DEMOGRAPHIC TRENDS: FERTILITY, MORTALITY, AGEING

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1. Introduction

The population development of a country depends on three components: births increase the population size; deaths decrease it; and migration can increase it or de-crease it, depending on whether there are more immigrants or emigrants.

These three components are shaped by very different mechanisms, which in modern societies are only loosely related. Thus, when we discuss population trends, we need to examine and understand the development of each component separately, before linking them together to arrive at a single figure for the population. This overview analyses the development of the first two components – births and deaths; migration is discussed in a separate study (Blaskó, Ligeti and Sik 2014).[1] However, the implications of migration will be highlighted briefly in the section on 'age distribution and ageing', towards the end of this chapter. This is a classical approach, since the definition of natural population change refers to the balance of births and deaths; however, the increasing contribution of migration to the size and age composition of the population, especially in modern societies, is also widely acknowledged and cannot be ignored.

The population of Hungary was 10,588,614 on 1 January 1989; three decades later, on 1 January 2018, it was 9,778,371 – a difference of over 800,000. If we consider the number of births and deaths between the start of 1989 and the end of 2017, it becomes obvious that the underlying changes were even more fundamental. In 2017, there were more than 30,000 fewer births and about 13,000 fewer deaths than in 1989. In the whole period under consideration, close to a million more people died than were born; the only reason why the population did not decline accordingly was that net migration until 2010 was clearly positive (more immigration than emigration). However, net migration changed recently, and therefore today migration also contributes to population decline (Cf. Gödri, 2015; Hárs in this volume).

[1] On migration trends, see also Gödri (2015).

Table 1 *Births and deaths in Hungary, 1989–2017 (persons)*

Year	Births	Deaths
1989	123 304	144 695
2017	91 577	131 674
Total (29 years)[a]	2 752 512	3 696 277

Note: [a] total from 1 January 1989 to 1 January 2018.
Source: Hungarian Central Statistical Office (HCSO) Vital Statistics, author's calculation.

2. Trends in fertility

Over the past 25 years, Hungary has seen radical changes in both the level of *fertility* and its composition. Even a brief overview requires analysis of various indicators over time. Although some indicators – the number of births and the total fertility rate – fell sharply in the decade after the regime change and then fluctuated from 1999 to 2012, since then they have been rising.

Fertility is captured most comprehensively by the *total fertility rate* (TFR), even though this can be severely distorted during periods that witness changes in the timing of childbearing (Bongaarts and Feeney, 1998; Spéder, 2014). Thus, any overview of the main changes must start with a description of this indicator.

As is widely known, the total fertility rate indicates the average number of children that would be born to a woman if she were to follow the prevailing rate of age-specific fertility in the population throughout her life from 15 to 49 years. In Hungary, the TFR was 1.82 in 1989; it fell to 1.3 during the 1990s and, as mentioned earlier, hovered at or around that level until 2010. Thereafter the process of recuperation increased the TFR, which remains at around 1.5 today. (*Figure 1*).

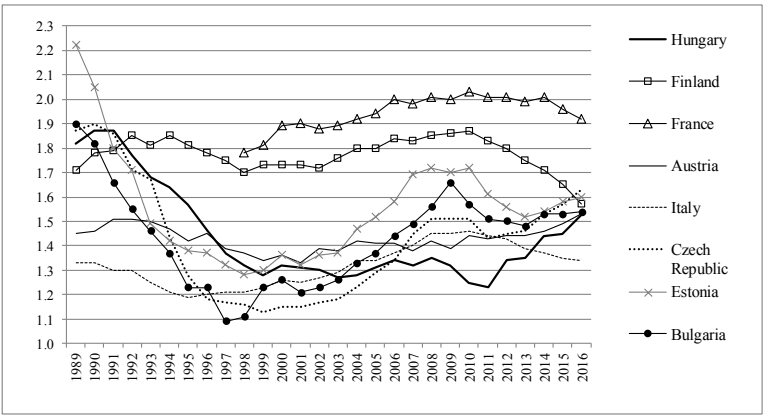
If we look at other countries, there are two important observations that can be made. First of all, the Hungarian trend is far from unique: it clearly resembles those of other post-socialist countries.[2] The figures for those countries were much closer together in 2005 than they were in 1989; though they have started to diverge again in recent years.

Secondly, it is clear that European countries are characterized by different levels of fertility. On the one hand, quite different countries are close to replacement-level fertility. Scandinavian countries (with their extensive welfare state provision) and France (with its special family policy regime) are usually mentioned as examples of countries with high fertility. However, fertility is

[2] For an overview of post-communist development, see Sobotka (2011).

also high in the United Kingdom, although under very different welfare state conditions. On the other hand, countries with low fertility include the German-speaking countries of Western Europe (Germany, Austria and Switzerland) and the Southern European states.

Figure 1 *Total fertility rate, 1989–2016*



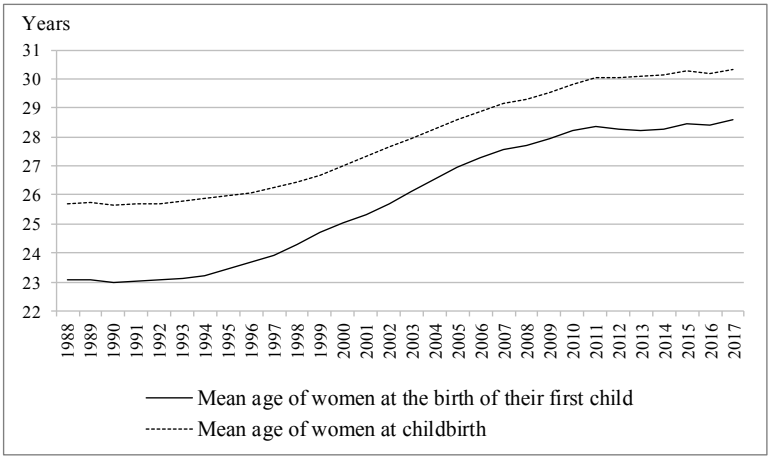
Source: Eurostat (downloaded: 3 December 2018).

The sharp fall in fertility following the regime change can be largely attributed to delayed childbearing – putting off having a first child (and indeed subsequent children); this can be observed in the post-socialist countries to different extents. In the space of 15 years, the average age of women at the time of first birth (MAFB) increased by nearly five years. This trend – the transition from early childbearing (in one's 20s) to later childbearing (in one's early 30s) – is commonly referred to as postponement. Factors commonly associated with *postponement* include the expansion of tertiary education, difficulties in labour market reintegration, the increasing instability of partnerships, and changing values.

The comparison of trends in age-specific fertility rates (ASFR) provides a more nuanced picture of age-related fertility behaviour. As was indicated earlier, before the regime change women generally had their children in their early 20s (*Figure 3*, curve showing the 1990s). The 'dominant' practice of early motherhood and the 'rare' occurrence of having children at a later age means that the curve shows asymmetry to the left. After the regime change, the shape of the curve changes radically: not only does it shift to the right (the 'ageing' of childbearing), but it also flattens (fewer children born) and starts

to resemble a bell curve (indicating the diversity of childbearing age among women).

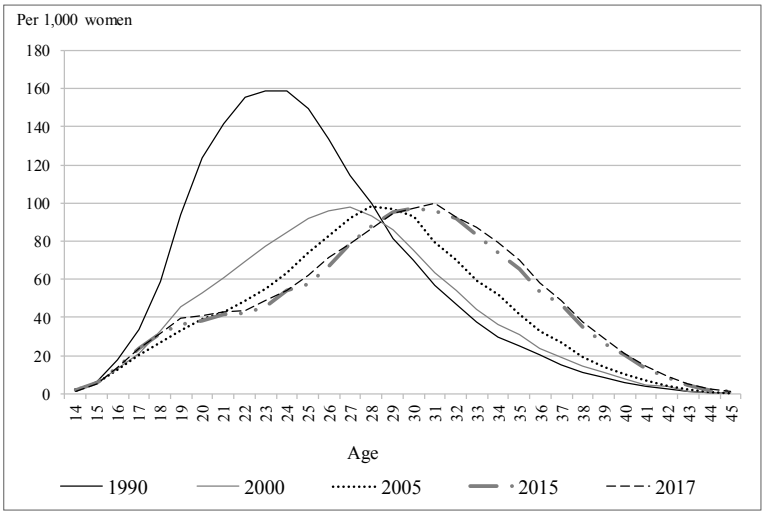
Figure 2 *The mean age of women at the birth of their first child and mean age of women at childbirth, 1988–2017*



Source: HCSO Vital Statistics, author's calculation.

Both the levelling-off of the curve of the MAFB (*Figure 2*) and the minimal difference observed in the curves of ASFR from more recent years (of these, the figure only shows the curves from 2015 and 2017) suggest that postponement has stopped; however, there is barely any sign of recuperation. There are substantial changes emerging that relate to dominant family size, which is discussed in detail elsewhere (Spéder, 2014). The proportion of those without children will undoubtedly increase, and the share of those with just one child is also likely to grow. Meanwhile the dominance of the two-child-family model is expected to decline. Thus, the trend behind postponement may be described as '*destandardization and differentiation'*. In other words, what we see is not simply a postponement of parenthood to a later age (i.e. young couples delaying starting a family for five or six years), but greater differentiation in fertility behaviour, which ultimately results in a lower average number of children born (completed fertility).

Figure 3 *Live births per thousand women of corresponding age, 1990, 2000, 2005, 2015, 2017 (births per thousand women)*



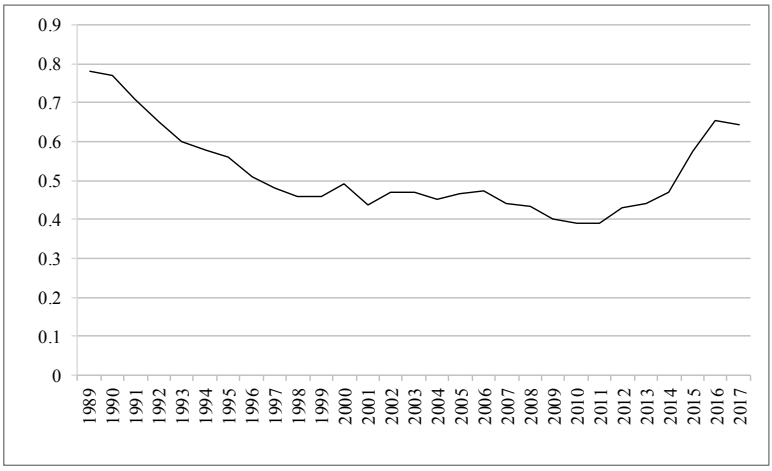
Source: HCSO Vital Statistics, author's calculation.

Alongside fertility behaviour, and closely related to it, *partnership behaviour* has also undergone a transformation. Only a concise report is given here; key changes related to family formation are presented.[3] The last quarter of a century has seen a decline in (the popularity of) marriage and an expansion of cohabitation as the first partnership. The total first marriage rate (TFMR) describes the probability of someone getting married during her/his life, based on age-specific marriage rates. In Hungary, the figure halved be-tween 1989 and 2012, dropping from 0.8 to 0.43 (*Figure 4*). Accordingly, for a long time the probability of a person getting married at some point in life was below 50 per cent. However, surprisingly, the popularity of marriage has increased in recent years, and the TFMR is now well above 50 per cent, remaining at 0.64 in 2017. This means that more than three women in five will marry at some time in life if the marriage propensity remains around the today's level. Recuperation – people finally getting married after postponement – is clearly one key factor behind the reversal. But also, government policy – ensuring tax credits for those who marry – may have contributed to it. Here it is necessary

[3] Divorce and divorce after a long marriage, for example, are not addressed here. For more on these and other characteristics of partnerships, see Földházi (2012) and Pongrácz (2012).

to note that this kind of reversal is not unique: something similar happened in Sweden just after the millennium (Ohlsson-Wijk, 2011). All in all, it is highly unlikely that TFMR could return to and remain at its former value of three decades earlier.

Figure 4 *Total marriage rate in Hungary, 1989–2017*



Source: HCSO Vital Statistics, author's calculation.

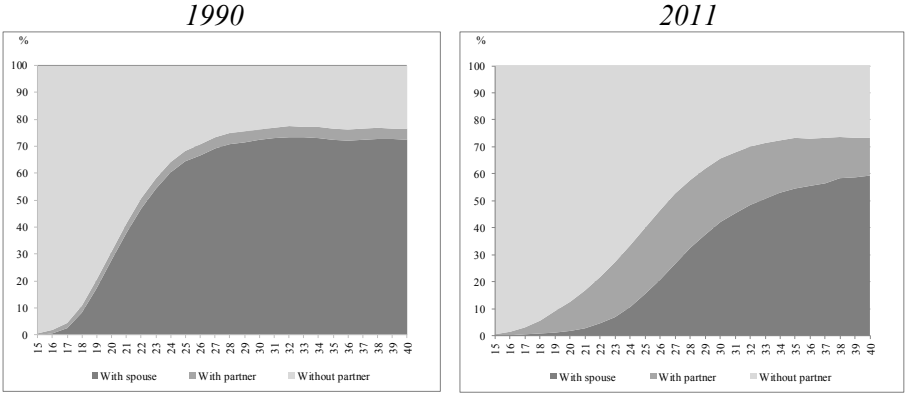
Cohabitation started to become more widespread in Hungary back in the 1970s, as a form of partnership after a divorce (Carlson and Klinger, 1987; Csernák, 1992). This paved the way for pre-wedding 'trial marriage' type partnerships.

It is important to note that cohabitation was starting to gain atraction even before the regime change; however, it really took off after 1990 (Spéder, 2005). Nowadays, the vast majority of first partnerships start out as cohabitation. A substantial proportion of these turn into marriage later; however, breakup is also common, as is continued cohabitation as an alternative to marriage. Changes in partnership patterns throughout the life course – in other words, the prevalence of different types of partnerships at different stages of life – are depicted in *Figure 5*, using data from the 1990 and 2011 population censuses.

During the period of regime change, three fifths of women aged 23–25 were already married; by 2011, the share of married women was lower even among 40-year-olds. On the basis of the 2011 figures, less than a quarter of 23–25-year-olds are in a long-term relationship, and less than one in 10 is married.

Another noteworthy phenomenon should be highlighted here: singledom (and the closely related 'living-apart-together (LAT) relationship') (Kapitány, 2012). According to census data, more than a quarter of women in their 30s are not in a relationship: some have never been in a relationship, while others were previously in a relationship that broke up. This phenomenon is interesting in itself; however, it is considered here from the perspective of childbearing. Singledom is, obviously, unfavourable from the perspective of childbearing, and our analyses also show that those in cohabiting partnerships are both less likely to have children and to have fewer children. Causal factors cannot be addressed here in detail (i.e. the potential correlations be-tween partnership and childbearing decisions), but it may be concluded that lower fertility is 'consistent with' changes in partnership behaviour.[4]

Figure 5 *Distribution of women aged 15–40 by type of partnership, 1990, 2011*

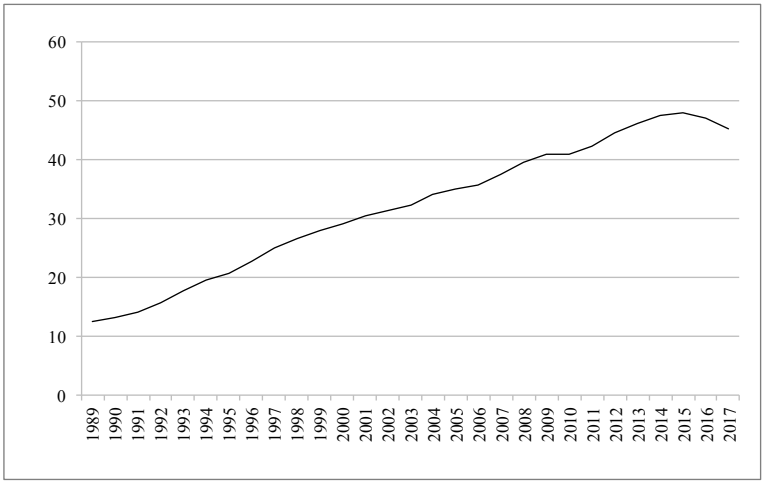


Source: HCSO Population Census 1990, 2011; author's calculation.

Evidently, the increase in the number of births outside marriage is associated with the spread of cohabitation. In 1989, 12.4 per cent of births were classed as 'extramarital'; by 2017, this had increased to 45.1 per cent (*Figure 6*). Previously the majority of births out of wedlock involved single mothers – 6–8 per cent of all births (S. Molnár et al., 1998). This share has since increased slightly, and according to our estimates currently represents 1 birth in 10: thus, more than a third of births occur in cohabiting partnerships. (The proportion of those born into a cohabiting partnership is even larger among first-borns.)

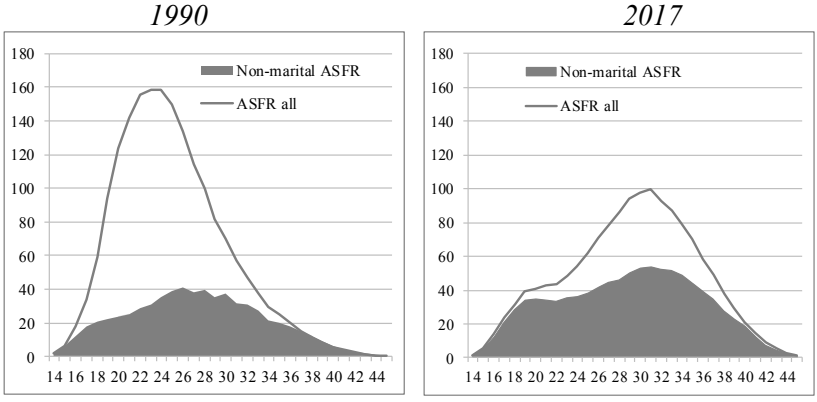
[4] For a more detailed account of changes in partnership behaviour in Hungary, see Murinkó and Spéder (2015).

Figure 6 Percentage of live births outside marriage in Hungary, 1989–2017



Source: HCSO Vital Statistics, author's calculation.

Figure 7 Age-specific fertility rate in 1990 and 2017 (per 1,000 women)

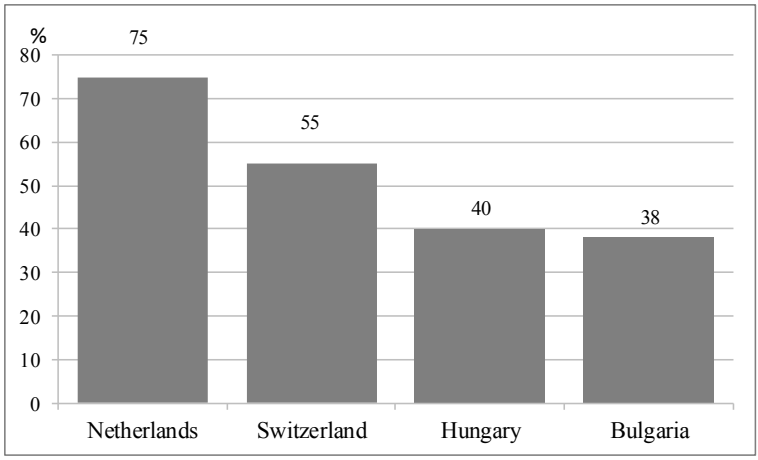


Source: HCSO Vital Statistics, author's calculation.

The characteristics of extramarital births have also changed slightly. In 1990, those who had children out of wedlock were more likely to be older than average. While this is still the case, currently it is the youngest who tend to have children exclusively outside marriage (*Figure 7*).

In relation to the fertility trends of the new millennium in Hungary, a further Central Eastern European feature should be highlighted. It is well established that there is a big difference (or gap) between childbearing intentions and actual childbearing (see Morgan and Rackin, 2010; Testa and Toulemon, 2006; Spéder and Kapitány, 2009). This is natural at the individual level, because people realize their childbearing intentions gradually, as they age – and sometimes their intentions change. Therefore, some end up having fewer children than originally intended; others have more; and only a minority have exactly the number of children they envisaged when they were in their early 20s (Morgan and Rackin, 2010). The prevailing total fertility rate is the result of a myriad of these micro-level decisions. However, it is of concern if these intentions are thwarted by social causes.

Figure 8 *Percentage of people who realize their two-year intention of having children within three years, four European countries, 2001–2005*



Source: Kapitány and Spéder (2012), own calculation.

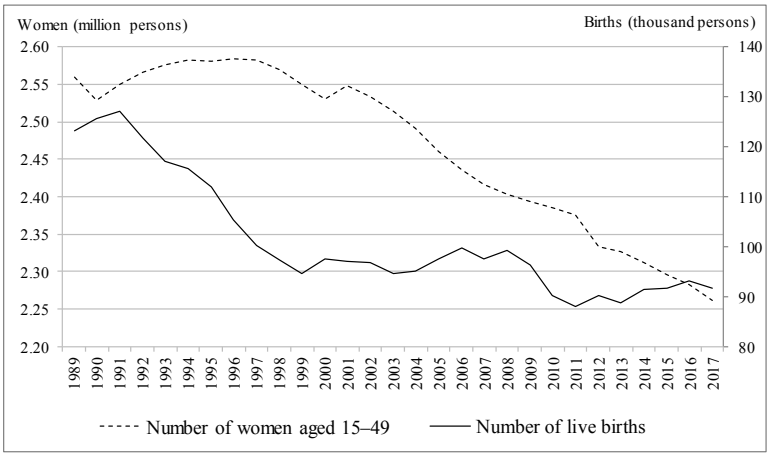
A comparative international study has highlighted the key role of social factors in the realization of 'childbearing intentions' (Kapitány and Spéder, 2012). We examined the likelihood of having children over a three-year period among people who reported their intention of having a child within two years (*Figure 8*). The results revealed major differences across countries. Whereas in the Netherlands, 75 per cent of such intentions came to fruition, in Switzerland the figure was 55 per cent, in Hungary – 40 per cent, and in Bulgaria – 38 per cent. These findings suggest that childbearing intentions are

more likely to come to naught in post-socialist countries than in Western Europe.

As to group-level factors, it was concluded that age-related barriers act alongside relationship difficulties. We found that those who intended to have their first child at a later age were more likely to be unsuccessful: they have less time in which to fulfil their plans and there is an age-related decline in female fertility (Kapitány, 2010). Therefore, forgone childbearing might be the unintended consequence of postponement. Our analysis also suggests that the rapid and unforeseen changes in the institutions and social structures of the post-socialist countries has created a societal context in which it is very difficult to realize childbearing intentions; the result is a constant revision of those plans. Research also suggests that both labour market policies and family policies (which keep changing) also hinder the fulfilment of childbearing intentions – a negative effect that is strongest among women with aver-age or below-average education.

As regards population trends, there is one particular Hungarian feature that should be mentioned, as it will have a major negative impact not so much on the total fertility rate (the average number of children), as on the number of births. The fact is that the current age distribution of the Hungarian population has been heavily influenced by incentives and constraints. The number of births in Hungary spiked in 1952–54, as a result of policies pursued during the so-called 'Ratkó era' (after the health minister of the time, Anna Ratkó).

Figure 9 *Women of childbearing age (15–49) and number of live births, 1989–2017*



Source: HCSO Vital Statistics, author's calculation.

The 'Ratkó cohorts' came of childbearing age in the early 1970s, just in time to benefit from a population-policy package introduced in 1973. Consequently, the number of births was exceptionally high in 1973–77. This generation is now in its early 40s. The size of subsequent female cohorts is shrinking year on year, and therefore the number of women entering childbearing age is set to decrease over the coming decades (see *Figure 9*). Thus, the number of births will continue to decline, even if childbearing propensity increases.

3. Trends in mortality

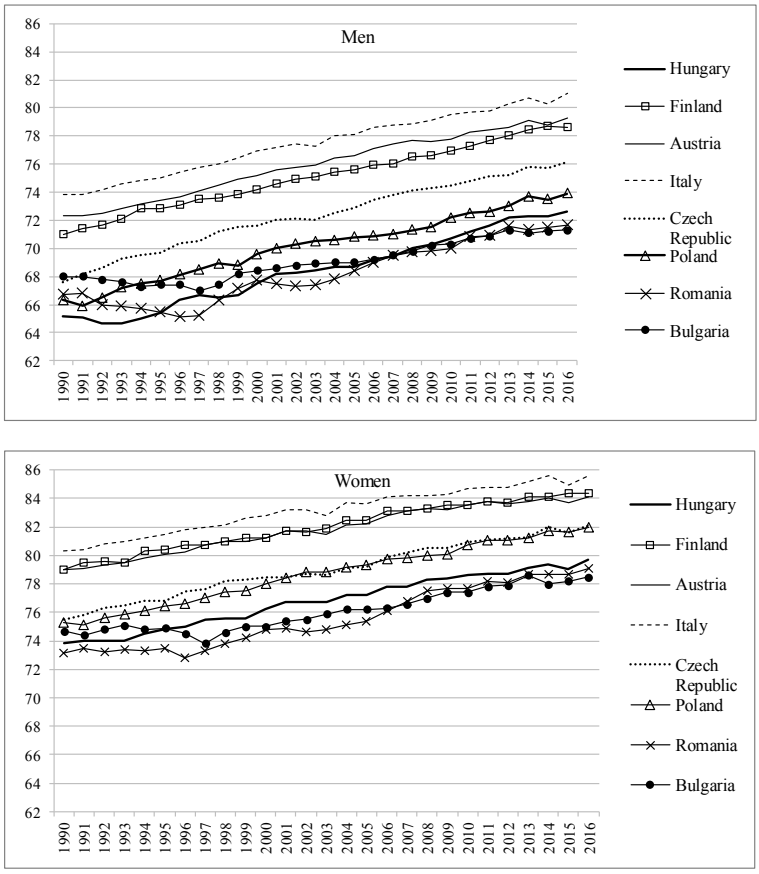
Life expectancy at birth is one of the most comprehensive indicators of mortality and wellbeing in a given population. Life expectancy at birth is a hypothetical measure that indicates on average how long people born in a given year would live if current mortality (age-specific mortality rates) prevail in the future. However, it is worth pointing out that life expectancy is much more an indicator of past living conditions and current mortality, because it is calculated on the basis of mortality, and thus also reflects past lifestyle and diet, as well as the 'efficiency' of the healthcare system, etc. At the same time, it also hints at future trends, because deterioration in mortality during non-exceptional times is relatively uncommon. (The majority of post-socialist countries have seen two such periods of substantial deterioration since the Second World War.)

Life expectancy increased substantially in Hungary in the post-war period, and until the early 1960s even kept pace with that seen in Western Eu-rope (Józan, 2002). After that, only women saw an improvement, while male life expectancy declined and stagnated in the quarter century until regime change.

After the regime change, life prospects deteriorated for half a decade: life expectancy fell for both men and women (although to a smaller extent among the latter). The nadir was reached in 1993–94; after that there was a marked improvement in life expectancy. In the two decades that followed, life expectancy at birth increased to 72.6 years for men and 79.7 years for women – increases of 7.4 and 5.9 years, respectively.

Comparison of the Hungarian trends in life expectancy with international data provides an important point of reference (*Figure 10*). The majority of post-communist countries saw a decline after regime change; this was particularly large in the former Soviet states, especially the Baltic countries (Vallin, 2004; Kovács, 2012). However, there was no decline in Poland or the Czech Republic. All things considered, Hungary has not succeeded too well in catching up with the Western European countries. There is still potential for improvement in life expectancy in our country.

Figure 10 *Trends in life expectancy in selected European countries, by sex, 1990–2016 (years)*



Source: Eurostat (downloaded: 3 December 2018).

The life expectancy of women differs considerably from that of men in every country; in Hungary, despite considerable improvements, the life expectancy of men still lags far behind that of women – seven years behind. The main reason for this is that mortality among middle-aged men – although it has clearly improved over the past decade – still substantially exceeds that of women (Kamarás, 2012: 33).

Comparison of healthy life expectancy allows for a more nuanced overview of the differences between women and men (Faragó, 2007). In this respect,

the gap is much smaller (58.7 and 60.9 years, respectively); thus women (will) spend only a minority of their additional life years in good health.

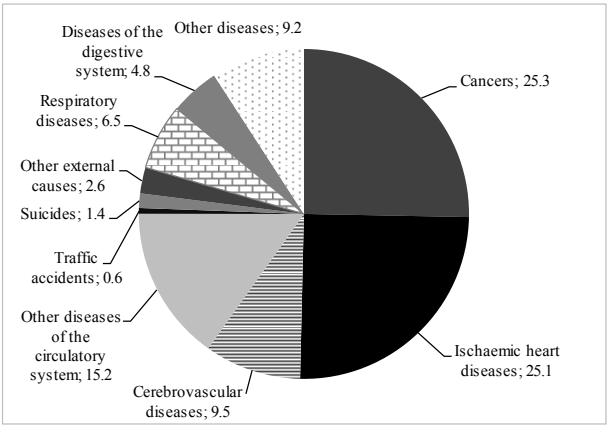
The past quarter of a century has seen increased social inequality in relation to education and employment status, and the changes in life expectancy have not been the same across the board (Klinger, 2007; Kovács and Őri, 2009). While there was an overall decline in life expectancy in the very early 1990s, in practice that meant life expectancy for those with lower education fell, whereas it merely stagnated for those with higher levels of education. When they came, improvements clearly benefited those with higher levels of education, while the life expectancy of those with medium or low levels of education has increased only recently (Kovács and Őri, 2009).

Consequently, the gap in life expectancy of men at age 30 with upper secondary education and those with only lower-secondary education in-creased from 5.5 to 8.4 years in the two decades to the end of the 2000s. For women, the difference grew from 1.5 to 4.2 years. It should be noted that differences in life expectancy by social status have diminished in recent years (Kovács and Őri, 2009: 57ff.).

The analysis of factors associated with mortality starts with the *distribution of deaths by main cause*. In Hungary, cardiovascular disease continues to be the main cause of death – nearly half of all deaths. Cancer (25 per cent) is the second main cause of death. Mortality related to diseases of the digestive or respiratory systems is also significant. 'Voluntary deaths' represent a relatively small (but from a societal perspective significant) cause of death: the share of suicides (seen during the communist times as the *morbus hungaricus*), was 1.4 per cent (*Figure 11*).

With regard to the distribution regarding cause of death, although there have been no major breakthroughs in the past quarter of a century (Kamarás, 2012: 36), a number of important developments can be reported. *Cardiovascular* mortality is high in European terms, and it can be argued that there has not yet been a 'cardiovascular revolution', which would be a key turning point in the improvement in life expectancy. Kovács (2012), however, concludes that within this category, mortality associated with cerebrovascular disease (such as stroke) has improved significantly and is approaching Western European levels. Cancer related mortality has declined only slightly in Europe, and the Hungarian trend by and large mirrors the European trend – with the exception of lung cancer, where Hungarian death rates are clearly higher.

Figure 11 *Distribution of mortality by cause of death in Hungary, 2015 (per cent)*



Source: HCSO Vital Statistics, author's calculation.

The figure for deaths caused by traffic accidents is low (1.1 per cent), but deserves attention because it is an avoidable cause of death. It is also especially important from the perspective of life expectancy, as it mostly affects young people, whose lost life years drag down the improvement in life expectancy. Following a rise in traffic-related deaths straight after the regime change, the trend is now basically declining and is largely comparable to Western European levels.

Suicide was declining from the mid-1980s; however, this trend seems to have stalled in the past decade. It is important to note that although Hungary no longer has the highest suicide rate in Europe, it is still above the European average. Suicide risk still has gender and territorial dimensions: men and older people are more at risk, and the centuries-old territorial pattern persists, with suicide much more common in the Great Plain than in the Transdanubian region or Northern Hungary.

4. Age distribution and ageing

From a demographic perspective, the age distribution of the population is jointly determined by fertility, mortality and net international migration. Fertility has a direct impact on the size of the youngest generations; mortality affects older generations; while migration is more spread out (although it mostly influences younger and middle-aged adult groups). Age distribution

over time is also shaped by population waves, and by how large cohorts progress in the age pyramid.

Population ageing is a widely acknowledged phenomenon that is also clearly reflected in the age distribution. However, it is useful to give a brief overview of the extent and drivers of population ageing, because alongside the well-known trends, there are also some less well-documented factors.

There have been some radical changes in the age distribution of the population (*Table 2*). Whereas immediately after regime change more than a third (34.4 per cent) of the population was very young (aged under 25 years), now just over a quarter (25.8 per cent) of the population falls into this cate-gory. The share of young adults and the middle-aged (25–54) has increased slightly and the 55–64 age group has expanded substantially. Finally, there has been an increase in all older age groups.

The fall in the proportion of children and young people can be clearly attributed to low fertility; meanwhile in the expansion of the older age groups the main driving force is increased life expectancy.

Earlier birth 'peaks' can be traced in the distribution of middle-aged groups within the age pyramid – i.e. those born in the 'Ratkó era' ('Ratkó-children') and their children ('Ratkó-grandchildren'). The increased numbers of 55–64-year-olds show that the 'Ratkó-children' are about to retire (or have already done so).

The entry of the 'Ratkó-grandchildren' to middle age, however, is not the main reason for the increase in the proportion of that age group (because it does not fully offset the exit from the group of their parents' generation). Rather, the increase results from migration – in particular, the settlement of ethnic Hungarian migrants from neighbouring countries. Since migration propensity is highest among young adults, net migration mostly boosted the size of the population aged 24–54 years.

Table 2 *Trends in the age distribution of the population, 1990–2016 (per cent)*

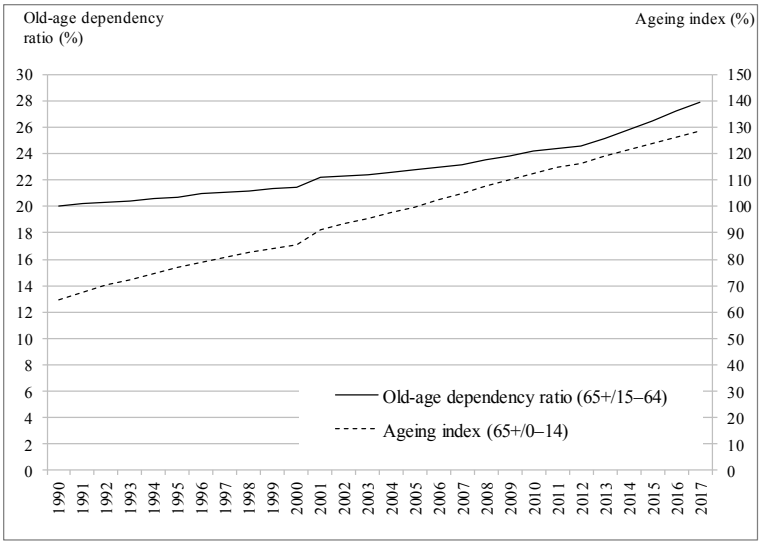
Age groups	1990	2001	2011	2016
0–14 years	20.5	16.6	14.6	14.6
15–24 years	13.9	14.5	12.2	11.2
25–54 years	40.9	42.5	42	41.9
55–64 years	11.5	11.2	14.5	13.8
65–79 years	10.8	12.4	12.9	14.4
80+ years	2.5	2.7	4.1	4.2
All	100	100	100	100

Source: Population census 1990, 2001, 2011, Microcensus 2016.

Population ageing is observed in many countries across the world. It is widely acknowledged that the continued improvement in life expectancy is a major contributor to this; however, the role of low fertility remains largely ignored. Population ageing – the increase in the proportion of older age groups – results from a combination of these two demographic trends.

A number of indicators are available to measure population ageing. In demography, the most commonly used measure is the ratio of people aged 65 or over in the total population. According to this indicator, the number of older people increased by 350,000 (from 1.37 million to 1.82 million) between 1990 and 2016. As a result, the share of the elderly was 5.5 percentage points higher than in 1990: 13.1 per cent of the population in 1990, 15.1 per cent in 2001 and 18.6 per cent in 2016. Growth has accelerated especially in the past decade.

Figure 12 *Ageing index and old-age dependency ratio, 1990–2017 (per cent)*



Source: HCSO Population Data, author's calculation.

Alongside the ratio of the older population, other common measures include the old-age dependency ratio and the ageing index. The dependency ratio is the number of older persons (aged 65 and over) per hundred persons aged 15–64, while the ageing index is calculated as the number of older per-sons per hundred persons aged 14 or under. The former indicator represents the current

state of ageing, while the latter forecasts future trends. The first is often used in the context of the sustainability of pension systems.

Both indicators have been growing steadily (*Figure 12*). The old-age dependency ratio was 20 per cent in 1990, 21.4 per cent in 2000, and it reached 27.9 per cent in 2017. In 1990, the ageing index stood at 64.5 per cent (i.e. for every 10 children or young persons there were six older people). A dramatic fall in fertility meant that the value of the index reached 85.5 per cent at the turn of the millennium; by 2005, the shares of the older and the younger generations were balanced; and in 2017, the number of older people exceeded that of children by more than 25 per cent, the ageing index reaching 128.5 per cent. In other words, for every 10 children or young persons there are approximately 13 older people.

Population ageing and improving life prospects for older people call for a further division of the older age groups. Three age groups are often distinguished within the elderly population: the 'young olds' (65–75), the 'older olds' (75–85) and the 'oldest olds' (85+). According to population data, the size of each group increased considerably between 1990 and 2016. The number of the 'oldest olds' doubled, while that of the 'young olds' increased more than 30 per cent; meanwhile there were more than 20 per cent more 'older olds' than two decades earlier. There are more women than men in the older population due to their better survival rates, and the gap widens with age (*Table 3*).

Table 3 *Size of older age groups, 1990, 2001, 2016*

Age groups	1990	2001	2011	2016
65–74 years	797 450	927 644	946 815	1 049 743
75–84 years	489 013	493 047	565 288	595 379
85+ years	87 459	125 559	165 017	176 162
All	1 373 922	1 546 250	1 677 120	1 821 284

Source: Population Census 1990, 2001, 2011, Microcensus 2016.

Population ageing is unstoppable; however, its extent varies significantly across societies. While there is a certain convergence in life expectancy in the developed societies and life prospects continue to improve even in countries with high life expectancy, the dynamics of population ageing are also determined by differing levels of fertility, and the contribution of net migration should not be ignored either.

5. Conclusions

This study has set out to describe the main natural population trends of the last quarter century. The key aim has been to highlight the most important changes focusing on fertility and mortality trends. However, it has also been necessary to present some trends in 'nuptiality' to understand changes in fertility behaviour. Finally, an overview of the past three decades has shown that the current situation is characterized by a slow, unstoppable transformation of the age distribution: the growth in population ageing.

Although explanations have been added to help the interpretation of certain trends, the analysis has not addressed causal factors. This has been done elsewhere by others (to some extent by ourselves), although further analysis is required.

After the regime change there were farreaching changes in partnership and fertility behaviour that resulted (as expected) in a decline in fertility. However, what was not predicted was that the number of births would not start to increase clearly and perceptibly after the end of postponement. This suggests that the structure of childbearing behaviour is also undergoing trans-formation. Mortality decreased modestly as a result of an improvement in life expectancy: the share of the elderly is increasing within the population, and mortality primarily affects them.

Finally, it was mentioned that positive net migration throughout the past quarter of a century has mitigated the extent of population decline. Nevertheless, positive net migration seems to be drying up, and therefore there should be reduced reliance in the near future on net migration to stabilize the population. Although the further improvement of life expectancy is predicted, population decline and ageing seem inevitable in the future; however, their extent will be heavily influenced by fertility and net migration.

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