

## STRUCTURE AND FUTURE OF THE HUNGARIAN SOCIETY<sup>1</sup>

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### MAJOR FINDINGS

- The population of Hungary has been diminishing ever since the early 1980s. Between 1981 and 2012 it decreased by nearly 750,000 out of which a loss of about 70,000 took place in the past three years.
- Population loss is the joint consequence of the low number of births and the high number of deaths. Natural decrease was slightly mitigated in the past decade by the positive balance of international migration.
- As women live over eight years longer than men, their share within the population is growing.
- Besides the overall process of demographic ageing, the age structure is characterized by the decreasing percentage of young people. Between 2009 and 2012 these processes continued, so today nearly one quarter of the population is above 60, and every sixth person is aged 65 and above, whereas the proportion of those under 20 is merely one fifth.
- The ageing index is steadily rising. The number of persons aged 60 and above has been higher since 2007 than that of persons

under 20. At present, the difference is 12 per cent.

- The spatial distribution of the population can be considered relatively stable. The number of Budapest residents was slowly rising in the past few years. The overwhelming majority of the sub-regions is characterized by a population loss, mainly in the economically more backwards parts of the country. From the 175 sub-regions, the population of only 31 increased almost steadily from 1990 on, to the largest extent some of them in Pest County.
- According to the latest population projections, a further decrease and an even stronger ageing process can be expected. By 2060 the number of the population will decrease by a million and a half, the proportion of the old (60+) will approach 40 per cent, and the number of old people will be over double the number of those under 20.
- According to the different population projection models, Hungary needs a considerable positive change in child-bearing, life expectancy and inter-national migration as well so that its population decrease and ageing process will slow down.

### POPULATION – PAST, PRESENT, AND FUTURE

The population of a country changes relatively slowly as a result of the gradual changes year by year. Long-term tendencies unfold only in the course of a longer period. At the same time, the development of the population is relatively predictable due to the regularity of the processes influencing change.

It is primarily the population censuses

<sup>1</sup> Revised version of László Hablicsek's study under the same title in *Demographic Portrait 2009 (HCSO – DRI)*.

that provide us with detailed information on the size and distribution of the population by various characteristics like sex, age, residence, marital status, educational level, economic activity, etc. The latest two censuses were taken in 2001 and 2011.<sup>2</sup>

The changes between two censuses are covered by the vital statistics (the registration of births, deaths, marriages, and that of the dissolution of marriages), the statistics of internal and external migration, other country-wide surveys, the microcensuses, and various representative surveys. The reliability of information gained from them is varied. For example, vital statistics is much more accurate than the data on migration.

On the basis of vital statistics and migration statistics population size is calculated for the years after the censuses by sex, age, and settlement. Due to various reasons, this calculated size of the population is not quite accurate. The differences are corrected at the next census. The most important characteristics of the population are its total number and the changes thereof, its distribution by sex and age, and its spatial distribution.

The present chapter includes also a national projection with respect to population size and its distribution by sex and age. The projection presented in the previous volume was completed and modified by the data of the years in between and the changes following from them. The estimations updated in this way run up to 2060, in harmony with the estimations of Eurostat covering the next half a century.<sup>3</sup>

Projection has been made in the usual three versions, i.e., in a medium (basic), a high, and a low version. The medium (basic) variant can be considered a realistic scenario of the future. The low version is highly

pessimistic, while the high one is greatly optimistic. The system of hypotheses is the following.

**Table 1. Different versions of hypotheses in the population projection for 2060**

Indices	Actual data on 2010*	Versions of hypotheses for 2060		
		Basic	Low	High
Average child number per woman (TFR)	1.26	1.50	1.30	1.70
Life expectancy at birth, men	70.50	82.60	77.90	88.30
Life expectancy at birth, women	78.10	88.80	84.40	93.20
Balance of international migration	11,519	15,000	8,000	22,000

\*According to preliminary data of the 2011 census, the average number of children is 1.24 and the balance of international migrations is 17,350 persons.

## CHANGES IN THE SIZE OF THE POPULATION AND THEIR FACTORS

In 1981 the population of Hungary was 10,710,000, which figure was the highest in the present territory of the country in the course of history. With the exception of 1992, this figure has been steadily decreasing since then. The census of 2001 registered 10,200,000 persons, and on October 1, 2011, the theoretical date of the following census, the number of the population was 9,982,000, therefore the loss is 218,000 persons in the period between the two censuses. The figure estimated on the basis of vital statistics for early 2009 was 10,030,000 but for early 2012 it was only 9,962,000, i.e., a loss of 68,000 people was calculated for three years.

Population projection allows for wide limits when calculating the population for 2060. The medium expectation is 8,550,000, the highest value is 10,010,000, and the lowest is 7,190,000.

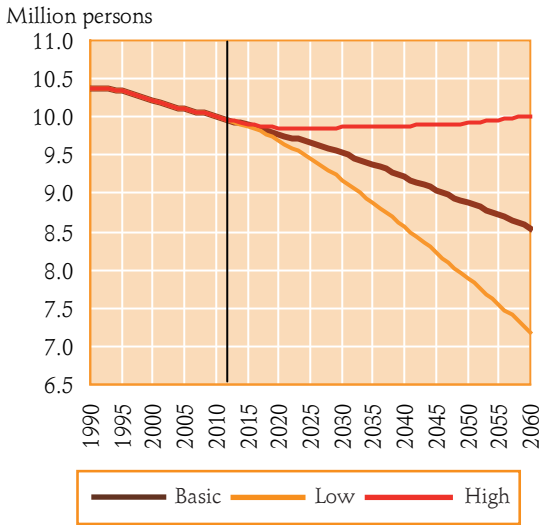
<sup>2</sup> The detailed results of the 2011 census are not yet available, so the study can rely only on preliminary data.

<sup>3</sup> For the methodology of projection see the text in frame.

The difference between the two extremes is 2,820,000.

This means that the decrease of the population is considered a basic tendency in the years 2011 to 2060 as it is estimated at a value of hardly over 10 million even in the high variant counting on a considerable improvement in fertility and intensive immigration. In order to realize a population growth, more than 1.7 children supposed by the high version would be needed on average but the highly unfavourable development of fertility in the past few years makes it increasingly less likely. The pessimistic low variant of hardly more than 7 million envisages a serious population loss (Fig. 1).

**Fig. 1. Size of the population in Hungary, 1990–2060**



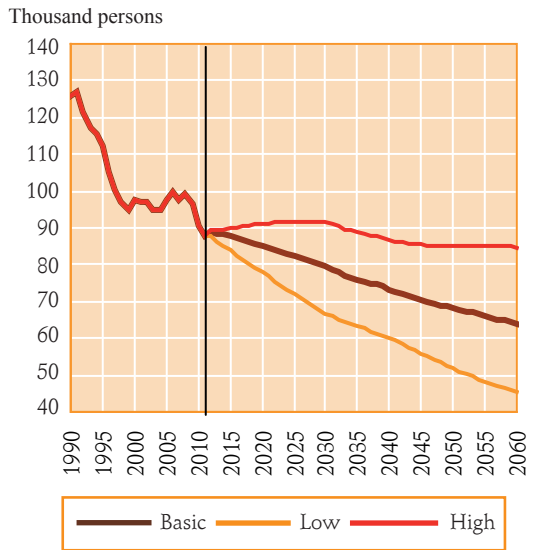
Source: HCSO Demographic Research Institute. Authors' calculations.

Population decrease has been more or less steady and even since the change of regimes. Between 1990 and 2001 the population of the country decreased by 175,000 and between 2001 and October, 2011 by 218,000, which totals nearly 400,000. Population projection

for the next half a century indicates that a loss of another 1.4 million can be expected even in the case of moderately improving parameters.

The changes in the size of the population are determined by the number of live births, by that of deaths, and by the balance of international migration as well. If the number of births exceeds that of deaths we speak of natural increase. If not, we speak of natural decrease.

**Fig. 2. Number of live births, 1990–2060**



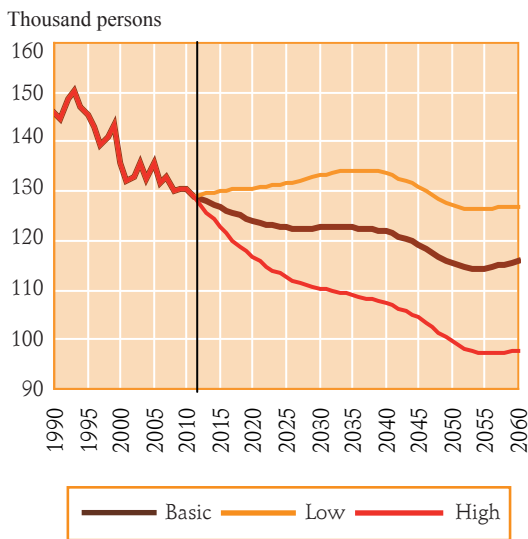
Source: HCSO Demographic Research Institute. Authors' calculations.

In 1990 still 126,000 babies were born but since 1998 the annual number of live births has been below 100,000. In 2010 90,000 babies were born but in 2011 only 88,000. Hungary has never experienced such a low number of live births in its history. A further decrease can be expected for the next twenty years, too, because the fertile female age groups are becoming ever less numerous. Should the average willingness to

have children remain unchanged, the number of births will drop again, and it will lag behind the earlier number of live births even in the case of moderately improving fertility rates. In a favourable situation (by a relatively high level of fertility) the number of live births can rise slightly above 90,000 but this tendency will turn in the long run once again (Fig. 2).

The other factor of natural growth is mortality. The probability of death grows with age, the number of deaths is, therefore, basically determined by the size of the older age groups (of those above 40 or 50). Another factor influencing the number of deaths is mortality, that is to say, the changing life expectancy in the various periods of life. The mean life expectancy at birth is the summary indicator of this factor.

**Fig. 3. Number of deaths, 1990–2060**



Source: HCSO Demographic Research Institute.  
Authors' calculations.

The number of deaths was very high in the greater part of the 1990s, over 140,000 per year. The improvement of mortality beginning with 1995 led to a gradual decrease

as a result of which the number of deaths in 2008 was only 130,000. In the two years after 2008 it stagnated on the same level and decreased again in 2011, remaining below 129,000. If the improvement remains moderate in the future, the number of deaths will decrease after a slight growth, then stagnates and, in the case of a gradual improvement, can remain permanently around 120,000. Should a considerable improvement occur, it can, however, drop to below 100,000 by 2060. There is no possibility to push it further down, which means that the expected rise in life expectancy alone will not be able to stop the natural decrease of the population without a remarkable rise in the number of live births (Fig. 3).

At the same time, it can be established almost with full certainty that similarly to the past twenty years, the number of live births will fall short of that of deaths in the future, too. Between 1990 and 2011 the number of deaths was by 775,000 higher than that of births. In the past three years alone, the natural decrease of the population was 115,000. In the next 50 years it will be 2,240,000 even by moderately improving conditions. This negative tendency can be mitigated by the positive balance of international migration, which means that the number of persons moving to Hungary exceeds the number of those leaving it. It has to be noted here that this time only those types of migration are dealt with that directly influence the number of population, i.e., ones for which a settlement permit or a long-term residence permit is needed.

Between 1990 and 2011 the total balance of international migration was over 356,000 persons, i.e., this was the surplus of immigrants as compared to the number of those leaving the country. The number of the latter was 46,000 in the past three years.<sup>4</sup>

According to the medium version of population projection, the surplus of

<sup>4</sup> Migration statistics are the least accurate among all statistics of population movements, so this figure is partly an estimation.

## METHODS OF POPULATION PROJECTION

The structure of the population and its changes are in close interaction with the economic, social, and environmental processes in the future partly as their cause and partly as their effect. Population projection, i.e., calculations for the changes in the number and structure of the population, can be an important starting point of social and economic planning. However, this necessitates basic knowledge on the part of the users as regards projections prepared by various institutions.

Besides the individual countries, several large international organizations prepare population projections, too. The United Nations Organization plays a leading role in this field and has published world-wide projection since the 1950s. Later there were three institutions dealing with population projection for the whole world, namely, the United States Census Bureau (USCB), the World Bank (WB), and the International Institute for Applied Systems Analysis (IIASA). The statistical office of the EU (Eurostat) prepares projections for the member states, as well as for Norway and Switzerland.<sup>a)</sup>

The basis of all methods used by the individual institutes is the cohort component method. When using this method, the basic components of population change are taken into account, such as live births, deaths, and international migration. The starting point is the current structure of the population at the time of the preparation of the projection by sex and age. The number of the initial population is increased by live births and decreased by deaths, just as immigrants contribute to it and emigrants diminish it. As a result of these processes, the size of the population changes year by year, and the changes in the age structure has to be taken into account, also.

Projections are based on initial hypotheses as regards the future rate of fertility and mortality and the number of migrants. In order to be able to frame

them, researchers need to analyze the tendencies of the past, rely on earlier research result, and compare their own with those in countries that show similar trends in their development. Most frequently, there are three systems of hypotheses concerning the components of the projection. The medium one shows the most probable future changes, while the low and high variants indicate the limits that are held possible at the time of the preparation of the projection. By combining the various hypotheses, a great number of relevant scenarios can be created but it is generally three fundamental variants that are calculated, namely, the high, the medium (or basic), and the low.

The methods of calculation can be different at the various institutions as to the initial system of hypotheses and as to how they handle the inevitable uncertainty pertaining to long-term population projections.

The UN sets out from the latest available data on the population or, should they be failing, makes estimates. Various hypotheses are formed with regard to countries with low, medium, and high fertility. In the course of the latest projection, a new method based on the theory of probability was used for working out hypotheses for fertility. The basis of the method is the fact that the change in fertility can be divided into three phases. First comes a phase with high fertility, preceding fertility transition. Then comes the transition itself, and finally, comes a post-transitional phase characterized by low fertility, fluctuating around a level necessary for simple population replacement, remaining close to it or tending towards it. The hypotheses for the individual countries are worked out according to the actual phase the country is currently in. The projection looks into the future as far as 2100 and contains all in all eight possible versions or scenarios. As regards fertility, five hypotheses have been worked out: a medium one, a low one, a high one (differing from the medium variant

<sup>a)</sup> Besides the above-mentioned organization, several demographic research institutes deal with population projection. The Netherlands Interdisciplinary Demographic Institute (NIDI) makes various long-term projections for the European countries, and the Vienna Institute of Demography (VID) works in cooperation with the IIASA on a world-wide population projection.

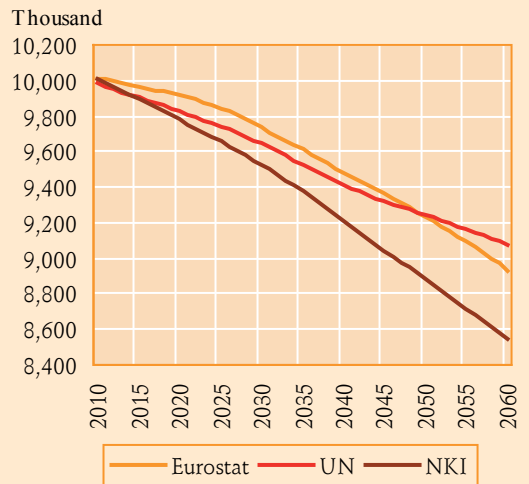
by 0.5 children on average), one postulating invariable fertility, and one counting on simple replacement. With regard to mortality, there is a variant (besides the medium one) that takes into account the impact of AIDS on mortality and one taking the mortality level of 2005–2010 constant. International migration was projected on the basis of a medium and a zero variant. Combining these hypotheses, eight versions have been worked out for population projection. The projections are updated every second year in three versions, and a totally new population projection is made with eight variants in every ten years. The results are published in the series World Population Prospects.

Eurostat similarly works on the basis of the cohort component method. Its basic assumption is that the fertility and mortality indices of the EU member states are getting closer and international migration tends to become balanced. The latest calculations postulate 2150 as the date of convergence. The calculations are updated every second year and published in the series Europop. Projections cover fifty years, currently ending with 2060. According to the calculations of Eurostat, in 2060 a woman will give birth to 1.68 children on average, men will live to be 82 and women 87, and the immigration surplus (the difference in the number of immigrants and emigrants) will be nearly 12,000 in Hungary.

*b) According to the hypotheses dealt with earlier, the medium variant for 2060 as regards the mean number of children is 1.5, male life expectancy is almost 83 years and female life expectancy is 89 years. The migration surplus is 15,000 persons per year.*

The projection of Eurostat predicts at first a slower, then an accelerating population loss for Hungary. The UN prognosis counts on a more even and more moderate population loss. Both calculations envisage 9,258,000 inhabitants for 2049 but eleven years later, in 2060 Hungary will have 8,898,000 inhabitants according to Eurostat, and 9,053,000 inhabitants according to the UN, the difference being 155,000. The projection of the Demographic Research Institute<sup>b)</sup> estimates 9,525,000 inhabitants for 2030 and 8,546,000 for 2060.

**Prospective changes of the population of Hungary between 2010 and 2060 by projections of Eurostat, the UN, and the DRI**



immigration will be 744,000 between 2012 and 2060, which will considerably mitigate the decrease of population.

## STRUCTURE OF THE POPULATION BY SEX AND AGE GROUPS

The distribution of the population by sex is shaped by three factors: the proportion of girls and boys among the new-born,

the differences in mortality by sex, and the share of women and men among the migrants. For biological reasons there are more boys among the new-born than girls and for similar reasons their life expectancy is a bit lower. The differences in mortality are enhanced further by the different life styles, so female life expectancy at birth can exceed that of men even by 10 to 12 years. In Hungary, the typical advantage of

women is 8 to 9 years, in countries with more developed health care systems and a more health conscious population it is 5 to 7 years, and in certain countries it can even be 4 years.

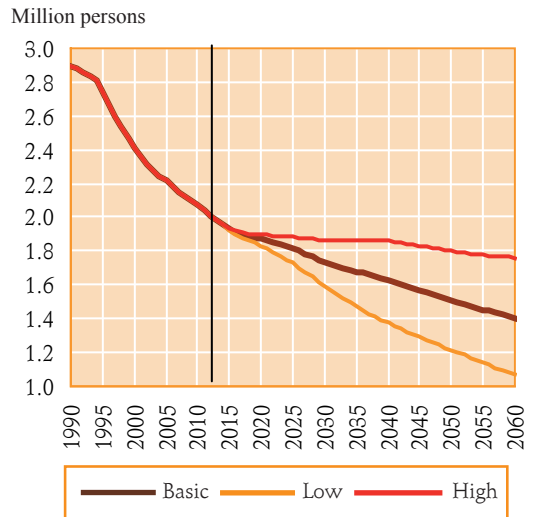
The population can be divided also to young, middle-aged, and elderly or old individuals. According to the general practice of the European Union persons below 20 are considered young. The limit of old age can, however, be either 60 or 65. In Hungary the first one is more justified as the retirement age is (still) nearer 60 than 65 and the average age at retirement is below 60.

The changes in the number of persons belonging to the different age groups are just as important as the changes in their share as compared to the whole of the population. This latter value is given special attention in examining the ageing of a population, i.e., the process when the mean age of a population rises and the proportion of the old generations increases. The middle generations are the ones who provide for both the young and the old. The relative weight of burden is shown by the dependency ratio. The quotient of the number of the young and the middle-aged is the young age dependency ratio, while that of the old and the middle-aged is the old age dependency ratio. The total of the two is the total dependency ratio. The dependency ratio is not to be mistaken for the ratio that compares the number of economically inactive persons with that of the active ones (sometimes mentioned also as dependency ratio in literature). Another important indicator is the ageing index that compares the number of the old to that of the young.

In 1990 there lived 5.4 million women and 5.0 million men in Hungary, 1,082 women falling to 1,000 men. In 2009 the number of women was 5.3 million and

that of men was 4.8 million, the rate of the sexes changing to 1,106. This latter figure was 1,104 in 2012 with 5.2 million women and 4.7 million men. The rate of men decreases primarily due to their higher mortality. According to the basic variant of population projection counting on a larger increase of life expectancy among men, in 2060 there will be 4.1 million men and 4.4 million women, the rate indicating female surplus falling to 1,068.

**Fig. 4. Number of persons aged 0–19, 1990–2060**



Source: HCSO Demographic Research Institute. Authors' calculations.

The size of the population by years of age is determined by several factors the most important of which is the size of the subsequent birth cohorts. As time passes, the outstandingly high birth peaks and deep troughs of the past result in increase or decrease in different age groups. At present the people born in two outstandingly large birth cohorts form especially numerous age groups. Age cohorts born in the 1950s and 1970s are much more numerous than others born either earlier or later. When age

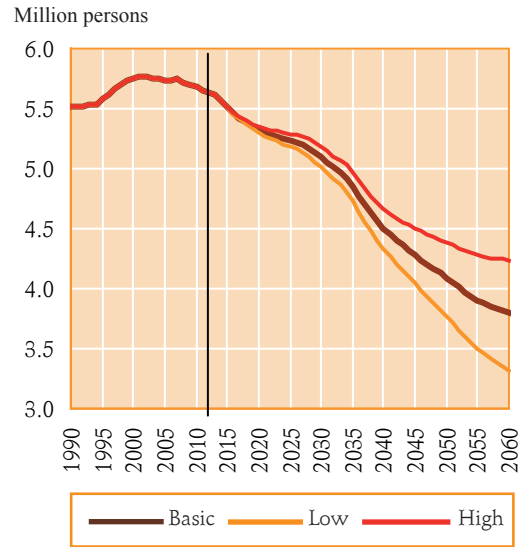
groups large in numbers reach old age, the ageing of the population suddenly – but not unexpectedly – accelerates. This is an additional burden on the ageing society struggling with the growing number of old people, arising from the improvement of life expectancy and the decreasing number of new generations, resulting from low fertility.

In early 1990 the number of those aged 0–19 was still 2.9 million, in 2009 they numbered only 2.1 million, and in 2012 2 million (Fig. 4). The decrease of nearly 890.000 was due to the extremely low level of fertility, that goes back partly to the postponement of childbearing to an ever higher age. As time goes by, around 2060 the even less numerous fertile generations may tend to have more children but the growth of fertility should be much higher than the expected in order to counterbalance the shrinking of the age group 0–19 in the long run. So the tendency remains and the projected number of the young can be merely 1.4 million in 2060. However, the number of the age group may decrease even to a far greater degree, should the average number of children remain as low as it is today. The share of the young is today 21 per cent, which is much lower than in the early 1990s (28 per cent) but still higher than it probably will be in 2060 (17 per cent).

The size of the middle-aged population (20–59 years) has been greatly increased by the fact that not only those born in the 1950s but also those born in the 1970s have been included. The positive migration balance also contributes to the high figure today. The group of those aged 20–59 numbered 5.5 million in 1990 and it numbers 5.6 million today. However, a decrease has already begun, which will accelerate in a few years when the numerous generations born in the 1950s will reach 60. In 2030, the age group is expected to number 5.1

million, and in 2060 about 3.8 million (Fig. 5).

**Fig. 5. Size of the age group 20–59, 1990–2060**



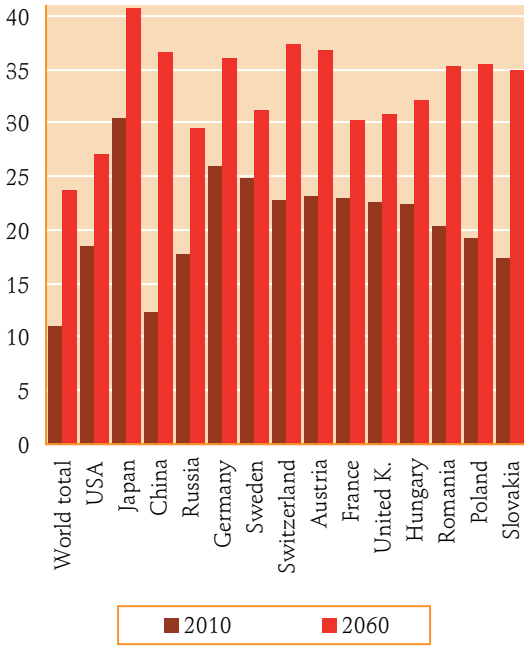
Source: HCSO Demographic Research Institute. Authors' calculations.

Calculating on the basis of the present age limits, one quarter of the population of the Earth will be old in 2060. The share of the old in almost all developed countries can be expected to be over 30 per cent (Fig. 6).

In the early 1990s persons above 60 numbered 1.9 million, in 2009 over 2.2 million, and in 2012 already over 2.3 million. Their proportion within the population rose from 19 to 23 per cent. As a combined result of the formerly mentioned fluctuation of age groups, low fertility rates, and improving life expectancy, by 2030 their number will rise to 2.7 million and their proportion to 28 per cent. By 2060, as a result of the uninterrupted process of ageing, their number can reach 3.3 million and their share can be around 39 per cent (Fig. 7).



**Fig. 6. The proportion of persons 60+ in selected countries of the world, 2010 and 2060**



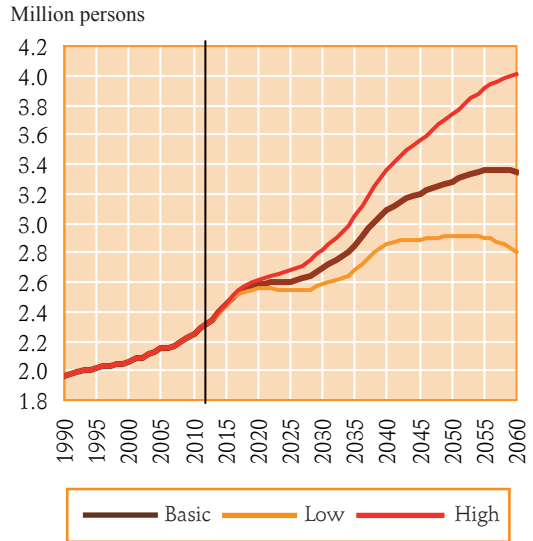
Source: UN Population Division. World Population Prospect. The 2010 Revision. Data collection. <http://esa.un.org/unpp>

Adding 5 years to the lower limit of old age, the number of persons 65+ can be expected to rise to 2.1 in 2030, which is near the number of those aged 60+ today. The proportion of persons 65+ within the population can approach 22 per cent, i.e., the present share of those above 60. In 2060 the age group is expected to number about 2.8 million, i.e., every third person will be 65 or older.

The ageing index (the quotient of the number of the old and the young) is a similarly important indicator of the shifting focal points of the different care systems within the population. The ageing index has risen from an annual 0.7 in 1990 to over 1.0, so today there are more old people than young in the population (Fig. 8). The proportion of the old compared to the young will continue to rise dynamically in the decades to come. By 2030 it is expected to be

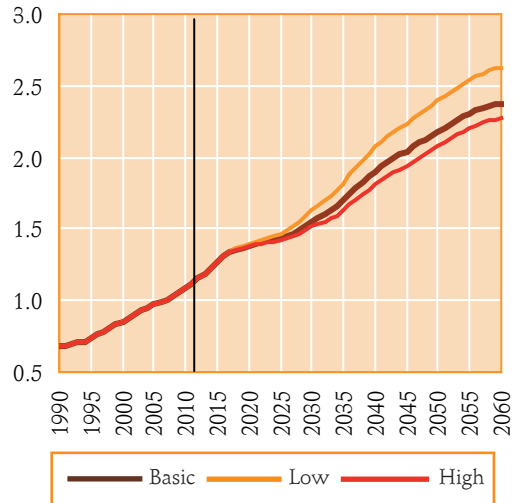
around 1.5 to 1.6, and in 2060 around 2.3 to 2.4. This latter figure means that the number of the old will be double the number of the young.

**Fig. 7. Number of persons aged 60+, 1990–2060**



Source: HCSO Demographic Research Institute. Authors' calculations.

**Fig. 8. Ageing index, 1990–2060**



Source: HCSO Demographic Research Institute. Author's calculations.

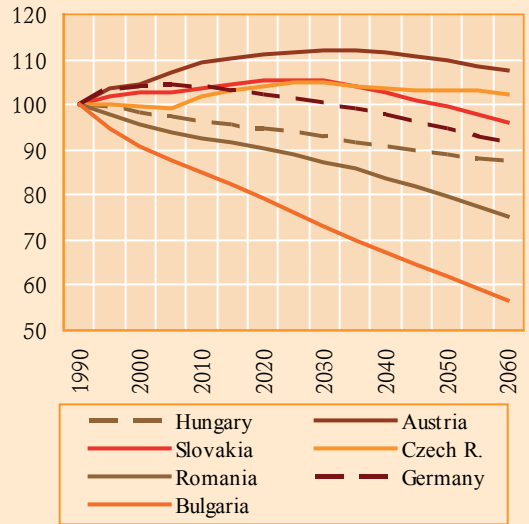
### INTERNATIONAL COMPARISON: POPULATION CHANGE IN HUNGARY AND IN CERTAIN COUNTRIES OF THE REGION

According to the medium variant of the UN projection, there will be considerable differences among the countries of the region in the next four decades. The population of Hungary has been decreasing since the 1980s, and has produced a moderately falling tendency since the change of regimes. This decrease is expected to accelerate from the 2010s on, as a result of which in 2060 the population of the country will be only 87 per cent of that in 1990.

In neighbouring Austria, the number of the population has been growing throughout almost the whole discussed period. The growth slowed down a bit only in the last two decades. The number of the population is still above the level of 1990 by 7 per cent. In the 15 years following the unification of the country, the German population was slightly growing but it has been steadily decreasing since 2010, to drop to about 91 per cent of the value of 1990 by 2060.

According to the projection, the Slovakian population reaches its maximum between 2025 and 2030, and falls by 4 per cent below the 1990 level by 2060. The situation in the Czech Republic is varied. Between 1990 and 2008 the number of the population was steadily decreasing, then partly due to positive changes in fertility, a considerable increase began that is expected to last till around 2030. The UN projection expects a slight decrease in the following years but the number of the population will still remain above the level of 1990.

*Prospective changes in the population of certain Central and East European countries, 1990–2060 (1990=100)*



Source: World Population Prospects: The 2010 Revision  
<http://esa.un.org/wpp/unpp>

The population changes in Romania and Bulgaria are the most unfavourable, primarily due to massive emigration and low fertility. The population of both countries started to drop heavily following the change of regimes, and by 2060 Romania is expected to reach 75 per cent of its population in 1990. The respective figure for Bulgaria is merely 57 per cent, in case the UN projection will come true.

### SPATIAL DISTRIBUTION OF THE POPULATION

For statistical reasons the territorial units of the individual countries are divided into categories within the European Union according to a unified system. The arrangement by five (the so-called NUTS levels)<sup>5</sup> for Hungary consists

of the following: the whole of the country, the regions, the capital and the counties, the sub-regions, and the settlements. The second level contains at present seven regions, the third contains 19 counties and the capital city, the fourth contains 175 sub-regions, and the fifth contains about 3,000 settlements.

The population of a territory generally means the residential population, i.e., the

<sup>5</sup> *Nomenclature d'unités territoriales statistiques – Classification of statistical territorial units.*

individuals who specified the given county and locality as their place of residence. The place of residence is generally identical with the actual place where they live. Besides the factors influencing also the number of the population in a country (like births, deaths, and international migration), the number of the residential population in a given territorial unit is influenced also by internal migrations or movements between the individual territorial units within the country.

The spatial distribution of the residential population has been considered stable for a long time as no sudden changes occur (Table 2). In 2001 and 2011 the inhabitants of Budapest represented 17.4 per cent, which is a considerable decrease of 280,000 persons as compared to the 19.4 per cent of 1990. This change is, however, the combined result of the slow decrease beginning from the mid-1990s and the faster increase beginning with 2008. The deepest point was 2007 when Budapest had only 1,695,000 inhabitants. Pest County has witnessed an unbroken increase since the 1990s, and its pace even accelerated from 2000, as a result of which the share 9.2 per cent in 1990 grew to 12.4 in 2011 meaning a population growth of 273,000. Two counties experienced a noteworthy population loss in economically backward territories, namely Békés and Borsod–Abaúj–Zemplén. This tendency seems to be especially lasting in the case of the latter.

The 175 sub-regions and the districts of Budapest show a varied picture. It is worth while examining the changes in the residential population divided into two periods, one between 1990 and 2001 and another between 2001 and 2011.

There is not a single district in Budapest out of the 23<sup>6</sup> the population of which grew in both periods. The population decreased

in 14 districts in both periods, and the loss was the greatest in each of them between 1990 and 2001. The population of District V decreased to the greatest degree, falling by one third in the first decade of the period in question. Decrease was over 20 per cent also in Districts I, VI, XII, and XX, too. In the following decade population loss became more moderate in some districts: 9 per cent in District XII, and 6.5 per cent in District V as compared to 2001. In Districts XVI and XVII the decrease of the first decade turned into a moderate increase, to be followed by seven other districts where the population loss had been considerable between 1990 and 2001. However, the increase did not reach 5 per cent even in Districts VIII and XIII where it was the highest.

In 90 sub-regions out of the 175 there is a steady population loss and in 50 of them the initial growth has been replaced by a decrease. Only 31 sub-regions could boast of a growing population in both periods and another 4 of decrease turning into increase. The greatest population loss occurred in the sub-regions of Mezőkovácsháza, Óriszentpéter, Tab, and Lenti but several other sub-regions followed them closely, namely those of Pétervására, Sátoraljaújhely, Bátorfyerénye, Letenye, Mezőtúr, Tokaj, Ózd, Bodrogköz, Csurgó, Bácsalmás, Sásd, Orosháza, Jánoshalma, and Sarkad. The growth was the greatest in sub-regions of Pest County near the capital, such as those of Veresegyháza, Pilisvörösvár, Budaörs, Dunakeszi, and Érd. They are closely followed by the sub-regions of Ráckeve and Szentendre. In the ones of Debrecen, Esztergom, Tata, and Pécs the initial population loss between 1990 and 2001 turned into a population increase in the following decade (Fig. 9).

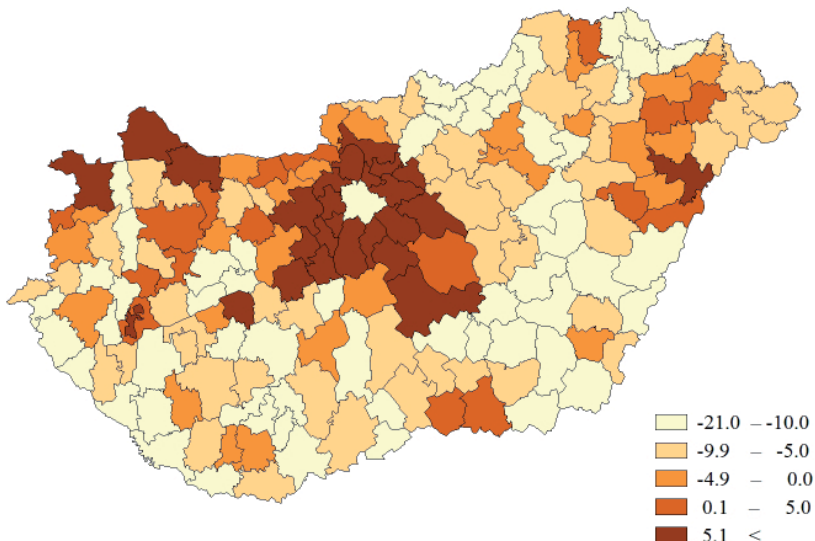
<sup>6</sup> Calculated on the basis of the data on population movement.

**Table 2. Residential population of the capital and the counties, 1990, 1995, 2001, 2005, 2011\***

Counties	Population size (thousand)					Percentage within the population				
	1990	1995	2001	2005	2011*	1990	1995	2001	2005	2011*
Budapest	2,017	1,930	1,778	1,697	1,737	19.4	18.8	17.4	16.8	17.4
Bács-Kiskun	545	541	547	540	521	5.3	5.3	5.4	5.4	5.2
Baranya	419	412	407	400	388	4.0	4.0	4.0	4.0	3.9
Békés	412	405	398	390	362	4.0	4.0	3.9	3.9	3.6
Borsod-Abaúj-Zemplén	762	750	744	732	691	7.3	7.3	7.3	7.2	6.9
Csongrád	439	429	433	425	418	4.2	4.2	4.2	4.2	4.2
Fejér	421	426	434	429	428	4.1	4.2	4.3	4.2	4.3
Győr-Moson-Sopron	424	426	439	440	449	4.1	4.2	4.3	4.4	4.5
Hajdú	549	550	553	549	549	5.3	5.4	5.4	5.4	5.5
Heves	334	330	326	323	311	3.2	3.2	3.2	3.2	3.1
Jász-Nagykun-Szolnok	426	423	416	411	389	4.1	4.1	4.1	4.1	3.9
Komárom-Esztergom	315	313	317	316	306	3.0	3.1	3.1	3.1	3.1
Nógrád	227	224	220	217	204	2.2	2.2	2.2	2.1	2.0
Pest	950	973	1,084	1,144	1,223	9.2	9.5	10.6	11.3	12.3
Somogy	345	338	335	332	318	3.3	3.3	3.3	3.3	3.2
Szabolcs-Szatmár-Bereg	572	573	582	582	562	5.5	5.6	5.7	5.8	5.6
Tolna	254	250	250	245	231	2.4	2.4	2.5	2.4	2.3
Vas	276	273	268	265	258	2.7	2.7	2.6	2.6	2.6
Veszprém	382	379	370	367	354	3.7	3.7	3.6	3.6	3.5
Zala	306	302	297	295	283	3.0	3.0	2.9	2.9	2.8
Total	10,375	10,246	10,198	10,098	9,982	100.0	100.0	100.0	100.0	100.0

\*Preliminary data of the 2011 census

Source: Demográfiai évkönyv 2010 (Demographic Yearbook, 2010), KSH; 2011. évi népszámlálás 1. Előzetes adatok (Census of 2011, 1. Preliminary data).

**Fig. 9. Changes in the population of the sub-regions between 1990 and 2011 (1990=100 per cent)**

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