

# 3.

## FERTILITY

*Balázs Kapitány – Zsolt Spéder*

### MAJOR FINDINGS

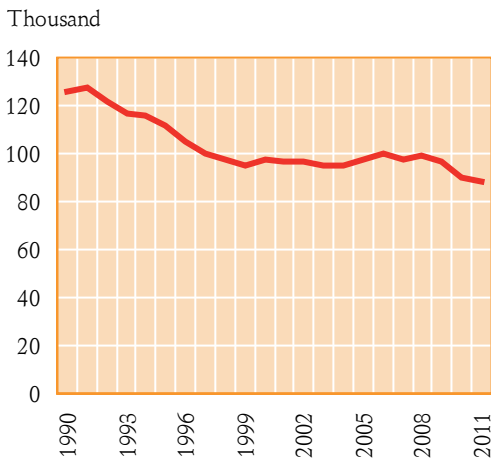
- At present, fertility in Hungary is the lowest in Europe and, in fact, in the whole world.
- The past three years witnessed a considerable decrease in the number of live births (10 per cent), comparable only to the one in the second half of the 1990s.
- The rate of having children out of wedlock is already 42 per cent. The majority of children arriving out of wedlock are born to parents living in cohabitation.
- The tendency of having children at an ever higher age continued in the discussed period. The mean age of mothers at birth reached 30 years in 2011, which is the average also for the countries of the European Union.
- The key factors contributing to the postponement of childbearing are the longer period of education, the shift in the forms of partnership, the decreasing popularity of marriage, and the difficulties of making an independent livelihood.
- The rate of those having a degree is rapidly growing among mothers, which is one of the causes of the fact that reconciliation of work and motherhood is more important than ever.
- It is highly probable that the rate of parents with two children will decrease in the future and that of those remaining without a child will grow just as that of those with one or three children.
- A significant portion of planned children are not likely to be born. Only one third of future parents are able to fulfil their intentions in the short run (within three years) in Hungary today. This rate is much lower than the similar one in Western Europe.

## CHANGES IN THE WILLINGNESS TO HAVE CHILDREN IN TIME AND SPACE

In 2011 88,050 children were born in Hungary, which was the lowest figure of all times. In 2008 the number of births still exceeded 99,000 but a considerable decrease can be observed ever since. The past three years witnessed a drop of 11 per cent. A decrease of similar magnitude last occurred in the period 1995–98.

The drastic fall started in May, 2010 as a shock and the following months fell behind the figures for the same months of previous years by about 10 per cent. Comparing the period between May, 2009 and April, 2010 with that between May, 2010 and April, 2011, the fall is 9.5 per cent, which is the largest 12 months/12 months decrease in the past fifty years (See KSH 2011).

**Fig. 1. Number of live births in Hungary**



Source: Central Statistical Office Demographic Yearbooks.

One of the primary aims of this chapter in the Demographic Portrait for 2012 is to

show the background of this unexpected and unprognosticated fall in the willingness to have children and the factors contributing to it. First we intend to evaluate the Hungarian data in international comparison, then analyze the demographic and social circumstances changing the young people's attitude towards having children.

What are 88,000 live births 'enough for' in Hungary today? The answer lies in various demographic indicators. The most easily understandable of them is the so-called total fertility rate which has to exceed 2 if a society wants to be able to reproduce itself. In 2010 the total fertility rate in Hungary was 1.25. For the year 2011 no detailed data are available for the time being but it is likely to be around 1.24 (KSH 2012).

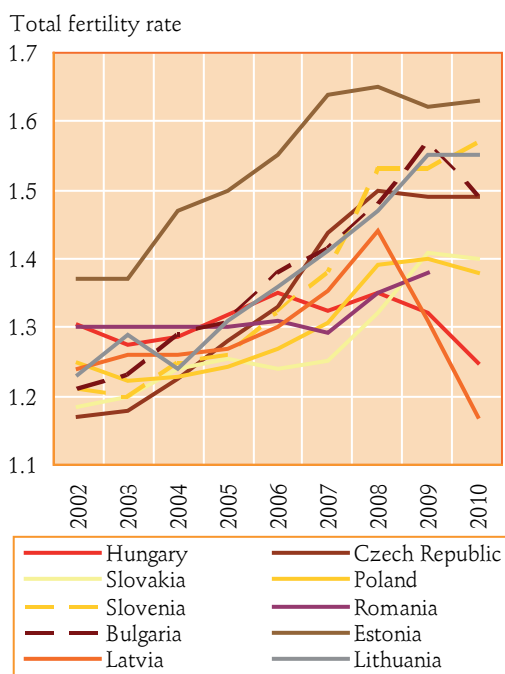
The total fertility rate falls below 1.3 only very rarely but this is not unique. Demographers call the phenomenon lowest-low fertility.

The significance of the problem is indicated by the fact that should a total fertility rate of 1.3 last for many years in a stable population where the average age at childbearing is 30, the number of the given population would drop to half in every 45 years. Although the population of Hungary has been steadily decreasing for over thirty years, this radical decline has not ensued yet. The reason for this is that the Hungarian population cannot be considered a stable one from demographic respect in that childbearing is postponed to a later age, life expectancy is growing, and the number of immigrants exceeds that of emigrants. These three factors are, however, not demographic laws, consequently a possible change can result in the acceleration of the population decrease. A lasting improvement can be expected only if fertility starts to grow in this country.

Lowest-low fertility is not unprecedented in Europe. Around the turn of the millennium both East Central European and Southern European countries were characterized by fertility below 1.3. Hungary produced similar

results for a few years at that time but they were still higher than those of the surrounding countries. For example, in 2002 it was only in Hungary and Estonia that the total fertility rate exceeded 1.3 among the ten newly accessing member states of the European Union (Fig. 2). However, in most countries with low fertility the willingness to have children started to rise in the middle of the first decade of the new millennium, followed by a period of stagnation since 2008. The fact that fertility has been stagnating in Hungary since 1999 gives rise to justified pessimism. The past two or three years did not bring with them the long-expected rise (the start of the recuperation period) but a drastic drop took place instead. There were such recession-stimulated drops in some other countries (e.g., Latvia) as well.

**Fig. 2. Total fertility rate (TFR) in the ten new EU member states**



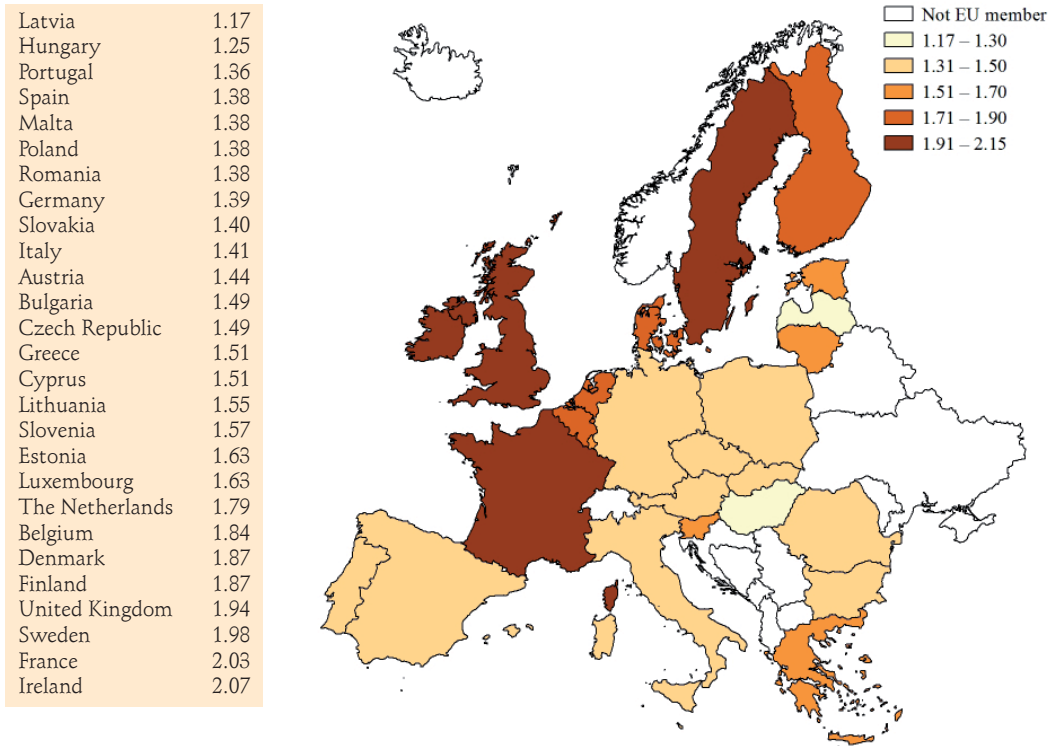
Source: Eurostat.

According to the latest international data from 2010, fertility in Hungary is one of the lowest in Europe and the world. Taking the 27 EU states into consideration, we are last but one, preceding only Latvia.

With a slight simplification, one might say that about one third of the European countries (France and the northern states) does not have serious fertility problems, the continental states of Western Europe have an average rate of 1.6, while the southern states, the German-speaking countries, and the former socialist ones are characterized by fertility rates around 1.4 or 1.5 (Map 1).

In several economically developed countries, the decreasing fertility of the past few years is generally attributed primarily to the economic world crisis. Although current research has proved that the crisis (mainly the resulting unemployment) can really influence the willingness to have children negatively, seeing the overall picture of Europe one would say that blaming exclusively the economic world crisis for the decreasing fertility of the population is definitely a simplification of the problem.

On the one hand, it is an undeniable fact that in the two countries most effected by the decrease in fertility (Latvia and Hungary), the GDP dropped to a great degree, on the other hand there are countries – namely Lithuania and Ireland – where economic crisis did not lead to fertility decline. Taking the whole of Europe together, the decrease of fertility is minimal. The economic crisis beginning in 2008 probably influenced the willingness of the people to have children negatively but this effect was not general and failed to influence the majority of the European societies or did so only to a far smaller extent than in Hungary.

**Map 1.****Total fertility rates in the EU member states, 2010 (or the latest available data)**

Source: Eurostat.

### INCREASING MEAN AGE AT CHILDBIRTH AND THE CHANGING FAMILY SETTING

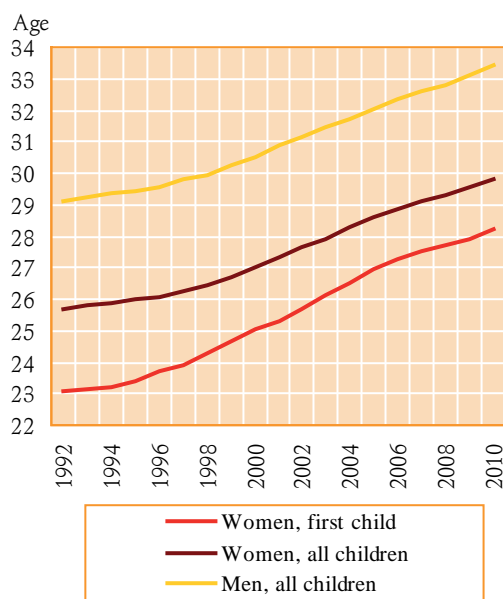
The dramatically low level of the willingness to have children goes back to a great degree to the postponement of childbearing. The earlier pattern of having children at a young age ceased to exist and Hungarian women increasingly follow the West European model of postponing the birth of their first children

to their late twenties or early thirties. This abrupt shift in the timing of births decreased the fertility rates of the individual calendar years to a great extent. The first signs of the slowing down of this process could be observed also in Hungary in the years 2006–2008 but since then – in parallel with the decrease in fertility – the pace of postponement has started to increase again.

The most evident indicator of the growing age of parents is the 'mean age of women at

first birth' and 'at childbearing' (Fig. 3). In 2011, the average age of first mothers was between 28 and 29 years, while the mean age at childbirth is presumably over 30. The age of fathers at childbearing is steadily rising, too. A „typical“ father today is 33 or 34 years old, while around the change of regimes about twenty years ago this figure was 28 or 29 years.

**Fig. 3. Mean age of women and men at childbearing**



\*Known fathers.

Source: Central Statistical Office, Demographic Yearbooks, authors' calculations.

The question is how far the limit of postponement can be pushed from biological point of view. It is, namely, a fact that female fertility decreases with age. According to the calculations of the French demographer Henri Leridon, the chance of a healthy woman of thirty to become pregnant in a year is 75 per cent, five years later it is 66 per cent, and at forty it is merely 44 per cent. The rate of couples unable to have children at all

despite their intentions might be 7 to 12 per cent when the woman is thirty, 13 to 22 per cent five years later, and 24 to 46 per cent when the woman reaches forty (in detail see Kapitány 2010).

Consequently, the postponement of childbearing to the thirties will most probably decrease the number of births otherwise planned. In January, 2011, the number of women in their thirties having no children was about 213,000, most of whom planned to have children. The respective figure around the turn of the millennium was below 100,000.

Although the postponement of having the first child makes the growth of Hungarian fertility difficult, it does not make it impossible on the whole. The mean age of first mothers is still below the EU average (though only with about half a year) and there are countries (France and Ireland) where the total fertility rate is above 2 even though the mean age at birth is above thirty.

When examining the changes in fertility in the past few years, one has to take also the changing social status of mothers into consideration. As it has already been mentioned, a typical mother today is around thirty, i.e., she was born around 1980. This generation is the first among those affected by the expansion of higher education after the change of regimes. Consequently, the year 2010 was the first when women with university or college degrees represented the largest group among young mothers (35.0%), surpassing the rate of high school graduates (31.8%) and those finishing only primary school or a vocational school (31.5%). For the sake of comparison, we have to note that around the turn of the millennium the share of the first category was 15.1 per cent and that of the last was 48.4 per cent.

This is important because the mothers' level of education greatly determines their conditions on the labour market at the time

of their decision to have a child. It has been a tendency in Hungary for a long time that women having university or college degrees had their first children while still employed (or in the case of further children they had been employed when having the first child and enjoyed family allowance since then). This model has not changed ever since. In 2000 91 per cent of women with degrees were employed at the time of birth, and in 2010 this figure was 90 per cent. In the case of less educated women the situation is different. In 2010 80 per cent of high school graduates and 39 per cent of mothers with primary school or vocational school certificates had had jobs before childbirth. (In the case of higher parity we included also those enjoying childcare allowance.) So it is natural that with the changing social environment and with the growing level of education among women the reconciliation of work and motherhood has become ever more important for would-be mothers and it has become less likely that a woman should decide for having a child without having a job first.

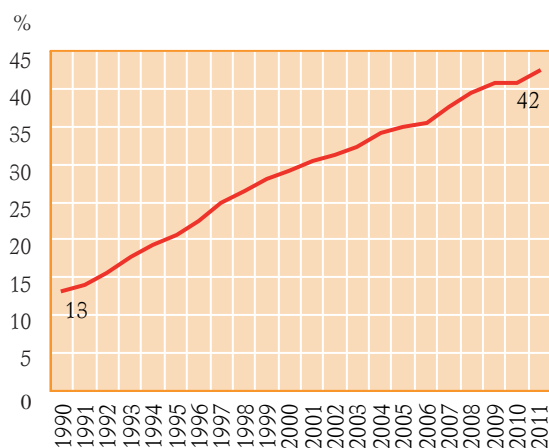
However, while there is a growing need for women to have children when they are employed, data of the labour market show that the employment rate of women of the age group 25–49 having no children fell from 82.6 per cent in 2007 to 80,6 per cent in 2010 due to the economic crisis. The increasing importance of being safely employed is indicated by the fact that the same rate for women with children aged 0 to 2 years rose from 10.2 to 12.1 per cent in the same period. The repeated modifications of the family support system in the past few years did not make the situation of women planning to have children easier, either (see chapter 4 in this volume).

## CHILDREN BORN OUT OF WEDLOCK

One of the most interesting changes of the past few years was that the increase in the rate of children born out of wedlock broke in 2009. From that year onwards it has been stagnating at a level of 41 per cent. The latest data from 2011 indicate that this was not a turn in the trend but we can speak only of a short-term stop as the rate of extramarital births continued to increase in 2011, reaching a level of 42.3 per cent according to preliminary data.

Having children out of wedlock is largely determined by the social status of mothers. As the data in Demographic Yearbook for 2010 testify, nearly three quarters of mothers with primary school and almost half of those with vocational training gave birth without being married, while the respective rate for high school graduates was 39 per cent, and for those with higher education was merely 19 per cent.

**Fig. 4. Rate of births out of wedlock in Hungary**



Source: Central Statistical Office, Demographic Yearbooks.



Regional differences are also considerable, indicating that giving birth to legitimate children has become the 'privilege' of regions enjoying relatively good economic conditions. Births out of wedlock are around or below 25 per cent only in the 'elite' districts of Buda characterized by a generally high level of education, in the sub-regions of Budaörs and Pilisvörösvár close to Budapest, and along the western border (in the sub-regions of Sopron and Kapuvár–Beled).

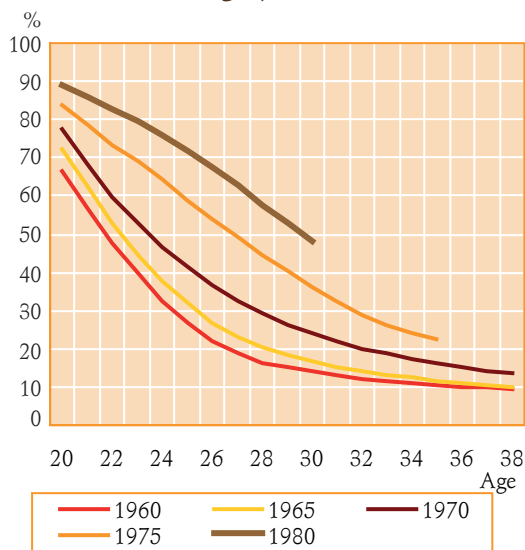
The other extreme is represented by strongly rural territories along the borders other than the western one. In the Selye sub-region in Southern Transdanubia 72 per cent of all children were born out of wedlock, and in the Bácsalmás sub-region this figure was 69 per cent. In 2010 there were 64 sub-regions in Hungary where the majority of children were born to unwed parents.

The changing pattern of fertility is largely influenced by the transformation of partnership, i.e., the postponement of establishing partnerships, the spreading of cohabitation, and the growing instability of partnerships. All these factors contribute to the ever smaller probability of having children and to the smaller number of children in general. There is, however, a new phenomenon that might help increase fertility, namely the growing number of new, lasting partnerships after the failure of the former one (i.e., after divorce and separation). New couples tend to wish to seal their partnerships by giving birth to a common child even though the members might have one or more children by their former partners.

It is not easy to discover which is the cause and the effect, though. It is, namely, well known that prior to 1990 many couples got married just because the baby was on the way. Today, this phenomenon is considerably less frequent, though it is still existing. Anyway, it seems that the shift in the forms of partnership played an important role in the decrease of fertility rates.

Our data on the number of children in families indicate that the predominant family model of the 1980s, i.e., a couple with two children, is deteriorating. Although final results can be obtained only about age groups above 45, it can be rightly presumed that the rate of childless women (Fig. 5) and of those with one child will most probably grow among those in their thirties at present, while the rate of those with three or more children will not decrease or will even rise slightly. Due to the growing instability of partnerships, the rate of those among women with two children whose offsprings are by different fathers will probably grow in the future.

**Fig.5. Rate of childless women in a given age, by birth cohort in Hungary**

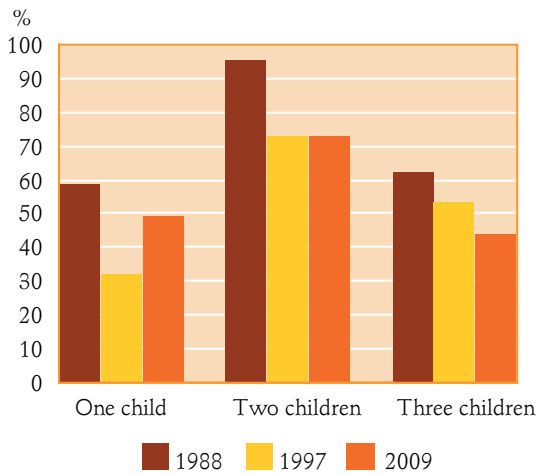


Source: Central Statistical Office Demographic Yearbooks, authors' calculations.

The shift in the number of children is mirrored also by the couples' preferences as to the desirable number of children, although the changes in this respect do not seem to be very pronounced. As compared to the period before the change of regimes, the rate of those

among people in their fertile years who agree with the statement "it is very good or good for a married couple to have two children" (see Fig. 6) decreased by 20 per cent. At first, the popularity of the single-child family model decreased but started to increase again, whereas that of families with three children seems to decrease throughout the whole period. To sum up, although families with two children still seem to be the most popular, the changes in the number of children are reflected also by the new preferences. The rate of those finding the situation of couples with two or more children favourable definitely decreased in the examined period.

**Fig. 6. Distribution of the opinions of Hungarian women and men aged 18-50 about the statement "It is very good or good for a married couple to have a certain number of children", 1988, 1997, 2009 (per cent)**

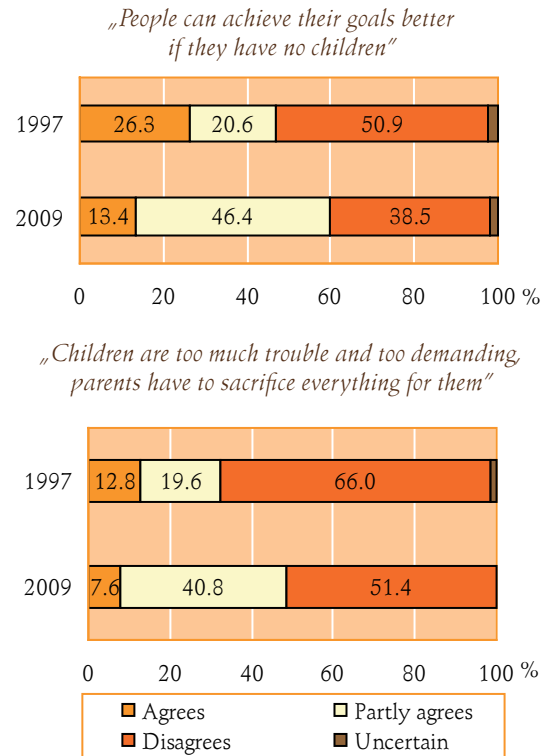


Source: S. Molnár 2011: 75.

It has been observed by many researchers that the changes in values considerably contribute to the people's willingness to have children. Growing individualism and the desire for autonomy and hedonism are blamed for decreasing fertility. A recent

research by members of the Demographic Research Institute has partly corroborated this view and partly made it more subtle. Comparing the situation in 1997 and 2009, the number of those who can no longer harmonize childbearing with other competing goals in their lives is definitely growing. The rate of those who at least partly agree with the statement "People can achieve their goals better if they have no children" grew from 47 per cent to 60 per cent in the given period (Figs. 7 and 8). It is still more interesting that the rate of those who were ambivalent ('partly agrees') about it more than doubled (from 20 per cent to 46.4 per cent).

**Fig. 7-8. Distribution of the opinions of Hungarian men and women aged 18 to 50**



Source: S. Molnár 2011.



So it can be established that the past decade witnessed a growing discrepancy between having children and reaching other socially important goals like having jobs and reaching a certain level of consumption, which resulted, at the same time, in a growing ambivalence in connection with having children.

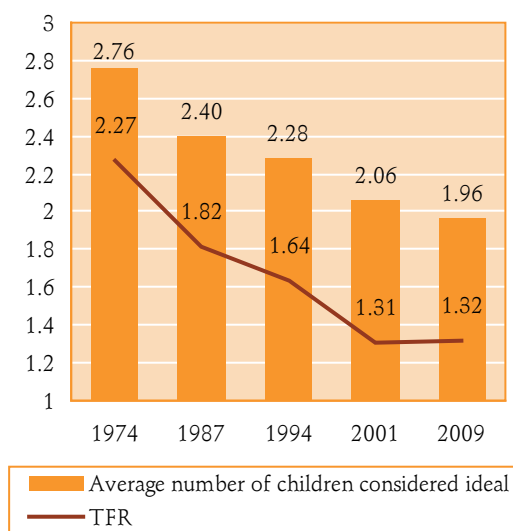
## INTENTIONS AND OUTCOMES

Today it is a well-known fact that there is a great difference between a couple's plans as to the number of their future children and the actual outcome. The plans of some are considerably postponed or never come true, while those of others are realized earlier than expected. Although it is not necessarily so, in societies where intended family planning prevails, the average plans for the size of the family always exceeds the definitive number of children born in the families (Fig. 9). In a survey starting with the year 1974 the ideal number of children was invariably higher by 0.5 or 0.6 than the actual TFR. On the basis of research results on the number of children held ideal and planned, according to which underachievement is always higher than overachievement, we can safely establish that not only the actual TFR but also the rate of completed fertility will remain considerably below the expected ideal number of 1.96 children (2009).

Although we are far from being able to explain the discrepancy between the ideal, the intended, and the actual number of children, we can point out some group specific and contextual factors. It is clear that those who plan to have their first child at a higher age are more likely to fail partly because they have less time to fulfil their plans, partly due to biological reasons. Since the birth of the first child, as a decisive life-changing event,

excludes the realization of several aims of the mother for good, it is evident that would-be first mothers (females having no children) are more likely to postpone childbearing than women who already have one or more children. It is similarly evident that people living in a stable and happy partnership are more likely to be able to realize their plans, so the growing instability of partnerships also contributes to frustrating the plans to have children. Finally, unexpected events like the deterioration and dissolution of a partnership, a new job, more favourable opportunities abroad, etc., similarly often make people revise their plans as to having children, which often results in having less than planned.

**Fig. 9.** *The average ideal number of children among persons below 50 and the TFR for the given years*



Source: S. Molnár (2011), authors' chart.

A comparative study of international scope called attention also to the fact that the social context plays a key role in realizing plans for having children (Kapitány-Spéder (2011). We wanted to know what the chances of

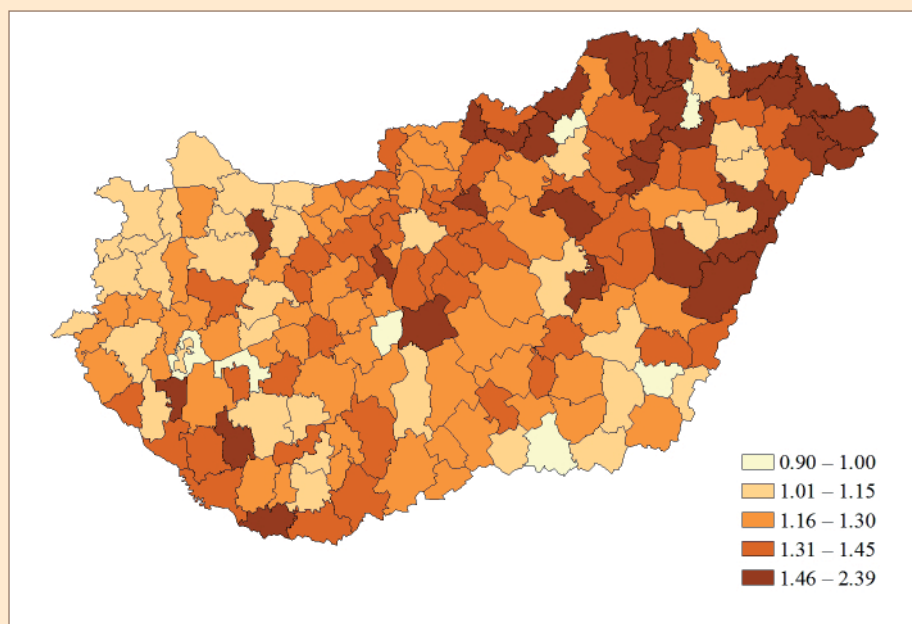
## TERRITORIAL DIFFERENCES OF FERTILITY IN 2010

The considerable territorial differences as regards the willingness to have children in Hungary represent a rarely studied but fairly important aspect of fertility. The total fertility rates calculated for certain sub-regions could be over double the values for others in 2010. In Northeastern Hungary, there were four sub-regions in 2010 where the TFR exceeded 2, i.e., the replacement of the population was safe in the long run. These were the Bodrogeköz, Abaúj-Hegyköz, Edelény, and Encsi sub-regions. The northeastern part of the country is generally characterized by a higher willingness to have children, while in Western Hungary and in the southern part of the Great Plains low fertility is more general. However, the differences cannot be attributed solely to the

usual discrepancy between east and west or urban and rural environments. An example for this is the Tokaj sub-region in Eastern Hungary which is one of the six ones with a TFR below 1. The rest of this group is dispersed throughout the country.

Budapest and other strongly urban sub-regions like Győr and Pécs among others can be found in the second half of the list but definitely not at its end. The 1.35 TFR of Pest County can even be considered high in national comparison. It is the third highest among the counties in the country. Certain well-to-do Buda districts also produce a rate above the national average. However, one must be cautious in comparing certain districts of Buda and the commuter belt around the capital as several couples living in the central districts consciously move to the suburbia or to the greener Buda districts when they plan to have children.

*Total fertility rate in Hungary by sub-regions, 2010*



Source: Authors' calculations on the basis of Central Statistical Office vital statistics.

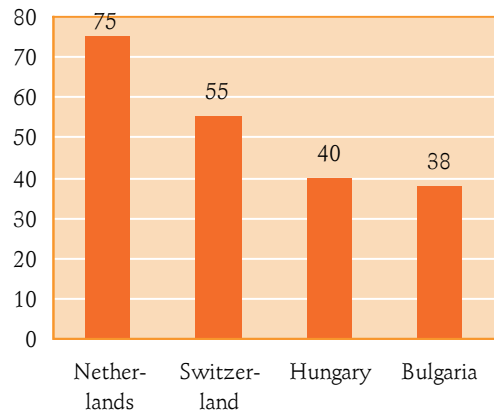
people planning to have a child within two years were to realize their plans within three. The results largely differed from country to country. Whereas in the Netherlands 75 per cent of the plans were realized, in Switzerland this rate was 55, in Hungary it was 40, and in Bulgaria merely 38 per cent. The results indicate that people in the former socialist countries are more likely to leave their plans unfulfilled than in Western Europe.

Our analysis revealed that in the former socialist countries the rapid and unexpected institutional and social changes created a social environment that makes the realization of the intentions to have children highly difficult and involves a constant revision of such plans.

Our research results indicate that the situation on the labour market and in the family support system (i.e., their instability) contribute to the tendency according to which women in the middle layers of society have rapidly been losing their willingness to have children since 1990 and are by now at the bottom of the scale with usually only one child, while the higher social layers tend to become polarized, i.e., the rate of childless women and that of those with several children

grows and the rate of mothers with a single child decreases. It can be established that the labour market as it is today hinders the realization of plans for childbearing in many cases and the negative effect is the greatest in the case of mothers with a secondary level education or even less already having children and planning still more.

**Fig. 10. Rate of those who realized their plans among persons planning to have children within two years in four European countries (per cent)**



Source: Kapitány – Spéder 2011.

#### THE CONTRIBUTION OF THE ROMA (GYPSY) POPULATION TO FERTILITY IN HUNGARY

Recently, the Roma population can be heard of ever more often in the news and the much debated ethnic group has come to the forefront of public interest. Their objective analysis is rendered difficult by the fact that in contrast with the practice of other countries, data collection for vital statistics as regards births does not contain information about the ethnicity of the newborn babies. Consequently, we do not have precise data on the willingness to have children among the Roma population. The data referring to nationality in the 2011

census will not be published before 2013 but the previous census result indicate that the majority of persons held Roma by their neighbourhood declare themselves Hungarians, consequently the statistical data on nationality are unsuitable for giving a reliable picture about the Roma ethnic group. The scope of sociological data collections is too restricted to make reliable estimates on the various age groups.

The territorially specified data available today come from the national competence survey (Országos Kompetenciamérés) beginning in 2001, in the course of which the rate of Roma children is registered by primary schools. Thus these

data are not based on self-declaration but on the classification of school directors.

According to the data for 2009, the rate of Roma children (or of those classified as Roma) among all children attending primary school in Hungary can be 13 per cent, which is about double of the 6 to 7 per cent share of the Roma community within the total population of the country [cf. Papp (2011)]. These data roughly reveal the share of children born to Roma parents within all children born in Hungary or in different sub-regions around the turn of the millennium and in the years before that.

The chart shows that the rate of the Roma within the population and their contribution to the fertility rate is the highest in Northern Hungary where every fourth child attending primary school belongs to that ethnic group. In Borsod-Abaúj-Zemplén County their rate in the age group

can be estimated as high as 31.3 per cent. The three sub-regions of the country where Roma children in the age group 7–14 are a majority (Szikszó, Edelény, Bodrogeköz) can similarly be found in Northern Hungary. There are 21 sub-regions in the country where at least one third of all children born around the turn of the millennium belonged to the Roma ethnic group. Some of these are not in the northern regions of Hungary, e.g., the Selye and the Zalkaros sub-regions in South-western Hungary.

The above statistics indicate that the next twenty to thirty years will witness the considerable increase of the Roma population (or of those considered Roma by others) both as regards their numbers and rate. There will be larger regions in Hungary where the majority of the population will be of Roma origin.

***Rate of the Roma community within the total population and in the age groups attending primary school, 2009***

Regions/capital city	Estimated rate of the Roma within the total population*	Estimated rate of the Roma within the age groups attending primary school**
Budapest	4.6	8.1
Central Hungary (Budapest and Pest County)	4.4	8.1
Central Transdanubia	3.4	6.6
Western Transdanubia	3.0	6.7
Southern Transdanubia	8.2	16.0
Northern Hungary	14.1	27.8
Northern Great Plains	9.1	18.7
Southern Great Plains	3.6	7.5
<b>Total</b>	<b>6.4</b>	<b>13.0</b>

Source: \*Demographic Portrait 2009, p. 138; \*\*Papp (2011), pp. 259–263.

## REFERENCES AND FURTHER READINGS

- Andorka, R. (1978), *Determinants of fertility in advanced societies*, London: Meuthen.
- Aassve, A., Billari, F.C. and Spéder, Zs. (2006), "Societal transition, policy changes and family formation: Evidences from Hungary", *Journal of European Population*, Vol. 22. no. 2. pp. 127-152.
- Kapitány, B. (2010), "A kései gyermekvállalás kockázatai" (Risks of late childbearing), *KorFa népesedési hírlevél*, 2010:2 (downloadable from [www.demografia.hu/korfa](http://www.demografia.hu/korfa)).

- Kapitány, B. and Spéder, Zs. (2012), "Success and failure in the realisation of childbearing intentions. Comparing influencing factors in four European countries", *Population* (forthcoming)
- KSH 2011. Demográfiai évkönyv 2010 (Demographic Yearbook 2010), Central Statistical Office, 2011.
- KSH 2011. "A hazai termékenység legújabb irányzatai" (The latest trends of fertility in Hungary), *Statisztikai Tükör*, 80, p. 4. (downloadable from <http://www.ksh.hu/docs/hun/xftp/stattukor/hazaitermekenyseg.pdf>)
- KSH 2012. "Népmozgalom, 2011. január–december" (Vital statistics from January to December, 2011), *Statisztikai Tükör*, no. 7, p. 4. (downloadable from <http://www.ksh.hu/docs/hun/xftp/idoszaki/nepmozg/nepmozg11.pdf>).
- Oláh, L. Sz. (2003), "Gendering fertility: Second births in Sweden and Hungary", *Population Research and Policy Review*, 22/2, pp. 171-200.
- Papp, Z. A. (2011), "A roma tanulók aránya Magyarországon és a tanulói teljesítmények az általános iskolai oktatásban" (The rate of Roma schoolchildren in Hungary and the children's achievements in primary school), In Bárdi, N. and Tóth, Á. (eds.), *Asszimiláció, integráció, szegregáció (Assimilation, integration, segregation)*, Budapest: Argumentum, pp. 227–264.
- S. Molnár, E. (2011), "A közvélemény gyermekszám-preferenciáinak alakulása Magyarországon az elmúlt évtizedekben" (Preferences of the public as to the number of children in Hungary in the past decades), In Pongrácz, M. (ed.), *A családi értékek és a demográfiai magatartás változásai (Family values and the changes of demographic behaviour)*, NKI Kutatási jelentések 91 (Demographic Research Institute Research Reports 91), Budapest: Demographic Research Institute, 69–94.
- Spéder, Zs. and Kamarás, F. (2008), "Hungary: Secular fertility decline with distinct period fluctuations", *Demographic Research*, Vol. 19, Article 18, pp. 599–664.
- Spéder, Zs. and Kapitány B. (2009), "How are Time-Dependent Childbearing Intentions Realized? Realization, Postponement, Abandonment, Bringing forward", *European Journal of Population*, Vol. 25, pp. 503–523.
- Tomka, B. (2002), "Demographic diversity and convergence in Europe, 1918-1990: The Hungarian Case,"", *Demographic Research*, Vol. 6, No. 2, pp. 18-48. ([www.demographic-research.org](http://www.demographic-research.org))

