of Transylvania. In the Principality of Transylvania, which maintained the continuity of Hungarian statehood during a century and a half of Ottoman occupation, the Habsburg–Romanian and Turkish–Turkish military campaigns between 1552 and 1660 and again between 1672 and 1686 were particularly destructive for the Hungarian living there. Indeed, the Hungarian settlements connecting the Hungarian ethnic blocks of Székely Land and the Pátzai were destroyed to the greatest extent. As a result, from the second half of the 17th century, Hungarians were no more the majority, but a minority population in Transylvania. In the more protected mountainous areas, the new majority population, the Romanians, steadily increased, benefiting from the continuous supply losses from Wallachia and Moldavia.

In the first half of the 16th century, during the decades of Ottoman occupation and ideological political chaos, religious affiliation was influenced by the advance of the Protestant Reformations in Hungary; which began in 1517. An additional factor was the immigration of Serbs, Romanians and Ruthenians of Orthodox faith. The religious structure of the population of the Kingdom of Hungary is known more accurately from the beginning of the 20th century. At that time, 48% of the population was Roman Catholic, 27% belonged to Protestant denominations, and 28% were affiliated with the Greek Orthodox Church. In the tripartite Hungarian of the 16th and 17th centuries, the proportion of Protestants may have been the same as that of Catholics.

Only a violent programme of re-Catholicisation (the Counter-Reformation) could shift the balance in favour of the latter. The religious composition of the population was even more diverse, given that the various ethnic groups often belonged to different denominations. In the 17th century, almost all the Germans and Slovaks professed Lutheran (Evangelical) doctrines, while the vast majority of Hungarians supported the Swiss Reformation from the 1550s onwards. Only the Croats and a small number of Hungarians (e.g. in the eastern half of Székely Land, in Jászard and along the western border) remained Catholic.

As a result of the Counter-Reformation (the ‘Catholic renewal’), which began in the 17th century, many Protestant Hungarians who did not want to catholicoised fled areas of Habsburg authority to the more tolerant parts of the Carpathian Basin, including Transylvania and areas occupied by the Turks. Another success of the Counter-Reformation was the union of Orthodox Rumanians with the Catholic Church (1846) and the Catholicisation of a sixth of Orthodox Romanians (1869).

From the beginning of the 18th century to the beginning of the 20th century

Following a century and a half of Turkish occupation and after the suppression of Rakoczi’s War of Independence, there was an upturn in immigration to the depopulated areas, including the highly fertile Alföld region. During the wars, Slovaks, Rumanians and Roma-
In contrast, infant mortality had already been relatively low, and perinatal death was even lower, which had been linked to high nutritional standards and an increased level of child care. The demographic transition is reflected in the spatial distribution of the crude birth rate in the first decade of the 20th century. The increasing but patchy incidence of low values (below 20‰) reflect, on the one hand, rural areas of early birth control, one-child family models (e.g. southern Baranya, Óriási, Sárospatak in Transdanubia, Pest, Nógrád and Győr counties in Upper Hungary; the northern Banat plain and the Banat Mountains in the Banat, Kalocsa, Hunyad and the Saxon areas in northern and southern Transylvania) and, on the other hand, trends in Budapest and other major cities and industrial centres. The one-child family model as a conscious demographic attitude and way of life, resulting in the rapid decline and ageing of the population, cannot be regarded as specific to certain ethnic or religious groups, as Cal- vinist Hungarian, Lutheran Slovaks and Saxons, Catholic Swabians and Orthodox Romanians were equally dominant in the above mentioned core areas. Experts have linked the spreading of the phenomenon in the 19th century with poverty caused by a shortage of land and a fear of dwindling wealth. In the case of the capital and other major cities, which were targets of internal migration, a significant proportion of incomers were young and unmarried, and that had a negative impact on the birth rate.

The average number of children in families at the end of the 19th century was 5, which decreased to 4 in the first two decades of the 20th century. The lower values of marital fertility were characteristic in urban areas and in the southern part of Hungary, the central part of Upper Hungary and some counties in Transylvania. Meanwhile, the Alfold and the Kisalföld (Little Hungarian Plain) were typically conserved regions of high marital fertility.

In the case of the crude mortality rate, the decrease can be seen even more clearly, as high values (above 30‰) are exceptionally rare. The previous natural spatial relationship between birth and death rates (due to low fertility and child mortality, a high number of births accompanied by a high number of deaths) was on the decline. A weakening of the spatial relationship between the two rates, however, also indicates that in most places an improvement in mortality preceded the decrease in fertility. Low death rates could be observed mainly in the western third of Hungary, in areas with low infant mortality characterized also by one-child families, and in Budapest and in some of the major cities, where the previous correlation between urban settlements and high mortality also disappeared. The regional structure of mortality indicators outlined above, the spatial spreading of mortality transition, is also reflected in the spatial distribution of life expectancy at birth, including the mortality conditions of all age groups. Particularly un-favourable, pre-transition mortality levels occurred in the eastern and southern peripheral regions of the Alfold (e.g. in Békés, Abaúj, Baran and Somogy). In the latter areas, the phenomenon was often caused by the relatively high level of infant mortality, which resulted in more than a third of newborns dying before their first birthday. In contrast, infant mortality had already fallen below 20‰ in western Transdanubia, with mostly low fertility, and in most of Croatia and Upper Hungary, in Transylvania and in Budapest.
The difference between the crude birth and death rates is the natural increase (or decrease) \( \Delta N \). In addition to the increasingly widespread decrease in mortality, differences in fertility and the birth rates are the main causes of spatial differences in natural increase. Thus, the lowest values and even natural decrease (with the number of deaths already exceeding the number of live births) are typical for the traditionally rural areas of early birth control mentioned above. All those suggest that as a result of the demographic transition, Hungary gradually moved from an old mortality-controlled demographic system to a modern fertility-controlled one, as families consciously began to regulate the number of children and the timing of their birth.

In addition to natural increase, actual population changes are influenced by migratory movements. The net migration rate per one thousand people describes the target and source areas of internal and international migration. In areas with low carrying capacity in terms of the agricultural population but inhabited by people with significant natural increase (e.g. regions in the barren Dinarides inhabited by Serbs and Croats, and in the northern border region in the Carpathians with Slovaks and Romans) the local census population sought prosperity elsewhere, thus causing considerable local migration losses. In a lesser degree, similar emigration zones arose in areas with German and Hungarian populations in Transdanubia and the southern regions. At the same time, Budapest and its expanding agglomeration, other major cities and the newly booming industrial areas were the primary targets of internal migration, accommodating large numbers of newcomers. Extensive rural areas with previously sparse populations were also among the winners of internal migration at the turn of the 20th century. During this period, the mass outflow of the agricultural population to the expanding integrated farmsteads (‘tanyas’) near towns in the Alföld (mainly in the Dunai–Torda–Mátra intensively) intensified. Slovakia also saw outstanding migration gains because after the dissolution of the Military Border (1871–1881), enterprising farmers and landless labourers (Hungarians but also ethnic Germans, Czechs, Slovaks and Romans) migrated (mostly) from Transdanubia and Bačka in large numbers to the extensive and cheap Slovakian lands that had become available for sale.

During the 19th century, as the modern migration and colonisation campaigns were gradually discontinued, the number of Hungarians living in the centrally located areas with the most favourable agricultural production conditions in the Carpathian Basin, which therefore had a higher carrying capacity, tripled compared to that of the nationalities. Thus, the ratio of Hungarians in the total population increased from 35% to 46% between 1870 and 1910 (and to 43.9% if we exclude the Kingdom of Croatia–Slavonia). Ethnic processes favourable for Hungarians included a higher rate of natural increase, the scattering of the nationalities from the mountainous peripheries with unfavourable agricultural conditions in the central Hungarian ethnic areas, natural assimilation in what was a Hungarian language milieu, particularly affecting the urban citizens and a lower rate of emigration for Hungarians compared to that of the nationalities. In the first half of the 19th century, the most striking change in the religious structure was the increasing conversion of people with Orthodox religion (especially Romanians in northern Transylvania) to the Catholic Church. In 1857, the inhabitants of Budapest (the capital) formed 11% of the Hungarian Catholic population (1867), the conversion of non-Roman Catholic religious groups intensified. A liberal attitude towards Jews in the Kingdom of Hungary resulted in a significant Galician immigration from the end of the 18th century. In the final third of the 19th century, however, this significant migration gain was reversed for Jews at national level, as they settled increasingly in Austria, particularly in its more developed areas adjacent to Hungary (thus mainly in Vienna). Large numbers of people also emigrated to America, which offered a much more promising future than Hungary.

The map on migration from Hungary (1899–1913) clearly illustrates the regions and ethnic groups most affected by emigration. The main drivers of defuse emigration at that time were harsh natural conditions for agricultural production, the associated poverty, and the informal channels of information that led people to emigrate. Contact with Poles, Romanians and Jews living in Galicia, who were the first to experience the benefits of emigration to America, gave rise to the largest emigration core area in Hungary in the northeast, mainly inhabited by Slovaks, Romanians and Hungarians. For similar reasons, the propensity to emigrate increased in the Croatian and Serbian areas of the barren Dinarides due to contact with Croats on the coast of Dalmatia. Largely due to the desire to accumulate capital and reasons related to inheritance (the heir to the estate was the firstborn), a particularly high proportion of ethnic Germans (not only from Transylvania, but also from the highly fertile southern regions) tried their luck overseas. Romanians from the Banat and from southern Transylvania, who had been encouraged by the German example, emigrated to America in large numbers. The emigration statistics outlined here do not cover the vast majority of migrations to Austria (mostly to Vienna), as such movements were not subject to authorisation. Nor do they include those already emigrated who left illegally for Romania through the Carpathians. At the same time, there was also a significant rate of return migration during this period. This partly explains why, although 1.4 million people emigrated from the states of the Crown of St Stephen (the Kingdom of Hungary and the Kingdom of Croatia–Slavonia together) between 1899 and 1913, the number of Hungarian citizens living in America around 1910 was estimated at only 800,000.

In the period between the first and last censuses of the Dual Monarchy (those of 1869 and 1910), the characteristic spatial differences in population change were shaped in some places by natural trends in vital statistics and elsewhere by migration. The dynamic growth of the population was mostly due to natural increase in the Hungarian regions of the Northeastern Carpathians, in the Hungarian-inhabited Steiermark region, in the Slovenian core area of the northwestern parts of Upper Hungary and in Zagroje in Croatia. However, particularly high population growth in Budapest as well as in the other major cities, in the booming industrial areas, in the main emigration zones of Transylvania. At the same time, due to a significant increase in the number of children and the timing of childbirth, a significant population decrease was registered – due to a minor natural increase in the southeastern belt of the central parts of Upper Hungary and the northeastern part of Transylvania and due to emigration zones, mainly in the eastern third of Upper Hungary and the Dinarides. In the northern parts of the Banat, which were mostly inhabited by Slovaks, and in some parts of Transylvania, where the Serbian population was dominant, both factors of vital statistics played a role in the significant decrease of the population.

In the period from the end of the 18th century until 1913, the population density in Hungary changed due to the above mentioned trends in vital statistics, whereby the western (Croatian, Transdanubian and Upper Hungarian) counties in the vicinity of the Austrian provinces maintained their high population density values – partly in consequence of the economic benefits associated with their proximity to Austria (regions that dated back to the time of Turkish occupation). In contrast, the eastern third of Upper Hungary, which had been densely populated until the 19th century, constituted one of the more sparsely populated parts of Hungary in 1910 due to mass emigration. At the same time, the fertile Alföld, which had attracted the inhabitants of the mountainous periphery (like a magnet), saw a continuous decrease in population (the decrease was especially significant in the past), as well as its environs, had a high population density.