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FAMILY FORMATION AND CHILDBEARING IN THE 1990S AND AT THE TURN OF THE MILLENNIUM

FERENC KAMARÁS

INTRODUCTION

The study of the relationship between demographic processes and the socio-economic environment has remained one of the most exciting areas of research in demography. The closeness of this relationship and its direction and its direct or indirect character have been disputed issues. Studies of this nature are usually conducted with the expressed or unexpressed intention of finding some explanation for the influencing factors and the motivations of change. It does not, however, mean that with a parallel analysis of demographic trends and the social environment, we should assume a causal relationship between studied events. An identical or similar social environment may lead to profoundly different demographic situations and conversely, demographic processes of the same level or direction may emerge under significantly different social or economic conditions.

The social and demographic events of the past decade deserve particular attention in so far as the nature of this relationship is concerned. The 1990s was a spectacular period of political, economic and social systemic change, accompanied by a rapid change of demographic phenomena and behaviour. The nature of the relationship between the two processes has not yet been clarified by close scholarly scrutiny. Such analysis requires a serious overview with a historical perspective and the work of empirical investigations exploring the causes and interrelationships. But it should be made clear that unusual and new demographic phenomena have appeared in processes of family formation and childbearing that did not exist before, or only decades earlier, in a different social environment. At the same time those demographic processes that continue to determine the changes of our population into an unfavourable direction have accelerated.

There is not only some relationship between the social and demographic processes, but also among certain demographic phenomena, that may mutually strengthen or weaken each other's effects, thus shaping the entire demographic situation. Thus the decline of the marital movement not only promotes the spread of co-habitation and enhances the number of extra-marital births but also generates a decline in fertility. Fertility that steadily remains under the simple reproduction level makes the age composition of the population older, thus

increasing the number of deaths. Family stability is related to fertility, since married couples support more children than single people or divorcees, on the other hand remarriage encourages childbearing as those who marry again bring up more children than those who marry only once. Changes in the composition of the population by marital status reduce fertility while increasing levels of mortality, since the life expectancy of the unmarried is less favourable than that of the married population living in families. With falling fertility and growing mortality, the rate of the decline of the population speeds up.

In the 1990s all these processes appeared to have strengthened, offering a demographic reflection of the system change and its painful years. This paper primarily concentrates on changes in nuptiality and fertility. Without aiming at a complete overview it attempts to explore background factors which have played a role in the trends of family formation and childbearing. Wherever it is justified and seems necessary, the paper relies on the results of representative surveys in order to give a more differentiated presentation of the explanatory variables. Based on the most recent data of 2000, it analyses changes of direction in the movements of birth and marriage and it also dwells on the more important characteristics of social and regional differences.

CHANGE OF STRATEGY IN MARRIAGE BEHAVIOUR

The British demographer of Hungarian origin, *John Hajnal,* when studying the history of the European customs of marriage, discovered two distinct behavioural patterns (Hajnal 1965). Countries east of the line linking Trieste and Saint Petersburg (named after him as Hajnal-line) were characterised by early marriage and a low proportion of people who never married, whereas in countries west of that line a relatively late marriage age was accompanied by a relatively high proportion of 'bachelors' and 'spinsters'. Historically Hungary was located at the eastern rim of the Hajnal-line, and until the mid 20th century it was characterised by family formation at a young age and a high proportion of those getting married. This historical image has undergone significant changes over the past two decades, profoundly redrawing the European map of nuptiality. The decline in nuptiality was already apparent in the 1980s, and the process of decline intensified in the 1990s. Clearly reflecting the dynamics of current trends the proportion of marriages per thousand unmarried persons aged 15 and over decreased by 30% in the 1980s, while dropping by 43% between 1990 and 1999. Among those getting married 83% were entering their first marriage, thus the inclination of unmarried people to getting married is of decisive significance in nuptiality.

An increasing abstention of women from marriage is particularly conspicuous, characterised by the fact that the proportion of never married women getting married was halved as late as in the 1990s. In the former rise of nuptiality

the remarriage of divorcees and widowed persons played a significant role; in the present decline there is an increasing number of divorcees who do not marry again. This is an important factor due to the prominence of this group. The age composition of those getting married has significantly changed. Young married couples aged 20 or 25 are increasingly less in number. Ten years ago 28% of brides were teenagers when they pronounced the 'I will', now their proportion is below 10%. 20 to 24 year-old bridegrooms have become increasingly rare, suggesting a markedly differentiated decrease in the inclination to marry by age. The younger the age the more significant is the extent of disinclination. During the 1990s the inclination to marry dropped in the most frequent age of marriage to one-third of women between 20 and 24, and to almost one-fourth of teenagers. An inclination for marrying has not grown within older age groups either, yet their proportion has grown among those marrying, and this has almost automatically raised the average age of couples. During the past ten years the average age of first married brides and bridegrooms has grown by almost 3 years, that of women from 21.5 to 24.2 years, and of men from 24.2 to 26.8 years. The well-considered and increasingly postponed remarriage of the divorced is characterised by a significant growth of time between divorce and remarriage. Almost twice as much time is taken by divorced men and three times as much by divorced women in order to make up their minds to remarry than ten years ago. As a result the mean age of divorcees who remarry has overtaken the age of those getting married for the first time. It continues to be the case that the divorced men are more 'sought after' than females of the same marital status, since the proportion of those remarrying is significantly higher in their case. However this also depends on age. Divorced women below the age of 25 are more 'wanted' than older women and men of the same age and marital status, whereas over the age of 30 the chances of remarriage would differ more between divorced men and women to the advantage of the former (Table 1).

Table 1

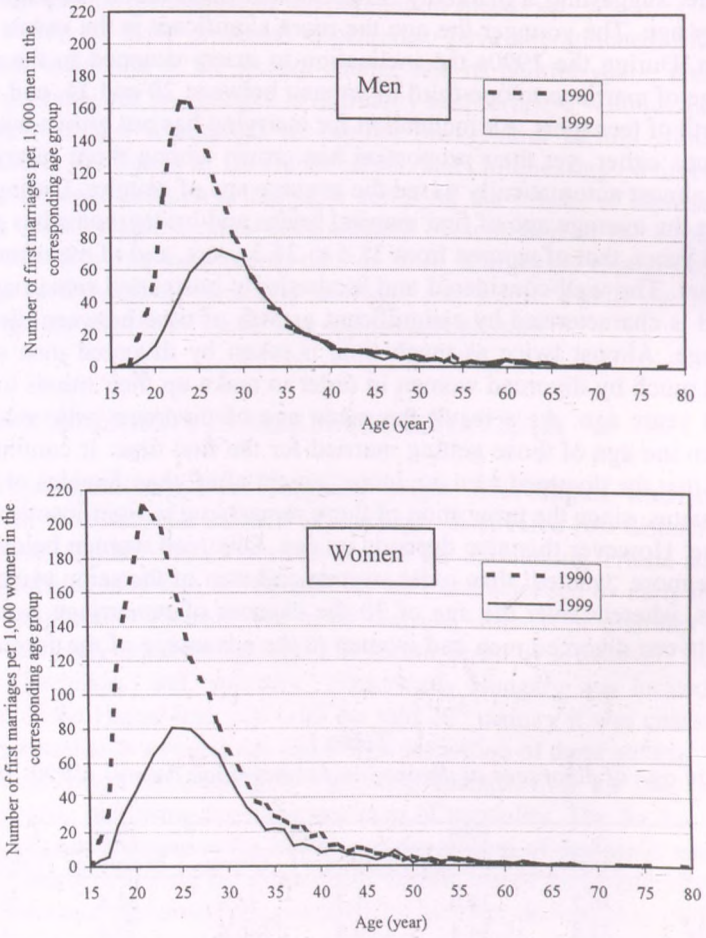
Mean age of divorcees at divorce and remarriage (years) (1990, 1999)

Gender	1990			1999		
	Divorce	Remarriage	Difference	Divorce	Remarriage	Difference
Male	36.7	38.0	1.3	38.6	41.5	2.9
Female	33.8	34.4	0.6	35.6	37.4	1.8

Source: Demographic Yearbooks.

The large number of marriages among young people that for a long time characterised Hungarian patterns of nuptiality was marked by the frequent marriage of girls between ages of 20 and 24 throughout the 20th century, and most

probably even before. The modal age of women getting married for the first time was 21 years even in 1900; in other words the proportion of first marriages was the highest in that age. In 1999 this age was between 24 and 25 years, and 30 year old never married women married in the same proportion as those of 20. This tendency had never happened earlier. Due to a shift in age of first marriages, from the mid-1990s onwards marriage became the most frequent in the case of single females in the 25–29 year age group can be observed (Figure 1).



Source: Demographic Yearbooks.

Figure 1

Ratio of persons marrying for the first time by gender and age (1990, 1999)

Is it only the timing of marriages and their postponement to a later date that is behind these phenomena, or are we facing a manifestation of mistrust in the institution of marriage, or even a crisis in family life based on marriage? The answer is uncertain for the time being. Demography often uses indicators that project the present situation and study what would happen if there were no changes whatsoever and current forms of behaviour became lasting and permanent, at least for a generation. In the case of marital movement such a projection would suggest that less than half of currently 15 year-old girls would marry by the age of 50; in other words, more than half of them would spend their lives without a legal husband (Recent 1999). This data should be handled with care as in reality the situation may change from one year to another. Yet the indicative value of perspective indices is significant, particularly at a time when the actual situation is deteriorating in contrast to an assumed one of no change. Marriage patterns in 1990 indicate that more than three-fourths of single women would have married before the age of 50, whereas only 46% of them would do so according to marital tendencies in 1999. Could the prestige of marriage have fallen to such an extent within ten years? Probably not rather individual careers and the social environment have shaped changes pushing family formation towards a later age.

In general the cohort figures of nuptiality which can be read from the annual data of the calendar do not present too much of a discouraging image, but the changes characterised above are already faithfully reflected in the behaviour of younger generations. The female generations born after World War II and currently in their 50s still followed the traditional 'East European' marriage pattern. 95 to 96% of the generations born in the second half of the 1940s and in the 1950s married at least once. The first signs of change appeared in the generations of the 1960s, and became increasingly marked in the case of young people born in the 1970s and later. The dynamics of change are characterised by changes in the proportion of those getting married up to a given age. Accordingly more than half of teenagers married for the first time up by the age of 20 in 1980, compared with only a little more than one-third of them in 1990. Today 10% of them would get married by the age of 20. A little less than four-fifths of the more than 90% of women who got married by the age of 30 ten or twenty years ago are currently still married. Thus with progressing age, the differences due to timing have been dropping and have practically balanced out by the age of 50 (Csernák 1994). At least this has been the situation up to now. Today however, there is such a lagging behind on the part of young people that it is doubtful whether the formerly high rates of ever married will survive in the future. For this to happen proportion of married people should grow five times among 20 year olds over the coming five years and eight times over the coming ten years so that the proportion of those getting married for the first time should reach the values measured in the case of women currently at the age of 30.

There is little chance of this, though it is beyond doubt that the declining trend of marriage s seems to halt by the end of the decade, and a modest increase can be detected in the past two years (Table 2).

Table 2
Percentage of females married for the first time by the given age (1980–2000)

Age	1980	1990	2000	1980	1990	2000
	Married for the first time			Remained unmarried		
20	51.4	36.1	10.0	48.6	63.9	90.0
25	85.3	81.0	48.2	14.7	19.0	51.8
30	92.6	91.4	79.6	7.4	8.6	20.4
35	94.8	94.1	89.9	5.2	5.9	10.1
40	95.6	95.4	93.6	4.4	4.6	6.4
50	95.8	96.3	95.8	4.2	3.7	4.2

Source: Demographic Yearbooks.

A significant drop in marriages and their postponement to a later age do not necessarily mean that the establishment of partnerships for life would also become rare to the same extent. Data available from various sources confirms unanimously that the number and proportion of partnerships established outside wedlock have significantly grown over the past ten years. (KSH 1996/1; KSH 1996/2; KSH 1999). The problem is that the continuous statistics of demographic movement do not offer a possibility for measuring the spread of cohabitation outside marriage, as its establishment and termination does not come into the purview of official statistics. Thus a comprehensive analysis of the situation is only offered by the decennial censuses and the micro-censuses in between. Partial and indirect information may be obtained about the partnership relations of women in reproductive age from changes in the number of extramarital births. Representative survey results that explore the history of partnerships are also useful.

The characteristics of those living in partnership were presented in detail and were processed along identical principles by the 1990 census and the micro-census that followed six years later. As far as childbearing is concerned it is particularly the behaviour and practice of the female population at reproductive ages that deserves attention, therefore the analysis is restricted to them. During the six years surveyed the number of women living in cohabitation increased by about 65%, hence their proportion in the non-married population has grown to 13.5% from 8.7% in 1990. An overwhelming majority of those living in cohabitation are either divorced or single by marital status. The thrust forward in the proportion of never married women is conspicuous in the case of couples

living in cohabitation. In 1990 it was still the divorced who constituted the bulk of those living in partnership, whereas six years later more than half of those living in cohabitation came from among single (never married) women, and one-third of them from divorced women. The composition by age of those living in cohabitation is strongly differentiated if (former) marital status is taken into consideration. In view of childbearing it is important that 85% of women below the age of 30 and living in cohabitation are women who have never got married, while above that age it is increasingly the divorced that dominate. The picture becomes remarkable if the 'popularity' of cohabitation is considered regarding people with certain kinds of marital status. In this respect it is divorced women that take the lead, as almost one-fourth of them live together with their partners in this form. A special group is formed by those women who live in cohabitation 'within marriage', though naturally not with their legal husband. One-fifth of the legally married but separated women live in cohabitation, and the proportion of those who have chosen this special kind of marital status has grown by more than three times over the six years surveyed. Their weight is not significant as they constitute only 7% of those living in cohabitation. Only one type of marital status could be found where the establishment of cohabitation has been declining: that of the widows. It is not only that their proportion has dropped among those who live in cohabitation, but widowed women choose this form of partnership with less frequency.

The fact that cohabitation is still the rarest among unmarried single women is misleading, because one-tenth of women of reproductive ages live in cohabitation without being married. Due to the fall in the number of first marriages the number of never married women has significantly grown and therefore, regardless of the relatively low rates of cohabitation, their importance has grown among those living in cohabitation. Their role is also significant regarding changes in the behaviour of women of reproductive age in family formation and childbearing. In six years the proportion among them living in cohabitation outside marriage has increased more twofold, in other words the establishment of cohabitation is becoming increasingly popular among a growing number of never married women. For these women cohabitation may be regarded as a trial marriage that may be subsequently followed by marriage, whereas motivations may be different among those who have already been married once before. In the case of divorcees the increasing popularity may rather be attributed to caution deriving from earlier experiences, whereas widowed women consider cohabitation to be undignified, hence its decline in this later group. It can be assumed in the case of married but separated women that some common interest legally upholds the marriage; fear from loneliness, new opportunities, and even a mutual agreement with the legal husband creates a condition that is practically not within the marriage but legally not outside it (Table 3).

Changes in the number and proportion of children born outside marriage are indirect indicators of the spread of cohabitation. During the 1990s the number of births dropped by 31 thousand, but the number of children born outside marriage increased by 10 thousand within a declining total number of births. As a result the proportion of 'illegitimate' children has more than multiplied reaching 28% in 1999. Apparently a larger proportion of children are born outside marriage than the proportion of those living in cohabitation would justify. According to the data of the micro-census completed in April 1996, 5.9% of women of reproductive age, and 13.5% of never married women lived in cohabitation, while 22% of children were born outside marriage at the same period of time. The difference suggests that some of the children born outside marriage are from cohabiting couples. Others are from mothers not in permanent relationships. On the basis of data concerning the father, 60% of extramarital births originate from cohabitation, and 40% from mothers living alone. The majority of mothers bringing up their child alone are unmarried and young. This conclusion can be drawn from the fact that the age composition of single (never married) women is the youngest among women giving birth; 80% of children born outside marriage originate from never married women; while their proportion among those living in cohabitation is much lower (53%). The results of representative surveys indicate that the younger the age the more frequent cohabitation and childbearing is outside marriage. The results however have shown different proportions concerning the nature of the partnership. Among mothers who had borne their first child outside marriage the proportion of those who undertook childbearing without a partner was constantly higher than among those who delivered their child in cohabitation. It should be taken into consideration however that these results pertain only to the first child.

Table 3

Females of reproductive age living in cohabitation by age-groups and marital status (1996)

Age-group	Marital status				
	Single (never-married)	Divorced	Widowed	Married, separated	Non-married, or living separately together
	Proportion of those living in cohabitation (percentage)				
15–19	3.3	–	–	14.0	3.3
20–24	13.5	31.9	28.0	16.1	14.0
25–29	23.3	25.2	18.1	21.2	23.4
30–34	22.6	27.2	18.8	24.7	24.6
35–39	20.0	26.7	18.1	21.5	23.8
40–44	18.1	20.9	14.4	14.4	19.2
45–49	16.0	18.8	9.6	15.3	15.5
15–49	10.3	23.2	13.1	20.0	13.5

Source: Micro-census, 1996.

An essentially similar picture is obtained on the basis of representative surveys exploring the history of partnership formation already indicated by statistics on population movement. The Fertility and Family Survey conducted in 1993, studied the history of partnership formation in the case of women between 18 and 41, and men of 20 to 44 on the basis of a representative sample (KSH 96/1). With the establishment of the first partnership two opposite trends could be observed. In the case of the younger generations the proportion of those for whom this relationship also meant marriage has been decreasing, contrasted with a dynamic increase of those choosing cohabitation outside marriage. A significant change in marriage patterns is reflected in the fact that only 20% of women of the age of 20–24 married by the age of 20, whereas double proportion of women around 40 already lived in marriage by that age. In the case of young women four times as many had started their partnership career with cohabitation by the age of 20 (17%), than women over forty by a similar age (4%). Men marry for the first time at a later age and in smaller proportion than women. On the other hand there are more of them who try cohabitation, and the younger the generation under survey, the larger the proportion of those who establish such relationships by the same age. This survey also demonstrates that a significant part of partnership relations outside marriage end up in marriage at a later stage. In the case of women 37% of cohabitation for a period shorter than one year led to marriage, and about three-fourths of them married after cohabitations of four years. Men marry less frequently than women after periods of cohabitation (KSH 1996/1) (Table 4).

Table 4
Establishing the first partnership relation (1993)

Cumulative proportion of those entering partnership up to the given age	Female age-group at the time of the survey (1993)					
	18–19	20–24	25–29	30–34	35–39	40–41
15	0.7	0.9	1.6	1.7	0.7	0.9
16	3.4	3.5	3.0	2.9	1.4	2.3
17	6.1	6.0	4.4	4.3	2.7	2.7
18	10.2	8.9	7.0	6.9	4.2	3.2
19	11.6	13.5	8.8	8.3	5.4	3.2
20		17.1	11.5	10.1	6.5	4.1
21		19.0	13.5	11.6	7.6	5.0
22		20.7	15.6	13.3	7.9	5.4
23		20.7	16.9	14.4	8.3	6.8
24			18.1	14.8	8.9	6.8
25			18.8	15.5	9.3	7.7
26			18.9	15.8	9.9	8.1
27			19.2	15.8	10.4	9.0
28			19.4	16.5	10.7	9.0
29			19.4	16.7	10.8	9.0
30				16.7	10.9	9.5
31				16.9	11.1	9.5
32				16.9	11.1	10.0
33				16.9	11.1	10.4
34				16.9	11.1	10.4

Source: Fertility and Family Survey 1993.

Cohabitations are more vulnerable and less stable than marriages. The results of the survey show that the institution of marriage links members of the family more tightly than cohabitation outside marriage. Surprisingly marriages following cohabitation dissolve more frequently than those not preceded by cohabitation (UN 1999). The institution of the test marriage is not necessarily accompanied by a more stable family life. The least stable partnership relations are cohabitations even if a common child is born. This is supported by findings of Hungarian and international research (Kiernan 1999). The growing proportions of cohabitation outside marriage are currently unable to counterbalance the strongly decreasing trend of marriages, thus the youth of today establish their first partnership later and in smaller proportions than older generations had done by a similar age. As a consequence the median age of the first partnership has increased; it was 21.4 years for women of 20–24 in contrast with

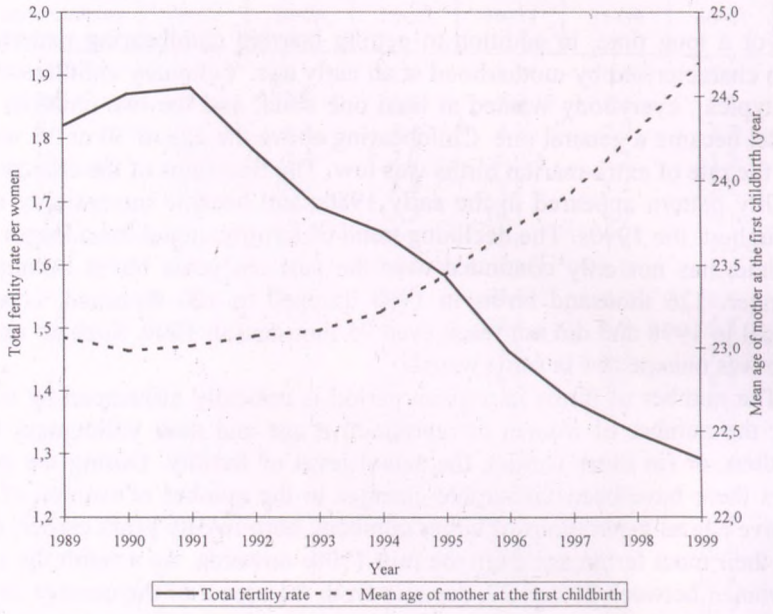
the 20.5 years of those of 40–41, and it was 24.2 years in contrast with men between 25 and 29, as contrasted to 23.7 years of men above 40.

CHILDBEARING PATTERNS, FERTILITY

For a long time, in addition to getting married childbearing patterns have been characterised by motherhood at an early age. Voluntary childlessness was not typical, everybody wanted at least one child, and the two-children family model became a general one. Childbearing above the age of 30 or 35 was rare, and the rate of extra-marital births was low. The first signs of the change of this fertility pattern appeared in the early 1980s and became increasingly marked throughout the 1990s. The declining trend of fertility, noted for a longer period of time, has not only continued over the past ten years but it became even stronger. 126 thousand births in 1990 dropped to 100 thousand, considered critical in 1998 and did not reach even 95 thousand in 1999. Such an extensive drop was unexpected in some ways.

The number of births in a given period is basically influenced by two factors: the number of women of reproductive age and their willingness to bear children, or (in other words), the actual level of fertility. During the past ten years there have been favourable changes in the number of women of reproductive age as generations of larger numbers, born twenty years earlier, entered into their most fertile age from the mid-1990s onwards. As a result the number of women between 20 and 29, decisive from the aspect of the number of births, continuously increased and is now higher by about 160 thousand than ten years ago. The growth in numbers could have counterbalanced a less extensive fall of fertility, or, at least it could have moderated its speed. This is what was expected by the population projections prepared in the early 1990s, indicating a moderate growth of the number of births from the middle of the decade onwards. This did not take place however, because willingness to give birth had dropped to such an extent that it pushed the positive effects of increasing number of women in the above category entirely into the background; it is the level of fertility that has become the decisive factor of the number of births of the day. The most frequently used index is the total fertility rate, which gives the average number of children to be born during the life of women under the fertility conditions of the given year. The value of this rate dropped by 30% between 1990 and 1999, but the extent of decrease is even more significant if only the period between 1991 and 1999 is examined. In the first two years after the change of the political system, in 1990 and 1991, the number of births and the fertility level did not fall but experienced some, though only moderate growth. Decline started in 1992, and accelerated from the middle of the decade. The annual rate of decline was uneven. The greatest decline compared to the previ-

ous year was reached in 1996 and 1997 with 7.6 and 5.5% respectively, and it was the lowest in 1994 with 2.4%. In 1998 and 1999 the rate of the decline of fertility became moderate, and it was lower than the one measured in the previous year by 3.6% in 1998, and 3.0% in 1999 (Figure 2).



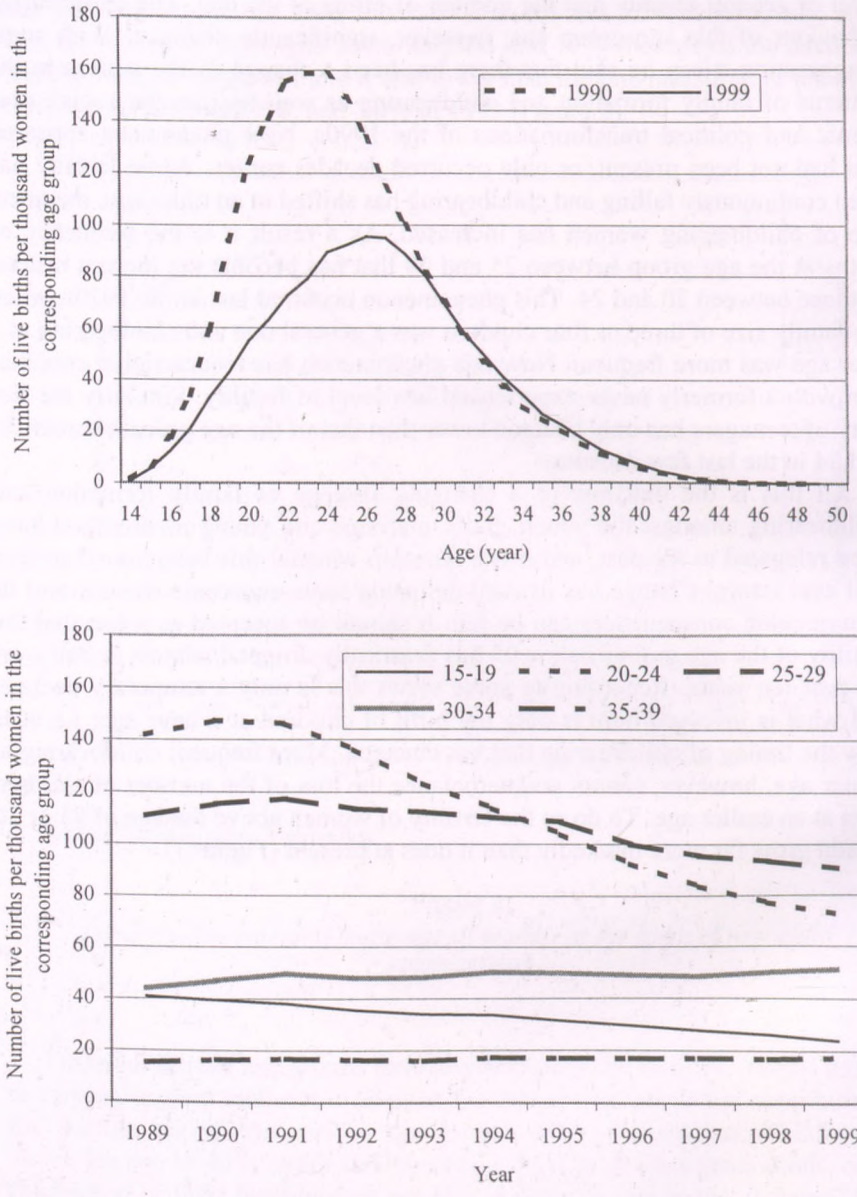
Source: Demographic Yearbooks.

Figure 2
Total fertility rate and mean age of mother at the birth of first child (1989–1999)

Different female age groups have contributed to the level of general fertility to varying degrees and so it is relevant to examine that which has contributed to the decline taking the various age groups into consideration. Childbearing above the age of 40 is rather rare; therefore the size of these generations, or the fluctuation of their fertility does not play a decisive role in the changes of the number of births. Though the fertility of the age-groups in their 30s did fluctuate during the past decade, its basic trend is nevertheless an increasing one. The frequency of their childbearing surpasses that of ten, or twenty years ago. After a long period of time childbearing has become most frequent in the female age group of 20–29, thus the changes of their fertility significantly influence the

level of general fertility and the number of births of the day. The childbearing behaviour of this age group has, however, significantly changed. With some exaggeration it can be said that there has been a change of the system in the patterns of family formation and childbearing as well besides the social, economic and political transformations of the 1990s. New phenomena appeared that had not been present, or only occurred decades earlier. While fertility has been continuously falling and childbearing has shifted to an older age, the mean age of childbearing women has increased. As a result it is the frequency of births in the age group between 25 and 29 that has become the highest instead of those between 20 and 24. This phenomenon occurred last in the 1920s, when the family size of three or four children was a general one and childbearing at a later age was more frequent. Now this phenomenon has reoccurred in conjunction with a formerly never experienced low level of fertility. Similarly the fertility of teenagers has only become lower than that of the age group between 30 and 34 in the last few decades.

All this is the outcome of a changing strategy of family formation and childbearing amongst the young. Early marriage and young motherhood have been relegated to the past, and it is a question whether this behavioural pattern will ever return. Change has its well-definable socio-economic reasons and its demographic consequences can be felt. It should be accepted as a fact that the fertility of the age groups below 25 has drastically dropped, almost to half over the past ten years. According to some views this is only a temporary decline, and what is involved here is only the birth of children at a later age; i.e. it is only the timing of childbearing that has changed. More frequent childbearing at a later age, however, cannot counterbalance the loss of the number of children born at an earlier age. To do so the fertility of women above the age of 25 or 30 should grow far more markedly than it does at present (Figure 3).



Source: Demographic Yearbooks.

Figure 3
Live births by age of mother (1989–1999)

In the 1990s only one significant demographic category can be found showing a definite increase in fertility: unmarried women and particularly those who have never married. Fertility of the unmarried has grown by almost one-fourth during the past ten years; as a result the rate of children born out of wedlock has significantly increased. Almost one-fourth of extra-marital births were due to teenagers, and about 60% to women below the age of 25. The earlier the pregnancy occurs the higher the possibility of extra-marital births. In the case of mothers below the age of 20 every 7 children out of 10 will be born outside marriage, which means an almost twofold growth since 1990. As far as its dynamics is concerned, this growth is even more significant; it is almost three times higher among those in their twenties. In 1999 every third child was born outside marriage to women between 20 to 24, and every fifth in the case of women between 25 and 29. While childbearing at a young age is becoming increasingly rare, if it takes place, it is far more frequently outside marriage than in the past. Cohabitation has not spread to such an extent that the number of extra-marital births has grown. Therefore, particularly in the case of young people below the age of 25, childbearing without lasting partnership relations may be of great significance.

The formerly close correlation between marriage and childbearing has weakened due to the growing role of extra-marital births. Though a decreasing proportion, but children are still mostly born in marriage. Therefore the question emerges of how fertility is influenced by a drop, by a postponement of the choice of partner to a later age, and concomitantly, by structural changes in the marital status of female population of reproductive age? How far can the growing number of extra-marital births and the fertility of cohabitation compensate the shortage produced by the falling proportion of those living in marriage and of children born in marriage? The question can be studied and assessed from various perspectives. It is not easy, if at all possible, to influence habits of choosing partners and the practice of family formation by external means. Therefore the changes have to be rather accepted as parts and corollaries of social processes rather than as targets of intervention. In this approach each child born is considered equally important to the population and society irrespective of the fact whether the parents live in marriage or in cohabitation, or even undertake to bring up their child alone.

Demographically the issue is more complex. Marriages are more stable, they represent greater security for the married couple and for the children, and together they are more fertile than cohabitating couples. Therefore the decrease in the proportion of married population, particularly among young and middle-aged strengthens the decreasing trend of fertility. The dissolution of marriage by divorce or widowhood can also be assessed in a qualified way. Divorced women bring up fewer children than married ones, but the difference is decreasing which may also mean that the number of children is less able to pre-

vent the dissolution of a deteriorated marriage. Therefore the growing proportion of divorces and divorcees has also had a diminishing effect on fertility. The situation is different if divorce is followed by a new marriage, or the dissolved marriage is followed by cohabitation. Women who have repeatedly married have had and continue to have more children than those who marry only once. Thus divorce may have a benevolent effect on fertility, provided it is followed by another marriage in time. The situation is similar in the case of cohabitation, which, in this respect is a substitute for remarriage. Women who have divorced, or were widowed but living in cohabitation bring up more children not only in comparison to women of a similar marital status, but in the absence of a partner, to women living in marriages. Therefore it is significant regarding fertility whether someone chooses cohabitation as a form substituting marriage, or, handling it as an alternative to marriage, wishes to spend her time as an unmarried single person living in cohabitation. It is a fact that women who cohabit without marrying have far less children by the end of their reproductive years than those who had once married (Table 5).

Table 5

Women living in cohabitation by age-groups, marital status and number of children (1996)

Age-group	Marital status					
	Single (never married)	Divorced	Widowed	Married, separated	Living in cohabitation together	Married, living with husband
	Children per 100 women living with partner					
15–19	52	–	–	–	51	62
20–24	59	120	200	101	63	96
25–29	79	155	200	181	101	149
30–34	138	187	222	197	172	194
35–39	155	213	267	258	209	203
40–44	190	189	225	206	196	203
45–49	141	198	273	194	203	199
15–49	81	191	248	196	136	181

Source: Micro-census, 1996.

The spread of cohabitation is a relatively new phenomenon in our country, therefore at least a generation has to pass until its influence on childbearing intentions, plans, and on actual fertility can be investigated. Recent researches based on representative surveys cannot be disregarded in this field. Research projects in other countries have proved that the arrival of the first child encourages couples living together to get married, but even in case of desiring more

children couples rather prefer marriage to cohabitation (Barber 1998). As an increasing number of young people begin their partnerships with extra-marital cohabitation, its influence on later childbearing should be clarified. On the basis of 1996 micro-census it appears unambiguously that the earlier marriage takes place, the more children are brought up by married couples, whereas a postponement of marriage to a later age does not only mean later childbearing but also fewer children. The relatively high Hungarian fertility of the 1970s was also caused by the large number of marriages at an early age and rapid childbearing. Its effect became apparent later on, since the young generations of the 1970s brought up more children during their lives than the older generations who were young in the 1950s or 1960s (KSH 1996/3.). The positive interrelationship between early marriage and fertility was also recognised and applied differently, when a reduction of high fertility was achieved by encouraging and rewarding increasingly late marriages (like in China) (Table 6).

Table 6
Impact of age at first marriage on fertility (1996)

Age at the time of first marriage (year)	Age at the time of data collection				
	20–24	25–29	30–34	35–39	40–49
	Live births per 100 women				
–19	119	187	218	224	221
20–24	62	125	181	191	194
25–29		70	142	175	172
30–34			93	145[a]	143[a]
35–39				100[a]	124[a]
40–49					88

[a] Partly an estimated figure.
Source: Micro-census, 1996.

To continue, it is a question how far the cohabitations spreading among the young substitute for the role of early marriage. The fertility trends of the 1990s so far have not shown positive signs. In the changes of fertility in 2000, however, it would seem as if there were some signs of change in the pattern. The adjectives should be used with utmost care, as so far there is no definite trend (yet unable to develop) on the basis of which assessment might be made. Though the trend of decrease seems to halt, little time allowing for change has passed. It is a fact, however, that with an exception of three months the number of births grew in each month in 2000, in comparison to the same period in the previous year, which meant almost 3,000 more newborn babies than the previous year.

Statistically this growth is not much, only 3.1%, and it should also be taken into account that the trend has taken place from a low point of births never before experienced. For the time being it is uncertain how lasting this process might be. After a long decrease even stagnation is regarded as an achievement, and an increase, even if uncertain or modest, is a favourable phenomenon. Earlier too there have been similar, and even longer periods when the fall in the number of births was a lasting one. But the situation that has emerged during the past decade is different. In addition to the fertility conditions of the year 1999, 100 women gave birth to only 129 children, which means a net reproduction rate of 0.615; in other words, even if mortality were totally disregarded the up and coming child generations would lag behind the number of parental generations by 40%. In other words a potentially large population decrease lies in the permanence of such fertility conditions. The inclination to have children became more distanced from the simple reproduction level. The favourable movement of last year took place from this low point (Table 7).

Table 7
Number and dynamics of births by main demographic characteristics of mothers (1999, 2000)

Characteristics	Year		Difference	Change
	1999	2000	Absolute figure	100% of previous year
Age-group				
–19	7 979	7 799	-180	97.7
20–24	30 648	28 338	-2 310	92.5
25–29	32 782	35 673	2 891	108.8
30–34	16 593	18 525	1 932	111.6
35–39	5 382	5 933	551	110.2
40+	1 261	1 329	68	105.4
Marital status				
Single (never married)	21 855	23 868	2 013	109.2
Married	68 180	69 255	1 075	101.6
Widowed	453	415	-38	91.6
Divorced	4 157	4 059	-98	97.6
Total	94 645	97 597	2 952	103.1

Source: Demographic Yearbooks.

It is worth noting in which groups the number of births has grown. The results are surprising in a certain sense. Growth can be experienced exclusively in the case of women above 25, and particularly of those between 30 and 39, where growth is almost 10%. On the other hand the number of births has

dropped further among women below 25. The further decrease of the fertility of the age group 20–24 is conspicuous; it meant a fall of more than 8% in 2000. Thus a transfer of childbearing to a later age continues, but formerly postponed children are now born in bigger proportions in more 'mature' female age groups. Together with increasing levels of education of mothers additional births have also grown. In the case of women with college and university education this growth reaches almost 10%, whereas the number of childbirths on the part of women who have not completed primary education dropped by 0.3, and of those who have completed the eight years of primary education by 2.0%. An improvement can be sensed by all birth orders but half of the growth has been derived from the additional number of first births. The number of newborn babies of subsequent order has also grown, and the most significant growth has occurred in the proportion of the fourth children, now more than 4% compared to the previous year. The most surprising result appears in the case of surplus births by marital status. In this respect more than three-fourths of the growth came from the childbirth by never married women, further increasing the proportion of extra-marital births. The number of childbirths by married women has experienced only a moderate growth, and that of the divorced and widowed women has fallen. Thus the emerging picture is a rather complex one, further complicated by the situation that in addition to the growth of births, the number of marriages has also grown by about 6%. The extent of increase here too is the most significant in the group of women between 25 and 34 who completed their university or college studies, namely in the case of age groups and higher education from where the majority of additional births come. It is unknown whether they are couples living in cohabitation earlier on and then getting married, but it is a fact that the proportion of those remarrying has also increased more than the average in addition to those who married for the first time. For the time being it can only be assumed, or rather hoped for, that additional marriages will subsequently show results in additional births within marriage as well.

SOCIAL AND REGIONAL DIFFERENCES

Educational levels and status in the labour market are two important events of life history that fundamentally influence family formation and childbearing patterns. They are interrelated too, but it is the level of education, that is of decisive significance. The longer the schooling period the more the beginning of the taking up of job is postponed; therefore growth in the participation in education automatically reduces the proportions of activity among the young. At the same time as higher qualifications create better positions in the labour market, they enhance chances of employment and reduce the risk of unemployment (Nagy 2001). The increase of the school period is also accompanied

by a postponement of family formation, but does not necessarily increase the later chances of marriage. Better-educated women become more attractive on the marriage market because they enhance the material security of the family. This is, however, accompanied by changes in the family division of labour and in the gender roles, that may encourage men to consider or even be frightened away from marrying women who are well-educated and have achieved high profile career at work. Research showing that women with university degree not only get married at a later age, but marry in smaller proportion than those of lower levels of education is worth considering. However, it is true that disadvantages experienced by better-educated women have significantly decreased in the 1990s, which is a phenomenon suggesting changes in traditional family roles and norms. Whereas economic activity and a more favourable status on the labour market enhance chances of marriage in the case of women above 26 as opposed to those who are inactive (Bukodi 2001). The different educational level of men and women may create tension in the marriage market too. Analyses of life courses by representative surveys have shown that almost half of the men (48%) reach their highest level of education by the age of 17, whereas this proportion is only a little more than one-third (34%) in the case of women (KSH 1996/1.). More teenage girls complete their secondary schools and pass the secondary final exam than boys, a significant part of who are satisfied with a skilled worker's qualification. And in 1996 more women between the age of 20 and 24 attended university (12.4%) than men of the same age (10.0%). Young girls and women of higher qualifications find it increasingly difficult to find a boy, or man of similar qualifications in the marriage market. Therefore heterogamy (different educational levels of those getting married) is of the highest proportion among women of secondary education.

There is yet another important phenomenon that may explain the negative relationship between the level of education and inclination to marry. And this is the growing popularity and spread of cohabitation among women of higher education. Cohabitation and childbearing outside marriage is no longer the speciality of a relatively narrow social group today, as it used to be decades ago when this proportion was much lower than the present one but quite stable over time. The tolerance of society has grown together with the acceptance of these phenomena. Concomitantly the proportion of women with a higher education has grown among those who live in cohabitation. Change has been particularly dynamic in the case of women between the ages of 20 and 29 who completed secondary school, college or university education. As a result cohabitation was rarest among women of various age groups who completed their studies in vocational schools in 1996, and from that year onwards women have increasingly chosen this form of partnership alongside the growth of their school education (Szukicsné, 2001). Regarding the growth of extra-marital births in the 1990s the fact that the average increase of the rate of children born outside

marring was much higher among the better-educated women, has played a significant role. All this has notably reduced differences in educational levels. Analysis of the births in 2000 will become possible only later, but it is conspicuous that one major cause of growth has been again children delivered outside marriage and additional childbirths to women with university or college education.

The interrelationship between education and fertility has been the focus of demographic researches for a long time. The increasing level of education is a necessary corollary and consequence of modern socio-economic development. It should not only be accepted, but also encouraged and supported. All this tends towards a general decline in fertility even if the fertility of women of higher qualifications has demonstrably increased in the 1990s (Szukicsné 2001). Education plays a dominant role in the timing of childbearing, but the earlier phenomenon, that higher education was accompanied by fewer children is not necessarily true. There may be significant differences between the number of children born up to a certain age according to levels of education, particularly in younger ages. Later on, however, these differences are moderated, or may even disappear. According to a representative survey of 1993, containing also data on the history of fertility, four times as many women who completed primary school education delivered their first child by the age of 24 (67%) than women with university degrees (19%). With the process of aging these differences are moderated, and are practically counterbalanced during the second part of the reproductive period. About 91% of degree-holding women over the age of 35 gave birth to at least one child, and though this lags somewhat behind the 92–96% proportion of those of lower qualifications, the differences are insignificant. Elements of timing similarly appear in the case of second children, but they are less counterbalanced with the passage of time; finally the proportion of those women with secondary school final exams or university degrees who delivered a second child as well is about 10% lower, than those women with primary or vocational school education. This survey has also pointed out that the proportion of women delivering their third child does not automatically fall with better educational levels. Moreover, its effects are manifest in the average number of children, since women with university degrees over the age of 35 gave birth to more children than women of the same age with secondary education. In the case of the younger age group the postponement of the first and second children can be observed in the case of every educational level and this delaying behaviour is becoming increasingly marked with the growth of general educational levels. Thus it is a question whether second and third children will be born to the youth of today in the same proportion, as is currently visible in the case of women above 35, irrespective of their school education.

Conscious childbearing is based on a couple's joint decision, but does not always mean an agreement on the number of children desired in the family. In cases of disagreement one party carries weight and education may play an important role in the decision. The fertility results of the 1996 micro-census contain relevant data that demand attention (KSH 1999). Though the desired numbers of children are unknown, the actual family size shows an interesting correlation with the parties' educational level. Couples with completed equal secondary education have the smallest number of children and the largest number of children are born to families where the parents did not complete primary school education. The difference is more than double; in the former group 181, and in the latter one 408 children were born to 100 families. Children are smallest in number in families where couples do not possess university degrees. The educational level of men and women differently influences family size and it becomes obvious in the case of different levels of school education. The higher education of husbands favourably influences childbearing, while that of wives moderates it. This proves that more children are born to families where the husband's level of qualification is higher, than to those, where the wife's qualification is higher. The smallest number of children can also be found in families where the qualifications of wives are one or more levels higher than those of their husbands (Table 8.).

Table 8
Completed fertility of 40–49 years old married women by their own and by their husband's educational level (1996)

Wife's educational level	Husband's educational level					Together
	Less than 8 classes of primary education	8 classes of primary education	Completed vocational school	Completed secondary school	Completed higher education	
	Average number of children per 100 women					
Less than 8 classes of primary education	408	350	277	200	–	322
8 classes of primary education	250	226	209	197	197	217
Completed vocational school	244	203	199	186	184	197
Completed secondary school	126	184	188	181	185	184
Completed higher education	–	187	164	177	187	183
Together	310	221	199	184	187	201

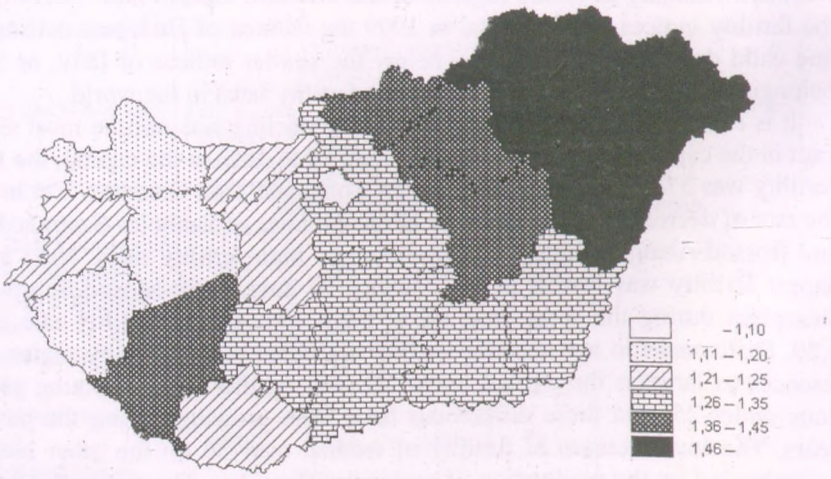
Source: Micro-census, 1996.

Significant differences in demographic behaviour may develop in even a geographically small country, and they can be mostly traced by the presentation of regional differences. Statistical regions often contain territorial units with different demographic behaviour. This is particularly relevant to the central Hungarian region, containing Budapest, but can be found elsewhere as well, depending on the investigated demographic phenomenon. Therefore differences by counties in addition to regional analysis can be pointed out, wherever justifiable. The regional differences, noted for long and understood as historically developed, can be found mostly between the eastern and western parts of the country, and are also manifest in the patterns of family formation and childbearing. The level of fertility was traditionally higher in the eastern part of the country, and the birth frequency of northern Hungary and of the regions in the northern part of the Great Plain is even today almost 30% higher than that of western Transdanubia (the region west of the river Danube). It is mainly due to the importance of Budapest and the demographically diverse behaviour of its population that childbearing is rarest in the central Hungarian region. In this region motherhood undertaken at a young age is not characteristic at all, whereas it is here that childbearing over the age of 30 is the most frequent in the whole country. Extra-marital births are commonest here and mothers are 2.3 years older than average age at the birth of their first child compared with mothers in northern Hungary and of the regions of the northern Great Plain. It is conspicuous that mothers have their first baby at the average age of 26.7 years in the capital city; hence they are more than 3 years older than mothers in Northern Hungary or in the regions of the northern Great Plain. According to the fertility indices of the capital in 1999 the women of Budapest deliver only one child during their life span – below the similar indices of Italy, or Spain, belonging to the countries with the lowest fertility rates in the world.

It is remarkable that the extent of fertility decline was not the most significant in the capital during the 1990s. In contrast to 30% in the capital, the fall of fertility was 37-39% in Veszprém, Fejér, Tolna and Zala Counties. Yet in 1999 the rate of decrease was the smallest in the counties of Szabolcs-Szatmár-Bereg and Borsod-Abaúj-Zemplén with traditionally high fertility rates. Next to Budapest fertility was lowest in the counties of Zala, Győr-Moson-Sopron and Veszprém during the same year, all of them with a total fertility rate below 1.20. Differences in age specific fertility are rather significant by region. Differences as large as three times occur between fertility rates of young generations under 25, and these differences have been growing during the past ten years. The low decrease of fertility of women over 30 on the other hand, is accompanied by the moderation of regional differences. The tradition of childbearing at an early age is found only in the county of Szabolcs-Szatmár-Bereg, where women still deliver their children most frequently between the ages of 20 and 24. Late childbearing is most characteristic of the capital. Therefore it is

conspicuous that the fertility of women between 30 and 39 is nationally the highest in Budapest. It is only here that the frequency of childbearing in the age of 30 to 34 years higher than the fertility of women between 20 and 24 years (Figure 4).

Growth of extra-marital births is most dynamic in the counties of north Transdanubia where formerly the proportion of these babies used to be relatively low. Regional differences have decreased, yet the difference is still one and a half times between Vas County in the West with the lowest proportion (20%) and Budapest, where 31 babies of every 100 were born outside wedlock in 1999. It is difficult to discover an interrelationship between levels of fertility and proportions of extra-marital births on the basis of regional differences. The highest and lowest rates of extramarital birth are equally characteristic of low and medium fertility counties, whereas in the case of high fertility counties the proportion of births outside marriage is not conspicuously high. The diversity of regional differences may be motivated by cultural traditions, and not by the proportion of urban population, since (curiously) there is hardly any difference between the proportions of extra-marital births in towns and villages, and those years are not rare when these proportions were often higher in villages than in cities. In 1999 the proportion of extra-marital births was consistently higher in the village population of the northern Great Plain and southern Transdanubia, than among those living in cities. The situation was also similar in the county of Zala in western Transdanubia and in the county of Heves in Northern Hungary.



Source. Demographic Yearbooks.

Figure 4
Total fertility rate by counties, 1999

No definite differences can be demonstrated in the regional variance of nuptiality patterns by which the eastern, or western part of the country might be markedly characterised. Undoubtedly the inclination to marry is the highest in the eastern regions of the country, but close behind comes western Transdanubia; in each of the Transdanubian regions people also get married in larger proportions than, for instance, in the southern Great Plain. The differences are not dramatic, unless the capital is considered as a separate region, since Budapest is conspicuous with its extremely low nuptiality rates as well. As a result the difference between the highest rates of marriage in Szabolcs-Szatmár-Bereg and the lowest ones in Budapest is more than 40%. As with births, it is only Budapest where the age of marriage has been pushed to a later one to such extent that marriage has become more frequent among women between 30 and 34 than in the age group between 20 and 24.

The interrelationship between births and marriages is also a delicate one in the various regions of the country. The interrelationship is unambiguous if county of Szabolcs-Szatmár-Bereg and Budapest are compared, because in these cases the highest and the lowest rates of marriage are coupled with differences of a similar proportion in fertility. In contrast the low fertility rate of western Transdanubia has evolved parallel to relatively high rates of nuptiality, and was accompanied by a moderate rate of extra-marital births. The interrelationships between the intensity of nuptiality, the level of fertility and the rates of extra-marital births are so multi-faceted and complex within and among the individual regions that they make the exploration of unambiguous relations and the drawing of clear conclusions extremely difficult (Figure 5).

The regional differences in childbearing patterns express, if indirectly, the population-retaining strength of areas and the reproductive capacity of the population. The significance of the gross reproduction rate calculated on the basis of the actual level of fertility is that it disregards mortality conditions; in other words, it presents the extent of the replacement of population up to the end of the reproductive age without taking into account the impact of mortality. The 1999 value of this index indicated that on a national level the number of children born was about 39% lower than in the parental generation, even if none of the newborn girls died before the age of 50. Based on this index, reproduction was guaranteed for the last time in 1991 in the two counties of highest fertility – counties of Szabolcs-Szatmár-Bereg and Borsod-Abaúj-Zemplén. Since that time there has been no major territorial unit in the country where the replacement of local population can be guaranteed despite completely disregarding the impact of mortality during reproductive age. Under the fertility conditions of 1999, the gross deficit of reproduction was 20% in the most fertile county of Szabolcs-Szatmár-Bereg, and was 51% in the least fertile: Budapest.

Fertility being for a longer period below the reproduction level characterises the whole country and every region. Due to the high levels of mortality and the aging of the population the number of deaths exceeds that of births in every region of the country. The extent of natural decrease emerging as its consequence differs significantly by region. The extent of natural decrease is the most significant in the regions of the southern Great Plain and of Central Hungary and is the smallest in the regions of the northern Great Plain and of central Transdanubia. Fertility is higher in the regions of the northern Great Plain, but more favourable mortality moderates the speed of natural decrease in the central Transdanubian region. The situation of Budapest differs significantly from the other regions in this respect too. More favourable conditions of mortality cannot counterbalance extremely low fertility; therefore natural decrease is of the largest extent in the capital city.

An extremely variegated image emerges of the actual increase, or decrease of the number of people if internal migration is also taken into consideration. There are regions where emigration increases the extent of natural decrease, whereas in other cases immigration moderates its rate. On a regional level the country has no attractive area where, as a result of the positive balance of immigration the number of inhabitants would significantly grow. As far as internal migration is concerned, the situation of the central Hungarian region is the most contradictory one. The population of Budapest not only decreases naturally but also through emigration. This is, however, mostly directed towards the neighbouring county of Pest, but the agglomeration of the capital attracts migrants from other parts of the country as well. Therefore considering the region as a whole, internal migration moderates the extent of natural decrease. The situation is similar in the central and west Transdanubian regions, as internal migration is mainly directed towards these counties of dynamic economic development, reducing the extent of natural decrease. On a county level the country had two territorial units where, due to the positive balance of internal migration, the population has actually grown over the past years. These are the counties of Fejér and Pest. On the other hand emigration affects the regions of the Great Plain and northern Hungary most, increasing the rate of natural decrease. As a result of internal migration, the number of people has been decreasing most significantly in the regions of the southern Great Plain, northern Hungary and of southern Transdanubia, whereas the extent of actual decrease is the smallest in the central Transdanubian region. Taking Budapest out, the picture is altered in so far as emigration is bigger than the extent of natural decrease – as a result of which the actual population is annually reduced by 15 persons per one thousand inhabitants of the capital city. Already in the year 2000 it depleted the number of inhabitants in the capital by about 28 thousand people.

CONCLUSION

Patterns of family formation and childbearing have changed radically during the last decade in Hungary, significantly altering the future demographic development of the country. Due to the change in the timing of family formation and childbearing, the spread of cohabitation in the younger generations and the alteration of social and regional patterns of demographic behaviour, it is safe to conclude that the country has already passed through a systematic change in spheres of reproduction concomitantly to the political and economic changes. On the basis of this radical shift it seems that for a period of time Hungary will not be characterised by a general pattern of relatively high and early nuptiality and fertility, which has been understood as some kind of 'Eastern' pattern. Further research will have to establish whether social and political processes underlying this change of patterns are only temporary phenomena or long lasting new trends.

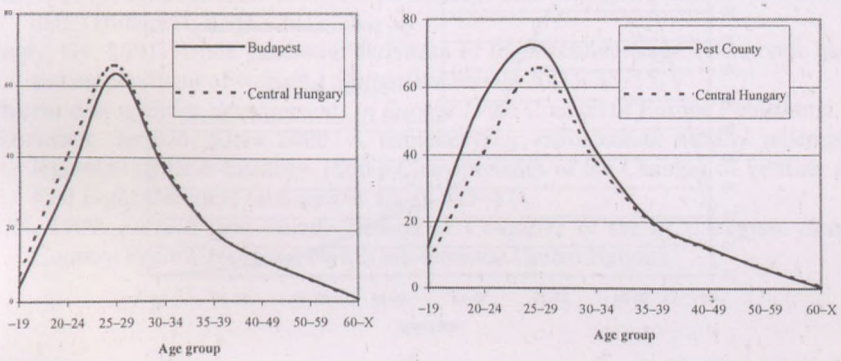
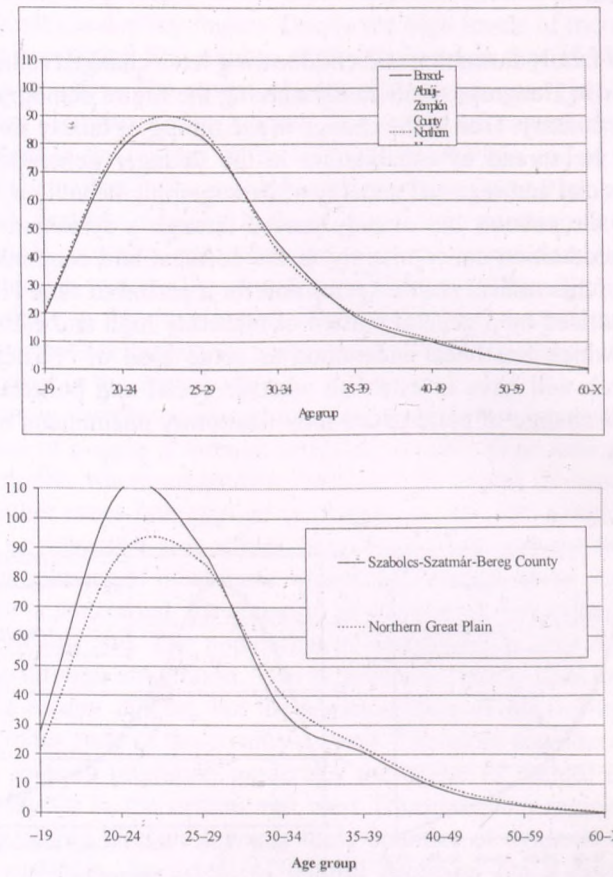


Figure 5
Marriage patterns by counties and regions (1999)



Source: Population movement database.

Figure 5
Marriage patterns by counties and regions (1999) (cont.)

Translated by Vera Gáthy

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BIRTH OUT OF WEDLOCK

MARIETTA PONGRÁCZ and EDIT S. MOLNÁR

INTRODUCTION

In Hungary the ratio of births out of wedlock was low for many decades amounting to only 5–6 percent of all births. In the early-mid 80s this percentage began to grow and increased dramatically during the nineties. In the last two years nearly 30 percent of all births was out of wedlock. This phenomenon is obviously attributable to the growing popularity of cohabitation. Just as in many other European countries, the institution of marriage has entered an era of change in Hungary.

Despite the growing rate of cohabitation without marriage, this type of living arrangement is still relatively rare in Hungary. From the microcensus of 1996 it appears that an overwhelming majority of couples – about 75 percent – are married. Beside the 16–17% of those living in one-parent households the 8–9 percent of those opting for cohabitation cannot be considered dominant in this context. However, cohabitation without marriage is clearly becoming increasingly popular among couples in Hungary too. In addition, there has been a growing social tolerance towards this kind of lifestyle beyond those choosing it. Although the average ratio of couples living in cohabitation is relatively low, for younger generations cohabitation without marriage is widespread reaching an estimated 25–30 percent among people in the age group of 20–29 years. Of course, this does not mean that the members of this cohort will live all their lives in such relationships. Some will marry the current partner or someone else, but the fact that in the most fertile period of their life they choose cohabitation explains the dramatic increase in births out of wedlock witnessed recently in Hungary.

In spite of the growing ratio of births out of wedlock and cohabitation without marriage, Hungarian attitudes are still fundamentally traditional or conservative. Unlike in some countries in Western and Northern Europe, the question is not why people decide to get married, but just the opposite, why does a major and growing number of couples prefer cohabitation to marriage? The apparent similarities of cohabitation as a social phenomenon conceal these two different perspectives. Behind the Hungarian perspective there is a marriage-oriented value system and a traditional idea of the family.

According to our previous research reservations in Hungarian society about cohabitation and births out of wedlock are essentially not of a moral nature but are connected to worries about the security of children born out of wedlock. This assumption is supported by statistical evidence suggesting cohabitation is a less stable partner relationship and consequently fails to provide the same level of security to children in the long run as legal marriage. Similarly, the fertility rate of cohabitation is lower than that of marriages and thus their contribution to the reproduction of the existing population is smaller. Furthermore, after giving birth out of wedlock a considerable portion of mothers are left to raise the child alone with single-parent status resulting in a number of social and financial problems in raising the child.

The crucial question here is whether the continuous increase of births out of wedlock expected throughout Europe and in Hungary will be accompanied by a change in the internal content of the relationship between the parents that will make this family form more stable. As increasing numbers choose this living arrangement, will this sort of family relationship become increasingly similar to the pattern of marriage-based family life, and the only difference official documentation of the partnership? Furthermore, are mothers raising their children alone relying only on themselves or do new alternatives of family life present an option for them? For example separated parents might continue to have strong emotional ties. By answering these questions we shall be able to develop novel approaches in terms of legal, social and family policies addressing the problems related to births out of wedlock.

The above questions have also been incorporated into a survey conducted by the Demographic Research Institute in 1996. The survey sample consisted of 1,500 mothers that gave birth out of wedlock in 1995. The primary goal of this survey was to identify how conscious the decisions of these mothers with different family statuses to have a baby without having a legal relationship with a partner were. This involved several questions concerning the nature of their decision to give birth out of wedlock. Was their choice determined by their value system? If so, was this a final decision or was it the result of necessity stemming from individual circumstances not necessarily excluding the possibility of future marriage. These questions aim at asking if an irreversible process is observable eroding the traditional form of family life based on marriage or if cohabitation will evolve as an alternative to legal marriage also surviving the changes. The question of how these processes effect the situation, role and stability of families is also of great interest to us.

HISTORICAL BACKGROUND

Public opinion on births out of wedlock and the social status of children born in this manner have varied across diverse historical eras and social strata. When in 1850 vital statistics began to be nationally collected on the basis of parish registers in Hungary, the 'origin' of children was regarded as crucial information. Besides the three key data (sex, religion, 'viability') recorded at birth, a fourth question was also asked: whether the given child was born inside or outside marriage (in so-called 'pagan' marriages). Some of the children born out of wedlock were born to cohabiting, 'concubinary' couples, whether he or she was 'legitimate'. While authors at that time showed relative tolerance towards non-marital relationships, they tended to be very pessimistic or critical of the prospects, the mental-bodily progress and social adaptation of children born in 'pagan' marriages. They also regarded most of these children as destined to be the 'pariah of the society'.

In the late 1800s the rate of 'illegitimate' births was about 8–10 percent. This value remained stable for nearly a century, apart from minor war-related fluctuations, until 1980. Considering the revolutionary changes in birth control and the array of contraceptive techniques during this period, we can say that behind the virtually unchanged rate of 'illegitimate' births very different sexual behaviours and moral values existed.

Based on the analysis of the dynamics of 'illegitimate' births over past decades it seems that the absolute prohibition of abortion introduced in the first half of the 1950s did not have any impact on the rate of 'illegitimate' births. As a result of absolute prohibition of abortion one might have expected that unwanted pregnancies resulting in unwanted births would considerably increase the frequency of extramarital births. On the contrary, legitimate births increased. While the number of 'legitimate' births in 1954 was 21% higher than in 1952, the number of 'illegitimate' births in the same period increased by only 16 percent. In response to the moral expectations of society at that time, the overwhelming majority of couples were trying to legitimise 'illegitimate' pregnancies by getting married. The liberalisation of abortion introduced in the second half of the 1950s resulted in a sharp decline of the number of births, which process had a greater impact on 'illegitimate' births rather than on 'legitimate' ones. This led to the refutation of yet another demographic theory claiming 'illegitimate' births were typical of a relatively constant group of population with a decline in births automatically increasing the ratio of births out of wedlock. All in all, we can conclude that the changes in the number and rate of births over the past couple of decades have mainly been restricted to births to married couples and have hardly influenced the ratio of extramarital births standing steadily at 5–7%. The turning point came in the early 1980s when the extramarital birth rate started an initially slow but ever accelerating

increase. As a result, the ratio standing at 7.1% in 1980 rose to 30.3% by 1999, which means that today every third child in Hungary is born to unmarried parents or a single mother.

DEMOGRAPHIC CHARACTERISTICS OF MOTHERS GIVING BIRTH OUT OF WEDLOCK

Unmarried (single, divorced, widowed, separated; either living alone or in cohabitation) women giving birth mostly belong to the younger generations.

Table 1
Distribution of extramarital births, by age of mother (1985–2001) (%)

Age group	1985	1990	1995	1997	1999	2000	2001
–16	11.7	10.8	7.0	5.6	2.8	3.9	3.9
17–19	21.7	23.1	21.0	18.7	17.7	15.6	14.3
20–24	25.0	26.6	32.3	34.9	35.6	34.3	32.6
25–29	19.0	16.4	20.4	21.6	23.7	25.1	26.7
30–34	14.3	13.1	11.1	11.7	13.1	13.9	15.1
35–39	6.8	8.3	6.2	5.7	5.6	5.7	6.0
40–49	1.5	1.7	2.0	1.8	1.5	1.5	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Demographic Yearbooks.

The data above shows marked structural changes (Table 1). On the one hand a vast majority of extramarital births are to very young mothers (23% of them are under the age of 20). On the other hand the ratio of very young mothers is on a relative decline with a simultaneous increase in extramarital births between the age of 20 and 30. This trend is well demonstrated by another indicator showing the extramarital birth ratio within specific age groups (Table 2).

Table 2
Ratio of extramarital live births relative to 100 live births by age of mother (1985–2001) (%)

Age group	1985	1990	1995	1997	1999	2000	2001	2001/1990
–16	53.2	78.8	86.3	90.1	100.0	92.4	92.5	117.4
17–19	17.0	28.9	44.1	54.1	68.8	67.0	70.5	243.9
20–24	6.3	8.8	18.8	25.0	30.7	34.3	38.0	432.1
25–29	5.8	7.7	12.9	16.2	19.2	20.0	21.6	279.9
30–34	9.0	13.3	17.1	20.0	20.9	21.2	21.8	164.2
35–39	15.8	19.5	23.1	25.2	27.7	27.4	27.3	139.8
40–49	18.8	25.4	30.1	32.1	31.0	31.0	32.3	127.3
Total	9.2	13.1	20.7	25.0	28.0	29.0	30.3	231.6

Source: Demographic Yearbooks.

Both in the past and today we can observe a tendency whereby the younger a woman becomes pregnant, the more likely that it is a birth out of wedlock. In case of mothers between 17 and 20 years of age every second child is born outside marriage and the same ratio is nine out of ten in case of mothers younger than 17. While there is a declining tendency to have children at a young age, whenever this does happen it is likely to be out of wedlock. The occurrence of extramarital births at such young ages has never been so frequent as today. As mothers' ages increase, the extramarital birth ratio decreases. These are the age groups with the lowest rate of birth out of wedlock because most of the middle-aged women still live within a marriage. However, in these age groups unmarried women have increased their share in the number of births. For example, one third of the very rare births over the age of 40 are out of wedlock, which means every third child of elder mothers is born out of wedlock.

The tendencies mentioned above are closely linked to changes in attitudes toward marriage. The decline in the number of marriages has significantly raised the ratio of singles whereas the radically lower number of re-marriages has increased the number of those in divorced and widow/widower status. Unmarried women take a major share in births out of wedlock as they give 81.8% (as of 1998) of the total of such births (this is a higher proportion than in the early 1990s).

The social status of women giving birth out of wedlock is analysed on the basis of their schooling despite the fact that it is becoming increasingly difficult to define social status according to the number of school-years a person has received or the type of employment they are engaged in.

Table 3
Rate of extramarital live births
by the level of education of the mother (1990–2001) (%)

Number of school-years completed	1990	1995	1997	1998	1999	2000	2001	2001/1990 1990=100
0–7	49.1	58.7	60.9	63.5	67.8	67.8	69.2	141.0
8	16.2	25.1	30.6	33.0	36.6	36.6	39.4	243.0
9–12	6.3	12.4	15.6	16.9	20.6	20.6	21.6	342.2
13–x	4.5	7.5	9.2	10.4	11.3	11.3	11.5	254.5
Total	13.1	20.7	25.0	26.6	29.0	29.0	30.3	231.2

Source: Own calculation based on primary vital statistic data sources.

The table shows very significant differences in the ratios of extramarital births according to the number of school years completed (Table 3). Completion of 8 years of elementary school seems to be a milestone. For women who attend school for more than seven years the rates of extramarital births decrease by almost 50%. At the same time, the dynamics of change throughout the 1990s demonstrate that the greatest increase occurs in precisely the category of those with higher education (secondary and university). In these groups, the ratios of births out of wedlock have grown by some two and half times over the past eight years, which has reduced the difference based on highest and lowest education levels from eleven-fold in 1990 to six-fold. The increasing extramarital birth rate of women with higher social status is related to this behaviour becoming socially more tolerated and accepted over the past couple of years. At the same time we must note that increased social tolerance could lead to the further spread and a higher ratio of births out of wedlock.

The distribution of unmarried mothers by labour market status also shows interesting variations (Table 4).

Table 4
Rate of extramarital live births by the labour market status of the mother (1990–2001) (%)

Labour market status	1990	1995	1998	1999	2000	2001	2001/1990 1990=100
Economically active	10.1	15.1	20.3	21.5	22.3	23.6	233.4
Economically inactive	6.9	12.5	20.4	28.7	29.1	31.1	451.2
Dependent	37.0	38.3	40.3	43.0	46.0	47.2	127.7
Unemployed	–	33.2	38.8	39.8	42.4	43.7	131.6*
Total	13.1	20.7	26.6	27.8	29.0	30.3	231.2

Source: Own calculation based on primary vital statistics data sources.
* As compared to 1995.

While in 1990 the rate of birth out of wedlock was the lowest among inactive mothers [(on child care allowance (till the child is three year old), child care benefit (income-proportionate), or retired)], this category now has produced the most dynamic growth in this respect in the 1990s. In the surveyed period the rate of extramarital births among inactive mothers (primarily those unmarried and on child care allowance or benefit) has nearly tripled. This means there is an increasing number of women deciding to have a second or third child out of wedlock in addition to an existing child under three.

All in all, unmarried mothers are typically very young, have below-average schooling and no jobs (i.e. dependent or unemployed). At the same time, analysis of the recent years' data also reveals a structural change. The rates of extramarital births among women of a relatively older age, higher education and active labour market involvement (or inactive because of being on child care benefit/allowance) have increased more rapidly than the average ratio of extramarital births.

SOCIOLOGY OF BIRTH OUT OF WEDLOCK

Social and value aspects of birth out of wedlock

The demographic data presented above make it possible to show the key trends of extramarital births and to analyse the most important connections and changes. However, the macro-statistical figures do not and cannot give answers to important questions such as the mothers' actual, *de facto* marital status. The vital statistics provide us with information as to the ratio of single, divorced and widowed women but we know neither the ratio of *de jure* single mothers who

are unmarried but still live in cohabitation for some time nor the exact ratio of mothers *de facto* living alone. A survey of the nature and intensity of non-marital relationships is crucial from the perspective of children born. Obviously, the development, education and socialisation of a child is strongly influenced by his/her parents living in a close relationship – if not in a marriage – as compared to his/her mother being alone all the time.

An additional question is whether or not it is a *pre-determined choice* by mothers to give birth out of wedlock, without a *de jure* relationship. Do they base their decision on values? Is it a final decision or is it made *out of necessity* generated by various individual reasons, circumstances that might eventually still lead to marriage? In other words, is this a conscious opposition to *de jure* marriage (an 'anti-marriage attitude') that could be interpreted as a passing tendency of radical anti-traditionalism typical of a specific social stratum? Or are we witnessing a slow transformation whereby new trends gradually reduce the importance, significance and timing of the ceremonial act and legal binding within the relationship between parents? Exploration of the weight, trend and intensity of value changes can help us to find answers to such questions. Is this the start of an irreversible process resulting in the gradual disappearance of traditional family life based on marriage, or can we expect to see various, equally valued living arrangements in addition to the survival *de jure* of marriage? This last scenario is suggested by previous results showing the lack of anti-marriage sentiments among younger generations, who have difficulties accepting certain marriage-related 'necessities' (such as the obligatory adherence to moral and religious rules, the parents' involvement in family matters, adaptation to judgements of others, etc.). Younger generations seem to have an ever-increasing preference to the sovereign right to choose between living arrangements. They expect an overall social recognition of this right without any moral judgement of the advantages and disadvantages of marriage versus cohabitation.

These questions are common in the most recent sociological literature on families. Pregnancy and the birth of a child bring the woman or couple to a crucial juncture in the relationship requiring them to make a definite choice within a limited time. Do they want to have the child in a freely selected, looser, more liberal permanent relationship, do they prefer '*testing*' their relationship and postponing the decision or do they *choose to legitimise their relationship in the near future?* Of course, decisions to marry may be driven by several reasons: to fulfil an internal moral drive, to gain recognition from family and peers or to assure the future of a child. This crucial period (i.e. the post-natal months) in family life and participants' value-driven decisions can be examined more closely by examining the 1996 questionnaire of 1500 women who gave birth out of wedlock in 1995.

The data in this survey indicates a cohabitation ratio of 74% proving that the significant rise in extramarital births has been mainly a result of the spread of cohabitation. One fifth of these pregnancies are born to parents in separate but close relationships and only a small fraction (6%) of them came from casual relationships. At the time of data collection (within one year of the birth), most of the mothers still lived together with the father of the child. 64% of the mothers were still in cohabitation and 6% had married, whereas 30% remained single, raising their children alone.

Relevant data demonstrate Hungary's similarity to several Western European countries in terms of the father's presence. For instance, in Sweden – with a high ratio of births out of wedlock – 80–90% of the parents live in some form of stable relationship. The cohabitation ratio in the Netherlands and Belgium, with lower illegitimate fertility, is similarly high. In contrast in Germany, lonely mothers make up the greatest group.

Why do unmarried women give birth?

Public opinion polls suggest Hungarian society is relatively tolerant towards couples living in non-marital relationships as well as toward young couples deciding to test their relationship in a trial marriage. However, having children outside marriage is less tolerated. It is claimed that 'if a couple living together expects a baby, they should definitely get married before the birth'. In other words, extramarital births represent a behaviour pattern that remains unacceptable to the majority even if social tolerance is continuously rising in this respect. This makes it justifiable to explore which causes and life circumstances lead women to give birth out of wedlock disregarding public opinion.

Table 5

'What circumstances made you decide to give birth to a child?' (1996) (%) (N=1433)

Categories of reasons	(%)
– it was planned in advance	29.2
– it was planned but for a later date	17.9
– it was primarily the mother's decision	8.4
– it was primarily the father's decision	4.4
– got pregnant and did not want induced abortion	30.1
– pregnancy was detected too late	8.4
– other reason	0.4
– no reason or hard to explain	1.2
Total	100.0

Source: S. Molnár et al. (1998): 106.

Based on the distribution of answers we can see the predominance of conscious family planning (Table 5). 60% of answers, such as *'it was planned', 'it was planned for a later date', 'decision by mother or father',* indicate some kind of planning. However, the ratio of answers referring to the mother's accidental, unwanted pregnancy is still quite high. Nearly 40% of respondents answered *'did not want induced abortion'* or *'pregnancy was detected too late'.*

The weight and priority of reasons for their decision varied according to the parents living arrangements and the strength of their relationship before and after the birth. Couples living in cohabitation before having a child and *getting married afterwards* predominantly answered *'it was planned'* and stressed the consciousness as a result of their stable relationship. However, there were also a significant number of respondents who planned to have children but only at a later date. They presumably would have scheduled their marriage for a later date, too, but the unexpectedly early pregnancy led them to get married after the birth.

Opposite answers came from mothers who had neither lived with the father of the child at pregnancy, nor after the birth of the child. In some cases, this pregnancy was the result of a 'causal relationship'. Their answer reveals a special duality of motives. Undoubtedly, most of these single mothers whose pregnancy was accidental primarily gave birth to a child because they were late detecting pregnancy or because they had emotional, moral or health-related reasons for rejecting abortion. At the same time there is another significantly smaller distinct group of single mothers, who consciously decided to become pregnant and give birth to a child without living with the father. This situation was indicated by the answer *'it was primarily the mother's decision',* which had a ratio of 16% among single mothers, twice the average ratio for the entire sample.

The *actual length of co-residence* is also a major factor behind the reasoning of mothers living in cohabitation. In stable, more-than-two-year-long relationships a vast majority – over 60% – of mothers emphasised the conscious, planned nature of their pregnancy. In contrast, those with relatively new, one-year-long relationships mentioned accidental pregnancy quite frequently.

Altogether, we can say that decisions to have children are primarily dependent on the nature and intensity of the parents' relationship. Couples with longer and more stable cohabitation explained their decision with the same factors mentioned by married couples in fertility surveys.

Marriage plans – reasons for not getting married

Most of the mothers giving birth out of wedlock live in more or less stable relationships and the majority of these couples consciously planned to have children. This justifiably raises the question of why they have not legalised their relationship officially and legally by getting married. This is particularly interesting since they have chosen not to marry consciously and their joint decision to have children presupposes both a close relationship and sense of responsibility. Is their current status related to the couples' conscious choice of living arrangement or is their decision against marriage related to temporary obstacles?

Table 6
Marriage plans of mothers in cohabitation (1996) (%) (N=1049)

Categories of planning	(%)
– about to get married	21,7
– may marry – no decision as yet	35,5
– no marriage planned	42,0
– had been married to each other but now divorced	0,8
	100,0

Source: S. Molnár et al. (1998): 109.

(1) The definite intention to marry is typical of over one fifth of cohabiting mothers, primarily of younger mothers (younger than 24) who have only cohabited with the father for two or less years (Table 6). In the latter case this form of cohabitation can probably be interpreted as a trial marriage rather than a fixed living arrangement. The longer this cohabitation lasts, the more couples say they do not want to change this arrangement.

The question of *'why is marriage only planned after the birth of the child'* is primarily relevant for those who say they want to legalise their relationship soon (Table 7). The ratio of answers indicates that their postponement of marriage is mainly a consequence of factors over which they have no or little control. Various 'psychological' reasons are far less important. Such psychological reasons include the parents' emotional ties only being solidified after birth and the parents' realisation after the child's birth that legalisation of their relationship can guarantee the future and security of their child.

Table 7
'Why did you only marry after the birth of your child?' – Distribution of answers of mothers with plans to get married 'soon' (1996) (%)

Categories of reasons	(%)
– marriage was planned before but there were financial/family-related obstacles to it.	59.8
– longer time was needed emotionally to make this decision.	12.2
– decided on marriage primarily a way of guaranteeing their child's future and security	16.3
– other reasons	6.6
– no reason or hard to explain	5.1
Total	100.0

Source: S. Molnár et al. (1998): 110.

Within the large and varied category of external, financial/family-related obstacles one of the most frequent reasons for postponement was that at the time of birth the father had yet to break up an existing marriage. Equally common was the reference to financial problems. Wedding ceremonies, especially outside Budapest, often present such an immense financial burden to the families of the couple that they can only be arranged after long years of saving or borrowing substantial sums of money. In this environment, arranging a wedding without the expected ceremony and formalities evokes more criticism than a child born 'prematurely' in a relationship.

(2) The argument is a little more complicated among those who say they do not want to get married in the future or who give an uncertain, 'maybe', in answer to the question concerning plans for marriage. The reasons for *'why not'* are partly the same but there are some variations here too.

In both groups the most often cited argument is that marriage is merely a legal action, a formality, so it is absolutely unnecessary. It is briefly expressed by saying *'no document is needed'* (synonymous explanations include 'it is fine this way too', 'the point is we live in harmony', 'marriage gives no guarantees either', 'this is what we got used to' or 'marriage is unnecessary', etc.). These are the arguments voiced by around one quarter of those decisively rejecting marriage and one fifth of those 'maybe' getting married in the future.

The lack of necessity for an 'official document' is an especially popular answer among mothers with at least secondary–level education as well as among couples where either the mother or the father (or both) is divorced, i.e., those with negative experiences regarding marriage.

In the category of second most popular arguments the reasons are a mixture of those decisively against marriage and those 'maybe' getting married. The first group ranks *'the need for independence'* as second (13%) and the *'fear of restrictions'* and *'need to preserve independence'* are even more emphatically present in the explanations of those relatively older (over 30) and among mothers not of Roma origin.

The other explanations show that only a minority of mothers disagree with marriage as an institution or as a chosen living arrangement. Decisions against marriage are rather based on individual ideas, circumstances, and opportunities than on any real consideration of factors against a legal form.

For example, it is not a conscious 'anti-marriage attitude' when couples become uncertain about 'whether it is worth getting married' for very practical reasons. 11% of those 'maybe' getting married and 8% of those rejecting marriage say *'cohabitation could perhaps be a better option because of welfare benefits'*.

In addition, we cannot say marriage as an institution is rejected when mothers do not want to marry the father of their child because they do not see him as suitable for the husband role. *'Generally, I do not reject marriage but I certainly do not want to marry the father of my child'* was answered by 10% of those absolutely refusing marriage and 2% of those 'maybe' getting married.

Nearly one fifth of those absolutely refusing marriage and those uncertain cannot accurately explain why they are against legitimising their relationship. This is quite a high ratio and it is even higher among young mothers with very low schooling and especially among Roma mothers. This also demonstrates that their attitude is not so much determined by some conscious opposition but by circumstances beyond their control.

We might presume that anti-marriage sentiments are the strongest in mothers left alone and raising their child or children without the father (for mothers giving birth in 1995). This accounts for 30.2% of the total of women with children born out of wedlock. The answer to the question of *'have you ever planned to marry the father of your child?'* was a definite 'no' in case of over half of single mothers (52.5%). This means they neither considered a future marriage when they entered into an intimate relationship with the future father nor at the time of their pregnancy. However, a not much smaller proportion of single mothers had expected to marry the father (47.5%). The answers to *'why have you not considered getting married'* and to *'why have your marriage plans failed'* clearly show that the ratio of single mothers finding marriage unnecessary is even lower than that of mothers in cohabitation. The main reason single mothers do not marry is the father.

Table 8

'Have you ever planned to marry the father of your child?' – Distribution of answers by mothers living alone after giving birth (1996) (%)

Categories of planning	Categories of reasons	(%)
there have been such plans		
	Why has it failed?	
	– *father does not want to get married (for the time being)*	21.3
	– financial or family-related obstacles	13.5
	– other reason or cannot explain	12.7
	Total of single mothers with marriage plans	47.5
no such plans because		
	– it is not considered important in today's modern world, it does not make any difference whether you live in marriage or cohabitation.	10.9
	– independence allows her to achieve her goals ideas more easily	8.1
	– there is no overall rejection of marriage there is *no intention of marrying the father of her child*	22.0
	– not marrying is a better option in terms of entitlement to welfare benefits	1.4
	– other reason or cannot explain	10.1
	Total of single mothers with no marriage plans	52.5
		100.0

Source: S. Molnár et al. (1998): 113.

Overall, nearly half of the mothers remaining alone emphasised individual obstacles to marriage (father not wanting to get married or mother not wanting the father to be her husband – 43.3%). Another 37.7% of them mentioned family-related, financial, social or other obstacles. Less than one fifth of them said 'documentation is not necessary' or 'they want to remain independent' (19%). Only this latter group may be categorised as opposing marriage. Of course, the term 'anti-marriage attitude' is an over-simplification because in most of the cases there is no clear opposition. Instead, people in this category mainly lack the ability or will to accept the legal obligations associated with marriage in their lives.

Popularity of the various family forms

Although the data unanimously indicates that the majority of mothers with children born out of wedlock are not at all opposed to formal marriage, it is still worth examining which social-demographic groups of mothers have the strongest sentiments against marriage as an institution. The most important question is whether those initiating the latest changes in these processes most intensively hold such sentiments, i.e. women of older age and higher education. The analysis does reveal such a correlation of anti-marriage sentiment with family form, marital status, age, locality and education.

There are two main dimensions in the variation of opinions. Life course variables are one of them. Anti-marriage sentiment is more popular among those in cohabitation or divorced than those living alone or single. This is reasonable since most of those in cohabitation (especially after a longer period of living together) have made a more or less final choice of living arrangement, whereas those who are divorced obviously have negative experiences of marriage. At the same time, divorcees are on average older and have a stronger desire to live independently than the young and single.

Social variables have a more marked and stronger impact than life course variables. This is because attitudes are not only influenced by demographic life course but also by social status. This can be seen via the link between different attitudes and education. As educational levels rise, the ratio of those opposing marriage rises too. Mothers with university degrees have the strongest desire to lead an independent life (nearly 20% as opposed to the average 7–8%). Even this position among mothers with university degrees does not mean a categorical denial of marriage as an institution, rather, they recognise the two forms of relationship as equal choices. The frequencies by educational level suggest that the recent and rapid changes in behaviour among women with higher education are a sign of changes in the value system.

There is a striking difference between the opinions of mothers living in Budapest and in the countryside. As compared to the countryside in Budapest, we have found twice as many women, who had negative sentiments towards marriage. This could be one of the reasons why every fourth child in Budapest was born outside marriage, as opposed to the national average of 'only' every fifth, in the surveyed period. Value changes and the impacts of modernisation are more likely to occur in Budapest where the ratio of qualified women is higher than in the country.

Considering opinions separately from actual decisions, we find mothers having children out of wedlock are more pro-marriage than anti-marriage.

Table 9
Popularity of different family forms, by mothers' living arrangements after birth (1996) (Opinion Poll Type Index With 100 Scores)

Living arrangements	Average	Single mothers	Mothers in cohabitation	Mothers marrying later
to live in marriage	85	82	85	98
to live in cohabitation	81	69	88	75
to live alone, independently	24	37	19	16
to have close contacts with the father but not live with him	33	42	29	27

Source: S. Molnár et al. (1998): 119.

The vast majority of mothers giving birth out of wedlock consider marriage an ideal pattern but find cohabitation an equally ideal option. Cohabitation is only preferred to marriage by women who actually live this way although opinions on the two patterns only differ minimally. As far as those getting married after having children are concerned, we can clearly identify the couple's self-justification for marriage. Since these couples live together without marriage till the birth of their child, they also promote the desirability of cohabitation.

The attitudes of mothers left alone are more complex. This is because some consciously choose to live independently (they appreciate this arrangement more than other mothers) whereas other single mothers live alone despite their own desires. This latter group would probably select marriage over cohabitation. The vast majority of mothers living alone would probably choose legal marriage over cohabitation if the decision were left to them alone.

The results of other research projects on value and family planning further substantiate this positive marriage attitude found among mothers giving birth out of wedlock. Research led by László Cseh-Szombathy focused on young adults in the age family formation (Cseh-Szombathy 1979). This research has found that although people between 20 and 40 years–old are strongly in favour of non-legitimised cohabitation, most of them refuse to accept the allegation that 'marriage has become an outdated institution by now'. We may draw similar conclusions from our research on mothers raising their children alone. While they recognised permanent cohabitation as a valid option, these women primarily identified marriage as the ideal form.

CONCLUSION

The majority of Hungarians do not oppose marriage despite the decreasing nuptiality rate, the spread of cohabitation and the increasing number of births out of wedlock. Marriage has a stable position in the social value system. At the same time, it remains to be seen when and how this set of values will be changed by the demographic tendencies currently in a phase of transformation.

It is a well-established claim that the acceleration of modernisation necessitates the destruction of traditional social structures so that the family becomes less and less an institution governed by social norms and increasingly based on private agreements between partners. However there are competing interpretations. Our results certainly allow that the expansion of alternative norms and values of cohabitation does not mean that the value of the family is diminishing. The distinctive priority of family and children, which is a special characteristic of Hungary, may also be found in other countries where alternative forms of family life are more common practices. We have to accept that nowadays the diversity of approaches regarding family life is a natural and normal phenomenon. Only a family policy and family legislation capable of responding to these changes in a flexible manner can prevent families – regardless of their traditional or non-traditional forms – from reacting to accelerated modernisation in a way that leads to instability and dysfunction. Let us consider two significant facts from our research. First, a considerable number of mothers avoiding marriage planned and wanted to have a baby. Second, the majority of these women chose to reside and raise their child or children with a partner. These findings support the optimistic hypothesis that even with the weakening of the traditional family framework, the desire for children and a complete family remains strong.

Nonetheless the spread of cohabitation and the rising number of births out of wedlock cannot be considered as a positive process from demographic perspectives. The likelihood of cohabiting couples splitting up is far higher than those in legal marriages. This makes families increasingly unstable with possible negative consequences for the bringing up of children. It is an additional negative aspect that cohabitation is always associated with a lower fertility than marriage. Thus, the spread of non-marital forms of living together in itself leads to a decrease in fertility.

Translated by Miklós Thuránszky

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MARRIAGE AND COHABITATION – FACTS AND OPINIONS COMPARED

MARIETTA PONGRÁCZ and ZSOLT SPÉDER

INTRODUCTION

The rising occurrence and acceptance of cohabitation is without doubt one of the most conspicuous feature of the demographic changes that has occurred in the last decade and a half in Hungary. Of course, this phenomenon is by no means unique and has been widely described in other countries as well (Cherlin 1992; Kiernan 2002). This change is one of the key elements of the concept of 'second demographic transition' (Van de Kaa and Lesthaege 1987). The spread of cohabitative arrangements must of necessity indicate a decrease in the number of marriages and/or may signal changes in the meaning and content of marriage as an institution. However, it would be an oversimplification to interpret these processes merely as cohabitation replacing marriage. Premarital cohabitation ('trial marriage') directly indicates the connections between the two forms of partnership. At the same time, we would not be justified in saying that all cohabitation ultimately leads to marriage and that the spread of cohabitation presents no challenge for the institution of marriage. Altogether, we are currently experiencing a turbulent and transitory period in the forms of lasting partner relationships. One of the central issues of the social-demographic research project 'Turning points of our life course' is the understanding of the transitions of the forms of partnerships. The fundamental concept of this research project is the same as that of the 'Generation and Gender' program (UN/ECE 2000) and it performs a longitudinal study of demographic processes, among them the changes in partner relationships.[1] The full utilisation of the data system and the assessment of the influences of structural and behavioural factors will become possible after the second wave of data collection since it is only then that the 'selective' and 'adaptive' processes may be separated (Lesthaeghe and Moors 2002). Without the second round, the data currently at our disposal allows for a very narrow interpretation and permits us only a description of the initial situation.

In comparing *marriage and cohabitation* we will first compare social characteristics of the respondents, then we will use certain indicators to point out

[1] For the description of the concept of the Hungarian research, see Spéder 2002. The panel survey 'Turning points of our life course' was supported by NKFP, Budapest No. 5/128/2001.

differences in certain aspects of values systems. The questions on the 'suggested' and 'useful' forms of living together in the questionnaire target the discovery of community expectations, in the words of Lesthaege and Liefboer: the 'normative controls' at work in the community. Finally, in the concluding part of our study we will focus on certain life-course features of cohabitation and marriage.

BASIC CHARACTERISTICS OF PARTNERSHIPS

Up until recent times, marriage had been the only form of long term partnerships in Hungary. A very small proportion of the population lived in cohabitation and only postmarital cohabitations prevailed (Csernák 1992). The spread of cohabitation started gaining momentum in the late 1980s (Kamarás 1996; Bukodi 2001). Most of those living in lasting relationships (63% of the 18 to 74 age group) still live in marriages (87%) but cohabitative arrangements are becoming popular among young people (to which point we shall return). Most of those living in cohabitation are today never married (57%), one-third of them are divorced and 10% of them are widowed. These three groups indicate the differentiated nature of cohabitative arrangements and we may surmise that the content of relationship also varies significantly between these groups. Those in the first group are running a 'trial marriage' before tying the knot, those in the other group choose this living arrangement as an alternative to marriage. Those that are divorced have already voluntarily dissolved a relationship which they earlier thought would be lasting. All this made it sensible for us to treat these groups separately in the part describing the various types of cohabitative arrangements. However, the low number of elements allows us to set up only two groups: those who have never married ('new type of cohabitation') and those who had been divorced or widowed ('old type of cohabitation').[2] This division is supported by the age distribution of those living in cohabitation, since never married people living in cohabitation tend to be much younger.[3]

[2] In the two groups taken together, we have 80% divorcees and 20% widowed.

[3] To better understand the features of the 'new' type of partnerships, we divided the married people into three groups: young couples (under 40), middle-aged couples (40 to 59) and older couples (60 and over). By this, we have managed to filter out the cohort effect, however roughly. In the comparison of married and cohabiting forms of living, young married couples will have an especially important role.

Table 1
Distribution of people between 18 and 74, by marital status and form of partnership (2001/2002) (%)

Type	%
Never married, living alone	21.1
Never married, living in cohabitation	4.6
Married living in marriage	54.4
Married, living in separation	1.3
Divorced, living alone	7.2
Divorced, living in cohabitation	2.6
Widowed, living alone	8.0
Widowed, living in cohabitation	0.7
Total (%)	100.0
N	16 363

Source: 'Turning points' panel survey.

Table 2
Different forms of partnerships by age groups (2001/2002) (%)

Age group	Marriage	Cohabitation	
		Never married	Widowed/divorced
18–29	10.1	62.9	5.6
30–39	20.5	23.9	19.6
40–49	25.0	9.4	30.0
50–59	22.4	2.1	27.4
60–69	16.0	1.6	14.6
70–75	6.0	0.1	2.8
Total	100.0	100.0	100.0
N	8898	758	538

Source: 'Turning points' panel survey.

Later we will focus on the choice between cohabitation and marriage, so let us now present the social characteristics of those living in these unions. As far as *education levels* are concerned, there is hardly any difference between those living in marriages and cohabitation (Table 3). In contrast to Western European countries where cohabitative arrangements are mostly the choice of higher educated and better trained young people, in Hungary the education level of people in cohabitative partnerships lags behind that of people living in marriages. It would be too early to generalise, but right now, there is nothing to indicate that the 'new type' of cohabitation is a 'fashionable' form of life which

trickles down from the more educated social groups. What is truly conspicuous is that a breakdown by education level – which strongly differentiates the new Hungarian society – shows no significant differences.

Table 3
Educational levels by different forms of partnership (2001/2002) (%)

Education	Married			Cohabiting		Total
	19–39	40–59	60–	'New type'	'Old type'	
Less than primary	1.4	2.4	17.4	5.8	6.1	5.5
Primary	15.6	21.6	34.3	21.9	28.4	22.8
Vocational	37.5	31.5	20.2	21.5	32.7	31.1
Secondary	29.8	28.6	17.2	27.7	22.5	26.4
Higher	15.6	15.9	10.9	12.1	10.2	14.3
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
N	(2727)	(4218)	(1957)	(759)	(538)	(10196)

Source: 'Turning points' panel survey.

Data on the *economic activity* of the respondents again show no significant differences between those opting for cohabitation and those living in marriages. The ratios of those employed, self-employed, unemployed and having other economic status is almost identical, whether speaking of young married couples or those living in the 'new' cohabitative relationships. A marked difference can only be found among those on maternity benefits and those in the 'other inactive' category. A much higher percentage of married people are on maternity benefits (i.e. have children) and if we were to break down the data further by gender, the difference would be even greater. We were expecting a high ratio of students among the cohabiting couples but this expectation has not been fulfilled. In today's Hungary, student life seems incompatible not only with having children but also with having lasting relationship. Those who live in 'traditional' cohabitation exhibit a breakdown pattern similar to that of middle aged and older married couples. (We should remember there are more middle-aged divorcees than older, cohabiting widows.) We have also examined the differences by income status and places of residence but found no significant correlation. All in all, we can conclude that the major economic indicators of those living in marriages and those cohabiting are very similar and no characteristic differences between them can be established.

Table 4
Economic activity of those living in partnership, by form of partnership (2001/2002) (%)

Economic activity	Married			Cohabiting		Total
	18–39	40–59	60–	'New type'	'Old type'	
Employed	61.3	58.0	6.5	60.3	46.9	48.6
Self-employed	8.2	9.5	1.4	6.2	7.6	7.2
Unemployed	7.0	4.4	0.1	8.9	4.7	4.6
Old age pensioner	–	6.9	81.3	2.2	17.5	19.5
Claimant of disability allowance	1.5	16.1	6.2	2.1	14.9	9.2
Maternity benefits	16.5	0.6	0.1	9.5	3.4	5.5
Homemaker	2.7	2.4	3.0	2.5	2.0	2.6
Student	0.5	–	–	2.0	–	0.3
Other inactive	2.3	2.2	1.5	6.2	3.0	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: 'Turning points' panel survey.

It was expected that the *fertility behaviour* of those living in marriages and those cohabiting be different on account of age composition of these groups. Whereas married people have a 1.83 children on the average, this figure is only 1.17 for those living in cohabitation. If we differentiate this as previously, the average number of children for married people in the different age groups will be 1.64, 1.98 and 1.83. Cohabiters who have never married have 0.65 children on the average while those in traditional cohabitative arrangements have 1.93. The table below, detailing the number of children, clarifies the picture further. There is no sharp difference between married couples[4] and they are characterised by a dominance of two-children families. We can also say that young couples do not lag behind middle-aged couples – but the two kinds of cohabitative relationships are indeed characterised by markedly different fertility behaviours. The majority of never married people who live in cohabitation are childless (59.9%) and 20% of them have only one child. This is the group least active in childbearing. The highest ratio of multiple children is to be found among those divorcees and widows who live alone while this group has a relatively low ratio of parents with two children. This seems to be the most heterogeneous group from the perspective of fertility. It is important to understand the forms

[4] Naturally, we are aware that the fertility of generations born in different historical periods differ from each other, but this is not a primary concern here. On this, see Kamarás, 2001.

of partner relationships in order to assess fertility processes. The two may constitute simultaneous processes that go back to the same root – or one may be presupposing the other.

Table 5
Number of children in partnerships by form of partnership (2001/2002) (%)

Number of children	Married			Cohabiting		Total
	18–39	40–59	Over 60	'New type'	'Old type'	
None	13.8	5.2	7.9	59.9	9.5	12.3
1	29.2	19.9	27.9	22.8	31.0	24.7
2	40.9	54.8	47.1	12.3	36.1	45.5
3	12.3	15.0	11.9	3.7	13.9	12.8
4	3.8	5.1	5.2	1.3	9.5	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	2723	4215	1953	759	538	10188

Source: 'Turning points' panel survey.

FORMS OF PARTNERSHIP – BEHAVIOUR COMPONENTS

There are countless numbers of works in social sciences highlighting the fact that in modern societies the homogenisation of life courses is decreasing and the freedom of individual choices is expanding (Beck 1996; Friedrichs 1998; Liefborer 1999; Corijn 2001). At the same time, other pieces of scholarly works indicate the structural constraints of choices and the limits of individual freedom (Mayer and Leisering 1995). In demographic literature the presumption that changes in demographic processes and the demographic behaviour of individuals are the consequences of structural changes (in welfare state, labour market, etc.) and value changes (individualisation, diminishing social control) has become generally accepted. In our research we attempted to measure the effects, even if in a limited fashion,[5] of countless structural and behavioural changes. In the foregoing we have looked at some structural factors, even if in a limited fashion, and now we turn to behavioural elements.

There are many problems associated with behavioural elements. One of them is that an empirical study of this phenomenon goes back a shorter time than the study of objective indicators and consequently there is less scholarly consensus on their usability. Also, the analysis of cross-sectional data with regards to behavioural elements is rather contradictory. In demography, this is well at-

[5] A more detailed analysis of structural elements will become possible after the second wave of data collection.

tested by the volume edited by Lesthaeghe (Lesthaeghe 2002). While looking at objective variables theoretically we can be sure that education levels or age are causes and cannot be effects; analysing values, opinions and demographic events (partner relationship, number of children, etc.) together, it is much more difficult to clarify what is the cause and what is the effect. Even though social sciences regard values on the level of individual as rather stable, we cannot be sure that childbearing or divorce do not modify these. In other words, we cannot say whether our values 'adapt'. At the same time, we can presume that people with different values will make different decisions and select different options in a period where the number of options is increased. Lesthaege has performed an excellent analysis of this issue from the perspective of demographic processes and he stresses values and orientations where panel-type analyses can be very fruitful (Lesthaege 2002)[6]. Having considered all this, here we focus on a few behavioural variables that might play an important part in selecting one type of partnership over another, but they are less determined by adaptive or selective processes. At the same time we realise that from the perspective of our particular topic, truly novel findings will become possible only after a second wave of data collection.

Values: religiosity

The decision to live in cohabitation as opposed to marriage can be influenced by a number of subjective and objective circumstances. Research has revealed that in some of the cases, the reason is a postponement until a change in the circumstance preventing marriage (lack of a secure job, lack of suitable residence, etc.) As for those cohabiting, the reason in some of the cases is a conscious rejection of marriage which is often verbalised as 'we don't need a certificate' suggesting a practical reason and pre-empting further questions. However, we think that behind this practical behaviour rejecting formalities, there are certain value judgements, in other words, the choices between different forms of partnership are the result of a value-driven choices between options emerging from differentiating social conditions (Barber et al. 2002). We posit that the attitude toward religion – existing or non-existing – might serve as basis for deducting value differences (Kiernan 2000). At the same time we suppose that people's religiosity is a stable part of their value system, that is, less exposed to the above-described adaptive/selective mechanisms. To apply this to partnership: it is unlikely that the choice of a form of partnership will have an effect on people's religiosity. That is why it makes sense to examine the correlation between the religiosity of those living in marriages and those

[6] We can see the effectiveness of the panel analyses in the volume edited by him.

living in cohabitation. We measured religiosity in our study by two types of questions – one was a traditional direct question about religiosity (see Table 6), the other pertained to a sort of symbolic religiosity, specifically to rites of church and community (Table 7).

The ratio of those who follow the doctrines of churches is much higher among those living in marriages and in this group those who are 'religious in their own way' are also represented at an above-the-average rate. But how will the picture change if we apply the age variable to the married group? The ratio of those following the doctrines of the church is highest among those over 60 while the ratio of non-religiousness is surprisingly high among young and middle-aged married couples – even though it is even higher among middle-aged couples living in cohabitation. Comparing young married couples with people living in non-marital (premarital) cohabitation we will find that the ratio of those who are religious according to the teaching of churches is higher in the former group while the ratio of non-religiousness is higher in the latter. This is a very important feature because the spread of cohabitative arrangements impacts young people primarily. The difference in religiosity between married and cohabiting couples is not overwhelming but tangible.

Table 6
Religiosity by forms of partnership and age (2001/2002) (%)

	Married			Cohabiting		Total
	18–39	40–59	60–	'New type'	'Old type'	
'I am religious, I follow the doctrine of the church'	13.3	14.5	28.6	6.1	10.2	16.0
'I am religious in my own way'	55.6	58.9	57.8	52.9	55.6	57.2
'I cannot say'	6.7	3.9	1.9	6.7	6.3	4.6
'I am not religious'	23.2	21.6	10.7	33.6	27.3	21.1
'I do not wish to respond'	1.0	1.0	0.9	0.5	0.4	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	2723	4213	1955	758	538	10187

Source: 'Turning points' panel survey.

We also measured the religiosity of people living in and outside of marriages by gauging their attitude towards rites of the community and the church. We posed three questions – about the perceived importance of christenings, church weddings and church funerals – and constructed a three-tier scale on the

basis of the responses. Our data unambiguously shows the ratio of those attaching greater importance to these rites is much higher among people living in marriages. Some people among those living in cohabitation attach no importance to two out of the three rites (Table 7). A further breakdown of the data along these questions showed that the older the respondents are, the more importance is attached by them to christenings, church weddings and church funerals. An exemption to the linearity of direct proportion is the youngest age group of 18 to 29. They attach greater importance to church rites than the two subsequent age groups (30 to 39 and 40 to 49), in other words, the linearity of the opinions is observable from people in their thirties on. Obviously there are many other value-related factors at play in the choice between the two forms of partnerships. Further multi-variable analyses must be performed to clarify the effects of the various factors but we are confident that these later analyses will confirm the significant effect of religiosity.

Table 7
Rites observed by forms of partnerships ('symbolic religiosity') (2001/2002) (%)

	Married			Cohabitation		Total
	18–39	40–59	60–	'New type'	'Old type'	
Not religious	19.9	18.6	10.9	26.7	26.9	18.5
Both	46.9	44.4	33.3	53.9	48.8	43.9
Religious	33.2	37.0	55.8	19.4	24.4	37.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	2687	4129	1923	746	525	10010

Source: 'Turning points' panel survey.

Values and expectations: recommended form of life

The role of the diminishing social control mechanisms in new demographic processes has often been assessed in the relevant literature (Lesthaeghe 1996; Liefbroer 1999). We concur in the opinion that marriage is primarily a community institution and its decline is partly a product of the 'disappearance' of community spaces and the transfer of partnerships into a 'community vacuum'. We tried to measure these community expectations (which are individual values as well) i.e. the rejection or support for the two forms of partnerships in an indirect way. (*'What form of partnership would you recommend young men and woman to choose?'*)

Table 8
Forms of partnership recommended to young people by those living in partnerships (2001/2002) (%)

	Married			Cohabiting		Total
	18–39	40–59	60–	'New type'	'Old type'	
Alone, independent	1.7	2.2	0.8	3.4	2.0	1.9
Cohabitation	4.4	4.7	3.2	24.1	19.7	6.6
Cohabitation followed by marriage	69.7	57.5	30.5	69.5	61.5	56.7
Marriage	22.1	33.0	63.0	1.6	14.1	32.5
Does not know	2.1	2.7	2.6	1.4	2.6	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	2720	4217	1956	760	538	10191

Source: 'Turning points' panel survey.

The responses unambiguously reflect the marriage-centred attitude of the respondents. A decisive majority of the total respondents regarded marriage as the desirable end state of partnerships. Those living in cohabitation constituted no exception to this and neither did young people. At the same time an overwhelming majority of the respondents including those living in marriages regarded a premarital cohabitation ('trial marriage') as desirable and commendable (Table 8). This seems to signify that a decisive majority of those living in cohabitation, regardless of earlier marriage history, regards cohabitation as a transitory form which appears at certain juncture in a life course. The ratio of those who regard cohabitation as an alternative to marriage is by no means negligible but they are certainly in the minority. This is true for 25% of those living in a 'new' type of cohabitation and 9.7% of all the people under 30[7]. The ratios seem to suggest that those living in an unmarried cohabitation are thinking of tying the knot later or have been forced by outside circumstances to adopt this form of cohabitation. The ratio of those rejecting all forms of cohabitation outside marring is not insignificant though certainly in the minority. One-third of the people living in partnerships belong to this group but the majority in this category is constituted by the oldest respondents. This attitude is less widespread among young people: 11.2% of those between 18 and 29 share this opinion. What is especially important about the permissive attitude of the middle-age groups is that for young people – being their parents – they represent the most important community control. Among them we find fewer people rejecting all forms of cohabitation (only marriage is permitted) and those who

[7] In this study, we could not create tables to go with all the data.

regard cohabitation recommendable as a temporary form of living together are in majority. Regarding all forms of living arrangements, we must point out that living alone is not a recommendable form of life among the young or the old, the married and the cohabiting – and a negligible minority (3.4%) of those living singly deems it an ideal form of living. This seems to bear out Utasi's findings who concluded that living alone in Hungary is not an alternative form of living but a failure to form a partnership (Utasi 2002).

We also looked at whether pregnancy plays a part in the transition from cohabiting to marriage. Responses given to this question[8] reflect a previously unprecedented liberal attitude people did not used to exhibit (S. Molnár–Pongrácz 1998) (Table 9).

Table 9

Perception of the importance of marriage among those living in partnerships (2001/2002) (%)

	Married			Cohabiting		Total
	18–39	40–59	60–	'New type'	'Old type'	
'Not at all important'	9.1	7.7	3.1	25.0	19.4	9.1
'Not really important'	24.7	20.2	7.7	37.8	33.5	21.0
'More important than not'	30.1	26.4	18.3	19.5	20.6	25.0
'Important'	35.4	44.6	69.5	16.9	25.8	43.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: 'Turning points' panel survey.

The traditional formalisation of the family status of the child to be born into the family is primarily important for those living in marriages, both young and old, but there are those among them for whom the 'formal family status' of the child is not overly important. A majority of people living in cohabitation, especially in the new form of cohabitation, does not think this important[9]. Divorcees and widows living in cohabitation have a more traditional view on this.

Even though strictly speaking we cannot compare our data with those of earlier studies, it seems to us that assessments of partnership are much more permissive today and less prescriptive. The prejudices that are reflected in such Hungarian expressions as 'wild marriage' ('common-law-marriage') and 'liv-

[8] The question was the following: '*How important do you think it is to get married if the woman in the cohabitative relationship gets pregnant and wants to keep the child? If it is important, when should the marriage take place?*'

[9] We should recall that they exhibit a very high rate of childlessness. This group can be a very interesting one when it comes to the examination of adaptive processes.

ing together illegally' ('living in sin') are not to be found today. The strictures against cohabitation gave way first to tolerance then to recommendation of it as a form of living. At the same time, marriage continues to be a value since the majority of young people do not regard it as an obsolete institution but as the final form of partnership to be attained. Of course all this suggest a transformation in the institution of marriage, which needs further exploration.

Rational reasoning in choosing forms of partnership – what is more advantageous?

There are divergent public notions about the advantages and disadvantages of marriage and living together without being married. Some people contend that the partners invest more energy into nurturing a relationship when it is not cemented by a 'certificate' but by emotions. Others will say that marriage constitutes the assumption of serious responsibility for each other and therefore this form ensures a more harmonious living for both the spouses and the children (Waite 2000). We have posed questions in this regard to married people (some of whom lived in cohabitation earlier) and to those currently living in cohabitation. Needless to say, our expectation was to see a divergence of opinions of the advantages and disadvantages along the lines of the different forms of partnerships, if not for other reason, then because people have to reduce 'cognitive dissonance'. The responses given to queries about advantages and disadvantages yielded a somewhat surprising picture (Table 10).

Of course it is not unexpected but rather reasonable that those living in marriages would not regard any other form of cohabitation as more advantageous. What is more surprising, however, is that those living in cohabitation do not regard the form of living chosen by them as more advantageous in almost any respect. This is of course partly due to the majority in this category that regard marriage as the ultimate form of living together to be attained at the end. What is most surprising and thus demanding further study and interpretation, is that those living in cohabitation opted for the neutral stance of 'it is not the legal form that matters' in almost all the questions. Also surprisingly there is a high ratio of married people also opting for the 'it is not the legal form that matters' stance. Could these results be suggesting that the choices are not made on the basis of the listed factors, or that generally speaking the institutional frameworks of partnerships are in the process of transformation, or that perhaps other reasons are concealed behind the reply 'it is not the legal form that matters'? Needless to say, only further research can attempt to provide answers to these questions.

Table 10

The advantages / disadvantages of different forms of partnership as perceived by those living in partnerships (2001/2002) (%)

'Cohabitation or marriage will better ensure ...?'	Marriage more than cohabitation	Cohabitation more than marriage	It is not the legal form that matters
Married			
Financial security	58.3	1.2	39.3
Childbearing, the future of the child	76.5	0.7	22.1
Survival of the relationship	53.6	2.1	42.9
Successful conflict management	46.9	4.1	46.6
Realisation of individual goals	40.8	8.9	48.1
The approval of parents and relatives (Anna is it good?)	76.3	0.9	21.4
Married, under 40			
Financial security	49.1	1.0	49.9
Childbearing, the future of the child	72.2	0.8	27.0
Survival of the relationship	44.5	4.2	5.8
Successful conflict management	38.3	4.2	57.6
Realisation of individual goals	30.1	10.1	59.8
The approval of parents and relatives	72.1	1.0	26.9
Cohabiting			
Financial security	20.1	6.1	72.7
Childbearing, the future of the child	39.5	3.8	55.1
Survival of the relationship	15.6	9.1	74.3
Successful conflict management	11.7	10.9	75.9
Realisation of individual goals	10.6	13.1	74.6
The approval of parents and relatives	43.9	4.9	49.1

Source: 'Turning points' panel survey.

If we look at the details of the different aspects, we find that marriage is deemed most advantageous by both groups in the aspects of childbearing, the future of the child and the opinion of parents and relatives. Conflict management between partners and the attainability of personal goals are deemed as least dependent on the chosen legal form, in other words, the view demanding conflict management and relationship maintenance in a loose partnership based on emotional and not legal ties might be rejected.

The quality of partnerships

The statement above is supported by opinions regarding the quality of the relationship, the satisfaction level with marital or cohabitative relationship. Both married people and those living in cohabitation seem to be highly satisfied with their partnership and they gave it an average rating of 8 out of 10 points. The satisfaction indicator of marriages (8.76) is slightly higher than that of the cohabiting couples (8.39) but the difference is slight indeed. Judging the highly positive assessment of family life and the quality of partnerships in the light of the high number of divorces we might be justified in suspecting that questions pertaining to the quality of partnership touch upon the most sensitive areas of the private sphere and the respondents feel that some problems are just not for the public to know about.

The other question pertaining to the quality of partnership shows no great distribution even though we posed it in a less sensitive 'inquiry environment'.[10] While married people worry less about their partnership, this is really true for older people. There is no marked difference in this respect between newly married people and those living in the 'new type' of cohabitative arrangement. Of course we are aware of the fact that the quality of partnerships depends on a lot of other factors. A close examination of these alters the picture emerging here only slightly (Gödri 2002). At the same time, we expect to be able to propose a greater number of new statements after the second wave of data collection when we will have the chance to look at life-course turns, such as whether a lower level of satisfaction, all other factors being controlled, is more likely to lead to separation or not (Bumpass 2002).

Table 11

Relationship anxieties among those married or cohabiting (2001/2002) (%)

'How worried are you over your partnership?'	Married			Cohabiting		Total
	18–39	40–59	60–	'New type'	'Old type'	
'None at all'	62.6	73.0	81.7	57.8	62.0	70.1
'A little'	22.7	16.5	9.6	29.0	23.7	18.2
'A lot'	14.7	10.6	8.7	13.2	14.3	11.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	2699	4156	1893	758	532	10038
Satisfaction (average)	8.85	8.57	8.99	8.48	8.10	8.69

Source: 'Turning points' panel survey.

[10] The relevant question (worry over partnership) is embedded into a list of possible sources of worries (health, future of country, future of self, partnership, etc.).

MARRIAGE AND COHABITATION IN THE LIFE COURSE

Comparing the ratio of those living in marriages and cohabitation (55% and 8% respectively) makes one wonder whether it is justified to talk about a dramatic spread of cohabitative arrangements. At first sight, the cross-sectional data seems to suggest differently, since at the time of the survey seven times as many adults lived in marriage as in cohabitation. We will be nearer to the truth if we also look at the number of people who *ever* lived in cohabitation or what forms of partnership people chose *first.* Over four-fifth (81.6%) of the adult population in our sample has lived at one time or another in a cohabitative arrangement. 91.8% of those who ever lived in a partnership have lived in a marriage as well. Currently, two-thirds (67.2%) of those who ever lived in a partnership are married. At the same time, a quarter (25.8%) of those who ever lived in a partnership also lived or lives in cohabitation. 6.4% of all respondents and 7% of those who ever lived in a partnership had at one time lived in cohabitation that did not lead to marriage. Currently, one-tenth (9.9%) of those who ever lived in a partnership live in cohabitation.

Which is to say that the cohabitative form of living arrangement has been and is chosen by many more people than is suggested by the cross-sectional data (current partnerships). We need to elaborate our interpretation of cohabitative relationships in the future, but we already have a basis to see its relation to marriage. 14% of those who tied the knot for the first time lived together with the partner before marriage ('trial marriage') and 25% of divorcees formed cohabitative relationships after the divorce. The fundamental question – to what extent young, under-30 people currently living in cohabitation will be willing to enter into marriages – can only be answered after the second wave of data collection.

The distribution and changes in time of *first partnerships* presents us with a more nuanced picture of the changing role of marriage and cohabitation in partnerships. We know that for two-thirds (64.7%) of the respondents, marriage was the first relationship when the partners were living together. At the same time, 17% of all respondents (i.e. 25% of all people involved in partnerships) started their partnership history with a cohabitative arrangement. Looking at the ratios by cohorts we can form a pretty clear picture about the changes that occurred recently (Table 12). While in the older cohorts (almost) all the people started out with a marriage, one-fifth of those in the middle-age group (e.g. 40 to 44) used to live in cohabitation with their first partner, the majority of first relationship is cohabitative among people in their twenties today. (Of course, this is a probability as we do not expect but cannot discount the possibility that a decisive majority of those who never lived in partnerships will marry their first partners.)

Table 12
People belonging to different age groups, by types of first partnership (2001/2002) (%)

Age group	Form of first partnership			
	Marriage	Cohabitation	None	Total (N)
18–19	0.7	9.4	89.9	904
20–24	10.8	28.1	61.1	1 768
25–29	33.5	40.7	25.8	1 691
30–34	53.9	33.9	12.2	1 483
35–39	68.6	23.9	7.5	1 298
40–44	77.7	16.1	6.2	1 604
45–49	83.6	11.2	5.2	1 773
50–54	89.0	6.2	4.7	1 479
55–59	91.5	5.3	3.2	1 318
60–64	93.9	3.1	3.0	1 146
65–69	94.1	2.5	3.4	1 020
70–75	94.5	2.3	3.2	906
Total	64.7	17.0	18.4	16 390

Source: 'Turning points' panel survey.

The comparison of the *first* form of partnership (Table 12) and the *current* form of partnership (Table 13) seems to suggest that some of the cohabitative arrangements turn into marriages. The ratio of marriages is higher than that of cohabitation already in the age group 20–24, which could not be possible unless the first cohabitative partnership turned into marriage. As for people between the ages of 25 and 29, three times as many people live in marriages than in cohabitation (Table 13) even though 40.7% of these people had their first partnership in the form of cohabitation (Table 12). For the historic timing of the change, we can see that cohabitation became the dominant form of partnership among those born in the early 1970s (1972–1976).

Table 13
People belonging to different age groups, by types of current partnership (2001/2002) (%)

Age group	Current partnership			Total
	Marriage	Cohabitation	No partner	N
18–19	1.7	5.0	93.4	905
20–24	18.2	13.8	68.0	1 768
25–29	49.7	13.8	36.5	1 691
30–34	64.6	11.3	24.1	1 483
35–39	69.1	8.5	22.5	1 299
40–44	69.0	8.1	22.9	1 604
45–49	68.1	6.9	24.9	1 772
50–54	69.8	6.2	24.0	1 479
55–59	66.7	6.0	27.3	1 318
60–64	62.7	4.8	32.5	1 146
65–69	58.7	3.4	37.9	1 021
70–75	46.6	1.8	51.7	908
Total	54.9	8.1	37.0	16 394

Source: 'Turning points' panel survey.

The transition from one form into the other can be studied on the basis of partnership-history data. For our specific topic, the 'new' type of cohabitation is of special importance. What happens to the (first) cohabitative relationships? What percentage of them are dissolved, maintained or turned into marriage? Also: does the transition pattern change? The fate of cohabitative relationships depends to a large extent on the time elapsed since its inception. With the passage of time, a greater number of them turn into marriage or get dissolved while the number of surviving relationships consequently declines (Table 14). Two years (24 months) after their inception, one-third of them turn into marriages and five months after 'moving in', half of them turn into marriages (Table 15). Four-fifths of these relationships are intact at the end of the first year, but this is only true for 27.8% of them after five years.

The cohort-specific analysis of the data will allow us to perceive the changes occurring in time. When looking at what changes occurred in time in the first cohabitative partnership, the inclusion of the oldest people might be misleading, since at the time of their partnership-formation the ratio of people opting for a cohabitative arrangement was very low. Looking at young and middle-aged people we find that the ratio of cohabitation turning into marriages somewhat declines. This is true for all time periods even if our table only shows status changes in the first 24 months (Table 15). The decline is quite even due to the spread of the other two forms of living among young people:

the ratio of those dissolving a cohabitative arrangement as well as the ratio of those sustaining a cohabitative arrangement for a longer time both grow among the youngest people in our sample. In this perspective a very modest change can be detected in partnership careers. Nonetheless if we take into consideration the dramatic rise in the spread of cohabitative arrangements in first relationships, we cannot detect decisive changes in the sample regarding first cohabitative arrangements. A good portion of cohabitative arrangements – 42% of them after 5 years – turns into marriages. Needless to say the transition between partnerships should be subjected to further inquiry.

Table 14

The form of partnership, 12, 24 and 60 months later among those who started out cohabiting (2001/2002) (%)

Partnership	12 Months	24 Months	60 Months
Marriage	12.6	29.4	50.9
Dissolved	8.0	13.4	21.3
Cohabitation	79.4	57.2	27.8
Total	100.0	100.0	100.0
%	2430	2291	1861

Source: 'Turning points' panel survey.

Table 15

Status of partnership 24 months after first cohabitation by age groups (2001/2002) (%)

Partnership	Age groups						Total
	18–29	30–39	40–49	50–59	60–69	70–75	
Marriage	20.8	33.3	37.6	37.0	28.4	28.6	29.4
Dissolved	18.0	10.4	10.9	12.3	6.0	14.3	13.4
Cohabitation	61.2	56.3	51.5	50.7	65.7	57.1	57.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N=	867	778	412	146	67	22	2291

Source: 'Turning points' panel survey.

CONCLUSION

In this study, we have analysed some features of marital and cohabitative relationships with the help of data collected in 2001/2002 in what we plan to be the first wave of a longitudinal study. We can state that the ratio of those living

in cohabitative relationships at the time of the survey taking conforms to the national average. However, the number of people who ever lived in a cohabitative arrangement outside marriage is much higher than this, in other words, a much higher number of people have experienced this form of partnership. It is also apparent that the number of people opting for a cohabitative arrangement in their first relationship is growing among young people. The demographic and socio-economic composition of married people and those living in cohabitation exhibited no significant differences. The ratio of younger people is higher among cohabiting couples but they have a lower average number of children.

The study of the value systems of the respondents seems to suggest that there is a correlation between value systems and forms of partnerships: those living in cohabitative arrangements exhibit a weaker bond to religion than those who live in marriages. The analysis of individual opinions revealed that those living together at the time of the survey taking formed a complex group from the perspective of their future plans. Part of them regard cohabitation as a transitory form of living before marriage while others regard it as a final decision. This heterogeneous composition is partly responsible for the uncertain opinions expressed by respondents over the advantages and disadvantages of married life versus cohabitation.

In the past decade or two, the practice and social acceptance of cohabitation have gradually increased. Our analyses show that the meaning of cohabitation is rather differentiated: some people regard it as an arrangement preceding marriage, others an arrangement following marriage and yet others think of it as an alternative to marriage. In theory, a panel-like approach makes it possible to track those who were living in cohabitation at the time of the first wave of survey taking – to find out whether cohabitation turns into a marriage over a time, whether the relationship gets terminated or if the partners opt to remain in the 'illegal' relationship for 'ever'. It will be even more important to study the objective circumstances and/or subjective motivations that help or hinder the transition between the different forms and we will arrive at a much finer picture of cohabitative relationships and the meaning of marriage and cohabitation.

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INDEPENDENT, NEVER MARRIED PEOPLE IN THEIR THIRTIES: REMAINING SINGLE

ÁGNES UTASI

INDIVIDUALISATION AND THE SPREAD OF THE SINGLE LIFESTYLE

In the majority of countries with a high level of development, demographic statistical data show that the age at which people make their first marry is becoming increasingly delayed. One of the likely determining reasons for this is that societies living in relative prosperity are going through an increasing degree of individualisation, the period of education is extending in young people's lives, and an increasing number of people are going on to higher education, after which women enter the job market with equal opportunities to men. Another important consideration is that in welfare societies individual legislation ensures a minimum subsistence as a basic right. For many people this gives rise to the illusion that, come what may, they are able to survive alone, without the security of a family and without a permanent partner and this illusion tends to continue into the future.

Social and economic changes have transformed community expectations and conventions, together with opinions regarding the family and partner relationships. Neighbours, relatives and friends accept the cohabitation of unmarried partners as quite natural so there is no need for formalising the relationship. By postponing or omitting marriage altogether the social environment necessarily accepts childbirth outside marriage, even though only a few decades earlier this was heavily censured.

Despite the formal pluralisation of partner relationships and increased tolerance toward different forms of cohabitation the value of the family is not decreasing. The institution itself, as well as the nature of the cohabitation of permanent partners has gone through equally serious changes, but value preference surveys show that the family is still at the head of the preference list. This might be the explanation as to why partner relationships in which the parties retain independence (or its illusion) turn surprisingly frequently into a permanent relationship which leads to starting a family, usually in the form of marriage.

Thus, while welfare societies exhibit an increasing variation of partner relationships, the cohabitation of permanent or married partners still enjoys priority, even though the family is becoming ever more 'nuclear', the number of

family members is decreasing and, simultaneously, the proportion of single people is increasing.

THE APPEARANCE OF THE CATEGORY OF 'SINGLE' IN SOCIOLOGY

Naturally, the phenomenon has attracted the attention of specialists in the field appearing as a new direction for research. As early as the 1970's, statistical data inspired sociologists and demographers to pay more detailed attention to the lifestyle of single people as a dominant phenomenon indicating the nuclearisation of families. Laslett (1972) in his typology of households does not mention separately the variety which emerges through individualisation – he only has a summary category for 'single person households.' One decade later, however, the theory indicating the emergence of post-modern family types (Lüscher et al. 1988) becomes widely known. This theory clearly indicates that it has become necessary to reckon with a new variety of households which emerges among the remarkably increasing number of single people mainly appearing amid the younger generation. The form which is the subject of our study, however, does not appear among basic types describing forms of pluralisation, while other family types which appear among a far smaller portion of the population are mentioned. The main reason for this is that while looking to identify chief family types, theorists have focused (in addition to the nuclear family as the basic form) on the new types which emerge through a change in the partner relationship. One of these, according to them, is 'quasi-married cohabitation' in two sub-categories depending on whether there are children in the family or not. Another group is formed by types of family, becoming ever more common, which are formed as a consequence of re-marriage after divorce on a mass scale and include children from previous marriages as well as those born into the new marriage (Vaskovics 1994). Although the proportion of these has certainly grown, it remains true that a similarly weighty layer of single people has not been recognised as a dominant tendency resulting from pluralisation.

At the same time, examining human life-cycles, researchers noticed that the phases of the life cycle which used to follow in each other's wake more or less regularly, now more and more frequently diverged from the recognised 'model' in other words the regular arch leading from marriage to widowhood has broken. In its place a single lifestyle has become wedged in the periods after divorce and before re-marriage or has occurred before the first marriage or between the pre-divorce and post-divorce forms of cohabitation (Vaskovics 1994).

A number of experts have nevertheless refused to acknowledge the remarkable changes which indicate the pluralisation of family types and a social sci-

entific warfare has emerged concerning the future of the family (Berger and Berger 1984; Fukuyama 2000). The latest developments are seen by some as merely transitional phenomena (Easterlin 1980, 228), while others see it as a logical outcome. The latter group of authors argue that as since women have appeared on the job market on a mass scale, the income they have generated and the social benefits of welfare societies have eased the pressure to get married (Becker 1981).

As women have become economically less reliant on men and under far less financial pressure, the role of emotions accompanying partner relationships has also come to be viewed differently. A bond which had previously often lasted (had to last) a lifetime, was replaced by forms which were better suited to satisfy individual desires and needs at the given time. These forms were devised for a shorter period of time because of the instability of emotions and required less self-sacrifice and less mutual reliance (Roussel–Festy 1979). Material and emotional points of view assumed a new relation. As the priority of romantic emotions and love was accepted, it became a common conviction that marriage can rarely last till the end of life since couples usually get disenchanted with each other well before then (Giddens 1992). Research has shown that *earlier family forms* exercised pressures which acted to moderate individual desires and ensured the emotional balance of the individuals on a societal scale. Customary law clearly outlined the limits of the emotional freedom of the married partners, thus they restricted self-fulfilment but catered for the stability of the marriage. Under the influence of individualisation, community norms transformed, new conventions of the social environment permitted divorce and cohabitation, and today even law does not contain any restrictions in this area. Bonds dictated by the social environment are loosening, the freedom of choice is expanding; all this brings about the pluralisation of family types (Berger and Berger 1984).

TYPES OF SINGLE PEOPLE, THEIR CHARACTERISTICS AND THEORETICAL ASPECTS

Singe parents, single mothers

Different types of family forms only began to receive the attention of the social sciences only after debates addressed changes in the role and structure of the family as part of attempts to identify the causes of these changes. Researchers were interested in the situation and lifestyle of children growing up in broken families as a result of divorce, and in the situation of the parents bringing up these children inspiring research projects that looked into the life of single

parent families and particularly of single mothers. Some came to the conclusion that the rising number of mothers bringing up their children alone can be attributed to liberal welfare policies offering them support. Others had the same opinion about mothers who gave birth to their children outside of marriage, arguing that the benefits received by these women are higher than the sum received by those who live in a marriage (Miller–Garfinkel 1999).

The interest of the social sciences in this field was particularly provoked by the fact that in the majority of developed countries the number of children born outside marriage has been rising over the last few decades. The new status of single mothers is a natural consequence of this process. Researchers have identified two types for this status. One group (1) consists of single women who gave birth to their child without a husband or a partner because, for lack of information, they did not know how to avoid pregnancy or because they had made a conscious decision to have a child, usually because of their increasing age. The other group (2) consists of mothers who chose cohabitation in a quasi-married form, in an unmarried long-term partnership. In terms of their lifestyle, the women in the latter group are not without a partner as they have a long term relationship or their relationship actually leads to a formalised marriage, usually after the birth of their child (Giddens 1992; Pongrácz and S. Molnár 1997).

Being single as the new lifestyle of affluent young people

It was only after interpreting the phenomenon of the single parent family that researchers began to notice that in most developed countries there was a noticeable increase in the number of people, usually in their thirties or forties, who lived alone. Those following this specific lifestyle were usually persons who had finished their studies, had acquired a home of their own or were able to rent a flat independently. They lived separately from their parental home, had furnished their new home comfortably and in most cases centred their life around work and career-building, while engaging in various free-time activities such as travelling, sport, social and cultural commitments.

One researcher of the topic, using the experiences of the head of a German psychological clinic, Jaeggin, summarised it in eight main points:

1. for the single person the home is an exceptionally important sphere of life, offering safety and comfort;
2. cooking, particularly in the case of men, is seen as creativity, an art form;
3. the person lays great stress on filling up empty evenings or week-ends and thus gains great expertise in the versatile organisation of spare time;
4. the person considers friendships more important and shapes them more consciously than married people;

5. professional work, which gives meaning to life, is crucial, the person seeks for interesting and exciting elements in their work;
6. relatives are necessary evils;
7. sexual relations are of less concern than they are for married people. His/her partners are not always single;
8. taking a longer holiday is usually a failure, an unsuccessful experience (Börggrefe 1997).

Scientific research concentrated chiefly on the differences in lifestyle when compared to those living in a marriage. One survey interviewed sixty people between 25 and 45 years of age and classified the positive and attractive features of the single lifestyle and its disadvantages (Stein 1980). The positive features identified by the scholars were that the single lifestyle (1) promotes the person's career as single people can devote all their time and energy to their work, (2) they are also more free and independent in every respect; (3) they can enjoy more varied sexual experiences. Negatives mainly consist in the fact that these people have fewer relationships and these are more loose and weak, and as a consequence of this (1) they are alone and (2) they feel lonely. The lack of relationships mainly comes from the fact that other people of a similar age are mostly married, they have different aims and commitments, different interests and activities. A single person often ends up lonely and therefore becomes more reliant on emotional help from friends (Carbery and Buhrmeister 1998).

Research has also shed light on the circumstance that the above advantages and disadvantages may also depend on the gender of the person concerned. On the one hand, when comparing married and single men, researchers concluded that they have the same chances of building up a successful career, they have the same chances of occupying positions of high status and income. This is so despite the fact that married men devote far more time to their family than single men. At the same time in terms of mental and physical life courses married men are better off than single men – they live a longer and happier life than those without a partner. It is possible, of course, that men who are healthy and possess more positive psychological and physical traits are more likely to get married than those who 'remain bachelor'. This hypothesis has been discarded by the relevant research and it was found that the benefits were to be attributed to marriage itself (Bernard 1982). This was not so in the case of women. Married women were found to be far more unhappy and frustrated than married men and *the comparison of married women as against single women* also showed that the former suffer from depression and psychological problems more often than the latter, whose state of health was also significantly better.

Another survey, which was conducted among mothers aged 33, came to a different conclusion when it compared the psychological state of members of the two groups (Hope et al. 1999). According to the results, single mothers are far more often characterised by negative stress than married mothers. On the

analogy of this finding it is possible to suppose that the existence or lack of children influences significantly the psychological status of the women in question.

The comparison of *single women and single men* has led to the conclusion that the latter are troubled by more psychological problems even though their financial situation, their income and occupational status are more favourable.

Another element of the subject was examined by Hradil (1995) who in an earlier work recorded milieus which characterise various life conditions and lifestyles. Examining the lifestyle of single people, he found that in this group the per capita income of the household was higher, thus the lifestyle more favourable and the freedom of choice wider than of those living in a different formation. As a result of this, single people stood a better chance of finding their way into the milieu groups which offer the greatest advantages – into that of the 'hedonists' who concentrate on enjoying life and into that of the 'alternatives' who concentrate on individual preferences (Hradil 1995).

Research has also established that a single lifestyle is not always the result of personal will or choice. Young people living in relative affluence and engaging in versatile activities have different motivations from others for postponing long-term partner relationships. At the same time, in terms of the different motivations, hardly any of the existing typologies can be called useful. Perhaps the most successful typology was set up by one of the most widely known experts of the field and allows a two-dimensional classification (Stein 1980, p. 11).

One of the dimensions of Stein's typology is the degree to which lifestyle is the result of a conscious choice, in other words the extent to which the situation 'just worked out like this' or whether it was chosen by the person in question. The other differentiating factor is the temporal structure, the permanence of the situation. A single lifestyle can be 'stable', it can be one that became stabilised and permanent in the later course of things or it can be 'temporary', in which case it is planned to last for only a limited amount of time.

	Chosen	Not chosen
Temporary	People who have not yet got married are putting off marriage. They are not looking for a partner but are not opposed to marriage	a) People who have looked for a partner actively for at least a period of time but have not found one yet, b) People who had not planned to get married earlier but are now looking actively for a partner
Stable, stabilised	a) People who have made a definite choice in favour of the single lifestyle b) Those who are opposed to marriage for a variety of reasons c) Those who forego marriage in compliance with the rules of their religion	People who would like to get married but cannot find a partner and thus accept with resignation that they will have to live alone for the rest of their lives

IN SEARCH OF 'SINGLES' IN HUNGARY

In referring to this unique lifestyle which is spreading among young people we often use the phrase 'single without a permanent partner relationship' or 'independent,' but in Hungarian we have not found a better label than 'single person' ('szingli').

The rate of 'official' single persons 'without a permanent partner' within the population

We believe that being single is probably the dominant lifestyle of young people in their thirties or possibly early forties in Hungary just as it is in the majority of welfare societies. Its spread occurs irrespective of the changes affecting the whole of society, more precisely of the national trend of single people. In Hungary the number of persons officially considered single has grown very dramatically over the last few decades.

Table 1
Distribution of the population over the age of 15 according to marital status (1986 – N=9186; 2000 – N=10549) (%)

Marital state	Male	Female	Total	Male	Female	Total	2000–1986
Married	71.6	64.0	67.7	60.0	48.5	53.8	-13.9
Unmarried	23.0	15.9	19.3	27.4	18.7	22.7	+3.4
Widowed	1.8	14.0	8.2	4.9	21.6	13.9	+5.7
Divorced/separated	3.6	6.0	4.8	7.7	11.2	9.6	+4.8
Single total	28.4	35.9	32.3	40.0	51.5	46.2	+13.9

Sources: Életmód, 1986 (4), 2000 (4) Budapest: KSH.

If we compare data for 1986 and 2000, we find a sharp increase in the number of single people. The one-and-a-half fold increase (from 32.8% to 46.2%) which has taken place over the last decade and a half indicates strong changes in social and economic conditions and their intensive influence on human relationships, social integration and family ties. The growing rate of single people can be traced back to increased individualisation brought along by social and economic changes, to the transformation of value preferences and family forms, to the high mortality rates of Hungarian men and to the increased pluralisation of forms of partner relationships.

The above quoted record, however, only represents the 'official' marital state, while it does not give information on the genuine directions of partner relationships. Thus we do not know what proportion of the population actually lives without a permanent relationship, truly alone. According to a representative survey made in 2001 (ISSP/2001, N=1524), 41.0% of the over-18 population belongs to the category mentioned above in terms of marital status. Their lifestyle can differ widely, however, depending on whether they have a permanent partner relationship or not. In view of the pluralisation of marital and partner relationships described above, it is important to know this if we wish to study the lifestyle of single young people. The survey considered those people single and without a permanent partner who are neither married, nor live in quasi-married cohabitation, nor have a permanent partner.

According to Table 2, one third of the sample (32.2%) are single without a permanent partner, in other words, the number of people without a permanent partner is almost 10% lower than that of officially single people. At the same time, a difference according to gender is remarkable: the proportion of women (40%) is almost twice as high as that of men (22%) among single people without a permanent partner.

Table 2
Adult (over 18) population by forms of partnership (2001) (N=1524) (%)

Form of partnership	Percentage
Single, without a permanent partner	32.2%
Single, with a permanent partner	9.1%
Lives with married or quasi-married partner	58.7%
Total	100.0%

Source: ISSP/2001.

Different groups of officially single people contain different proportions of single people without a permanent partner. The proportions of single persons without permanent partners are the following in the various groups:

Table 3
Single persons without permanent partners by marital status (2001) (%)

Marital status	Percentage
Never married	55.9%
Married but separated	83.3%
Divorced	78.4%
Widowed	97.6%.

Source: ISSP/2001.

On the basis of the above it is to be expected that Hungarian followers of the single lifestyle will include, besides young unmarried people, a considerable number of young divorced and separated persons.

Single people in their thirties in terms of 'official' marital status

Looking at the number of people in their thirties who are still unmarried, we find their numbers continually increasing. However, 'putting off marriage' is more widely characteristic of men than of women. Some of the reasons for this are rooted in cultural tradition, others stem from economic factors:

- Women have more restricted resources and a lower income for creating a single lifestyle than men, thus a greater number of them try to secure financial stability through marriage;
- Although the time of getting married has been generally deferred, putting off marriage is more characteristic of men, as women still follow the traditions in wanting to find themselves safely married at the age when they can still appear at the marriage market looking attractive, so as to avoid being 'left on the shelf'.

Although more than a quarter of women (29%) and of men (27%) in their thirties had themselves recorded as officially single, as women and men follow different marriage traditions, the categories of single persons assume different structures for the two sexes (Table 4).

Table 4

Composition of persons in their thirties according to marital status and gender (1986 – N=1896; 2000 – N=1728) (%)

Marital state	1986			2000			Change
	Male	Female	Total	Male	Female	Total	2000–1986
Married	87.0	76.0	81.3	71.0	73.0	72.0	-9.3%
Unmarried	9.3	9.6	9.4	21.6	11.1	16.0	+6.6%
Divorced/separated	3.1	7.2	5.2	7.2	14.3	11.0	+5.8%
Widowed	0.6	7.2	4.1	0.2	1.6	1.0	-3.1%
Single total	13.0	24.0	19.7	29.0	27.0	28.0	+8.3%

Sources: Életmód, 1986 (2), 2000 (4) Budapest: KSH.

According to these proportions there are twice as many unmarried men (21.6%) as there are unmarried women (11.1%) and half as many divorced men (7.2%) as there are divorced women (14.3%).

Table 5

Composition of persons in their thirties by household roles (2000 – N=1728) (%)

Household roles	Men	Women
Husband/Wife	70.0	73.6
Long-term partner	5.5	5.5
Mother/father living together with their child	0.5	*12.1*
Child	*16.4*	4.2
Relative	1.3	0.3
Single	6.3	4.3
Total	100.0	100.0

Source: Életmód, 2000 (4) Budapest: KSH.

If we compare data for 1986 and 2000, we find that the rate of single people among persons in their thirties has grown by almost ten percent (8.3%) in the last decade and a half. This rise is particularly remarkable among men (+16%) while it is slightly more moderate among women (+3%).

In harmony with the structural differences according to gender there are differences in the household structure, family position and role of the persons concerned and thus obviously in their lifestyle within the family as well (Table 5).

The rate of single parents is particularly high among women in their thirties which is partly a consequence of childbirth outside marriage but even more of

marriages made at a earlier age than the age of men and of increased divorce rates coming from individualisation. If a relationship breaks up in which the partners have cared for a child together, the separation causes a serious change in lifestyle. One possible variety is *the single parent family*. Naturally, the most widespread is the category of *'single mother'* since young divorced women stand a much smaller chance of re-marrying than divorced men. We may conclude this from the fact that the rate of divorced men is still half that of divorced women in the over-40 age group.

Single persons in their thirties and forties without a permanent partner

Data quoted with reference to the family structure of single people in their thirties and the position they occupy within the family and household fail to give us a precise answer as to the precise rate of single people within the age groups in question. This is because we do not know what proportion of people within the 'officially' single category actually lives alone without a permanent relationship. In fact, these are the people we need to identify if we want to research the characteristics of the lifestyle of young people who are single and independent.

We sought information on the 'unofficial' permanent relationships of persons in their 30's and 40's in a research project on social networks carried out in 2001 (ISSP/Kapcsolatok/2001 N=1524 N= persons in their 30's and 40's= 474). We found that one in five members of this age group were single, living alone without a permanent partner. It is true that not all of them can be considered 'single' in our sense as they are not all 'marketable', and they do not live in relative affluence. At the same time, we can assume that we can gain information about the composition of this group by analysing this sub-sample.

In order to acquire hypothetical information and some data about the population which can supposedly be labelled as 'single,' we isolated those people in the 30–49 age group who do not have a permanent relationship. On the basis of these calculations, one fifth of people in their 30's and 40's (19.6%) can be included in this category.

The relatively small size of the sample allows us to draft hypotheses with only the utmost caution. The two main types of the 'single sample', i.e. the never married men and women (42/) and the divorced men and women (48%) assume more or less the same proportions among persons in their 30's and 40's without a permanent partner. Examining the data according to gender, we find that two thirds of the men, but only one quarter of the women in this age group are unmarried. The distribution of divorced persons is precisely the reverse: two thirds of single women are divorced while among men the rate of the divorced is only one third.

Two thirds of these single people have children. This high proportion indicates that Hungarian followers of the single lifestyle in all probability include twice as many single parents (mainly mothers) bringing up their child alone without a permanent partner than unmarried men or women who are following an alternative lifestyle and are putting off marriage.

As far as composition according to the place of residence is concerned, almost half of unmarried men without a permanent partner live in villages while only a quarter or such women can be found in villages. At the other extreme of the residential hierarchy, in Budapest, we only find 7% of single men while 30% of single women live in the capital.

After a systematic survey of the data we can summarise our findings by saying that it is probable that the majority of single men without a permanent partner come from the ranks of a less educated and not very 'marketable' strata of the population while among women the situation is the reverse – the most individualised and highly qualified women who are also most successful at the job market are the women we find in highest proportions among those choosing a single lifestyle.

The history of the single lifestyle and its increasing popularity in today's Hungary

It is questionable whether we would be justified in considering the phenomenon of the single person new in Hungary. As far as we know, even in the first third of the twentieth century, particularly in the middle classes, many men only started a family in their thirties, since society expected them to support their wives. The wife was not supposed to be earning a living, what is more, the husband's income had to be sufficient to employ at least one household employee (Buday 1916; Szabó 1938). Men were usually unable to create the financial background for a middle-class living standard until they had moved higher up in the professional hierarchy in the course of their thirties.

Thus, middle and lower middle class men of the past who were forced to put off marriage under financial pressure partly organised their life in a similar fashion to today's single people. The composition of the latter, however, is still radically different, primarily because they are not hindered by financial difficulties and also as expansion of education has lead to an increase in the number of single women. Career-building, work-oriented emancipated women who are often in higher education until the end of their twenties often acquire special qualifications, and stabilise their position in the job market with an ever increasing capital of knowledge. They are less and less willing to get married at the beginning of their career, to have children early, to forego promotion prospects and to give up their independence, nor are there economic pressures to

force them to do so. They are only willing to accept a marriage or partner relationship which allows them to keep relative independence and which offers them more than the traditional role of supporting and serving the man's career.

A further motive for the spreading of the new lifestyle is that as a result of social developments in Hungary, an increasing number of young people now move out of the parental home, as they (or their parents) are able to buy or rent an independent home. As a result of differentiation in economic potential and wealth which followed the collapse of communism, Hungary saw an expansion of that relatively affluent layer of society, members of which were able to buy their children an independent home. Furthermore owing to a powerful differentiation in wages, a number of young professionals with up-to-date specialist skills came to occupy such lucrative jobs that they were able to produce the money required for buying and/or maintaining their (first) independent home. As a result of this independence, which goes hand in hand with having an independent home, the relationship of the partners is now no longer shaped under the watchful supervision and control of the parents. Several new forms of partner relationships have emerged which are looser than the customary forms. The young people retain their independent homes, do not move in with each other in the long term, but live together for recurring longer or shorter periods, sometimes on set days of the week. In harmony with their needs they retain their relative autonomy and the independence that they consider necessary for career-building and for expressing their personality.

Thus, this lifestyle is not the same as living without partner relationships. The parties certainly devote some time to their relationship but this amount of time is reduced or regulated by mutual agreement. This gives them occasion for free-time activities independent of each other, as well as for spending time with colleagues in order to further career building. The household work entailed by marriage and particularly the tasks of bringing up and looking after children, would allow considerably less freedom than this.

Independence, freedom and a varied lifestyle can be very attractive, yet young people do not usually plan to maintain this form of life in the long term. They think that after a few years they will definitely find their real partner and accept a permanent partner relationship. However, chasing success at work and the habitualised need for the independence considered necessary for their career becomes a motive which grows to shape their everyday life. Thus, the increased costs which a permanent partner relationship and childbearing would necessarily entail are postponed from one year to the next and by the time the person is ready to restrict individual desires they find that after such a delay they have difficulty finding a suitable partner who might satisfy their needs.

MOTIVATIONS AND TYPES OF SINGLE PEOPLE IN HUNGARY

We used case studies (N=45) in an attempt to identify motivations, on the basis of which about one fifth of Hungarian young people in their thirties prefer a single lifestyle over a permanent partner relationship. We examined whether it was a result of conscious choice or a consequence of social conditions. We were aware of the fact that in the eyes of the majority of the Hungarian population the paramount value is having a family and bringing up children. On the basis of this we assumed that it is unlikely that the lifestyle of single people could be attributed to a conscious lifetime commitment or to an aversion toward families, even less to an open stance against the family as such. We presumed it to be more likely that a lack of permanent partner relationships was mainly a result of special hindering circumstances coming from the person's conditions of life and to a minor extent of a delay caused by the temporary dominance of the career in the person's life. However, it remains a fact that there has been an increase in the number of Hungarian young people who decide to put off choosing a 'final' partner and accepting the responsibility of having a family.

Our analysis was chiefly aimed at identifying the motivations for this specific lifestyle in the person's life conditions. We examined the motivations which encourage single people to preserve their independence. We assumed that in certain cases there was a correlation of factors and in others only one dominant cause why the person had not established a family tie based on a traditional relationship. As a result of this examination, we classified single people in their thirties in five types. Below we provide a brief description of these types.

The career building single person

The best known and most widespread type of the single person is a product of individualisation. Representatives of this type see their career and the pursuit of professional success as the essence of their lives. Among other motives what moves them is permanent competition entailed by a meritocratic order and an accelerated pace of life, the need to retain a job which is in some sense favourable. They ensure variety by having a succession of partner relationships in the form of loose cohabitation. However, these do not jeopardise their independence. If the partner decides to make the relationship permanent or even thinks of starting a family and having children, the single person usually ends the relationship and replaces it with a new one. In the long term they repeatedly subjugate their emotional life to professional success and they persuade them-

selves again and again that it is not yet time for the 'real' relationship, that it is a waste of time and too early to worry about it and that it will come by itself, some time near the peak of the expected professional success.

The regular pursuit of sport for improving physical condition also serves the basic aim in the lives of these people. Another factor pointing in the same direction is membership in various clubs which is meant to enhance professional contacts and strengthen their network capital. Their everyday life is not troubled by financial difficulty, they usually earn a higher income than the average of similarly qualified married persons but they also spend a lot on objects and activities which serve to raise their prestige, such as high quality cars, travel, expensive sports equipment and sports activities (tennis, sailing, skiing and squash). At exclusive parties they appear with their current partner. They choose their friends from among persons who pursue a similarly career and success-orientated lifestyle. Thus the interests of these persons become progressively detached from those of their friends who got married at the traditional time of life – from former classmates or university fellow-students – until their earlier friendships become entirely broken.

Career building is usually successful, these people manage to create life conditions which are above the average for their age group and to acquire valuable goods. In possession of some degree of wealth, a business or enterprise created by their own effort, however, they feel that a permanent or married partner would form an unfair claim to everything they had created. Thus they are terrified of calculating, interest-based relationships and they distrustfully suspect that a potential partner would choose them for their affluence and not for themselves.

A further deterrent factor may be that if these people sometimes experience the breakdown in the relationships of similarly success and career-oriented persons in their social environment: they witness divorces, conflicts and law suits about the distribution of assets. Amid the circumstances of a career-oriented, rushed lifestyle, partner relationships do indeed tend to get hallowed and exhausted, thus marriages made at the traditional time of life easily come to seem as mere formal cohabitation, a hollow economic unit. Such negative examples make the outside onlooker cautious, possibly going as far as giving rise to extreme distrust which makes it difficult or even impossible to choose a partner and start a family and thus leads to the conservation of the previously developed lifestyle.

The effect of childhood patterns and upbringing

Family models and upbringing influence choices made in adulthood. After experiencing the poor relationship of the parents and recurring quarrels be-

tween parents and grandparents, some people find it difficult to imagine harmonious relations. There are great numbers of people who, in the cases of their parents, neighbours, and relatives, have only seen examples of failed relationships laden with conflicts. Some of our interviewees believed that their lifestyle was a consequence of these negative patterns. At the same time, they are still aware of a desire for the perfect partner relationship and a family, but believe that no such thing exists and this deters them from choosing a partner and starting a family. They believe it might be possible to maintain harmonious relations for a limited period of time but also that in the later course of events harmony is necessarily replaced by arguments and hostility. Although they recognise the source of tensions experienced in childhood (e.g. poverty or alcohol dependence), they justify their lifestyle by claiming that successful partner relationships are impossible regardless of the circumstances.

Upbringing has also had its influence on those single young people who received a legacy of beliefs in their parental family, social environment or friends stating that they had to be careful with partners and must not rush the decision as it was for a lifetime and thus needed thorough consideration. A close partnership tie could only damage professional advancement, studying or career, it would stand in the way of free entertainment and would act to reduce freedom. These young people were warned that they should live a free and independent life as long as possible. They had also been taught to distrust members of the other sex. Warnings of this kind received in early youth had influenced many young people who prefer and retain their independence. Such an attitude of denial becomes confirmed over the years. The defence mechanisms 'programmed' by the social setting can even stifle sincere emotions. Time goes on and after a number of years the young people find that now, when it is certainly not too early any more, they would like to find a true partner and have children. At a time when they would gladly leave behind the delaying attitude, their habitual beliefs and fixed distrust for the other gender? make it far from easy or simple.

It is a well-known phenomenon that young people who are accustomed to comfort and affluence, instead of taking the initiative, wait around passively for 'someone' to come along and become their partner. They believe it is not necessary to look for their potential marital partner as 'true love' will come 'by itself'. It is also part of their conviction that if this does not happen, that is not a problem either, as single people can also live a fully valid life. Persons in their thirties have often passively allowed a whole decade or an even longer period to slip by. Members of this group do not actively enjoy their single lifestyle but they are not willing or able to build relationships. In retrospect many of them are aware that at some stage they had a chance for a permanent partner relationship but at that time they judged the 'candidate' as unsatisfactory in some respect and later on there were no other candidates. They carry on waiting and

nothing happens. This resigned state of existence is very different from the lifestyle of those modern single persons who make an active choice. The decisive difference is in the active and conscious nature of the decision as described above.

Social differences – the influence of status, migration and difference in age

The marriage of people of similar status (*status homogamy*) is one of the general characteristics of permanent relationships. It is a condition which helps retain the relationship, makes its operations easier, supports the exchange and mutual circulation of sources of solidarity. The status homogamy of married partners is one of the decisive requirements of Weber's stratification according to social status groups (in German *stand – the editor)*. Its effect of strengthening human relationships is well known and accepted in all stratified societies.

One frequent reason why people fail to find a partner is because they are unwilling or unable to live in a relationship which is asymmetric in terms of status. If such a relationship emerges despite the odds, it is almost necessarily only temporary in character. The asymmetric status of the (potential) partner is frequently a cause for graduate women to choose a single lifestyle. The more highly positioned of the two parties believes that s/he can 'survive alone' and will not accept a person who would cause a drop in the standard of life. The relationship of partners of asymmetric status eventually breaks up and the end result is once more a single lifestyle.

Young people change their place of residence quite frequently. The most common cause for this is the intention to earn a degree in higher education or to take a job. In the case of most students migration encourages choosing a partner as they come into the milieu of persons of similar status. In some other cases, however, where the migration leads to a mobility of status, starting a relationship is made more difficult. Friendships, family ties and acquaintances at the original place of residence become broken. Beyond the psychological difficulties of having to cope with this kind of change owing to a loss of contact resources, these migrants have to invest more energy and money in being able to survive in the new setting and to create a home and a background for themselves.

The same is true of young people who come from ethnic Hungarian regions of the neighbouring countries and re-settle in Hungary, unless they arrive in this country already allied with a partner. By engaging in studies or work in Hungary they become isolated from their earlier sphere of contacts and without the support of this sphere they have to spend multiple amounts of energy on ensuring basic requirements of life compared to persons surrounding them who were born and brought up here. This stands in the way of settling with a part-

ner, forces the person to delay the final decision and thus in the later course of events it becomes difficult to find 'the real one.'

The numbers of single persons are further increased by those who have spent several years or even decades studying or working abroad. After returning, they find that they are behind their coevals in trying to find a partner. Their earlier group of friends has become dispersed and eliminated, their contacts have broken, and most of their earlier friends have become married. Living abroad has usually provided them with much higher financial standards than those who stayed at home but they find that this is a disadvantage rather than a source of help as it has increased their expectations but also their distrust, while their circle of acquaintances has become narrowed.

A similar problem faces those who live their life travelling regularly between two places. This usually characterises people who had come from the country to a big city. They regularly visit home or live in 'dormant' villages retaining their strict, traditional value system. In their new urban environment they fail to create a permanent relationship but their ties are also becoming loose at their place of origin, providing them with ever fewer occasions for possibly finding a partner. Eventually, they remain without suitable social networks at either of the two places, nor have they enough free time to find a partner who would satisfy their needs. Consequently, they are often left alone or have to content themselves with 'half-relationships', having to share with somebody else. After a while they give up hope of finding a partner suitable for starting a family, and toward the end of their thirties they accept the status quo with resignation.

Traditional communities have differentiated views on the question of the age gap between partners. They accept the relationship of men of more advanced age with considerably younger women as quite natural, but usually stamp the relationship of older women with younger men as unacceptable. In the latter type of case the age gap prevents the relationship from becoming permanent. On occasion, however, women in their late thirties live in a loose cohabitation with a partner who is 10–12 years their junior. The relationship is usually based on the 'rational' agreement that it is not meant for the long term. 'According to plan' if the relationship becomes hollow they would step out of each other's lives. This loose cohabitation seems to presage a single lifestyle only for the woman, but in fact, under the influence of a 'comfortable' relationship which allows relative freedom, the man also finds himself putting off the final choice and possibly only makes an effort to find the conventionally accepted partner after a number of years. By this time in his thirties, the man often comes face to face with the difficulties described above.

Cohabiting partners

The increasing popularity of quasi-married cohabitation is one of the general motives behind persons remaining single. This is a form of relationship which offers most of the advantages of marriages while in the case of a change of emotions it enables the parties to avoid the legal difficulties of a divorce procedure. A permanent cohabitation is able to fulfil the expectations that the parties have towards a marriage. In most cases the partners actually have plans to formalise the relationship at some later stage but they feel comfortable in a partnership which simultaneously ensures the sense of independence and a close emotional tie. They suspect a risk in formalising the affair and therefore continue to put it off. People in this kind of partnership also valorise the element of voluntary participation in the relationship and the lack of outside pressure.

Naturally, experience shows that the longer or shorter cohabitation is usually followed by a change of partner. The majority of our sample had at some stage lived in a permanent cohabiting relationship. The length of these relationships varied, some were extremely loose and short-lived but there were also some which existed for several months or even years. In most cases, however, the partners get used to the practice of changing partners as soon as the relationship becomes displeasing, even on a permanent basis. This practice is incompatible with stability. Nonetheless, there are a number of persons who would like to have a permanent relationship and start a family but they cannot easily find a suitable partner who answers their expectations. If they do enter a relationship, they start off with an informal cohabitation, following their earlier routine and postponing decision and responsibility. They believe 'it is best to wait and see what comes of it'. The essential feature of the strategy is postponement.

'Bachelors' and 'spinsters'

Every age group includes self-contained people who withdraw from the community and from relationships. These people live alone either because they are unable, or they refuse to adapt to other people. The first case betrays psychological problems, the latter bespeaks egoism. This form of life becomes ever more ossified as the years go on and if people of this tendency do not find a partner early on, in the course of their twenties, their chances decrease rapidly in the later course of their life. They give up on having successors in their children, as living with a person and adapting to others is a necessary requirement. These self-contained interviewees usually do not feel lonely, they are not bored,

they find themselves always able to organise some pastime for themselves and are able to make their life pleasurable or at least tolerable without a partner.

THE PANIC OF THE SINGLE PERSON TO FIND A PARTNER

Single persons in their thirties usually consider the family as the natural form for human beings to live together with each other, even though some of them have given up hope of a family in their own respect. This is one of the motives for their preference. On the other hand, they are uncertain concerning their own future and this is an equally powerful motive. They believe that the best way to organise life these days is to ensure independence as early as possible. They think people ought to be their own masters and create the conditions for their independent life. To this end it is necessary to rate jobs and tasks into a strict chronological order and in this unique hierarchy finding a partner and starting a family are moved back along the scale while creating a stable financial background becomes foregrounded. A relatively loose partnership is a more suitable framework for this activity as it seems both to contain and not contain a commitment and it can be broken at any time if other tasks presented by life should so demand. This form of life is extremely convenient until people reach their mid-thirties. After this point, however, witness our interviewees, everyone is overcome by the desire to start a family.

Finding a suitable partner, however, requires time and the given conditions and expectations do not make the job of the single person easy in the marriage market. This is the point at which single people begin to panic about finding a partner. They experience a strengthening of feelings and thoughts about the transience of life. They feel it is definitely time to create a family of their own and to give birth to children who would replace them – at the same time they are short of an appropriate candidate. Thus they find themselves unable to accomplish the task of finding a partner, which had been precisely scheduled earlier and has now become overdue. They feel lonely and they believe that this is now going to remain a permanent state. Most of them give up the conviction that an independent form of life is the ideal lifestyle. It becomes clear to them that people need partners, a family and children.

CONCLUSIONS

Relatively well-positioned, affluent persons in their thirties and forties who do not have a permanent partner relationship are what we consider a single person. Approximately one fifth of the thirties-forties age group can be included in this category.

Researching the motivations and types of the phenomenon we found two major characteristics. First in the case of a certain affluent, highly qualified, mainly unmarried group of young people we are talking of a consciously chosen lifestyle which is constructed around a preference for career-building and/or free time activities. Second for the majority of singletons, however, living alone is a *form of life* defined by social conditions.

It is important to single lifestyle is most likely to occur after a divorce or the break-up of a long-term partnership, often in the case of relationships created despite major social distance between the parties. In terms of the structural composition of the population of single men and single women is different. Two thirds of the latter are single mothers while two thirds of the former are unmarried, putting off marriage. Approximately half of unmarried men live in villages, are in a lower social position, and poorly qualified, while the greater portion of single women are urban and highly qualified.

Traditional family values and the expectations radiated by the social environment influence the timing of long-term relationships differently for men and for women. Women are more likely to submit themselves to traditional expectations, thus they marry 'in good time' but by the time they are in their thirties they are divorced, often bringing up children. Men, on the contrary, have shown an increasing tendency in the past few decades to put off getting married, instead remaining single for a long time. In the final balance, single women in their thirties without a permanent relationship carry a considerably heavier burden and do more to fulfil the job of social reproduction than men of the same age.

Translated by Orsolya Frank

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DIFFERENT HOUSEHOLD FORMATION SYSTEMS IN HUNGARY AT THE END OF THE 18TH CENTURY: VARIATIONS ON JOHN HAJNAL'S THESIS[1]

TAMÁS FARAGÓ

INTRODUCTION

Demography is a branch of the social sciences particularly well suited for the use of models, perhaps because a main feature of demographic research is the search for empirical regularities, where events and entities are presented in an unambiguously numerical form (Coale and Trussel 1996). However, the quality of the established model depends on how thoroughly the empirical research has been exploited for model building and how suitable the model is for later practical application.

Having devoted a long time to the study of family and household structures, we often find ourselves in an ambiguous situation. Browsing among the relevant case studies we often come upon brilliant pieces of writing which allow us to glimpse the previously almost unimaginable depths of pre-industrial family relations or individual life-cycles. However, the limitations of the knowledge offered by these studies have also been obvious for a long time. The case studies which have become known in the last two to three decades seem valid mainly for a certain community, a few dozen square kilometres or a unit of a few hundred families, and even for these they only cover a shorter rather than a longer period. The representational nature of such studies is often questionable – we cannot really describe the demographic characteristics and processes of a larger region on the basis of them.

When we turn to the theoretically oriented macro studies (of different household formation models) we frequently find that they lack thorough analysis and a solid database – their arguments are too often based on scattered and contradictory evidence. On the other hand, these theories and models usually have great interpretative force and can lead to interesting conclusions.

[1]This is the extended version of a paper presented at the conference 'The Population of the Carpathian Basin at the Millennium,' on November 9th 2000. Its first version was given at the 23rd conference of IUSSP in Beijing, China, October 1997 and then it was published in English in *Historical Social Research* 1998 No. 1–2. The present version is a considerably revised text compared to the original English, with an extended bibliography also containing recently published materials on the question.

We have found that research based on macro data and incorporating its results into a model to be the type which takes us closest to understanding past societies: thus this is a path worth following. However, research by demographers modelling present-day families and households has already proved that this is not very easy to put into practice. Although their analyses are built on large masses of easily accessible data (the researcher dealing with the present is able to access data for his/her model which is unimaginably rich in comparison with the work of the historical demographer), they contain several simplifications and yet still appear rather complicated. In creating his model for the contemporary household and family, J. Bongaarts lists six demographic factors that determine the composition of nuclear families (marriage, fertility, adoption, mortality, migration, divorce) and four more factors that determine how nuclear families and the remaining individuals in the population combine to form households (headship prevalence, household formation, transition and dissolution) (Bongaarts, Burch and Wachter 1990). Perhaps it is needless to say that the author concentrated only on the demographic aspect of the household and family formation complex, while omitting the relationships between household characteristics and socio-economic, cultural, psychological, and kinship factors from the list. The latter were also not included among factors examined or applied in other research on the present (Kuijssten and Vossen 1988). We must add that this refers to modern nuclear families which are usually small, simply structured and fulfil a limited number of functions. The families and households of pre-industrial times, both in their structure and in their functions, were much more complicated. Besides serving as crucial units from a demographic point of view, they also served as the basis of social organisation: they were domestic, family and kin groups, cultural (sometimes even military and religious) entities and also micro-economic units producing goods and services at the same place and at the same time.

The situation is somewhat different with regard to historical models of marriage, family and the household. First of all, as we have indicated above, researchers in this field can rely on a much poorer database which is more fragmented in terms of time and place of reference. What is worse, it is not usually possible to extend and transform this database in accordance with scholarly needs – the survival and data content of historical sources has to be considered more or less arbitrary from the point of view of the present. Besides, as we have also indicated, families and households in the past have functioned through a far more versatile complex of roles than their present successors; in other words, a more impoverished set of sources should enable us to analyse and model a far richer set of phenomena and structures. The challenge of the task is, naturally, also a source of inspiration to some extent, therefore attempts towards a theoretical and methodological approach to the problem have been launched more or less simultaneously with the historical research into families and households.

In the elaboration of historical household, family and marriage models, two traditions can be clearly identified. *John Hajnal* (1965, 1982) starts from the tradition of demographic theories and contemporary demographic analyses. He ascertains regularities on the basis of aggregated data, distinguishes between regions and makes world-scale generalisations. Representatives of the Cambridge School, *Peter Laslett* (1972, 1977, 1983) – and *Richard Wall* (1983, 1995), in their turn represent the rational tradition of European historical demography deeply oriented towards the search for empirical regularities. They are chiefly interested in those traits of families, households and marriages which can be deduced from case-study type empirical examinations (or are suitable to follow up on those) and if possible, try to avoid (particularly Wall) those vague generalisations which overarch large periods or territories. At the same time, they also try to include in their model (or, as they have cautiously called it, 'set of characteristics' or 'criteria') some factors which are not directly demographic (such as kinship, labour organization or welfare functions). All their proposals, and they have quite a few, appear in the form of simple statistics, proportions and ratios, rather than declaring unequivocal and clearly understandable rules. Thus, it is no accident that Hajnal's statements, which appear in plain, clearly formulated rules and indicate a wider scope for generalisation, provoked broader interest among the researchers even beyond the boundaries of historical demographic research. The writings of *Peter Laslett* and *Richard Wall*[2] only attracted serious attention among historical demographers interested in families and households. In what follows we too intend to concentrate on John Hajnal's theory of households and marriages, although it will occasionally be inevitable that we include some statements by the Cambridge School connected to the work of Hajnal.

HAJNAL AND HIS CRITICS

Almost forty years ago John Hajnal published his famous and ground-breaking paper on European marriage patterns (Hajnal 1965). His second major contribution to the topic was the 'Two basic types of the pre-industrial household formation system' (henceforth to be referred to as 'System') first published in

[2] The present statement, however, cannot be considered valid for Peter Laslett's other writings. The author's books and papers on pre-industrial English society, or on the unique character of the nuclear family in Western Europe and its role in industrialisation and social welfare (Laslett 1976, 1984, 1988a, 1988b) and the related conclusions regarding economic and social history provoked vigorous debates among social historians (see Seccombe 1992).

1982[3]. The author regarded this paper as the sequel to the previous one so we shall also consider the two essays together as two pieces of one coherent theory. In the introduction to the 'System' *John Hajnal* clearly declares the aim of his paper: 'to compare modes of behaviour that result in the formation of households of various kinds, as well as to compare the results of that behaviour' ('System', p. 449). He also clearly described his limits. He would only treat seventeenth and eighteenth century Western European and the comparable Asiatic regions in their pre-industrial phases because at that time not enough relevant published household data for other territories like Southern Europe or Finland existed. Furthermore, he emphasised data covering populations of 5000 or more instead of data from small individual communities. He excluded stem family formations (not really justifying why) and also urban household systems. He was nearly always cautious in his conclusions and emphasized several times that 'there are other kinds of household formation systems besides the two considered here'. Hajnal also declared that some things were missing from his set of rules, e.g. he did not describe the regularities regarding individuals detaching themselves from the household, nor those regarding the dissolution of households.

His basic statements, the famous household formation rules, can be summarised as follows ('System', p. 452). Two main systems of household formation are observable in these parts of the world he had examined:

I. Simple family household system.
Basic regularities are:

1. late marriage (over 26 for men and over 23 for women);
2. neo-locality (immediately after the marriage the newly-wed establish an independent household);
3. before marriage young people frequently circulate between households as servants.

II. Joint family household system.
Main characteristics are

1. early marriage (mean ages at first marriage are usually under 26 for men and 21 for women);

[3]The much better known and more frequently cited paper which *Hajnal* published under the same title in the volume of collected essays 'Family forms in historic Europe' one year later, in 1983, was an abridged version of the former text. Several important, highly stimulating and highly provocative findings were left out of the second version. It is a regrettable fact that while some of the authors are sharply criticizing the original essay, the majority of historical demographers are acquainted primarily with the second, abridged version.

2. after the wedding the new couple stay in the household of the parents of one of them (no new, independent household is established)[4]
3. new households formed only through fission (splitting) or inheritance after the death of the head of the household.

In connection with discrimination between these two types, the author considered the question of service and the employment of servants crucial and thus formulated this question more precisely and in more detail further on ('system' p. 473). In his opinion the characteristics of service as an institution in the rural populations of pre-industrial Northwest Europe can be described using the criteria below:

a) the proportion of servants in the population is high, at least 6%, but usually over 10%;
b) servants are unmarried;
c) service is a transitory life position which the majority of country people enter at an early age, (before marriage) (life-cycle service);
d) beyond domestic and personal services the servants form an integral part of the farm labour force;
e) servants are hired for a limited period on a contractual base;
f) servants live as members of the master's household;
g) servants are not socially inferior to the master in their status (both they and their masters consider service a transitional state).

Hajnal supposed that the two household systems resulted in different internal relationships in the family[5] and they reacted in a fundamentally dissimilar fashion to difficulties resulting from economic problems and/or population pressure. Joint family households, for example, were able to absorb unemployment arising for the above reasons (population surplus), while similarly, the small households of North-West Europe increased the proportion of young adults in service and delayed their marriage. 'It was probably because of the service that Northwest Europe could operate with a balance between birth and death rates established at a lower level than prevailed in other pre-industrial societies ... populations with a joint household systems lacking that mechanism' ('System' pp. 478, 481). *John*

[4] In practice most young couples start their new life with the parents of the young husband: to use a phrase borrowed from anthropology, the choice of residence after marriage is patrilocal. (Author's note. *Hajnal* does not cover this question.)

[5] In the joint household 'the young husband's parents will often be in charge of the household. The young wife comes under the authority of her mother-in-law at an age at which, in Northwest Europe, she would often have been in service under an unrelated mistress. Her husband may continue to have a closer relationship with his mother, who is present in the household, than with his wife'. ('system' pp. 475.)

Hajnal perceptively avoided specifying clearly the regional consequences of his rules but *Peter Laslett*, following in his wake, was not as cautious. 'Western familial tendencies may themselves have disposed towards factory industrialization ... [but] the Japanese, the Russians, or even the Italians and the Poles, in so far as they adopted industrialism as a way of life, may not be in the same position in respect of the industrial culture as the West Europeans themselves ... neolocal tendencies were never part and parcel of the historical social structure of these societies as they have been for the West Europeans (Laslett 1983, 559).

In his study on marriage patterns, which constitutes the first half of his work (Hajnal 1965), *Hajnal* actually cut Europe in half with a line stretching from Trieste to Leningrad (St. Petersburg) on the basis of 1900 demographic data – this line has become deeply engraved into the consciousness of demographers and social historians since that time. The name *Hajnal* gave to his pattern has also been passed on – authors still keep referring to the 'North-Western European model' as a 'European pattern,' overlooking the fact that by doing so they more or less unconsciously exclude the societies of the peripheries (increasingly only the Eastern peripheries) from Europe.

As is customary with programmatic texts, *Hajnal's* two writings caused a profound cleft between readers, and thus generated believers and opponents. There have been few analyses on marriage, family or the household since the 1960's that leave *Hajnal's* writings unmentioned. Reactions to his statements can be divided into four groups – some authors accept them fully, others accept them with some reservation, some disapprove and others remain silent. It is not necessary to talk about those in agreement with Hajnal in much detail. Most of these authors produce case studies on Western societies based on limited source material in space and time. Samples from the other groups, however, deserve some attention.

Let us start with those who accept *Hajnal's* views with certain limitations. Some authors – first of all those who worked on the peripheral societies of Western Europe or were interested in the historical demography of non-European people – had compatibility problems regarding the direct use of *Hajnal's* data, so they tried to supplement or slightly modify his statements.

Daniel Kertzer and *Dennis Hogan* (1991), while expressing their appreciation of the works of *John Hajnal* and *Peter Laslett*, proposed modifications on the Mediterranean marriage pattern model of the latter author and declared their doubts regarding any simple connection between the structure or type of families and households and age at marriage. According to *Francesco Benigno* (1989), in pre-industrial Italy and Spain there were at least three marriage models[6]

[6]Benigno refers in this respect to the writings of M. Barbagli ('sistemi di formazione della famiglia in Italia', Boletín de la Asociación de Demografía Histórica 5 (1987): 80–127) and R. Rowland ('systemas matrimoniales en la península Ibérica (siglos XVI–XX.: una

functioning, and he could not find any association between early marriages and the formation of the nuclear family household. He thinks we ought to attribute more importance to economic, social, and other demographic factors not directly linked to the family. 'Both marriage and household patterns express the links between the economy and demography, and systems of production and social reproduction ... these links set limits and established tendencies, but ... the variability of the types of domestic organization and the demographic values strictly linked to them depend on different cultural modes, on diverse ideas of the family and its social role, and upon individual and family choices' (Benigno 1989, p. 185).

Katherine A. Lynch (1991) has noted that although *John Hajnal* concentrated on rural populations, the European marriage pattern is not in conflict with the social and demographic structures of European cities and towns over the long term adding two modifications to the model: (1) that 'various social groups within urban settings used the two parts of the European Marriage Pattern with different levels of intensity and commitment' and (2) that 'urban dwellers' practice of marriage was constrained not only by the mores and beliefs of their own social group but also by the kind of urban economies in which they lived' (Lynch 1991, p. 91).

A third group of readers, usually not historical demographers, were sharper in their critiques. *Wally Seccombe* (1992, p. 186) thought it was misleading to refer to the late marriage as a rule or custom, and he believed that out of the three rules declared by *John Hajnal* 'only the second pattern' can be 'normatively upheld'.[7] However the greater part of his criticism turned against Peter Laslett's interpretations and the uniqueness of the Western European family model. Anthropologist *Jack Goody* has been ever harsher on *Hajnal*. He declared *Hajnal's* model and the uniqueness of Western European society and household structure, as claimed by the Cambridge school, to be only another form of myth-making just as the other elements of *Hajnal's* rules and the conclusions drawn from them: the importance of service, the existence of institutional care for old poor people, and the ability to keep a balance between birth and death rates. He felt that the general contrast between Northwestern Europe and the Asian societies was not valid ('or if valid, not so important'). According to Goody, *Hajnal* 'over-stresses the actual differences', 'the data do not altogether justify such a sharp dichotomy' and 'it is not clear how these differences, real or supposed, inhibited or advanced the development of capitalism, industrialization, or modernization' which are central themes

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perspectiva regional', v. Perez Moreda and D.S. Reher eds. Demografia histórica de Espana (Madrid 1987).)

[7]According to Seccombe's interpretation 'a couple in charge of their own household after marriage' (Seccombe 1992, pp. 294).

behind the theory of the dominance of the nuclear family household (Goody 1996, pp. 14, 17).[8]

The grandiose summary of family history research in France (Burguiére 1996) did not state its criticism so sharply but in our opinion the French historical demographers went even further, concluding that instead of retaining *Hajnal's* two and *Laslett's* four models, it would be more profitable to return to the three basic models defined by *Le Play* in the late 19th century: the nuclear, the communitarian and the stem family (Burguiére 1986, p. 46)[9]. According to *André Burguiére* and *Francois Lebrun*, on a European scale it would seem more useful to distinguish between forms of family organization by their cultural peculiarities rather than their geographical location (or, to 'translate' the meaning of the authors, it is not useful to try to divide family types by rigid geographic boundaries). This is also essentially the attitude followed by the relevant chapters of the four-volume French work on population history (Fauve-Chamoux 1988; Segalen 1988).

Finally there was a particular and very silent form of reaction. It was interesting and thought-provoking during our survey of the literature to see that an important group of the authors, professional demographers dealing with the modelling of the present day households, showed nearly complete ignorance of the *Hajnal* theses and the debates they have generated (Burch and Matthews 1987; Keilman, Kuijsten and Vossen 1988; Bongaarts, Burch and Wachter 1990; Burch 1995). Such an experience involuntarily reinforces the impression on the reader that co-operation between the researchers of the past and the present is still well below the desirable level.

If we survey the literature devoted to (publicising, debating or using) *John Hajnal*'s theses in a chronological order, we find while up until the end of the 1980's or early 1990's the characteristic approach was a critical tone, from the first half of the 90's the emphasis began to shift. In recent years the focus has shifted to analysing the family and household structures of regions that had been absent in thematic or geographic terms, and to the conclusions that could be drawn (or generalised) from these. Instead of continuing to criticise the original theses of *Hajnal* (it is hard to say anything new in that respect) the question of further developing them has become foregrounded.

One group of authors did specific case studies and tried to approximate and align the resulting conclusions with *Hajnal's* theses. Let us now look at a few of these.

[8] This criticism is thought-provoking as its author is a famous anthropologist with extensive knowledge regarding the world outside Europe, who has actually put his finger on one of the genuine weak points of the *Hajnal* thesis: the shortcomings and accidental nature of the database concerning extra-European territories.

[9] Cf. Burguiére, A. 'Pour une typologie des formes d'organisation domestique de l'Europe moderne (XVIe–XIXe siécles)', Annales E.S.C. (41) 1986. No. 3, 639–655. pp.

Antoinette Fauve-Chamoux (1995) published a very interesting description of the functioning of stem families in the Pyrenees, and explicitly proved the existence of them during the eighteenth and nineteenth centuries as well as their slow decay after 1900. She attributed great importance to the inheritance system characterising this region and a type of family organisation based on a rigid non-egalitarian property transmission system. In her view, stem families as systems are far from a rare phenomenon and can be viewed instead as the third basic form of co-resident units.

Norbert Ortmayr (1995) found three marriage patterns in the Alps, and constructed the so called 'Alpine marriage pattern' strongly defined by social stratification and the very slow progress of agricultural development (both of them related to given ecological characteristics). In addition late marriages this pattern was characterised by a very high rate (up to 30%) of persons who did not marry.

Beatrice Moring (1996) illustrated the temporal limits of a particular system of household, based on source material from South-West Finland. She discovered a local community where what *Hajnal* called the 'Eastern type' of early marriage was transformed into the 'North-Western type' (late marriage) in *Hajnal's* terms, in parallel with a gradual process of proletarianisation.

Part of the same interpretive tendency has been formed by conference sessions at which dozens of researchers have compared their case studies to each other in order to arrive at conclusions regarding household and family history, suitable for generalisation and supported by a broad base of data that the programmatic works offer. Without striving for totality we can mention a few important events of this kind. The Cambridge conference of the CORN group in 1998 concentrated on the connection between village economy and marriage (Devos and Kennedy 1999). The talks given at the 12th International Conference on Economic History (Fauve-Chamoux and Ochiai 1998) and the section comparing European and Asian family structures at the 19th International Conference on Historical Studies held in Oslo, as well as the preliminary conference to this event held in Liège in 2000 (Neven and Capron 2000) were also important elements of this trend in thought.

The present study offers no space for summarising each of the dozens of talks given at the events mentioned above. All we can do is to provide a sense of the dimensions of content, time and space that they covered. The research done by the CORN group summarises studies extending from 1350 to the 20th century and covering North Western Europe (British Isles, Scandinavia, one-time Netherlands and its successor states and Westphalia) (Devos and Kennedy 1999). In terms of content the studies mainly explore the questions of marriage, peasant and farm-based husbandry, prices, proto-industrialisation and state intervention.

The 20 writings examining stem family history in a Eurasian context mainly concentrated on Japan, China, Korea and Central Europe in the traditional sense (the German-speaking areas) as well as on Scandinavia, but they also included studies on Northern France, Eastern Europe as well as Vietnam, Thailand and

India. This was supplemented of the conference itself by considerations extending even to South-America (McCaa 1998). In terms of their topics the individual lectures were far narrower than the conference mentioned above – they concentrated, almost without exception, on one family form, that of the stem family. Although the majority of the authors used the methods and approach of historical demography, parts of the volume also explore sociological and anthropological perspectives.

The participants of the Liège and Oslo events essentially continued the Eurasian comparative research mentioned above, but instead of concentrating on the stem family, their attention extended to certain questions of historiography and ideology (family and belief system) and partly to the relationship between the family and the economy. They also included some geographic regions in the discussion which had previously been given less attention (Russia and Italy) (Neven and Capron 2000).

By relating the above, we are aiming to illustrate two facts. On the one hand, by perceiving an important phenomenon and stating it in a provocative fashion it is possible to include dozens of scholars and thus dozens of regions in related research; the debate around the *Hajnal* theses (with the help of *Peter Laslett*'s equally provocative contribution) has 'globalised' research in household and family history. On the other hand, surveying the published results, the reader inevitably feels inspired to compare his own results with those disclosed here, to enrich his own methods with what has become known here, to compare his own sources with those generated in the course of the research of the functioning of other ages and societies. Such inspiration may also be helpful in enabling the scholar to view the results of research in his own country with some objectivity and distance and to attempt to position Hungarian population and society somewhere on the spectrum of Europe and the world. Thus it may be of interest to include a few experiences generated through non case-study type writings which can be utilised in relation to the Hungarian experience.

Laurie Cornell (1987), who is mainly involved in studying the historical demography of Japan, argued that it was necessary to extend *John Hajnal*'s model in such a way as to include the stem family as the third family type. She emphatically drew attention to the importance of the results of historical demography related to Japan where it may be possible to observe the origin of life-cycle service as well as its decline, on the basis of mass-scale data. Her colleague, *Osamu Saito* (1997a, 1997b) went even further and distinguished between the European and the Japanese stem family. He claimed that although both of them had a three-generational composition, their structures were different. The proportion of co-resident relatives in the Japanese stem families was different in composition from those in Europe. The role of relatives, however, was far greater than in early modern Western Europe. Thus he believes that while the Western stem family was close to the nuclear family, its Japanese version had

affinities with neither the joint type, nor with the simple family household. Thus, it could be called a fourth rather than a third type. So, it can be seen as no accident that as early as 1998 an entire conference section was devoted to the problematic of the stem family, within a Eurasian project impressive in size and composition and financed by Japanese research funds (Fauve-Chamoux and Ochiai 1998).

American scholars were interested in other questions of the problematic of family, household and marriage. *Daniel Scott Smith* (1993), upon examining colonial North-American marriage patterns, found a significant distance between this and the pattern valid in North-Western Europe. On the other hand, he appraised the neo-local choice of residence as an important and decisive system of customs. He argued that this feature was the dominant factor of the model and not that of the 'lifecycle service' (which did not exist in this form there) and on this basis he declared Early America to be the part of North-West European household formation system.

His colleague, *Michael Haines* (1996) gladly accepted this thesis and stressed the important distance between Eastern Europe and Colonial North America, despite similarities in their contemporary marriage patterns. In other words, it is clear from the above considerations that in harmony with their own social historical past different groups of scholars are sensitive to different questions within the problematic of family – household – marriage. Naturally, it seems that, beside mere geographic connections, the classification of one's own society reflects psychological motivations and considerations pointing beyond the bounds of academic life. At least, from the present perspective, there is something comical in the efforts of certain North American authors making an effort to avoid the appearance of any resemblance between Colonial America and Eastern Europe.

The conclusions of *Jürgen Schlumbohm* (2000) are of relevance to us in at least two areas. On the one hand they reveal that the role of family systems in determining demographic behaviour has long been known to certain groups of experts in the social sciences. The writings of this author from Göttingen offer us a brief glimpse into the debate in German social sciences between the 1880's and 1930's around the relationship between the peasant inheritance system, the family system and population development. It was due to a negative political intervention that the useful elements of this German academic heritage were also forced to be become a latent undercurrent over decades. With the exception of a small number of well-informed persons this knowledge has functioned as a useful element in scholarly work. Another important observation concerning *Schlumbohm* actually concerns the results of his own micro-investigations. These led him to the conclusion that in the historical reality disclosed by the data, the marriage, family, kinship and inheritance systems of local societies functioned in a far more flexible way than any of the large theories would allow us to believe. His results offer a most justifiable warning about the dangers of simplification and rapid

generalisation practiced in the interest of model-building and about the frequently significant discrepancies between types, norm and real life.

Theo Engelen (1999) of Holland is one of the few exceptional scholars who compare 20th century demographic changes with *John Hajnal*'s theses, more precisely, with that part of them which concerns marriage models. His analyses led him to the conclusion that the famous thesis can be declared erroneous in a number of points. Late marrying is prevalent in Western European cities, too, even though there are no apparent obstacles to early marriage in this context. Generally, he fails to see clearly the economic factors behind *Hajnal's* marriage model, even though these forces must or should have existed. He finds the statistical supporting apparatus of the model tenuous, as *Hajnal* usually used national mean figures which obviously fail to reflect the tendencies and sizes in regional differences, which are often rather significant. He is also sceptical as to whether the dichotomy set up by the illustrious author (early marrying as opposed to late marrying) is suitable for describing marriage systems of the world, particularly without taking on board the existence of transitional zones. Finally, he finds that the question of the temporal end of the model is similarly unclear. *Hajnal* names the 1940's as the time when this system ended, but *Engelen* believes that it was a lengthy process beginning as early as the 1930's, and that differences between Western and Eastern Europe are still observable after the 1960's (and in some places even the 1990's). Thus *Engelen's* results show, from the perspective of the 20th century and with the help of macro-statistical data, that the relevant model is not only time-bound in its origin but its transformation or disintegration is also observable from the first decades of the 20th century onwards. (In other words, the *Beatrice Moring's* study of 1996 referred to above presents something that is certainly not an isolated phenomenon.)

Markus Cerman and *James O. Brown*, who summarise recent research in family and household history (Cerman 1994; Brown and Cerman 1997) (chiefly based on micro-study results from Czech and Austrian areas) also warn that although the importance of the *Hajnal* theses is indubitable, we must beware of premature generalisations. While the Hajnal-line divides the territory of the one-time Austro-Hungarian Empire, empirical data shows that on the one hand, various family types cannot be so clearly discriminated in every case and on the other hand, as Cerman found, marriage patterns and the given household structure were not always closely interrelated. The two phenomena and structure are to be examined and interpreted separately. (Thus, his conclusions are in line with empirical evidence concerning Southern European societies.)

Livi-Bacci's book published in 1992, (Livi-Bacci 1992) emphatically claims that the existence of the marriage model outlined by *Hajnal* varies both in its temporality and its regional expansion. He also drew attention to the fact that at many points the Hajnal-line shows remarkable correspondence to the linguistic and cultural map of Europe. *Dirk van de Kaa* (1999) also proposes that the

numerous lines dividing Eastern from Western Europe that have been proposed during the previous debates about the definitions of the regions (geographic structure, expansion of Roman and Turkish occupation, dividing line between Eastern and Western Christianity, areas that had come under the influence of 18th and 19th century industrial revolution and those which had not etc.) ought to be somehow tuned in with the Hajnal-line.[10]

The works of *Richard Wall* (1998) reveal that Europe's regional variation in terms of family structure was already known before Hajnal's time. *Fréderic Le Play* distinguished three regions as early as the 1870's – Southern and Western Europe dominated by the stem family (the Eastern boundary was at the end of the continuous German-speaking area); the Northern areas (British Isles, Scandinavia, Holland and the North-German coast up to Prussia) where stem families do occur but their co-residence is, according to *Le Play*, unstable, and the region of patriarchal families. (The Russian Empire, the Balkans, and the Habsburg Monarchy). It is remarkable that *Le Play*'s map coincides not only with the pre-World War I. state boundaries but also with the Hajnal-line which connects Trieste with Saint Petersburg (except for the Baltic region which falls in the zone of the Western family system in this author's work). Thus *Hajnal*, although he does not refer to *Le Play*, actually presents a modern formulation of a demographic regionality which had long been suspected by other, earlier authors. It is only a peculiarity of the development of social sciences that the earlier mentioned German scholarly heritage and the French and Anglo-Saxon segments of relevant knowledge presented by *Richard Wall* (1998) and *André Burguicre* (1986) were so late in finding the way to each other and why this could only happen with Anglo-American mediation (not to mention the even more belated incorporation of Asian/Japanese research and cultural heritage in the 1980's and 1990's.)

Austrian research has also played an important part from the point of view of the *Hajnal* theses and the regionality of marriage, family and household types. There are two authors and two texts which deserve particular attention (both exist in slightly different English and German versions): the summarising works by *Michael Mitterauer* (1994, 1999) and *Karl Kaser* (1996, 1997a). *Mitterauer*, who originally started out as a mediaevalist, brings together the *Hajnal* line with the regionality problem long known to mediaevalist scholars, i.e. the boundaries between Eastern and Western Christianity and of Mediaeval European colonisation[11] (the so-called Carolingian line). According to his conclusion the

[10] In this proposal the author is following the line of through expounded by Ad van der Woude ('Van St. Petersburg narr Triest. De Europese grenslijn?' In Maatstaf 1993. No. 5. 80-94).

[11] By this the present author, and historical research in general, usually mean the gradual migration of mediaeval German peasant and artisan population toward the East which resulted, between the 9th and 14th centuries in Central and Eastern Europe., in the emergence

'European marriage pattern' which *Hajnal* focuses on can be retraced to the middle ages and its expansion coincides with the eastern boundary of the Carolingian empire. All this is related to the estate system, with undivided inheritance and the expansion of servitude, all of which factors go back to the social organisation of the Holy Roman Empire.

Inspired by the above, *Karl Kaser* of Graz speaks of a Hajnal-Mitterauer - line and, adding his own thorough and wide-ranging research experience of the Balkans to *Mitterauer's* system of arguments, he attempts to create a coherent map of South-Eastern Europe's family types (Kaser 1996, 1997a). He claims that on the European territory we can observe four systems of marriage and family structure:

1. a household system based on the nuclear family and practising a neo-local choice of residence (Romania);
2. a life-cycle household system with complex households based on a patrilocal choice of residence, where the death of the head of the family is followed by the distribution of the assets (Hungary, Bulgaria, Continental Greece);
3. a household system based on the nuclear family and combined with a neo-local or uxori-local choice of residence;
4. a lifecycle household system of joint households based on a patrilocal choice of residence, where the death of the head of the family is not followed by the distribution of the assets, the family unit with its complex structure can survive and be renewed over a long period (mainly Albania, Serbia, Croatia but small areas with a similar structure also occur in Greece, Bulgaria, Romania and Hungary, according to *Kaser*).

Kaser adds to these types a fifth zone which comprises Slovenia, Western Hungary and the Western edge of the Carpathians (today's Western Slovakia) where he finds no clearly dominant family or marriage characteristics.

Thus, proposals by Austrian historical demographers and social historians are not only exciting in the broader sense of families and households but also specifically concern the characteristics of the social organisation of past Hungarian society and its place in Europe in the context of the texts in question. At the same time, the above-mentioned studies also contain points of uncertainty, imprecision and occasional error, in terms of the past of Hungarian population and society.[12] It

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of villages of 'German right' and mining and trading towns taking on German urban privileges, both possessing mainly German populations.

[12] *Karl Kaser*, for example, refers in connection to his statements on Hungary to works by *Rudolf Andorka* and the present author as well as to Hungarian ethnographic literature published in foreign languages but without using historic sources referring to any specific population (*Jenő Barabás, Béla Guda, Judit Morvay* on the extended family and *László Földes* and *Attila Paládi-Kovács* on shepherd life). We feel that these texts do not allow for such sweeping conclusions as the author draws. The Hungarian parts of his family typology maps, which take into account the present-day borders, were probably down on the basis of

is therefore justified for us to attempt to juxtapose the Hungarian family system with the Hajnal (or Hajnal-Mitterauer) line and to attempt a brief coherent description of the Hungarian family and household structures. The experiences arising from the texts listed above and briefly summarised, covering a broader time period and geographic spectrum, also inspire us to do so.

First of all, it is quite clear that when a phenomenon, in this case that of marriage and the formation of households, is comprised into a model, it always inspires a great deal of research. It generates strivings to check and justify the model and exploits the model's potential to systematise source data. On the other hand, a model also serves as a warning that we have to be cautious in our choice of database for our more general conclusions. For reliable results it is not enough to lean on a great number of cases but these have to be capable of reflecting regional differences too. So far as possible, it is also desirable to make an attempt to align major national and regional averages with the results of micro-examinations. Last but not least, the results must be suited to sketch out, at least in rough outlines, the connections of demographic and other (social, cultural, legal and political) phenomena and processes with families and households. We must learn to accept the fact that neither the phenomenon of marrying, nor families and households as social and demographic base units, constitute *a priori* pure demographic structures or processes.

JOHN HAJNAL AND THE MARRIAGE AND HOUSEHOLD SYSTEM OF PRE-INDUSTRIAL RURAL HUNGARY

For a Hungarian scholar of historical demography, the debate over systems of marriage and household formation seems exciting for several reasons. First, the topic (and the debate which surrounds it) is interesting in its own right as it concerns one of the most important problems of our social and demographic history. Secondly, it is interesting by virtue of the fact that it marks out the place of Hungary on the historical demographic map of Europe (and the world) as clearly belonging to the Eastern hemisphere. Moreover, the data of historical Hungary was used at several points of the 'System' as statistical arguments with which the author, originally of Hungarian origin himself, presented the difference between Eastern and Western systems for the emergence of households. So, for the next few pages we shall try very briefly to confront the demographic data known to us about the history of the Hungarian population with the rules described by *Hajnal*. It is necessary to indicate, however, that, due to the limits of sources, in the forthcoming section we shall follow the example of *John Hajnal* himself and

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the original published by *Rudolf Andorka* and the present author about historical Hungary, with little attention to the work's regional precision.

focus on the rural population which constituted about 85% of the contemporary total at the end of the 18th century.

A general picture

To what extent does the national data of pre-industrial Hungary comply with *Hajnal's* rules? According his specifications, if a population lives in a society which is fundamentally dominated by joint households (of a complex structure) this population has to be characterized by early marriages (Rule II/1). The earliest Hungarian national data which can be used for such calculations, those of 1777, show that the mean age of first marriages was 22,5 for men and 20,5 for women for the territory of historical Hungary in the narrow sense (i.e. without Transylvania, Croatia, the Military Border and Banat province). This satisfies the rules. The age at which men marry and when they become heads of family must show a significant discrepancy (i.e. the newly wed couple do not usually set up a new household (Rule II/2) – this also seems to hold for the majority of pre-industrial Hungary (Faragó 1995). But there are problems in the case of the Rule II/3 concerning the way in which men become heads of households. In the literature we can find descriptions as well as case-studies dissimilar to *Hajnal's* examples (where households divide into smaller units through inheritance or simple division, but retain their joint character) – in many cases, data shows the formation of new household units emerging through a neo-local choice of residence (i.e. when the newly married son instantly leaves the paternal household). In other cases, the division of large households resulted in the emergence of purely nuclear family based households.

In the case of service the problem seems even more complicated. The Hungarian situation almost entirely complies with the rules described by *Hajnal* based on Western European characteristics: the proportion of servants is a little above 6 percent in the total rural population (1777), the overwhelming majority of them are not married and, as far as we know, their place in the division of activities at the farms as well as their social status nearly completely fulfil the requirements *Hajnal* proposed. There are only two points where these findings cannot be made to agree *Hajnal's* description. On the one hand, it is not quite clear what proportion of hired farmhands belonged to the 'life-cycle servant' category – certainly not all of them. On the other hand, the contemporary social status of the servants is also unclear. Some part of them most certainly came from poor cottager families whose life-cycle was different from those farmhands used as a sample for Western Europe. Their life-cycle moved along the following stages and statuses: unmarried servant – married cottager (with no property) – widowed poor relative (Faragó

1995). Thus the situation is not quite clear at our present stage of knowledge.[13] The situation becomes even more frustrating however if we take one step back from the level of national data and start examining the regional variation of the Hungarian population of the late 18th century on the basis of data in a breakdown by county.

A regional view of Hungary

The data utilized in this analysis for the quantitative study of marriage and household in pre-industrial Hungary is relatively unusual. Perhaps their most significant feature is their aggregate character which renders them capable of presenting only a rough picture of the problem in hand. This is a serious shortcoming. However, precisely because this data is so large scale, they manage to cover the entire territory of historical Hungary (which includes precisely 15 thousand settlements in the broad sense and in the narrow sense specified above it extends to roughly 8000 towns and villages). This is important because, taking into account the present scholarly capacity of Hungary, analysing the whole of 18th and 19th century Hungarian society from this one point of view on the community level or in the form of case-studies would take several decades, even if sampling methods were used.

In the last decade of the reign of the well known enlightened Habsburg queen, Maria Theresia, as well as during the time of her son and successor Joseph II., there were several population enumerations in Hungary. The first official census was held in 1784/85 applying Austrian methods and practice (followed by two revisions in 1786 and 1787). Some of the summaries of this huge statistical operation survived – many on a county level and, in the case of the census, on a village level. A considerable portion of these have been published (Thirring 1938, Dányi and Dávid 1960 etc.). These sources allow us to analyse the most important characteristics of marriage, family and household structure in Hungary on a comprehensive scale.[14] Naturally, taking into consideration the low level of the skill of contemporary bureaucracy (not to mention the ignorance of statistics amid

[13]If we try to make a comparison using the typology described by *Peter Laslett* (1983, pp. 526–527), the result of such an experiment will be even worse. According to his 'tendencies' Hungary could be characterized by a near-Mediterranean type household, which does not seem really realistic. Here we share the opinion of the scholars dealing with Italian family history (Benigno 1989; Kertzer and Hogan 1991): the problem is not , in the main the peculiar character of Hungary, but the set of criteria suggested. They do not adequately describe the marriage, family and household systems of those areas of Europe they are believed to characterise.

[14]Some published results of the first census were also used by *John Hajnal* ('system' pp. 469, 482) but he could not go into details in the course of his analysis, not being familiar enough with the source and the related literature.

a provincial nobility which had been forced by the central government to carry out data collection among the local population), there are bound to be serious shortcomings and omissions in the data which might be dangerously misleading regarding certain settlements. On the county level, however, the data appear relatively reliable, at least to the extent of allowing us to draw a rough map of the social and demographic reality of the time in question.

If we project onto a map the calculated female mean age at first marriages for 1777 (Map 1), which was estimated on the basis of the age structure of the marriages registered by the population enumeration of that year,[15] – we find an unequal distribution of marriage patterns in pre-industrial rural Hungary[16]. Although the mean female age at marriage was much lower in late eighteenth century Hungary than was characteristic for contemporary Western Europe (Flinn 1981), we cannot say that teenage marriages dominated. We may identify several distinct regions in the country in terms of age at marriage. In the Western and Northern counties this average age is relatively high – around 21 years. In the central and Eastern part of the county the age at marriage is in line with the national average, this being 20 years, while in a third group of counties, mostly those on the Eastern edge of the Great Plain, the average age at marriage is under 20 years, i.e. marriages are contracted really early, meeting the theory of the Eastern marriage model. Regional differences in average age at marriage are even more clearly shown if we look at the proportion of young peasant women married under the age of 20 in each country (Map 2). According to this view, there are only two insular areas (Árva and Szepes counties in the Northern Carpathians and Sopron, Moson and Pozsony counties near the Austrian border) where marriage over 20 dominates. If we draw a line from Lake Balaton to the Zemplén hills in the North-East of the country, South-East of this line approximately two thirds, and in some parts three quarters, of the women are under 20 at marriage according to our data. In fact, according to this data, the area of early marriage even appears north of this line in Central Trans-Danubia (Győr and Veszprém counties) and in the Palóc region (Hont, Nógrád, Gömör, Borsod counties) in Northern Hungary. These are the areas which are truly characterised by the 'Eastern marriage model.'

Looking at the distribution of servants by county (Map 3), the separation of the different regions is perhaps even more distinct. In the western part of the country, dividing the area of historical Hungary with a new Southwest-Northeast line which is slightly further Northwest than that defining differences in age at

[15]Based on the literature of Hungarian historical demography and on our research experience (which does not register many first marriages in the pre-industrial period where the female was under 15 or over 30, we made our estimate on the basis of the first three female marrying age groups: below 21, 21–25 and 26–30.

[16]The county values consist of only village and market town populations, the royal free cities were surveyed separately, partly with different questions (for example it was not possible to estimate the average age at marriage from this data).

marriage, we find a Western European level in the frequency of servants. The proportion of servants in the total population is over 6% in every county, and in certain places it is around 10%. Considering that this area was the home of a large population of poor cottagers (Faragó 1977), this means mainly that peasant farmsteads used servants in these areas. Conversely, in the South-Eastern region, the majority of which was re-populated or re-settled after the expulsion of the Turks, and in Croatia, low proportions reveal that farms used hardly any hired servants. The above map is confirmed by data concerning servant migration (Map 4) as the 1777/78 summaries of the population enumerations provide a county breakdown of the numbers of servants who had arrived in the surveyed area (village or town) with the aim of seeking service. The regional breakdown of the data is even sharper than above, as a large proportion of servant migration (probably resulting from the contractual nature of service) only seems considerable for a small Western and Northern area but not for the Central and Eastern counties.

Seemingly this is a situation where we have reproduced in a minor form *Hajnal's* boundary within the frame of one country (pushing the line slightly toward the East). But let us go further. If we attempt to localize regions where the proportions of extended or joint family households were higher (this can be measured quite easily and accurately through the average number of married men per household from the results of the first census) we get a completely different picture from that above (Map 5). There is a significant part of the country which ought to be characterised by a strong presence of complex joint households but in fact is not (in Eastern Hungary) and at the same time in the central part of the Northern area, where age at first marriage is higher than average and servant hiring is relatively high in proportion, our data points clearly to the predominance of complex joint households. There is nothing extraordinary in finding that the lowest married male proportions, (i.e. the simplest households: in all probability dominantly nuclear family units) are characteristic of the Western ('Westernised') part of Hungary This is in accordance with *Hajnal's* theses. It is more difficult to interpret the fact that we find the same simple family structure in the sparsely inhabited and economically and socially most underdeveloped areas of Rusyn and Sekler to the East as we find in the Western counties of Moson and Sopron. These maps and territorial distributions suggest that the connections between service, early age at marriage and the incidence of joint family households are far from clear and can in no way be called unquestionable.

Hopefully the earlier survey of the relevant literature was convincing enough in showing that the connection between the economic, social, demographic and cultural characteristics of family and household are complicated even in a society whose development had been unimpeded. However, the development of Hungarian society can be called anything but undisturbed in the modern period. Between 1526 and 1699 a considerable part of the country lived under Turkish

rule (the Banat province was occupied till 1718). The numerous wars of this period, as well as the epidemics of the plague which followed the various armies marching through the country, took heavy tolls on the population of Central and Southern Hungary. Thus it is no wonder that after the period of warfare was over, these under-populated areas attracted a high number of settlers and the 18th century saw a period of immigration, as well as internal re-migration, lasting through several decades. This resulted by the middle or the end of the century in a population somewhat distorted in terms of gender and age which also differed considerably from the previous period in terms of denominational and ethnic composition. Although the re-settling movement was more or less over by the middle of the 18th century, traces of this deformed population structure are still noticeable in the data of the 1787 census. The Southern and Eastern part of the country are still characterised by a considerable male surplus probably owing to the gender bias of the immigration movement (Map 6), while the proportion of the young age groups is also higher than average in these areas.

The Western and Northern parts of the country, which stayed under Christian rule and were not involved in the long-lasting wars, were still densely populated at the end of the 18th century (Map 8), although dozens of thousands of their population surplus had left these counties during the previous decades and formed settler islands in the re-populated central and Southern territories. As a consequence of the above, the structure of the population in terms of gender and age groups was far more balanced in the ex-monarchical counties in Central Hungary. The ethno-cultural map of the country had also become much more colourful as a result of the internal and international waves of migration but unfortunately there exists no statistically correct database which could be projected onto a map to display this distribution for the late 18th century.

Statistical analysis of variables

In the last few decades the composition of households in the past has been the subject of a considerable number of quantitative historical investigations both on a micro and on a macro-level. In the case of pre-industrial Hungary, the analyses presented in such studies relied mostly on simple statistical procedures such as proportions and cross-tabulations. While a number of such studies have made important contributions to the topic, their dependence on a single and simple method of statistical analysis raises a question common in quantitative research, namely: to what extent are empirical results and their modest statistical analyses capable of producing valuable interpretations and explanations to the specific problems exposed?

In the next few paragraphs we attempt to use slightly more advanced methods to test the proposals gained through the above regional distributions. In order to

gain an indication of the strength of the results, two different techniques will be employed: simple zero order correlations and multiple regression analysis[17].

In testing the family and household formation system of pre-industrial Hungary we used four measurable variables (age structure, age at marriage, family structure, frequency of service and a further four variables to test the general populational conditions (gender composition, population density, agricultural density and an artificial indicator to show the effect of Turkish occupation). (The variables used in the analysis are defined in Table 1.) The latter group of variables is crucial in the case of Hungary since, as we mentioned above, 18th century population conditions were rather peculiar in this country and thus there is reason to assume that this situation may have influenced the family and household structure too. As a first step of our analysis we produced the simple linear correlations, then went on to calculate the multiple regression. In the first step the household composition was specified as a dependent variable to be a function of the other variables. In the next step we kept changing the dependent variables – first taking the frequency of servise, then that of early marriage instead of family composition as the dependent variable. In the meantime we repeatedly checked the strength and interpretative value of the regressions. In the calculations we considered it advisable to use slightly different indicators than for constructing the map. For the sake of homogeneity we mostly used proportions and we calculated the majority of our figures for males. This is based on the two very probable suppositions that data regarding men are more ample and precise in this period than those concerning women, and that this way we would not have to burden our calculations with the imprecisions caused by differences between the genders in the various indicators and distributions. We also had to reduce the geographical territory used in these calculations: Croatia and the three Southern counties of the Temes province (the so called 'Banat') were excluded from the analysis because of their scanty and unstable data.

[17]I owe many thanks to my colleagues *Emil Valkovics* and *László Hablicsek* for their invaluable help in calculations.

Table 1

Demographic characteristics of counties of the Hungarian Kingdom at the end of the 18th century (Variables used in the analysis.)

Variable	Mean value[a] Percentage	Definition
YOUNGMAR	28.7	proportion of males married between the ages of 16–20 among the total of marriages contracted between the ages of 16–35 (1777–78)
GENDER	50,8	proportion of males within the Christian population (1787)
FAMCOMP	103,8	number of married Christian males per 100 Christian households (1787) – measure of household complexity
SERVANT	62,0	proportion of newly arrived persons entering service from the total number of immigrants (1777–78)
POPDENS	30,7	number of Christian inhabitants per km^2 (1787)
AGRDENS	62,5	number of Christian inhabitants per km^2 of agricultural territory – (total land –forestland) (1787)
YOUNGAGE	52,9	proportion of 'sons' and 'heirs' (men between 0 and 17 yrs of age) in the total Christian population (1787)
DEVAST	0,4	1 if formerly Turkish occupied territory, 0,5 if border county (constantly suffering from warfare)
		Number of investigated counties: 43[b]

[a]Values are county totals, royal free cities excluded. Only the figures for Christian population used, Jews (1,0%) were excluded as their demographic characteristics were incomplete.

[b]One county (Ugocsa), the Banat and Transylvania have not enough comparable data – they were excluded from the analysis.

The main, and preliminary, result of the analysis could be summarised as follows. If we look at the inter-correlations of the basic factors (Table 2), we can see that our variables can be divided practically into two separate groups. The variables of early marriage (YOUNGMAR), gender composition (GENDER), as well as the impact and consequence of Turkish rule (population density and agricultural density – POPDENS and AGRDENS) and the involvement in the wars of the sixteenth and seventeenth centuries (DEVAST) are relatively strongly inter-correlated with each other. Nearly all of their values are significant and close to the two thirds of the figures are over 0,4 (i.e. they are significant at p=0.01). Outside this group there are partly scattered variables in controversial connection with the others. The variable of family and household structure (FAMCOMP) is

only strongly correlated with early marriage (YOUNGMAR) and slightly with gender structure (GENDER). The strong connection between complex family structure and early marriage is no surprise as this fits into the *Hajnal* theory, but there is no significant correlation (not even negative) between service (SERVANT) and family composition (FAMCOMP), which is somewhat surprising. The variable characterizing the strength and frequency of keeping servants (SERVANT) is in moderate connection with the majority of the other factors used, except for the two where a strong correlation was expected. In the case of age structure (YOUNGAGE) and family and household structure (FAMCOMP) we again see practically no significant correlation. The frequency of service appears almost independent of family and household structure both in strength and in territoriality (see Maps 2–4) Such low correlation between the SERVANT and the YOUNGAGE variables also suggests that in eighteenth century Hungary service cannot have been an organic part of the life-cycle of rural young people. The variable indicating the proportion of young population (YOUNGAGE) is practically independent of almost all the other variables, reinforcing the general opinion that all pre-industrial populations are dominated by a high proportion of young people regardless of other factors (marriage, migration, family structure, etc.).

If we observe the eight variables together, we also arrive at some interesting results (Table 3). The strength of multiple regression is relatively good if we use family and household structure as the dependent variable – the remaining seven variables account for 52% of the variance in household type. YOUNGMAR and AGRDENS can be considered the most important positive variables – the pattern of early marriage has a strong positive impact, and overpopulation (the high agricultural density) a moderate positive impact on the complexity of forms of co-residence. If we take service (SERVANT) as the dependent variable, the analysis gives much poorer results. Two thirds (i.e. the majority) of the variance in keeping servant depends on variables not involved in this investigation (probably economic and cultural factors). The only important, negative, variable for service is YOUNGMAR. In other words if the custom of early marrying is active in an area, this has a negative effect on the incidence of keeping servants.

Table 2

Zero order correlations among variables of demographic characteristics of counties in the Hungarian Kingdom at the end of the 18th century

Variables	YOUNGMAR	GENDER	FAMCOMP	SERVANT	POPDENS	AGRDENS	YOUNGAGE
YOUNGMAR							
GENDER	0,549						
FAMCOMP	0,571	0,330					
SERVANT	-0,432	-0,463	-0,073				
POPDENS	-0,464	-0,658	-0,181	0,332			
AGRDENS	-0,193	-0,652	0,129	0,368	0,641		
YOUNGAGE	0,216	0,097	-0,019	-0,016	-0,088	0,092	
DEVAST	0,325	0,694	0,221	-0,313	-0,405	-0,522	0,091
two tailed significance							
YOUNGMAR							
GENDER	0,000						
FAMCOMP	0,000	0,031					
SERVANT	0,004	0,002	0,643				
POPDENS	0,002	0,000	0,244	0,030			
AGRDENS	0,216	0,000	0,409	0,015	0,000		
YOUNGAGE	0,164	0,538	0,904	0,920	0,576	0,556	
DEVAST	0,033	0,000	0,155	0,041	0,007	0,000	0,560

__ significant at p = 0,01 level
---- significant at p = 0,05 level

Table 3

Results of multiple regression for the most important variables of family and household structure in the Hungarian Kingdom at the end of the 18th century

Dependent variable	Multiple		Important variables	
	R	R2	+	-
FAMCOMP	0,7188	0,5166	YOUNGMAR AGRDENS	
SERVANT	0,5707	0,3257		YOUNGMAR
YOUNGMAR	0,7704	0,5935	FAMCOMP	SERVANT

An intriguing result may be observed in terms of early marriages if we take YOUNGMAR as the dependent variable. This is where the interpretative force of our analysis at its strongest – nearly 60 percent of the variance can be explained with the help of our eight variables. The controversial role of FAMCOMP and SERVANT variables is really interesting in this case. Our investigations suggest that the complexity of forms of co-residence (the weight of joint and extended families) has a strong positive impact on the strength of the custom of early marriage, while the incidence of service has a negative impact on it.

After this brief survey let us try to interpret our results. On the basis of multiple regression we can suppose a relatively strong positive connection between the custom of early marriage and the existence of complex forms of co-residence. We can also suppose a moderate negative connection between keeping servant and early marriage, which fits Hajnal's theory. However, the above analysis also indicates some problems in the theory. The connection between keeping servant and early marriage is only moderate while the majority (two thirds) of interpretative factors are related to factors outside the sphere of this investigation. No real connection (not even negative) obtains between family structure and keeping servants, but agricultural density has a slightly positive impact on the incidence of more complex forms of co-residence. This means that behind the strength of customs of co-residence and marriage patterns as well as the incidence of keeping servant there must be several distinct demographic, economic and cultural groups of factors. We ought to be particularly suspicious of the importance of cultural factors which we have not been able to identify or analyse in any significant detail in the present study. In our case this may include the influence of local systems of customs as well as the distinctive ethnic and denominational conditions of the different territories (and also the unique distribution of such groups characteristic of Hungary). The regional distribution and strength of these factors partly depends on the earlier residential and population structure and partly on the geographic position and cultural setting of the given local society. All of these had undergone considerable change as a result of the Turkish wars, particularly in the Southern part of Hungary. The long period of Turkish rule created changes in the ethno-cultural structure of the country and also had a great influence on economic and demographic conditions. Wars and the separation between the part of Hungary under Turkish rule and the part ruled by the Habsburgs both acted to block the internal migration movement of the population surplus between the hilly parts of the country and the plains until the end of the 17th century. This resulted in overpopulation (high agricultural density) and an increase in the number of complex co-resident communities (families and households) in the former areas and under-population combined with smaller families in the latter territories.

Nevertheless, we have to treat the above generalisations with caution. Even the joint measuring of the eight factors is insufficient and gives a very poor representation of the complexity of the household structures of the Hungary of those times. The fact is that at this moment we are still unable to gauge the effect of various cultural factors (ethnic and denominational composition, not to mention the local customs of marriage, and inheritance). We must also note that although the database founded on county-level data covers a large mass of the population, it provides a relatively low case number in terms of the entities used for the analysis and is only able to offer a rough view of Hungarian society of the late 18th century.

Based on the above results we tried to describe and localize the tentative household types of rural Hungary at the end of the 18th century. First, we have a region which could be characterized by traits quite close to the Western European family structure. (This is close to *Kaser's* transitional region (Kaser 1996, 1997a), but is naturally more finely drawn.) Perhaps it is not really accidental that this type occurs most frequently along the Western borders of the country. It can be characterised by a relatively high age at marriage and a high frequency of employing servants. As case studies are absent, we unfortunately cannot tell what role life-cycle service played in this sphere.[18] Our data shows that the majority of households in this region were relatively small and simple in structure – we mainly find nuclear family households although we can also assume the existence of some stem families (Baross 1902; Mattyasovszky 1904). One remark, however, is called for at this point regarding the question of age at marriage. Although this is the area in Hungary with the highest ages at marriage, even these can be regarded as rather young compared to Western Europe. In this region which is ethnoculturally mixed in a number of aspects (this transition zone was inhabited in the 18th and 19th century mainly by German, Hungarian and Slovak and occasionally by Croatian and Slovenian people), there was probably a mixture of various cultural influences. This is not simply a consequence of ethnic variety, as customs and forms of social organisation were also probably transmitted between the various groups through simple diffusion. The differences of legal, political and economic conditions from those of the Holy Roman Empire, the discrepancies in standards of urbanisation and division of labour (industrial development) and many other, less obvious factors, probably also played their part in the emergence of unique family, marriage and household patterns. At any rate, for want of better terms and to avoid waiting for the results of the detailed analyses we could call the

[18] The difficulty is mainly in the fact that the family and household structure relations of the peasantry of the Western border area, which are perhaps most heavily characterised by the employment of servants, have not really been analysed by Hungarian research to date. As far as we know, Austrian researchers have not done much in this field, either, despite the fact that the majority of this area is today an Austrian province under the name Burgenland and the majority of the population belonged to the German-Austrian ethno-cultural group as early as the late 18th century.

forms of co-residence developed in the population of this region the 'Central European nuclear family' and the 'Central European stem family.'

A significant part of historical Hungary, primarily the southern border areas, can be characterised by large and complex co-residents groups of the same kind as researchers described for contemporary Russia and the Balkans (Aleksandrov 1982; Czap 1982; Hoch 1983; Hammel 1975; Kaser 1995, 1997b; Todorova 1993). In the South there were often not only two but several families living and working as one organised group. It is interesting that the majority of areas of this kind was not only in those parts of Hungary which lie relatively close to the Balkans but the residents themselves were mainly of Croatian or Serbian origin who had migrated into Hungary from among the mountains of the Balkans after the Turkish wars. This population had kept its original customs, most of them married very early and macro-statistical data of the late 18th century (household sizes over 8 people) make it rather likely that they lived in large, complex, '*zadruga*' type households. These groups very rarely included servants – the farms and the labour structure of the group were essentially founded upon kinship relations. These co-resident groups might be termed the 'Southeast European extended family' until their internal relations, functioning and the kinship system and demographic processes in their background have been clarified.

The fourth basic type of household to be found in 18th century Hungary might be termed 'the Central European complex household'. Their population mainly emerged through Hungarian internal migration (people moving from the hilly parts to the Great Plain) and through international immigration. The immigrants mainly arrived from the German Empire and Austria after the Turkish wars to the depopulated Central and Southern Hungarian areas. Their co-resident groups were usually simple in structure and were limited to the family of the head of the household. There were very few servants. The marrying age, however, is usually very young, thus families can be expected to have had a relatively high number of children. Therefore, we could say that in terms of their border position and demographic characteristics the families of non-South Slavic origin (despite the protests of North American researchers) show similarities to those living among the conditions of colonial North America .[19]

[19] The difference between the two areas did not mainly lie in the 18th century conditions (Smith 1993; Haines 1996) but in the social development following that period. Border areas were closed off much earlier in Hungary, at the turn of the 18th and 19th centuries, in other words well before the beginning of industrialisation while, except for free market towns and areas of the plains, they reverted to being agricultural areas organised into so called 'feudal relations'. The society integrating new settlers functioned totally differently in Hungary than it did in North America in the 18th and 19th centuries and the newcomers had to adapt to an economic, social and political setting very different from that in Western Europe (Várkonyi 1970). Thus it is barely extraordinary that the eradication of frontier conditions by closing the borders led to an increase in the number of 'Eastern type' complex households in several other parts of the country (Faragó 1977).

Naturally, other interpretations of the results found here are also possible. We would need far more information on Hungarian household patterns, families and households in order to be able to define the truly important and frequent, relevant types. Certain things, however, can be predicted already. Several hill country peasant populations (Slovakians, Poles (Gorals), Romanians, Rusyns and Seklers)[20], who lived as shepherds or settlers of the deforested areas in the Carpathians, cannot be distinguished on the basis of county data and up to this point we do not have much information about their family and household conditions and marriage customs. There were probably measurable differences between the family and household conditions of various social groups[21], such as land-owning peasants, cottagers, rural artisans and the country gentry.[22] However, one fact is obviously clear. Neither the factors and variables determining the emergence of households, nor the regional distribution of household types can be interpreted and described in an unproblematic fashion for historical Hungary using *Hajnal's* theses. First of all, the demographic factors used in the 'system' are not always clear. Secondly, the demographic factors are not always satisfactory for describing and explaining the functioning of various household types. The latter must be treated as a socio-demographic model, taking into account the non-demographic background factors of the Hungary of that time. Thirdly, the weight and the direction of the connection between the various factors might also change over the times – thus, for example, we may suspect whether that the devastation of the assets, villages and people during the Turkish wars and the resettling movements which followed led to the Hungarian rural population of some regions becoming more 'eastern' in terms of demographic and family/household conditions. Keeping servants appears to be a factor more or less independent of household type in Hungary. Last, but not least: the phenomena and types connected to families and households cannot be separated, according to our data, with a clear dividing line (cf. *Hajnal,* 1965) – their regionality can be likened to a colourful woven cloth rather than a clear-cut territorial division.

[20]In terms of religious denomination the first two groups are Roman Catholics although Slovakians also include some Lutherans, while the latter followed the Greek rite (were Greek Catholic or Greek Orthodox). The majority of the Seklers were Calvinists, one part (those in Csík county) were Roman Catholic.

[21] In this question we disagree with *John Hajnal*. He wrote in the 'system' that 'all layers of the rural societies dealt with in this paper, from the rich to the very poor, followed the same household rules' (pp. 454–455). We would refrain from such a clear-cut opinion in this question. Although occasional similarities and identities irrespective of social strata cannot be ruled out entirely, we believe that for a proper clarification of the question further investigations are required.

[22]The importance of the gentry as a social stratum needs to be emphasised here. We know little of their demographic, family and household characteristics, although their proportion reached 5% nationally by the end of the 18th century. (In fact there were counties where this rate was over 15%.)

CONCLUSION

The present text was written with the aim of discussing Hajnal's theses but it seemed inevitable, besides making a critique of household typology, to diverge to some extent toward creating a household typology. It was on the basis of population enumeration data that we confronted Hungarian data with *Hajnal's* theses and provided a brief statistical analysis – this has not enabled us to apply a dynamic approach to the problem of household structure. We are aware that the functioning of certain systems can only be understood through becoming acquainted with the individual life-cycle of the persons living in them and the communal life-cycle of the group.[23] This, however, is practically only possible through micro-studies – both macro and micro-studies have their own place and function. The aim of this text, beyond that stated above, can be none other than making a proposal for further research on the number, character and territorial distribution of possible further types. Some in depth examinations will be required in order to decide just how real and important the proposed family and household types are, what demographic, social, legal (inheritance) procedures and economic and cultural setting served as the background to their functioning. The base types will only fill out once their functions, the sphere of their participants and their functions, economic, social and cultural environments are revealed (and clearly distinguished from each other). We are convinced that all of us ought to avoid the kind of manufacturing of household types which was still going on in the international literature of the 1970's and which was based purely on formal traits and differences in percentage points.

If we try to review and consider once more what would be the best path on which to progress further along the way of exploring marriage, family and household systems, we find that we have not very many choices at the moment. Either we wait for the birth of a new general theory or we try to collate the useful and important elements from earlier typologies and hypotheses. As far as 'grand theory' is concerned, there are still problems waiting to be (or never to be) solved which may inspire adventurous model builders. Marriages, family and household types of the pre-industrial period are extremely complicated and combine a most varied array of demographic, economic, social and cultural factors. This may inspire some to create new typologies and execute novel

[23] Limitations of sources and methodology (e. g. a statistical approach) as well as the aim of an examination, can define the approach to a problem. If in the present paper we did not talk about life and family cycles this does not mean that we are not aware of them or do not consider them important- but we would find it comical if someone tried to argue in defence of it in the style of Lutz Berkner's criticism of Peter Laslett thirty years ago. (For an analysis of misunderstandings see Peter Laslett's sarcastic responses. Laslett 1987)

modelling experiments. The other solution, and this is what seems most acceptable to us, is to accept *Philip Kraeger*'s proposal and give up thinking in terms of universalistic regimes and adopt instead a regionally and temporally limited frame of reference (Kraeger 1986).

On the basis of the above we must be prepared that within the borders of each country (or even region) there may exist as many as two or even more systems for the emergence of households. In this respect, besides Hungary, we can also quote Italian and Spanish examples (Benigno 1989). Naturally, we do not think that the two systems of household formation proposed by *Hajnal* should be replaced by several dozen household types or patterns for marriage and household formation. It is definite, however, that pre-industrial societies cannot be characterised by this simple dichotomy,[24] but we do not believe that the number of demographic systems actually functioning was historically too large.

The line of argument here expounded may certainly be called sketchy. Still, we hope we have been successful in drawing attention to the fact that while to some extent it is necessary to have theoretical approaches (or at least to rethink earlier theories), these need to be far more concrete and far more solidly based on factual data than they have been heretofore. As far as the theoretical work is concerned, it seems high time to give up those approaches which are centred around Western Europe and which are coming to appear increasingly parochial. This latter will not be easy and there is plenty of work waiting to be done both in the field of creating conceptually selected and well-prepared case studies and in carrying out the experiments for generalisation based on these, whilst injecting the new results into the bloodstream of international research.

It might be useful to follow the example of Austrian researchers in connecting the arguments and results of the debate about the concept of Central Europe/Eastern Europe, and on 'divergence' with regard to the regionality of family and household systems as basic units of social organisation and demographic processes. (By creating typologies based on specific characteristics and by making historical case studies more concrete perhaps we could resolve to

[24] Incidentally, if we look at one of the grandest projects of demographic research (with several historical ramifications), the European Fertility Project carried out under the auspices of Princeton University, we find that a very similar picture can be drawn of the process of the decline of fertility. Although the authors of the chapter summarising the results of the research are attracted to thinking in terms of a binary marriage model, the late 19th century data they present (1870–1900) also allow different conclusions. On the basis of the Princeton indexes of married women (*Im*) and married fertility (*Ig*) at least on marriage zones appear on the map of Europe. Naturally, these often do not coincide with political boundaries and not all the populations of the regions examined can be fitted into this picture. Thus, for example, the majority of France (except for Bretagne) and Central and Southern Hungary definitely cannot be included into any of the four zones listed in the concluding paper (Coale and Watkins 1986).

some extent the increasingly offensive broadness and sterility of the debates surrounding the definition of Central and Eastern Europe as regions.)[25]

To return to our point of departure: we have to be grateful to *John Hajnal* for these two brilliant studies. They have fulfilled perfectly the basic mission of theoretical studies. They have interpreted connections and processes, connected seemingly disparate factors, and provoked clarifying debates. As a consequence of these, it has become the point of departure for a great amount of research and is still likely to generate more. However, the futuristic prophecy of the author about his own work seems to be coming true, 'It may turn out, when statistical data on households for many more populations have been analyzed, that it is not fruitful to group together all the populations exhibiting those household formation rules that for the purposes of this paper are the defining characteristics of joint household systems' ('System', p. 455).

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[25] On the history of the lengthy debate on the concepts of Central and Eastern Europe see Szűcs and Hanák 1986; Ring 1986; Gyáni 1988; Rétvári 1996; Romsics 1998. 17–31.

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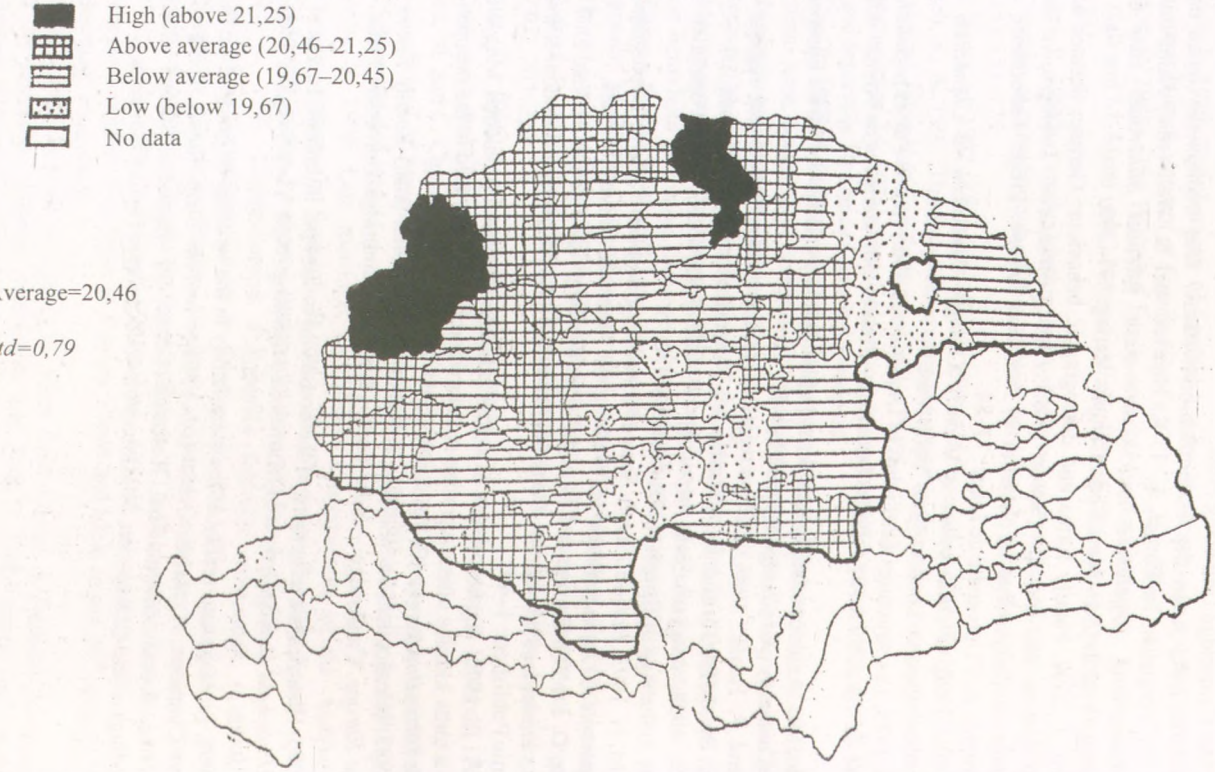
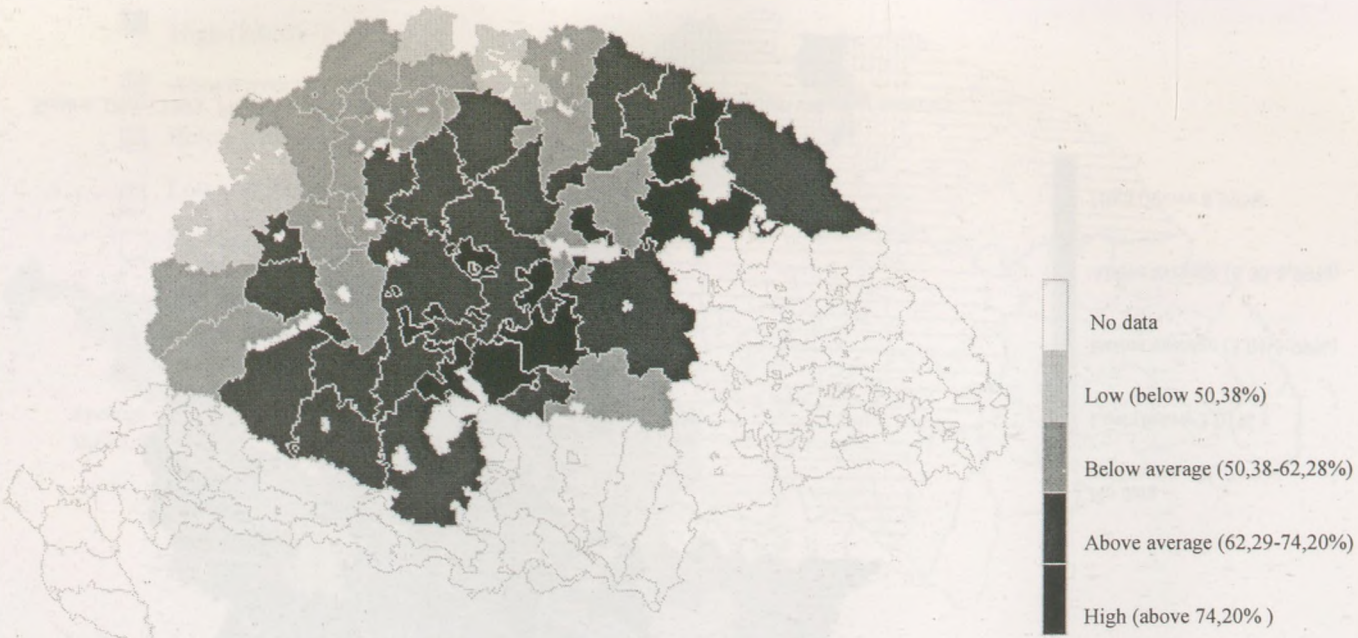
Map 1 *Estimated age at first marriage among daughters of commoners (1777–1778)*



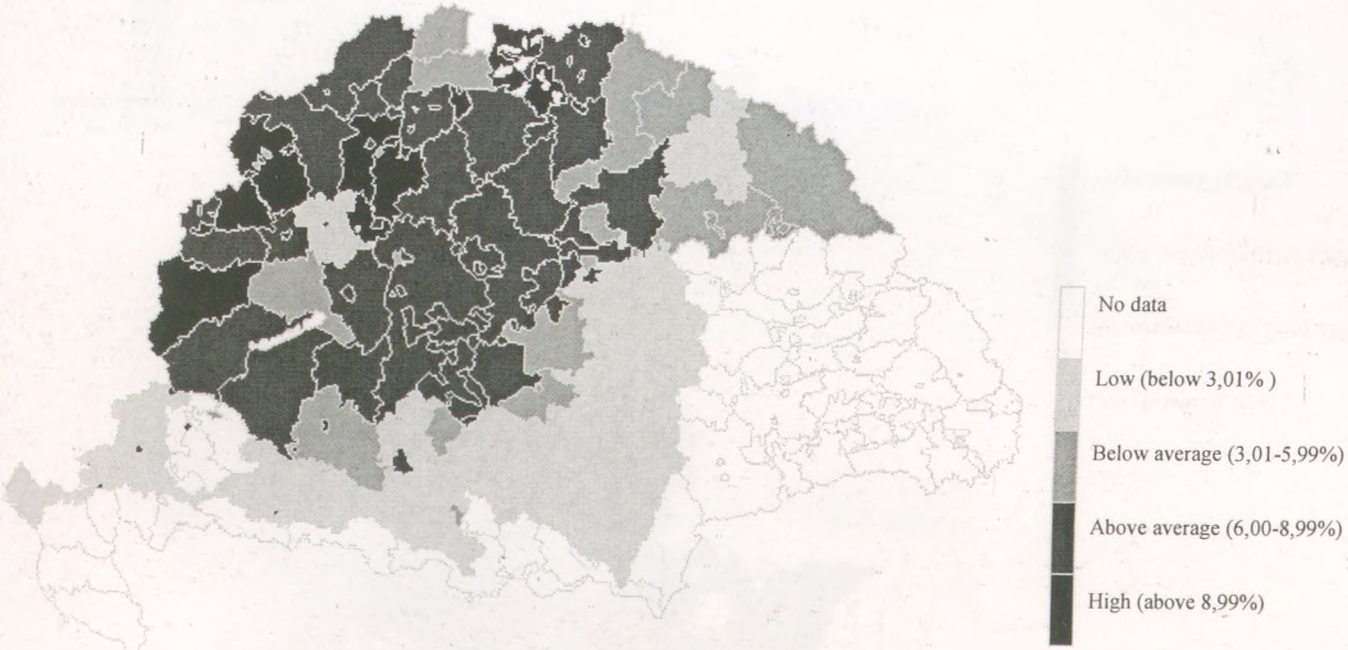
Source: Dányi 1993: 256–258.

Map 2 *Daughters of commoners getting married before the age of 20 by counties (1777)*



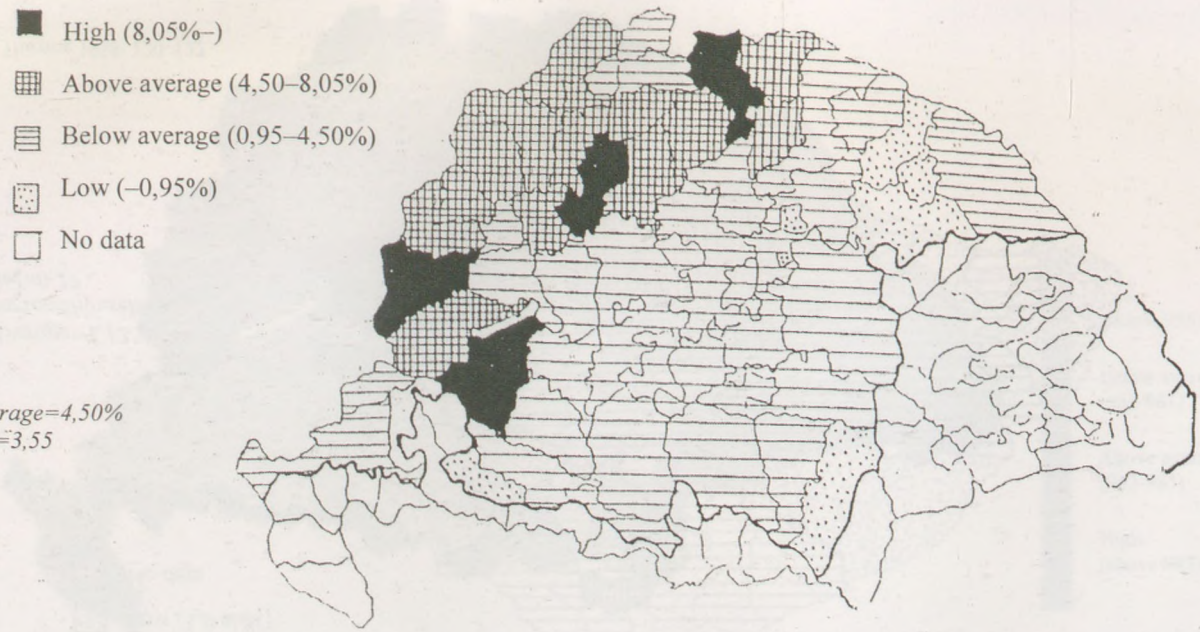
Source: Dányi 1993: 256–258. .

Map 3 *Proportion of servants in total population by counties (1778)*



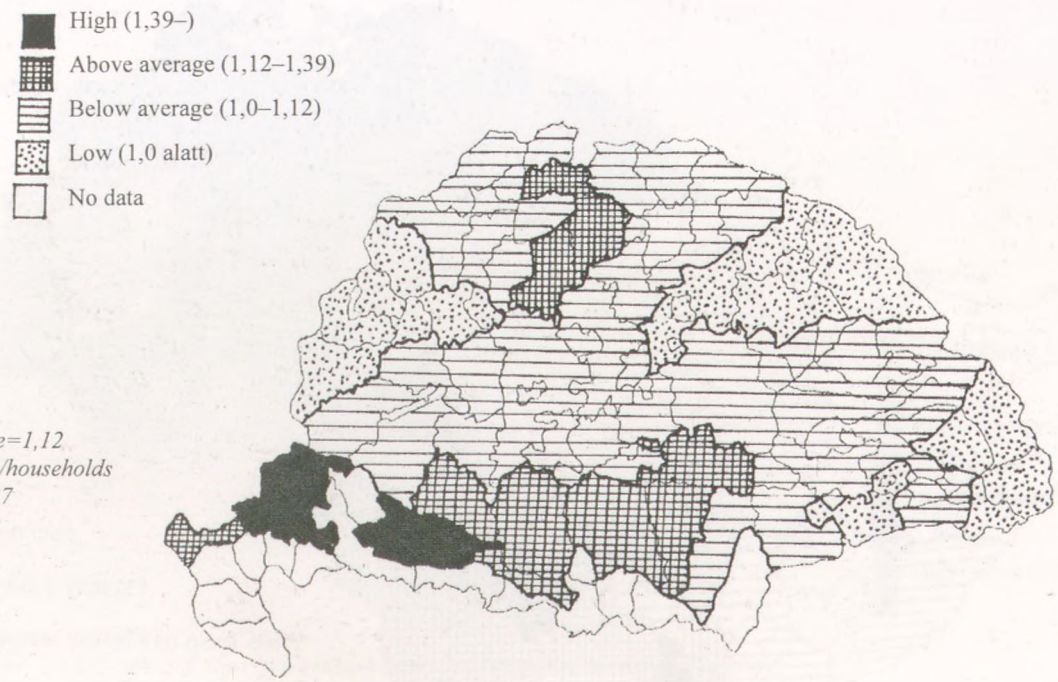
Source: Dányi 1993: 170–177, 264–288. Data on towns have been related to the average values of counties.

Map 4 *Servant migration. Proportion of people entering service in the immigrant population (1778)*



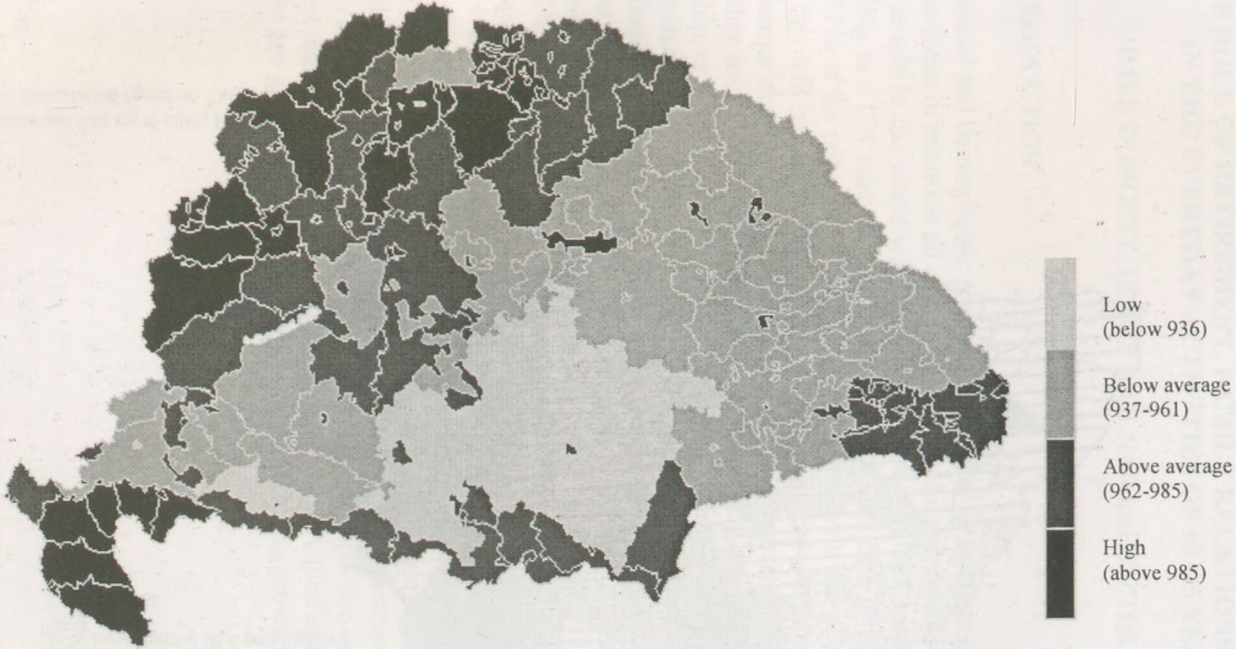
Source: 1993: 242–246.

Map 5 *Complexity of households. Average number of men per household (1787)*



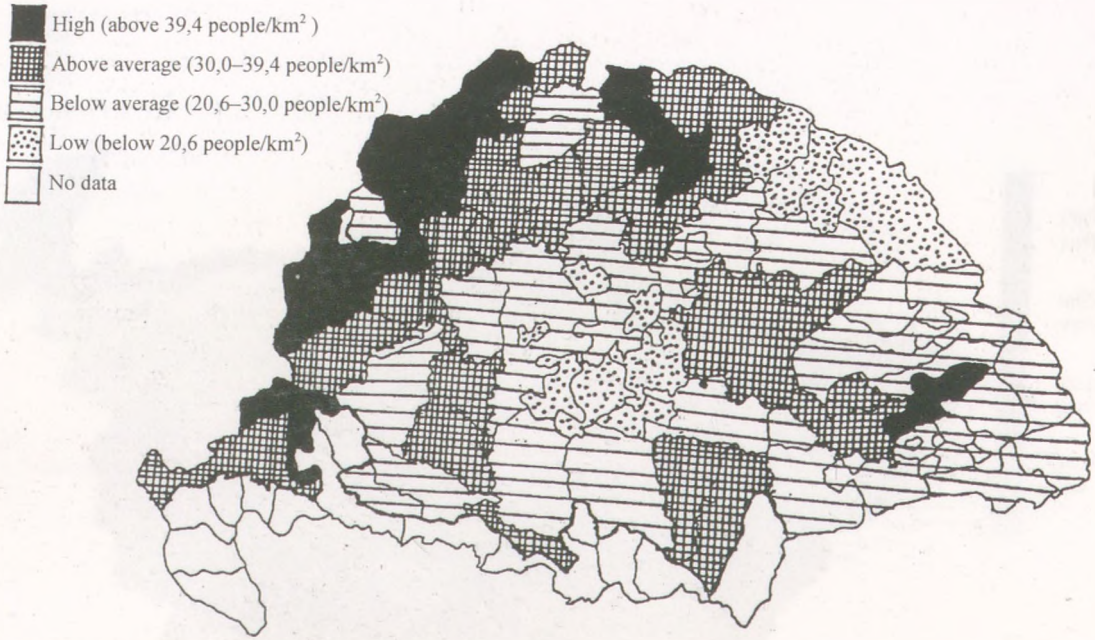
Source: Thirring 1938: 120–122.

Map 6 *Number of females per 1000 males among Christians (1787-ben)*



Source: Thirring 1938: 126–128.

Map 7 *Population density in the Hungarian Kingdom[a] according to the first population census (1787)*



[a] Counties and free royal cities together.
Source: Calculation based on Thirring 1938: 117–119.

THE ROLE OF RETIREMENT, FAMILY RELATIONS AND HEALTH IN THE EVERYDAY ACTIVITIES OF 60–75 YEAR OLDS

IMRE DOBOSSY, EDIT S. MOLNÁR and ESZTER VIRÁGH

INTRODUCTION

Social and demographic problems related to an aging population have been in the focus of attention all over the world for the past few decades. The ratio of old people in the world was 8% in 1950, 10% in 2000, however, by 2050, according to a UN study (UN 2000), more than one fifth of mankind, and about 36–37% of the population in Europe will be over the age of 60. We can expect that this will have a significant economic impact on economic development, on the labour market and on generation transfers. Furthermore, we must be aware of other social implications as well, such as family composition, forms of partnership, or even the health care system, public life and political behaviour (e.g.: the outcome of elections) will not be left unchanged. Thus we can say that the continuous growth of the elderly age groups and their larger ratio will have a direct impact on generation co-operation, which is a determining and basic factor in the functioning of society.

The general aging process common to the whole of Europe is typical for Hungary as well. In a population of about 10 million, the ratio of the age group of 14 and under has been dropping continuously and in the last few years at a faster rate, while that of the older active age groups increased, and that of the over 60 age group even more. These ratios result from fertility and mortality trends, while international migration has not played a determining role in Hungary, at least so far. 50 years ago, however, the proportion of the youngest and oldest age groups has changed significantly, the so called aging index (the ratio of the age groups of 65 and over to 14 and under) has grown significantly.

Table 1

Age composition of the population (male and female together, 1 January) and the aging index in Hungary (1949–2001) (%)

Age group (years)	1949	1960	1970	1980	1990	2001
0–14	24.9	25.4	21.1	21.9	20.5	16.6
15–39	38.8	36.8	37.0	35.8	35.5	35.1
40–59	24.7	24.1	24.8	25.3	25.0	28.0
60–X	11.7	13.8	17.0	17.1	18.9	20.3
Within this:						
60–64	*4.1*	*4.8*	*5.6*	*3.6*	*5.6*	*5.2*
65–X	*7.6*	*9.0*	*11.4*	*13.5*	*13.3*	*15.1*
Aging index	30.3	35.2	54.4	61.9	64.5	91.3

Source: Demographic Yearbook. Budapest: KSH

Though demographic aging and the deterioration of the age structure (with their attendant social effects) including all the striking social impacts, indicate a negative process, the growth in life span is a very positive phenomenon. This is especially true in countries – Hungary being one of them, unfortunately – where the average life expectancy at birth is low. In Hungary it is hardly over 70 and in case of men it remains under 70. Hungarian men who have already celebrated their 60th birthday can expect only just a little more than 15 years more in life, while women of the same age can expect 20. Life expectancy at birth has increased only very moderately in the past 20 years (for men, by 0.71 years between 1980–2000, for women, by 1.72) due to the very bad mortality rate. Nevertheless, the number of people 60 and over has fortunately increased by some 600 thousand in the last 20 years since 1980.

Social solidarity demands that younger generations pay increased attention to the living conditions and quality of life of the one fifth of the population slowly out of work, or becoming inactive. One of the most important elements of care is to prolong economic activities – work – on the one hand and on the other hand, to provide proper pensions and to sustain their value. Hungary, together with the rest of the former socialist countries, or with the countries preparing to accede to the European Union, is in a special situation in this regard. It is known that the employment rate of the 15–64 year olds is well under that of the EU Member States. This is partially due to 'traditions': for decades, women in Hungary retired at the age of 55, men at 60. Retirement age increased gradually only from the middle of the 90's (amongst legislation providing certain allowances and stipulating other stringent measures) – to 62, the retirement age currently in force. Another reason is the development of large-

scale unemployment product of the economic and social changes in 1989/90. According to the findings of the Labour Force Surveys unemployed people over 50 hardly ever sought work. Making use of the different possibilities of retirement (such as early retirement with age allowance, requesting disability status) and having met the required number of years spent in work, masses of them simply left the labour market, which did not offer them much anyway. As a result, the total number of inactive people receiving one of several types of pensions is significantly higher than the number of people being 60 and over (above 3 million.) Although within this group old age pensioners prevail receiving a pension which they are entitled to on the basis of the number of years spent in work (some 65%), even they may be comprised of people under the age of 60. The lifestyle of pensioners who have already retired but are still of working age resembles in a lot of aspects those of the 'elderly pensioners' than of the active members of their own age group because their possibilities – reduced financial means and social contacts – restrict then. Thus the double task of social action is made up of managing problems arising from biological aging, and also of easing the everyday financial and psychological problems of being a pensioner.

Social statistics provide us with different cross sectional and macro-statistical data on family relations and the housing conditions of the elderly and of the retired (the most complete ones are, of course, the census data), on income and consumption (continuous surveys on household budgets) and on lifestyles and health (periodically prepared national time budget and health surveys.) Cross sectional macro-statistics of different statistical offices, among them the Central Statistical Office of Hungary, which comply with EUROSTAT, ILO, WHO and other international statistical standards and recommendations, are available and abundant; they are easily accessible and make international and time series comparison possible.

Surprisingly, we have less information on the aging process as such in spite of the fact that it is important not only to describe the situation, but also to see how a dramatic change in status takes place in the life of the individual: retirement. Is it really true that aging goes hand-in-hand with the narrowing of one's scope for life and action, and if yes do the resulting disadvantages grow with age, or, having once reached old age, do people simply 'resign' themselves to their situations and feel less exclusion and loss of status? What impact do growing older and the deterioration of one's health have on the structure of activities of the elderly and on their well-being? In which period of one's life do difficult life situations develop most frequently which the elderly cannot solve by themselves, not even with the help of their families? No adequate answer can be given to these questions relying only on descriptive statistics; the answers are to be found in other data obtained with different approaches.

The Demographic Research Institute of the Central Statistical Office has recently launched a series of research projects using the panel method with the aim of providing an adequate data system to explain changes in demographic behaviour (Spéder 2002). The data system to be set up will bring major turning points of life courses and structural relations (e.g.: education, profession) into a single unified system, including the values and attitudes which are shaped by structural relations and which in turn have an impact on behaviour. During the first wave of panel data collection at the turn of 2001/2002, a national representative sample of 18–75 year old men and women were interviewed (altogether 16.363 people.)[1] This sample covering almost 60 birth years makes it possible to continuously monitor possible demographic events (such as partnerships, marriage formation, childbearing, divorces, grown children leaving home, becoming widows/widowers) for different generations now and in the future. Since some 20% of the total sample is in the age group of 60–75, a possibility to study the most important social and economic parameters of people living in 'the age of aging', but not yet considered officially old has opened up.

The most typical differences within the aging age group can be studied after the first wave of data collection. There are three typical features we discuss in the present study which go through significant changes during the time of aging, that is, between the years of 60–75. The first one is the significant transformation in economic activities and incomes within this age group. Special family relations of the 60–75 year olds make up the second characteristics, which are also significantly transformed in this period covering 15 years. The third one is health, which deteriorates spectacularly, as we will see later on. We will show that everyday tasks and activities which keep this age group busy also change considerably along these three parameters. Naturally a number of individual circumstances might play a role in the period of aging, such as life-courses, place of residence, economic activity, cultural level, the network of connections. As a result, aging can occur or become apparent earlier or later in life, depending on the individual. The interpretation and analysis of the individual process of aging will become possible only after the second wave of the panel study.

ECONOMIC ACTIVITIES AND INCOMES AT THE AGE OF 60–75

As has already been mentioned for a long time the Hungarian pension system made retirement possible at a relatively young age – as we see today. This significant change in status took place by the age of 56 in the lives of 85% of

[1] For the description of the concept of the Hungarian research, see Spéder 2002. The panel survey 'Turning points of our life course' was supported by NKFP, Budapest No. 5/128/2001.

retired woman of 75 and under studied at the turn of 2001/2002, and by the age of 60 in 90% of the lives of men of the same group. Ever since the pension system was transformed, retirement age for both genders has been 62. However, legislation is being applied gradually, thus we can still find regular old age pensioners, entitled in their own right, who are not yet 60. For example, 5–6% of the men and 18% of the women in our sample for old age pensioners were under 60 in 2001–2002. At the same time, nearly 90% of the 60–75 year old age group received old age pension to which they were entitled to in their own right. Therefore our statements on the aging age group are also more or less valid for the old age pensioners who are 75 or younger.

The findings of the Labour Force Surveys tell us that only a very small percentage (less than 4% nationwide in 2001) of the people above retirement age was economically active. Our own studies show that this figure was 1.5% among the 60–75 year olds at the turn of 2001–2002. We can state that men and women reaching retirement age (annually some 100 thousand people nationwide) practically disappear from the labour market. Employers are not interested in elderly people at all (this is true not only for retired people, but also for those who are close to retirement age.) This is something to think about because demographic aging and the increase in the number of old people raise the question more and more: how can the older generation be motivated? One way could be to prolong and maintain economic activities for as long as possible. But today there are several obstacles to this. According to our findings, most of the older active people (employees of 46–60/62 years of age) expect to be sent to retirement at the age of 62. But they would rather retire earlier than that, as an average by about 4–5 years. Reasons include becoming free from obligations, fatigue, bad health, but we can also find arguments such as counting on some sort of a job while being retiring. They would be happier to accept jobs as 'young pensioners' (with a secured pension behind their backs) rather than to retain a prolonged active, but uncertain labour market status where the danger of losing the job is present. In reality, however, employers are hardly interested in people even between the ages of 45–50. Realistically, today only a small proportion of old age pensioners wish to take a job. The proportion of those doing some sort of (legal or illegal) income generating jobs is not very high either. 7% of old age pensioners under 75 do regular work, 4% of them work on and off. But statistics do not really indicate this, and there are few traces in the organised economy either. Only those with a degree have somewhat better prospects here. As against the 5–7% of those who have finished only the 8 grades of elementary education, nearly one third of old age pensioners who have a degree and are under the age of 75 were able to generate some extra income through regular on or and off work at the turn of 2001/2002.

Statistical data and analytical studies clearly show that in the couple of decades before the change of the system at the beginning of the 90's, that is in the

70' and 80's, becoming a pensioner also meant drifting towards poverty. This situation changed or rather has been differentiated somewhat since the 90's. For example, the proportion of pensioners belonging to the lowest one fifth of the income scale dropped significantly in 1992–1998. This 'improvement' is, of course, relative. The drop in the standards of living was quite general in Hungary in the 90's, but the situation of the elderly as compared to that of the majority of society certainly deteriorated less in this particular period of time.

Our own studies support the fact that this statement was true also in 2001/2002: the proportion of 60–75 year olds in the lowest fifth of the income scale was better off than the average for the 18–75 year olds in our sample, and for the 18–59 year olds. Data also show that the elderly generation is more homogenous in its incomes than the younger ones; less of them belong to the extreme fifths of the income scale since most of them can be found in the middle income range. We can also see that the number of people in the lowest fifth of the income scale decreases by age. The opposite, however, cannot be said of the highest income fifth. As a matter of fact, there are less, not more 60–75 year olds among the affluent than young people. Furthermore, we can observe a quite large opening of the income gap in society as a whole there is a lot of polarisation, but this is less typical of the retired or aging generations.

Table 2

Ratios of those in the lowest and in the highest fifths of the income scale in the age group of 18–75 year olds, based on per capita income of household (2001/2002) (%)[*]

Age group	Lowest income fifth	Highest income fifth
18–29 year olds	22.3	25.3
30–39 year olds	27.6	18.5
40–49 year olds	26.4	18.9
50–54 year olds	22.2	23.4
55–59 year olds	16.5	24.0
60–64 year olds	12.5	15.9
65–69 year olds	14.9	12.3
70–75 year olds	12.3	12.0
Altogether	21.6	20.0
N=	(3150)	(2914)

Source: 'Turning points' panel survey.

[*]The per capita income in a household served as basis for setting the income fifths taking the so called equivalent income into account. The flexibility factor used to calculate the equivalent income was 0.73, which is close to the scale set up by the Hungarian Central Statistical Office.

Some 11% of the total sample could not or would not answer questions on the income of their households.

For pensioners, the situation is a bit more complex. Pensioners form an extremely heterogeneous group regarding the amount of the pension. Old age pensions which the pensioner is entitled to his/her own right are much better than other forms of pension benefits (disability pension, widow's pension, and other forms of pension-like benefits.) It follows that old age pensioners are under-represented, while other pensioners are over-represented in the lowest fifth of the income scale (and both are under-represented in the highest fifth.)

Table 3

Ratio of people not receiving pensions, old age pensioners and other types of pensioners in the lowest and highest fifths of the income scale in the total sample of the age group of 18–75, based on per capita income of the households (2001/2002) (%)

Pension received	Lowest income fifth	Highest income fifth
Not receiving pension	23.4	23.2
Old age pensioners	10.1	15.9
Disability pensioners	32.1	7.6
Other pensioners	31.4	9.6
Altogether	21.6	20.0
N=	(3150)	(2914)

Source: 'Turning points' panel survey.

Besides seeing the position in the income structure, we also determined the ratio of poor people in the studied population. As it is well known, there is no consensus on the definition of poverty; there are several methods that can be used to calculate the poverty line. One of these sets out the concept of relative poverty, and considers a certain percentage (e.g.: 40, 50, 60%) of the median income as income poverty. In our definition relative poverty covers those who have less than one half of the per capita average equivalent income in a household. Accordingly, 11.6% of the population of 18–75 years of age could be considered relatively poor at the turn of 2001/2002.

Using the above definition, the ratio of the 60–75 year old age group among the poor is significantly lower: 7.5% of the 60–69 year olds and 6.3% of the 70–75 year olds could be said to be poor. There is a significant difference in the poverty rates of those receiving old age pensions and other pensions: 5.3% of those getting old age pensions, and nearly 20% of the disability pensioners have income under the poverty line.

Table 4

Ratio of the poor in the age group of 18–75 year olds by age group and by type of pension received (2001/2002) (%)

Age group	poor
18–29	11.7
30–39	13.7
40–49	14.6
50–59	11.5
60–69	7.5
70–75	6.3
Total	11.6
N=	(16363)

Type of pension	poor
Not receiving pension	12.3
Old age pension	5.3
Disability pension	19.6
Other pension	17.4
Total:	11.6
N=	(16363)

Source: 'Turning points' panel survey.

Since the pensioner population is quite heterogeneous: we should look for the majority of the poor among the disability pensioners, among those living solely on widow's pension in single person households, and among those elderly who have no pension at all (or only some kind of pension-like benefit) and not among the old age pensioners. And in all probability the poorest of all are the old inmates of welfare homes, but we know nothing of their situation from our survey.

FAMILY RELATIONS

Besides the change in economic status and in the income conditions of the 60–75 year old age group, another major determining factor in their lives is the change in family relations. Most people live the last period of their family lives around this time, as a matter of fact this last stage of family life – children leaving the family home, death of the spouse – is already over for many. The distribution by family status indicates this very well: there are marked changes taking place from age group to age group in the different ratios, especially in the case of women – basically due to becoming a widow.

Table 5
Family status of the 60–75 year old respondents, by age group and by gender (2001/2002) (%)

Family status	Age group			Total
	60–64 year olds	65–69 year olds	70–75 year olds	
		Men		
Unmarried	4.5	4.9	1.4	3.7
Married, living together	77.2	78.4	77.1	77.6
Married, separated	2.0	1.3	0.9	1.4
Widower	7.7	9.3	16.6	10.9
Divorced	8.6	6.1	4.0	6.4
Total	100.0	100.0	100.0	100.0
N=	(505)	(462)	(409)	(1376)
		Women		
Unmarried	4.1	3.0	4.5	3.9
Married, living together	55.4	47.3	30.9	44.3
Married, separated	0.9	0.8	0.8	0.8
Widow	30.1	38.3	55.9	41.7
Divorced	9.5	10.6	7.9	9.3
Total	100.0	100.0	100.0	100.0
N=	(682)	(624)	(703)	(2009)

Source: 'Turning points' panel survey.

Today cohabitation as a life style is wide spread in Hungary, thus it is reasonable to take into account the relationships of couples not legally established. Some 8% of the total sample (of the 18–75 year olds) stated they were living in cohabitation at the time of data collection. This was higher among the younger ones (14% among the 20–29 year olds), while being considerably less frequent among the older generations: 5% of the 60–64 year olds and 2–3% of the 65–75 year olds lived in cohabitation in 2002.

When we discuss the variant describing the *types of familial cohabitation* below it is useful to take these two types of marriage type relationships together. In this stage of the life cycle this factor could be extremely important: it makes a difference if the aging person remains alone in a single person household, or lives together with someone with whom she/he has emotional ties, of whom she/he can take care, or who can offer support for her/him, with or without being legally married. This is the reason behind the somewhat higher figure of those living in partnerships than in marriage that we speak about when we refer to the variant determined for the different types of familial cohabitation Another criterion for setting the variant was 'the number of people in the

household'. These two features (whether someone lives together with a partner, or if there is another person living in the household) are determined very much by the age of the elderly people studied. We could say that *marked and significant changes* take place in this (only) 15 year long period between the ages of 60 and 75, and these changes show different characteristics in the two genders. For women the ratio of single person households almost doubles within the above 15 years and the number of those living in partnerships drops at about the same rate mostly due to their becoming widows. In case of men, the situation is somewhat different. The number of single person households increases slightly closer to the age of 75, but compared to the 60–64 year olds, the number of those living in two-person households and partnerships, quite large in number, increases by 10 percentage points. The reason for this is that wives are usually younger, thus men are less likely to become widowers. On the other hand, we may conclude from the fact that the ratio of 70–75 year old men (as compared to 60–64 year olds) increases in spite of the drop in the number of the age group that men living in marriages can probably *expect to live longer* than those who live without a partnership.

Table 6

Types of family forms among the 60–75 year old respondents by age group and by gender (2001/2002) (%)

Types of family forms	Age group			total
	60–64 year olds	65–69 year olds	70–75 year olds	
		Men		
Living in a single person household	10.2	11.6	16.9	12.6
Living without partnership in two or more person household	6.5	5.7	3.8	5.4
Living in a partnership in a two person household	52.0	60.1	62.1	57.7
Living in a partnership in three or more person household	31.3	22.6	17.2	24.2
Total	100.0	100.0	100.0	100.0
N=	(504)	(462)	(407)	(1373)
		Women		
Living in a single person household	25.9	33.9	47.4	35.9
Living without partnership in a two or more person household	14.3	16.2	20.7	17.1
Living in a partnership in two person household	42.4	39.2	27.3	36.1
Living in a partnership in three or more person household	17.4	10.7	4.7	10.9
Total	100.0	100.0	100.0	100.0
N=	(682)	(623)	(702)	(2007)

Source: 'Turning points' panel survey.

Generation relationships (own children, grandchildren) dominate in multi-person households of the 'aging generation' and only a small fraction of these 'multi-person households' are made up of other relatives or other persons.

Table 7

Presence of children, grandchildren in the homes of 60–75 year olds by age group and by gender (2001/2002) (%)

In the household:	Age group			Total
	60–64 year olds	65–69 year olds	70–75 year olds	
		Men (100%=1373)		
No own child	67.7	75.4	80.6	74.1
Own child	28.1	17.4	11.6	19.6
(within this, grandchild also):	4.2	7.2	7.8	6.3
Total	36.7	33.6	29.7	100.0
		Women (100%=2007)		
No own child	73.9	76.6	77.5	76.0
Own child	16.3	13.4	11.8	13.8
(within this, grandchild also):	9.8	10,.1	10.7	10.2
Total	34.0	31.0	35.0	100.0

Source: 'Turning points' panel survey.

The range of 60–75 year old men and women *living together with children/grandchildren* understandably narrows down with age: children grow up and leave the family home to set up their own. This means that for elderly people their family life cycle is coming to an end. Data indicates that in case of men this process may take a bit longer. We see the reason for this in the different marrying and childbearing practices of men and women. The majority of women of 60–65 married by the age of 24 (more than 80%), 40% of men of the same age married between 25–29, and another 9–10% of them only after they were 30. Because they married earlier, 60–75 year old women had their first babies at the average age of 24.83, while men of the same age had their first children at 27.25. Thus the children of the women in the study were older in 2002, and had thus left the family home earlier. (Just to note: the difference in the timing of childbearing in the lives of the two genders evens out in the final analysis. The average number of children born during the lifetimes of the 60–75 year olds differs only slightly between men and women; they vary from 1.7–1.8 in the different age groups.)

Due to the fact that as compared to men women have children earlier in life, in case of those living together with (older) children, more of them live together with grandchildren (as well), while in case of men with children – especially in the 'youngest' group of 60–64 – it is not rare to see family forms of living together with children who still need supporting (e.g.: students.)

Internal *age composition* of households is a determining factor. Studying the process of approaching old age, the 'age of aging' it might be important to investigate whether the elderly have a chance to interact with the *younger generations* and to what extent the younger ones involve them in their own everyday lives, share their problems with them.

Those living in households can be grouped roughly into the three usual categories:

- 0–29 year olds are considered to be *young*,
- 30–59 year olds are *middle aged*,
- 60 and over are *old*;

If we take these categories then we could say that only one third (33%) of the 'elderly generation', of the 60–75 year olds, can share their everyday lives with those belonging to the middle aged and young generations. About 30% of the 60–75 year olds live in single person households, 40% of them have only old people in their households. We do not know much about people over 75 because our sample did not cover them. Nevertheless, it appears that while only 5% of the total sample (18–75 year olds) live in households with at least one member over 75 years of age, in households of the 60–75 this ratio is almost double (9,4%).

It is partially related to the age composition of households that 76% of men and 81% of women of the age group of 60–75 live in households with *no active, income-earning member* in it. This also changes dynamically with age: the relatively better situation of men of 60–64 (provided most probably by the spouse who has not yet retired) is evened out between the two genders by the time they are 65 and over:

Table 8

The ratio of households with no active, income-earning members for 60–75 year old men and women (2001/2002) (%)

No active, income earning member in the household:	At 60–64 years of age	At 65–69 years of age	At 70–75 years of age	Total
Among men	57,0	75,5	79,2	69,8
Among women	71,0	77,8	83,5	77,5

Source: 'Turning points' panel survey.

Having studied the relationship between income and family forms it seems that living in a partnership (but only in a two person household) provides the best income situation for the old age pensioners. The benefit of 'two incomes, one set of overheads' is the reason for this. Yet even the single person households of old age pensioners are under the 10.1% average in the lowest income fifth. However, in case of those pensioners who live without a partnership but together with family members have greater chances of falling into the lowest income category. This is especially true for households where not only pensioners live, but also minors to be supported (grandchildren); the ratio of these pensioners in the lowest income fifth is clearly very high.

Table 9

Ratio of old age pensioners in the lowest and highest income fifths by types of family forms (2001/2002) (%)

Types of family forms	Lowest Income fifth	Highest Income fifth
Living in a single person household	7.8	13:9
Living without a partner in a multi person households	21.8	10.8
Living in a partnership in a two person household	6.0	17.5
Living in a partnership in a three or more person household	16.3	17.5
Household including supported children	24.6	15.6
Household not including a supported child	8.6	15.9
Total	10.1	15.9

Source: 'Turning points' panel survey.

The phenomenon that the relatively low rate of poor among the old age pensioners goes up to almost double among those who have lost their partners but still live in multi person households fits very well into this:

Table 10

Ratio of the poor among old age pensioners by family forms (2001/2002) (%)

Type of family forms	Ratio of the poor
Living alone in a single person household	3.1
Living without a partner in a multi person household	12.9
Living in a partnership in a two person household	4.1
Living in a partnership in three or more person household	6.5
Total	5.3

Source: 'Turning points' panel survey.

Having seen all this perhaps it is not surprising that old age pensioners under 75 retiring with relatively good pensions, sometimes even taking an income generating job, try to keep their independence as long as possible, even to the very end. Living together with younger generations, with children and grandchildren, is actually a necessity. Only families who are in great need will choose this option. Or perhaps the young ones need the income (pension) of the elderly, or may be the elderly person needs the support of the young. If this observation is true it would probably be necessary to study more in detail all the values, benefits and disadvantages of living together.

HEALTH

There is consensus in international and Hungarian literature that the most complete source of information on the health of the population is probably the subjective reports: to what extent do they feel healthy/unhealthy, is there any health problem in their lives which hinders them in their daily activities, how often do they visit the doctor, do they take any medication, etc. A great advantage of this representative data collection is that it also covers those who do not go to healthcare institutions or to doctors. Thus the topics and methods of inquiring about health are well developed, including the age specific methods, the detailed interviewing techniques focusing on certain diseases, lifestyles, mental and physical fitness and the feeling of well-being in general.

We used only a few of these elements in our survey, namely:

- Do health problems hinder 18–75 year old men and women in their everyday activities?
- Do they take any prescribed medication (implying some chronic diseases),?
- In general, to what extent are they satisfied with their health?

One third of the adult population reported to have *health problems hindering them in their daily activities*. As expected, this complaint increased with age.

Table 11

Frequency of health problems hindering daily activities in the lives of 18–75 year olds by age group and by gender (2001/2002) (%)

Age group (year)	'To what extend does this health problem/disease hinder you?'					
	Severely	Slightly	Varies	Does not hinder	Does not know	Total
			Men			
18–29	1.2	4.9	1.9	92.0	0.1	100.0
30–39	2.8	8.4	4.0	84.7	0.1	100.0
40–49	7.6	13.5	7.3	71.6	0.1	100.0
50–59	14.8	18.6	13.6	53.0		100.0
60–69	17.8	22.2	11.6	48.4		100.0
70–75	19.7	27.2	11.4	41.7		100.0
Together	8.2	13.0	7.1	71.7	0.0	100.0
N=	(633)	(1005)	(550)	(5554)	(3)	(7745)
			Women			
18–29	1.2	4.0	2.6	92.2		100.0
30–39	2.5	6.8	5.0	85.6	0.1	100.0
40–49	5.7	14.3	12.2	67.8	0.1	100.0
50–59	11.9	19.9	15.6	52.6		100.0
60–69	18.1	25.4	15.6	40.9		100.0
70–75	27.0	28.3	16.2	28.4	0.1	100.0
Together	8.9	14.5	10.3	66.3	0.0	100.0
N=	(766)	(1253)	(885)	(5710)	(3)	(8617)

Source: 'Turning points' panel survey.

As it is evident from the above, the *'turning point'* both for men and for women in the life course is around *50–60*: over the age of 60 the majority feel hindered in their daily activities by some health problem. Among the 70–75 year olds, a notable *difference occurs between men and women*: 42% of men, while only 28% of women feel fit enough to carry on with their everyday chores. The worse mortality of men is a possible explanation: those who are still alive are fitter. As for women, we are aware from other surveys that they visit their doctors much more often, thus their health-consciousness is more developed than that of men. Finally let us not forget that a significant proportion of old women live alone in single person households, thus their daily activities are more varied (they have to take care of themselves and of the home) and more tiring than those of elderly men living mostly with younger family

members. Old women who remain alone move in to live together with members of the family less often than old men who are alone. Thus it is quite understandable that some bigger chores are more tiring for the not completely healthy elderly women than for men of the same age.

The habits of taking medication regularly also coincide with the above. 29% of the 18–75 year old men regularly take some medication prescribed by a doctor, and the same is true for 41% of the women. Regular medication consumption increases dynamically with age: covering the majority of the oldest group (71% of men, 85% of women) do it. These shockingly high figures do not include over-the-counter medication (e.g.: sleeping pills, tranquillisers, pain killers) which are taken quite regularly by a lot of people as far as we know.

Table 12

Ratio of regular medicine takers among the 18–75 year olds by age group and by gender and among old age pensioners (2001/2002) (%)

Age group	Regular medication consumers	
	Men	Women
18–29	6.2	9.7
30–39	12.3	16.4
40–49	26.3	36.2
50–59	50.3	62.0
60–69	63.6	76.7
70–75	71.9	84.8
Total	29.7	41.7
N=	(2293)	(3581)
Old age pensioners	64.5	75.1
N=	(805)	(1522)

Source: 'Turning points' panel survey.

In general, 18–75 year olds consider their health as slightly better than average: measuring it on an 11 point scale, it came to 7.04. However, the grade point averages dropped by more than 3 points from the youngest to the oldest age groups (18–29 year olds: 8.57 points, 70–75 year olds: 5.19). Women of all age groups consider their health worse than men. Understandably, the worse values were found among the disability pensioners, who reached only grade 4 on the 11 point scale.

Table 13
The average grade points given to health among the 18–75 year olds by age group and among the old age pensioners (2001/2002) (0=worse, 10=best)

Age group (years)	Men	Women
18–29	8.67	8.45
30–39	7.86	7.77
40–49	6.96	6.68
50–59	6.01	5.92
60–69	5.89	5.52
70–75	5.56	4.94
Total	7.21	6.81
Old age pensioners	5.92	5.64

Source: 'Turning points' panel survey.

With the extension of the life span, more and more people reach an age when they cannot or can barely take care of themselves. As we have already seen, self-sufficiency is not without problems for nearly 60% of men and more than 70% of women at the age of 70–75. The ideas aging people might have of their own later lives are not only their own personal problems, but they raise the issue of the responsibility of the immediate family surrounding them and of society at large. It is necessary for society to prepare adequately for caring for the elderly, being aware of the need of the affected persons. This problem is becoming more and more pressing with the increase in the ratio of the old. Naturally it would be very desirable for the quality of life of the aging people not to deteriorate significantly in this downward period of their lives. In principle there are a number of ways to care for them, but it is a different issue that practical implementation requires a lot of investment from the families as well as from society.

The most considerate one of all the possibilities is if the elderly people are *not forced to leave their usual surroundings, personal objects and whatever they consider as their valuables*. This requires regular visits and care from the family members of the elderly. Another solution is to *move to live together* with a suitable younger member of the family (or with some other person, a relative, a friend). Finally we can mention here the concept of the *institutional household*, the advantages of which are round the clock supervision, professional care and to some extent maintenance of social contacts for the old people. Today there is a lot of interest in this. Some time ago crowded, bad quality welfare homes and old people's homes maintained by the state, local government or the church were maintained, but ever since the change of the socio-political system

market based alternatives have been developing more and more (though still not enough). True, they require a lot of financial investment, but advantage is that such an alternative imitate an 'own home' environment (e.g.: one's own quarters, room, or even own furniture, the use of one's own personal objects, etc.), that is, they can cater for personal wishes while providing constant supervision and professional care.

Preparations of society to care for the ever increasing number of elderly should be made while taking into account *whatever the affected people prefer and accept the most*. We extended our study to cover this, too.

The majority of the adult population – young and old alike – think that the *best solution for the care of old people who have difficulty caring for themselves is if they need not leave their own homes.* However, there is a considerable interest in institutions as well (16%). The least preferred form of care is 'moving in together' with someone (either the elderly moves to his/her children, or takes them into his/her own home); those choosing this form remain under 10% in the entire sample. This is understandable. It is difficult for an elderly person to feel a burden on a relative or on a child, and an adult child moving in or taking in the elderly may find it hard not to make it felt that he/she is making a sacrifice by changing his/her lifestyle.

If we look at the opinion of the retired population from the family life aspect we can see that interest towards homes providing professional care is the highest among pensioners living in *single person households*; more than one fifth of them would choose this, thinking of times when they can no longer take care of themselves.

Table 14

Choices of living arrangements among old age pensioners to the last period of their lives by types of family forms (2001/2002) (%)

Family forms	Would prefer to live in institution or home providing profes-sional care	Would prefer to remain in his/her own home	Would prefer to move in together with family member or another person	Other solution	Does not know	Total
			Old age pensioners			
Living alone in a single person household	20.6	59.8	12.4	1.3	5.9	100.0
Living without a partner in a multi person house-hold	13.7	66.4	13.2	0.8	5.9	100.0
Living in a partnership in a two person household	14.6	71.3	8.8	1.9	3.4	100.0
Living in a partnership in three or more person household	15.2	72.1	6.6	1.6	4.6	100.0
Total:	16.1	68.0	9.8	1.5	4.5	100.0
Total sample of 18–75 year olds:	*15.7*	*65.4*	*9.4*	*1.8*	*7.7*	*100.0*

Source: 'Turning points' panel survey.

In reality, the range of those living in single person households is actually significantly higher than those covered by our analysis: a significant proportion of them are over 75 or surviving on a widow's pension. Thus the demand for institutions providing professional care is probably higher than our study can predict. This too, is a reason for special preparations for this part of ones life – preparation on the part of individuals, families and society. As for the preparation of individuals and families, adequate savings are needed so that this type of care can be provided to the elderly with the least possible drop in their living standards. But attitudes must also change if we want to achieve this. Quite often when younger members of the family come across the degradation of their elderly family members, they have difficulties in finding a quick and good solution. Yet – according to our survey– more than half of the 18–75 year old, including the 'aging generation', do not tackle the problem of creating financial security for old age. As for the preparations by society, we need a wider scale

of differentiated support for the establishment and maintenance of homes as well as for the incentives of market participants (e.g.: by tax allowances).

Still, the most preferred solution for those who cannot, or can only barely take care of themselves is to be able to remain at home. Their care will increasingly become an institutional task because the younger, working members of the family, no matter how responsible they feel, can only provide very limited care. Taking care of the elderly by NGOs (regular visits, meals, physical care, walking, etc.) is one of the possible ways to solve this issue. Should society support them, this can even create jobs for a number of people. This could also help in keeping unemployed women or younger pensioners in work, diverting their activities into the legal labour market which is controlled and taxable.

THE ROLE OF REGULAR TASKS IN THE LIFESTYLE OF PENSIONERS

Below we will focus on the extent to which 60–75 year old men and women and pensioners of the same age spend their days actively and to what extent this is influenced by their family and health conditions.

Time budget surveys give us the most complete picture on the lifestyles of the 60–75 year old aging generation, or of the pensioners. We are lucky in that the Central Statistical Office prepared a national time budget survey just a year before our data collection, in 1999/2000. Thanks to this we have detailed information on how elderly people spend their days round the clock. Analyses are based on the so called time budget observations (logs), which make it possible to determine

- The daily schedule (in minutes), the structure of activities,
- The percentage of those doing a certain activity, and
- The average time consumption (in minutes) of those who actually carry out the particular activity on an average day.

Since time budget logs are prepared – through the timing of observation – seven days a week (including holidays and week-ends) and throughout the four seasons, analyses give us information not only on the activity structure of week-days and holidays, but also on the seasonality of the activities (*Harcsa* and *Sebők* 2002).

The table below offers us an example of this: time spent on the major types of activities (average minutes) in the aging generation (and a comparison to the entire sample population of 15–74), for men and women separately, on an average day of the year.

Table 15

Time spent on different activities in the total sample of the 15–74 year old population and among the 60–74 year olds by gender (2001/2002) (on an average day of the year, in minutes)

Activities	Total sample of the 15–74 year olds			60–74 year olds		
	Men	Women	Total	Men	Women	Total
Earning, productive activities	262	171	215	155	82	112
Full time job	189	127	157	28	8	16
Activities providing some extra income	7	3	5	4	2	3
Non-paid work done for others	14	11	12	15	14	14
Work done in own economic unit	51	30	40	108	58	78
Housekeeping: family provisions	94	240	170	87	272	200
Housework	49	184	119	76	225	164
Repair, maintenance	16	2	9	14	2	7
Shopping, use of services	17	26	22	23	27	25
Caring for children	12	28	20	4	4	4
Leisure activities	304	257	280	365	324	341
Leisure time spent in company of other people	59	43	51	53	42	48
Reading	27	21	24	43	28	35
TV, video	167	155	161	216	210	212
Physical relaxation	24	15	19	18	7	12
Hobbies	12	10	11	13	18	16

Source: Harcsa and Sebők 2002.

We tried to use another type of approach in the study of the lifestyle of the aging generation. Our starting position was that even though pensioners well deserve some rest and getting rid of the strict obligations required by a job, they might nevertheless miss regularly repeated 'tasks' from their lives, since these provide plans for them and make them feel useful. We feel it is important to be engaged in regular activities until the very end of one's life in order to be able to preserve physical and mental fitness – activities which they feel obliged to do which bring some sort of positive monotony, some permanence into their lives giving a rhythm to their days.

We have chosen eight typical activities which are due to their nature suitable to offer as day by day tasks, obligations. These are the following:

1. Housekeeping (cooking, laundry, housework, shopping).
2. Agricultural work, tending the garden and animals.
3. Keeping pet animals, caring for them (e.g.: cat, dog, fish, etc).
4. Domestic work, repairs, maintenance.
5. Caring for/supervising children, grandchildren.
6. Helping in children's household and farm.
7. Caring for the ill, taking care of another person.
8. Pubic activities, voluntary work (in NGO's, in church, in a political party, in local government).

It is worthwhile noting, that the range of possible daily activities could be a whole lot wider. Such could be for instance taking a job for a shorter or longer period of time, becoming informed (reading newspapers, watching TV), meeting people, talking to others, exchanging ideas, a variety of hobbies, acquiring more education (reading, studying, using the Internet), and we could go on and on. But these – perhaps with the sole exception of having a job – are more for individual interest, inclination or hobby, rather than an obligation that might be due to one's living conditions (for example: agricultural work, tending animals), or due to a task assumed within the family (baby sitting for grandchildren, caring for ill people) all of which give daily rhythm to a person's life.

Our question – which of the listed activities do they do regularly on a daily basis – was put only to the 60–75 year old pensioners. Future waves of the panel survey will show how 'obligation' of activities narrow down and in what aspects after this period in life.

Aging people are not equally affected in different activities. For example agricultural work or tending animals do not affect 15% of them – in the capital city of Budapest this is 40% – and about one fifth of the studied population is no longer involved in caring for children and grandchildren. Thus the amount and order of importance of regularly performed activities are shown in two ways:

- Taking the entire sample of the 60–75 year olds into account, reflecting the ratio of those doing the given activity within the age group, and
- Only among those 60–75 year olds in whose immediate environments the given activity could possibly be a task.

The two kinds of grouping are possible due to the separate handling of the answers by ticking 'my task', 'not my task', 'not affected'.

Table 16

Ratios of tasks regularly carried out by 60–75 year old pensioners as a percentage of the total sample and as the total number of affected persons (2001/2002) (%)

Tasks	As a percentage of all the 60–75 year old pensioners	As a percentage of all those 'affected' in doing the task	Ratio of those 'not affected'
1. Housekeeping	70.0	71.2	1.2
2. Agricultural work, tending the garden and animals	51.5	63.5	14.7
3. Keeping pets, caring for them	50.0	65.4	17.7
4. Household work, repair, maintenance	45.0	50.2	5.4
5. Caring for and supervising children, grandchildren	28.4	37.7	20.7
6. Helping in children's households and farms	24.3	31.7	23.3
7. Caring for the ill, caring for another person	12.5	17.8	26.7
8. Public activities	7.0	10.6	36.4

Source: 'Turning points' panel survey.

Housekeeping, repairs and maintenance are areas affecting practically all elderly people. We can also see that the first four places in the list are taken by activities which provide a daily task for the majority of the age group. The ratio of those who, no longer care for children and grandchildren (any more) increases significantly. However, more than one third of the affected group still participate intensively in supervising grandchildren (and to a lesser extent they have some obligations on their children's households or farm.)With age they are gradually left out of this work.

Only some 7% of 60–75 year old people participate in the work of NGO's, churches, political parties and local governments, which is not too high. (We must note here, however, that it is difficult to interpret the difference between the categories of 'affected, but does not do the task' and 'not affected', still, this is where most responders did not feel affected.)

The social–demographic characteristics of those carrying our certain tasks are shown with reference to those who have a realistic possibility to do the task, that is, they are affected.

Just as we were expecting, really significant differences were seen along the two major demographic characteristics, that is, gender and age (age group). Housekeeping is still typically 'woman's work'; household chores, repairs and

maintenance are typically 'men's jobs'. This does not mean that should there be need, elderly men and women refuse to do the 'atypical' tasks. Obligations of the two genders are getting closer nowadays especially in agricultural work, gardening and tending animals, though men perform more of these tasks than women. This is so partially because there is a lot of physically heavier activity involved and partially because women's time is taken up by housekeeping activities. (This is supported by Table 13 data: 60–75 year old women spend three times as much time keeping house than men of the same age.) Furthermore, women spend more time caring for grandchildren, for the ill, or caring for another person, while more men spend more time in public activities, though not much more.

With age, involvement in tasks in almost all areas gets reduced regarding genders. This can be felt even in housekeeping, but only in case of women. It is as though from the age of 70, fewer men are capable of doing heavy physical tasks in agriculture, in repairs and maintenance, therefore they get/find tasks for themselves among the different housekeeping activities.

The most striking from a demographic aspect is the reduction of activities around children and grandchildren: there is a sudden drop even (and especially among women) in this activity after they reach 70. By this time grandchildren do not need special supervision, and aging parents and grandparents cannot be burdened any more by helping in the children's homes or farms. The same is true for caring for the ill or for anyone else: families leave this work to relatives over 70 only as a last resort.

Table 17

Ratios of 60–75 year old pensioners doing regular tasks by gender and by age group (2001/2002) (as a % of those affected)

Age group (years)	House-keeping	Agri-cultural work, tending garden or animals	Keeping pets	Repair, mainte-nance	Super-vising children	Helping in chil-dren's homes and farms	Caring for the ill or for other persons	Public activities
				Men (N=1283)				
60–64	35.9	80.6	73.3	89.4	37.3	35.2	15.1	15.2
65–69	35.4	70.4	63.3	81.9	31.6	33.1	12.3	11.7
70–75	36.9	70.9	67.0	76.5	28.4	27.0	14.8	12.9
Total	36.0	74.2	67.9	83.0	32.6	32.2	14.1	13.3
				Women (N=1885)				
60–64	97.2	56.3	65.4	23.0	52.1	38.2	25.1	10.0
65–69	95.3	56.4	62.0	26.5	41.9	32.5	22.2	10.0
70–75	93.1	53.7	59.3	24.4	28.6	23.3	13.7	5.9
Total	95.2	55.5	62.3	24.6	41.2	31.5	20.3	8.6
				Together(N=3171)				
60–64	72.0	66.9	68.8	51.5	46.1	37.0	21.1	12.2
65–69	69.8	62.7	62.6	52.1	37.5	32.7	18.0	10.8
70–74	72.0	60.6	62.3	45.7	28.5	25.1	14.1	8.8
Total	71.2	63.5	65.4	50.2	37.7	31.7	17.8	10.6

Source: 'Turning points' panel survey.

Everyday tasks and obligations depend on the composition of the family elderly people live in. Those living in single person households are mainly the ones whose time is taken up almost fully by housekeeping – who could do the job for them, anyway? The ratio of those without a partner is also high, 80%, and the same is true for those pensioners who live in larger families, but do housekeeping tasks. This is so because women dominate the single person households as well as in numbers of those living with families but without a partner. Those living in partnerships are less tied by housekeeping even if they live just the two of them together or with more people; they also perform more activities than those living without a partner. This is also partially due to 'gender' as a variable in the background: 'men's jobs' are more present among those who live in partnerships. Anyway, partnerships create a sharing of tasks and obligations among the elderly, while also providing a more active, eventful activity structure for them.

Childcare and the supervision of grandchildren are more frequent than average among those – with or without a partnership – who live in larger families. Nevertheless, it is worth noting that a quite large percentage of pensioners living in single person households participate in family tasks: some 30% of them spend day after day taking care of grandchildren, 25–26% help in the children's households or farms, and some of them (6%) care for the ill or for another person.

Table 18

Ratios of 60–75 year old pensioners doing regular tasks by types of family forms (2001/2002) (as a % of those affected)

Tasks	Living in a single person household	Living without a partner in a multi person household	Living in partnership in a two person household	Living in a partnership in a three or more person household	Total
Housekeeping	96.7	83.7	60.3	51.2	71.2
Agricultural work, tending the garden and animals	60.7	55.1	65.9	69.1	63.5
Keeping pets, caring for them	65.3	64.0	63.1	70.5	65.4
Housework, repair, maintenance	44.2	31.0	55.2	59.4	50.2
Caring for and supervising children, grandchildren	29.4	43.5	38.4	44.0	37.7
Helping in children's households and farms	25.5	33.2	32.3	38.1	31.7
Caring for the ill, caring for another person	6.2	19.5	19.9	28.2	17.8
Public activities	9.9	7.7	10.6	13.7	10.6

Source: 'Turning points' panel survey.

Having studied the activities with regard to the level of schooling it seems that many more pensioners with better education spend their time caring for and supervising grandchildren than those who have just 8 grades of elementary education. Supervision of grandchildren is the task of nearly 50% of the 60–75 year old pensioners who have a degree, while this ratio among those who have only 8 grades is less than 30%. The less educated ones make up for this 'fault' by agricultural work and by tending animals: that amounts to 15–16 percentage points more than those with a degree who do these types of tasks. Could it be that parents prefer to leave their children with the more educated grandparents,

who can help in school work and have no tasks outside the house (in the fields, garden or with animals), than with those who actually are closer to the grandchildren and can supervise them?

Studying the differences from the aspect of the type of settlement people live in, the lifestyle characteristics are more pronounced. For 60–75 year old pensioners living in villages regular, out-of-the-house activities (the land, garden, animals) predominate the frequency in their case is higher than in case for those doing housekeeping activities. Yet from among village pensioners, a lot less participate in supervising grandchildren than among those who live in Budapest or in larger towns. Figures create the strange feeling that in pensioner groups with either low or high levels of schooling living in urban or village areas, tasks related to agriculture and animals or tasks related to caring for children or grandchildren are somehow interchangeable activities.

Table 19

60–75 year old pensioners doing agricultural work, tending animals and supervising children by levels of education and by the type of settlement they live in (2001/2002) (as a % of those affected)

	Agricultural work, tending garden and animals	Keeping pets	Caring for and supervising children, grandchildren
Level of education			
Less than 8 grades	64.8	68.0	27.8
8 grades	66.7	69.2	38.4
Vocational secondary school	67.2	65.6	37.1
Matriculation	56.5	55.6	43.9
Higher education	49.0	45.9	48.1
Type of settlement:			
Budapest	43.6	47.1	41.0
Town with county rank	50.5	45.3	42.7
Other town	61.4	66.5	38.3
Village	75.9	76.4	32.8
Total	63.5	65.4	37.7

Source: 'Turning points' panel survey.

The differences in the supervision of children and grandchildren seen as a function of the settlement are also related to the extent to which pensioners have a chance to take care of the grandchildren day after day either in Budapest, in other towns, or in the villages. It is well known that this task is not only

performed by those who live in the same house, but also by those whose children had already left the family home and set up their own. We have seen that a significant percentage of pensioners living in single person households or those living just the two of them together (29 and 38%, respectively) care regularly for their grandchildren.

78% of the 60–75 year old pensioners have at least one child who lives in a separate household. Regular, everyday supervision of grandchildren living in separate households can be done only if the different generation members of the family live in the same settlement. According to our data, going from Budapest towards the villages the ratio of pensioners whose grown up offspring 'remained local' drops significantly.

Table 20

60–75 year old pensioners by types of settlement and by the residence of their children living in separate households (2001/2002) (%)

Where children in separate households live:	Budapest	Town with county rank	Other town	Village	Total
N=	(621)	(633)	(880)	(1249)	(3383)
Same settlement with parents	44.6	47.2	43.5	24.2	37.3
Another settlement	12.4	17.9	19.1	34.4	23.3
Have children living in the same settlement and also in another settlement	9.3	16.7	18.6	22.3	17.9
Have no children in separate households	34.0	18.2	18.8	19.1	21.6
Total	100.0	100.0	100.0	100.0	100.0

Source: 'Turning points' panel survey.

True enough, we do not know the number or the age of grandchildren who do not live with aging parents. Nevertheless, we can see clearly that Budapest or urban pensioners are more likely to do the everyday tasks around their children and grandchildren who live in separate households. The reason is that a great number of village pensioners (a lot more than those in towns) allowed their children to leave for other settlements, perhaps because of the better opportunities to study or to find jobs.

The impact of employment of pensioners can hardly be evaluated because, as we have seen before, very few of the 60–75 year olds actually work. They work a lot less – understandably – around the house or animals. Nevertheless we have noticed that taking a job or the level of education might have some role in the extent of participating in public life. 30% of the pensioners with a

degree and one quarter of those working on the regular basis do regularly some public activity. However, due to their small ratio, this hardly improves the 10–11% average of those pensioners who do public tasks.

Health has practically no impact on housekeeping activities being the most important daily activity; it seems that housekeeping tasks cannot be avoided even for those for whom they are really difficult to do. The differences due to health reasons are more marked in tasks requiring physical energy and in family tasks, or even in public activities.

Table 21

Differences due to health reasons in activities done by 60–75 year old pensioners (2001/2002) (as a % of those affected)

Tasks	Health in daily activities		
	severely	lightly, it varies	does not
	hinder the person		
Housekeeping	67.8	76.2	68.8
Agricultural work, garden, animals	49.2	66.3	67.0
Keeping pets	56.2	68.0	65.6
Housework , repair, maintenance	39.6	49.4	55.7
Caring for and supervising children, grandchildren	28.2	35.7	44.3
Helping in children's households and farms	22.1	31.7	37.2
Caring for the ill or for other persons	15.3	18.3	18.7
Public activities	4.7	10.3	14.1

Source: 'Turning points' panel survey.

As we have shown earlier, 20% of men and 30% of women of the age of 70–75 feel hindered doing their everyday tasks. The situation probably deteriorates with age, and bad health would be one of the major hindrances of regular activities later in life, in real old age. While biological aging naturally brings about a decline in the activities which prove to be beyond one's energy, in actual fact some of them are simply omitted, we cannot consider it a natural process when elderly people are forced into inactivity due to severe health problems.

We could draw certain conclusions for the activities of pensioners if we looked at the number of regular activities in the study done day by day by the pensioners. However, a hypothesis which says that the more types of tasks and obligations one has, the more active he/she is, would not be realistic. We do not have information on the intensity of the activities done by the aging people. Some of them could be a total physical and psychological burden for the entire day – such as for example taking care of ill people. Nevertheless, we can say

with some assurance that if none of the studied 8 types of activities are present as regular daily activities for the 60–75 year old pensioner (and if that person does not do any income generating job either), than that person has meaningless, dull days without any rhythm in them. On the other hand, if one has many (at least five or more) daily tasks and obligations, he/she has a very good chance of spending his/her days actively, eventfully with a good rhythm.

We could say that 60–75 year old pensioners have an average of two-three tasks and obligations a day. It is difficult to say if this is a lot or too few because as we have said, even just one activity can fill one's day, while sometimes three-four activities could be done comfortably, one after another. The two extremes are those without any tasks (passive ones) and those with five or more (active ones). The ratio of the passive ones is 9.7%, that of the active ones is 14.5%.

It is no coincidence that the rate of the passive ones is higher than average among those who are seriously hindered by health in their daily activities (19%), and it is higher also among those who have less than 8 grades of education (14%). The rate of the active ones is around average in almost all the categories, 14–15%, village dwellers reach just a few percentage point above (18,4%), as well as those who live in partnerships but in a larger family (18,3%). It is worth mentioning that among pensioners with university degree, there is a significantly higher ratio of passive people and less active ones (12% in both sides). We have already mentioned that pensioners with a degree have better chances of finding an income generating job than those with a lower level of education: 23% of them work regularly, 8–9% work on and off (in case of old age pensioners as a whole, only 7 and 4%), that is, most of their time is spent working. But it is probably not only work that excuses them fully or partially from household or other family tasks and obligations. Pensioners with a degree are likely to have less difficulties in finding activities for themselves which suit their own interests, inclinations or else (hobby, culture, studying, Internet, etc.) which were not covered by the present survey.

CONCLUSION

The extent to which people reaching old age can preserve their activities and to the extent they have meaningful daily tasks have an outstanding role in the quality of their lives. Our study discusses the typical characteristics of age, economic activities, family relations, and health of 60–75 year old men and woman based on a recently launched panel based survey. Studying these three variants we can say that balanced family relations (maintenance of partnerships, proximity of children) and an acceptable health condition could significantly slow down the loss of useful activities which is natural with age.

Translated by Ildikó Várkonyi

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MORTALITY DIFFERENCES BETWEEN THE SUBREGIONS OF HUNGARY*

ANDRÁS KLINGER

INTRODUCTION

Regional differences in Hungary have long been the subject of research. Analyses have been so far either based on larger regional units (counties, or recently regions), or they have been done by settlements (for villages and towns/cities). The need arose to prepare a study for 'in-between', medium sized regional units in addition to larger and smaller ones. The statistical subregions seemed to be the most suitable ones for the purpose; research on them has been going on already for the last few years revealing a certain homogeneity – unlike the relatively heterogeneous larger regions. We also have data on subregions. Therefore we are preparing our survey on the mortality differences for these 150 subregions, and later on, in the second part of the survey, for the different districts of Budapest. We aim at comparing mortality data with the development indicators of the subregions, as well as to data with the demographic composition of the population.

METHODOLOGY

Mortality data of the subregions comes from the Population Statistics Data Base of the Central Statistical Office of Hungary. Since data for a single year is difficult to analyse due to the small numbers, we took data for five years, 1996–2000, to serve as the basis for our calculations. Gender and age specific mortality rates (for 5 year age groups) were calculated for the average values of the investigated five years. Using these, *standardised mortality rates* were calculated for the two genders separately and for the population as a whole in order to exclude age structure differences, for all the subregions. We took WHO age structure in world population as the basis for standardisation, which defines the composition of the population as follows:

* Part of the National Research and Development Programme under the number of 1/002/2001 and United Nations Development Programme (UNDP) project HUN/00/002.

Table 1
Age structure of world standard population, WHO

Age group	% of standard population
0	1.8
1–4	7.0
5–9	8.7
10–14	8.6
15–19	8.5
20–24	8.2
25–29	7.9
30–34	7.6
35–39	7.2
40–44	6.6
45–49	6.0
50–54	5.4
55–59	4.6
60–64	3.7
65–69	3.0
70–74	2.2
75–79	1.5
80–84	0.9
85–x	0.6
Total	100.0

Standardised mortality rates have been transformed into *standardised mortality indices* for the sake of easier comparison. This figure indicates the percentage of the standard mortality rate of a given subregion – for male, female or together – to the average standard mortality rate of the countryside. In the case of Budapest, the rates for districts were compared to the Budapest average. This division was necessary because the Budapest standard mortality rate (7.96‰) is only 86% of that of the countryside (9.28‰). Comparison to the national average (9.05‰) would cause distortions.

We can measure the degree of development of the subregions with a *complex development index*. This was defined based on the provisions of Parliamentary Decree No. 24/2001 (IV. 30.) The value of the complex indicator showing the level of development of the subregion was determined with the use of 19 indicators for all the subregions. The scale of values set by the extreme values of the different indices was divided into five equal parts, and then going from the worst to the best values they were given a point between 1–5, corresponding to the indicators of the subregions. The average value of the different index groups gave us the figures for the economic, infrastructural, social and occupational situations in the given subregion, and then the average of the four

groups of indices became the joint indicator for development (underdevelopment).

We used the following data to calculate the complex indicator:

Table 2

Data used in calculating the complex development index (based on Decree No. 24/2001 /IV. 20./ Parliament)

I. Economic indices

1. Economic (business) organisations per 1,000 inhabitants
2. Changes in working economic organisations
3. Number of scientific researchers/developers per 1,000 inhabitants
4. Personal income tax base per permanent resident

II. Infrastructural indices

5. Rate of homes with public water work utilities
6. Length of the sewage pipelines per 1 km of water pipeline
7. Rate of homes with pipeline gas supply
8. Number of guest nights per 1,000 inhabitants
9. Number of retail shops per 1,000 inhabitants
10. Complex (calculated) index for quality of life
11. Number of telephone lines per 1,000 inhabitants

III. Social situation

12. Rate of homes built with 3+ rooms
13. Number of cars per 1,000 inhabitants
14. Net migration
15. Rate of people of 60 years of age and over
16. Average population size of settlements
17. Mortality rate

IV. Employment situation

18. Unemployment rate
19. Long term – over 180 days – unemployment rate

In addition to the 19 indices of the complex indicator, other quality indices were also be taken into account in connection with mortality. Data related to

health care, educational institutions and public transport were especially significant.

The so-called *preferential regions* were defined on the basis of the above complex indices, and even EU funds were allocated accordingly. But these indices can be also used as quality indicators, thus they are suitable for the analysis of mortality. Out of the 150 subregions, 94 are considered to be preferential ones. Out of these, 90 are underdeveloped, 6 are regions of industrial restructuring, and 67 could be considered as regions of regional development. 36% of the population of the country live in preferential regions. 60% of all the settlements of the country belong to this category (some 1880 villages and towns).

MORTALITY DIFFERENCES BETWEEN THE SUBREGIONS

Due to significant differences in the mortality rates of the two genders it is justified to separate them first, which we should also do when we study the mortality differences for the different subregions. Looking the 1996–2000 average the standard mortality rate of men was nearly double those of women nationwide.

Subregions were divided into two groups based on the magnitude of their standard mortality rate as compared to the countryside average. Thus the mortality distribution of subregions in the database of average standardised mortality rates for the period of 1996–2000 was as follows:

Table 3

Number of subregions by mortality levels (1996–2000)

Mortality level	Standard mortality index	Number of subregions			As a % of subregions		
		Male	Female	Total	Male	Female	Total
		Based on mortality index					
1. Highest	113–130	23	14	20	16	9	13
2. Very high	108–112	29	23	25	19	16	17
3. High	104–107	18	20	21	12	13	14
4. Medium	101–103	12	20	20	8	13	13
5. Average	97–100	22	26	20	15	18	13
6. Low	93–96	25	25	22	17	17	16
7. Lowest	77–92	20	21	21	13	14	14
Total		149	149	149	100	100	100

If we study the distribution of subregions by mortality levels based on the total standard mortality index of the two genders, 13% of them would be in the highest category. This level is more typical of men: their index shows that 16%

of subregions belong here (that is, their mortality index is 113% or higher); women reach this category much less frequently: only 9% of subregions belong here.

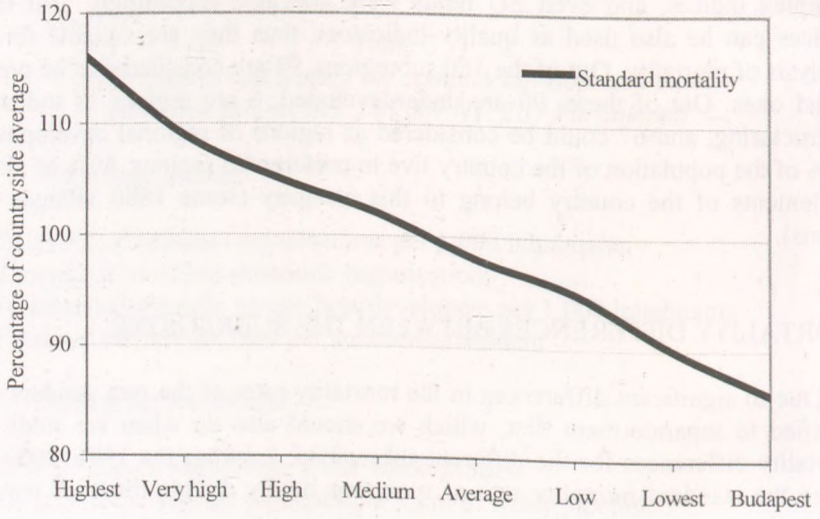


Figure 1
Mortality indices of the subregions (1996–2000)

This difference can be found even if we study larger groups. 47% of subregions can be put into the three high categories (1, 2 and3) based on the data on men. But if we take women's data, only 38% of them can be found there. The situation is the opposite in case of the middling groups (4th and 5th categories) for the two genders. As per the indices of men, 23% of subregions belong here, while based on women's data, 31% are present here. However, there is no difference in the lowest two categories (6th and 7th) According to the indices of men, 30% of subregions belong here, according to the women's indicators, the rate is 31%.

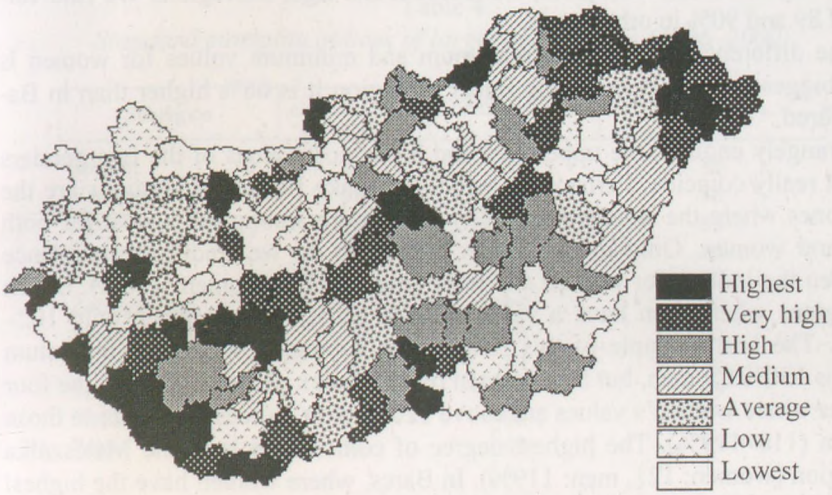


Figure 2
Standard mortality indices (1996–2000)

If we look at the data of the two genders separately we can see that *men's* standard mortality indices are the highest in the Szob region (130%), but the ones of the Kiskunmajsa, Kisbér and Őriszentpéter subregions follow closely (126–129%). There are three other subregions (Baktalórántháza, Nagykáta and Sümeg) where we find relatively high indices (122–123%). In 16 other subregions the standard mortality indices are between 113–119%.

The lowest mortality index for men can be found in the Csorna subregion (81%), followed by two North Lake Balaton subregions, the ones in Balatonalmádi and Balatonfüred (83–84%). The one in Sopron is just a little higher (85%), as are the ones in Szarvas, Szentendre and Győr (87%). 5 subregions have indices of 89–90%, and in 7 of them the index is 91–92%.

In the case of men, the subregion with the highest mortality (Szob) has a 60% higher mortality index than that of the subregion with the lower mortality rate (Csorna), which is quite a big difference among the subregions.

Taking women's data into consideration, the highest value can be found in the Barcs subregion (128%) though this index is quite high in the Lengyeltóti, Mátészalka and Kisbér subregions too (120–124%). 9 other subregions have a standard mortality index of 113–119% for women.

The lowest mortality rate among women can be found in the North Lake Balaton subregion (Balatonfüred: 77, Balatonalmádi: 80%), and this value is quite good (86%) for the Lenti, Gyöngyös and Pécsvárad subregions. It is only

a little higher for the Veszprém, Celldömölk and Eger subregions We find values of 89 and 90% in other cases.

The difference between the maximum and minimum values for women is even bigger than for men: in the Barcs subregion it is 66% higher than in Balatonfüred.

Strangely enough, the uppermost and lowermost values of the two genders do not really coincide. Perhaps the two North Lake Balaton subregions are the only ones where the standard mortality indices are among the lowest for both men and women. Only in the Kisbér subregion do we find correspondance between the indices for women and men (men: 127%, women: 120%). But in subregions where men have a value of over 120%, women reach only 102–108%. The best example of this is the Szob subregion where the maximum value is 130% for men, but here women reach a index of only 107%. In the four regions where women's values are above 120%, their indices are closer to those of men (110–119%). The highest degree of coincidence is in the Mátészalka subregion (women: 121, men: 119%). In Barcs, where women have the highest value of all (128%), the value of the index for men is slightly less (117%).

Due to the difference in the mortality rates of the two genders, the peak values of the *joint* (the total of the two genders) indices are different for the subregions. We can find the highest joint mortality index in the Kisbér subregion, where the value of 125% is 56% higher than the lowest value (80%) in the Balatonfüred one. This joint value is also high (120%) for the Mátészalka, Barcs and Őriszentpéter subregions The one in Balatonalmádi is one of the lowest (82%), closely followed by the Csorna, Sopron and Szentendre subregions (86–88%).

If we look at the map we can see that for both genders the highest standard mortality indices can be found in two areas of the country which are in some related: in north-eastern Hungary and in south-western Hungary. For men this is the case in the areas south-east and south-west of Budapest. The best off areas are the north-western parts of Hungary in case of both genders, but for men, subregions west to Budapest make up a continuous area with their low mortality indices.

In subregions where the mortality rate is 'very high' or 'high' (categories 1 and 2), there are relatively few towns/cities among the settlements (72 and 85% of the national average), however, in the 'low' category (number 6) there are many (126% of the average.) Strangely enough, this corresponds to the countryside average in the lowest category (number 7).

In subregions with larger towns/cities, the mortality level usually falls in the 'lowest' category, or it is in one of the low ones. The best mortality index can be found in the following subregions with larger towns/cities in them:

Table 4
Standard mortality indices of larger towns/cities (1996–2000)

Subregion	Standard mortality index		
	total	male	female
Sopron	87	85	89
Veszprém	90	92	88
Eger	90	93	88
Győr	90	87	93
Szeged	91	93	90
Zalaegerszeg	92	95	89
Székesfehérvár	92	90	95
Békéscsaba	92	89	96
Szombathely	95	93	99
Szolnok	95	96	95
Pécs	95	93	99

The Nyíregyháza subregion lags behind in the list of low mortality indices of subregions with larger towns/cities (98%), so does Kecskemét (99%) but even more so the subregions of Debrecen (101%) and Miskolc.

In line with the above, a lot more people live in subregions with relatively low mortality rates than in those where the mortality rate is high. The distribution of the population by the magnitude of the mortality index in 2001 was as follows:

Table 5
Distribution of the population by mortality levels (1996–2000)

Mortality level	Population (residents) 1 February, 2001	
	Thousand persons	As % of population
1. Highest	640	6.3
2. Very high	894	8.8
3. High	1 092	10.7
4. Medium	1 557	15.3
5. Average	1 236	12.1
6. Low	1 365	13.4
7. Lowest	1 636	16.0
Total countryside	8 420	82.6
Budapest	1 776	17.4
Total	10 198	100.0

Due to the differences of population and urbanisation ratios in the subregion groups, the average population of settlements increases with the decrease in the mortality rates. In other words: the lower the average population size of a set-

tlement is, the higher the mortality level will be. In subregions with the highest mortality rates, the average population size hardly reaches half of the countryside average, and even in those with very high mortality rates it forms only two thirds. Yet in subregions with the lowest mortality rates, the average population size is 43% higher than the countryside average, and it nearly triples if compared to the subregions with the highest mortality rates.

One related factor is that as mortality increases, the total population density of the group with a given mortality rate increases. The population density index of subregions with the highest and very high mortality rates hardly reaches two thirds of the countryside average. Yet the level of population density in subregions with the lowest mortality rates is nearly one third above this, thus they are about double those in subregions with higher mortality rates.

MORTALITY RATES BY AGE GROUPS

In addition to studying the general differences in mortality rates (which are presented through the standard mortality indices) it is also interesting to see whether the differences in age groups are the same or not. Therefore we calculated the specific indices for the following five typical age groups:

0–14 year olds,
15–39 year olds,
40–59 year olds,
60–79 year olds,
80 year olds and older.

The age specific mortality rates in all cases are clearly the highest in the subregions with the highest mortality rates, and then they drop gradually in all age groups with the decrease of mortality levels. However, differences become smaller with age.

The mortality rates of the under 40's in subregions with the highest mortality levels is about one quarter above the countryside average, in the case of the 41–59 age group only by about one fifth, and in case of the older age groups, by one tenth. The mortality index of the highest mortality level, compared to the lowest level, is almost one and a half times as high in the age groups under 40; in the age group of 40–59 it is 40%; for the older ones it is one quarter and one sixth respectively. If we relate the differences in the mortality rates of the different age groups to the standard mortality indices – that is, to the average – we can see that the largest variation occurs in the age group under 40: in subregions with the highest mortality rates it is 8–9% higher, in subregions with the lowest mortality rates it is 7% lower. The situation is the opposite in case of the

older ones: in case of the highest ones mortality rate by age is 4–5% better, in case of the lowest ones it is 3% worse than average.

Table 6

Mortality indices by age groups and by the mortality levels of subregions (1996–2000)

Mortality level	Death by hundred thousand inhabitants of the corresponding age group					
	0–14	15–39	40–59	60–79	80–x	total[a]
	As a % of the countryside average					
1. Highest	127	125	121	113	110	116
2. Very high	119	120	112	106	106	109
3. High	105	107	108	105	103	105
4. Medium	105	104	104	101	99	102
5. Average	91	100	97	97	100	98
6. Low	89	87	91	97	97	95
7. Lowest	85	83	86	92	86	86
Total countryside	100	100	100	100	100	100
Budapest	90	71	85	92	86	86
Total	100	98	98	99	97	98

[a] Standard mortality index.

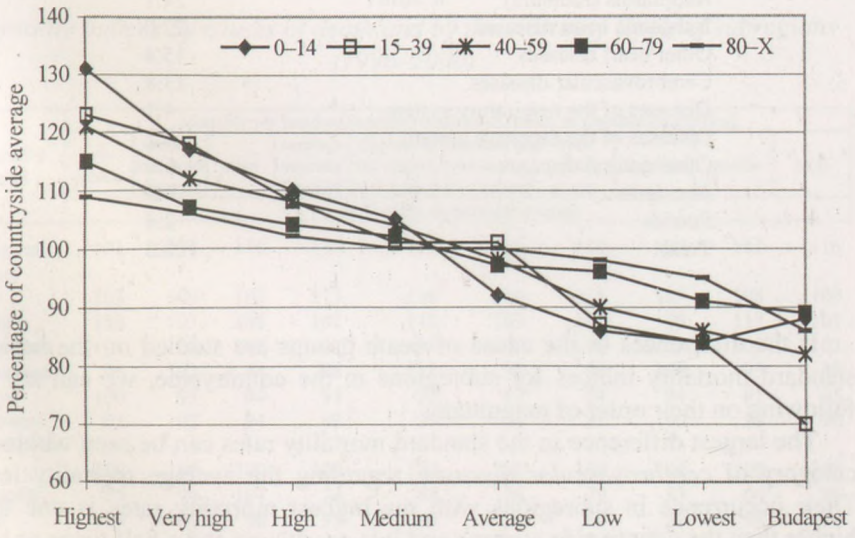


Figure 3

Mortality indices by age-groups in subregions (1996–2000)

The mortality index in Budapest almost always falls below the lowest levels of the countryside subregions. Perhaps the only exception is the age group of under 15, where the mortality index is 6% higher than in subregions with the lowest mortality rates. The two indices are the same in the age group of 60–79, and almost the same among the 40–59 year olds. Budapest has the greatest advantage among the 15–39 year olds (14% lower than in the subregions with the best mortality rate). Even in case of the oldest ones, there is an advantage in favour of Budapest (9%).

MORTALITY RATES BY CAUSES OF DEATH

When we analyse mortality differences it is essential to study the differences in the major causes of death as well. Due to the small number of deaths, only the following nine categories of cause of death were studied in the subregions (indicating also the national rates for 1996–2000):

Table 7
Main causes of death in Hungarian subregions (1996–2000)

Cause of death categories	%
Neoplasms (tumours)	24.1
Ischeamic heart diseases	22.0
Other heart diseases	15.4
Cerebrovascular diseases	13.8
Diseases of the respiratory system	4.1
Diseases of the digestive system	7.2
Other natural diseases	6.0
Accidents	4.9
Suicide	2.4
Total	100.0

If the differences in the cause of death groups are studied on the basis of standard mortality indices for subregions in the countryside, we can say the following on their order of magnitude:

The largest difference in the standard mortality rates can be seen within the category of *cerebrovascular diseases*, regarding the average mortality level. Their occurrence in subregions with the highest mortality rates is one third higher than the countryside average and it is nearly one and a half times as high as that of the subregions with the lowest mortality rates. Their frequency is 16% in the former ones and 14% in the latter ones. Also a huge difference can be found in the category of *diseases of the digestive system* (mostly due to liver diseases caused by alcohol). This is 31% higher than average in the highest

mortality categories and 62% more then in the lowest mortality categories. The frequency varies between 8.2 and 6.5%.

Differences are of medium level or are nearly the same in the two *heart disease* categories: in both cases mortality in subregions falling into the highest mortality category is 16% higher than average and one quarter higher than those in the categories with the lowest mortality. As for the category of *respiratory diseases*, mortality differences are similar: 14% compared to the average, but 52% compared to the lowest ones. Frequencies are almost identical in the two extreme groups. However, there is hardly any difference in the mortality level of the *tumour* category. In subregions with high mortality rates it is just above average, and we find an 8% drop compared to the average only in subregions with the lowest mortality rates. In subregions with the highest mortality rates tumours are identified as a cause of death in 21% of the total number of deaths; in subregions with the lowest mortality rates it is nearly 25%.

Among violent deaths, *accidents* show the greatest variation. Mortality due to accidents is one fifth higher than the countryside average in the highest mortality category, and one third more than in the lowest mortality category. There are 12% more deaths caused by suicide in the highest mortality category as related to the average, but compared to the figures of the category with the lowest mortality rates we can find one third more.

Table 8

Mortality indices by causes of death and by the mortality levels of subregions (1996–2000)

Mortality level	Mortality per hundred thousand inhabitants (based on standard population)									
	neo-plasms	ischae-mic heart diseases	other	cerebro-vascular diseases	diseases of the respira-tory system	diseases of the diges-tive system	other natural deaths	accidents	suicide	total
	As % of the countryside average									
1. Highest	101	118	116	133	114	131	118	120	112	116
2. Very high	103	109	103	113	118	114	118	107	108	109
3. High	100	103	108	107	118	103	109	96	115	105
4. Medium	104	100	102	93	94	106	104	103	109	102
5. Average	96	102	94	98	111	98	89	106	95	98
6. Low	100	95	94	93	95	93	94	94	91	95
7. Lowest	92	92	94	90	77	91	87	90	83	90
Countryside total	100	100	100	100	100	100	100	100	100	100
Budapest	95	94	107	76	68	86	79	83	60	86
Total	98	99	96	95	94	97	96	97	98	98

There are quite a lot of differences between Budapest and the countryside subregions with the lowest mortality rates with regard to the cause of death. There are certain causes of death where Budapest is worse off: this is mostly due to the category of 'other heart diseases' (14% higher), but the mortality rate is 6% higher in Budapest due to diseases of the digestive system too, compared to the countryside subregions with the best mortality rates. Furthermore, there are 2–3% higher mortality indices in the categories of neoplasms and ischaemic heart diseases, while there are 29% less suicides, 16% less deaths due to cerebrovascular diseases, and 8–12% less deaths due to accidents and diseases of the respiratory system per hundred thousand inhabitants in Budapest than in the countryside subregions with the best mortality rates.

It is worth looking at the causes of death causing surplus mortality in the subregions with the highest mortality rates. If we compare the mortality rates by cause of death in the countryside subregions with the highest mortality rates and those in the Budapest districts to those in the areas with the best rates we can identify the categories which cause the surplus mortality in the given category. There is a 29% difference between the two extreme values in the standard mortality index in the countryside. If we break down these extra deaths by causes of death, we find the following:

Table 9

Mortality surplus of the subregions with the highest mortality rates by causes of death groups (1996–2000)

Cause of death groups	Mortality surplus of subregions with the highest mortality rates compared to those with the lowest ones	
	Per hundred thousand inhabitants	percentage
Neoplasms (tumours)	30	8.4
Ischaemic heart diseases	70	19.7
Other heart diseases	48	13.1
Cerebrovascular diseases	81	22.9
Diseases of the respiratory system	21	6.0
Diseases of the digestive system	50	14.0
Other natural diseases	26	7.3
Accidents	20	5.6
Suicide	9	2.7
Total	364	100.0

Only around 8.4% of the surplus mortality in the countryside can be related to tumours. However, 22.9% surplus mortality is caused by cerebrovascular diseases. Ischaemic heart diseases also play an important role in the surplus mortality (19.7%), but the role played by other cardiac diseases is less signifi-

cant (13.1%). The effect of the diseases of the digestive system is also significant regarding the mortality surplus (14%).

MORTALITY RATES AND MENTAL HEALTH

The question arises: to what extent does mental health influence health in general, and thus what impact does it have on mortality differences? The Institute of Behaviour of the Semmelweis Medical University prepared a study with the title 'Hungarostudy/2002' which covered some 12.600 people in its representative investigation of the entire country and the subregions, and thus it became possible to answer this question too. Using the questions of the study, the Beck depression index was established in a 4 scale grouping for the subregions, and thus for the subregion groups. Thus we can compare distributions and depression averages in the subregions and in Budapest.

Based on the data of the representative study, 51% of the adult population nationwide can be considered as mentally healthy, 27% are slightly depressed, 13% are depressed and 9% are severely depressed. The average depression index is 7.9. If we look at the distribution by depression, study of the differential ratios for the healthy and the severely depressed seems to be the most fruitful approach regarding the levels of mortality. No linear increase or decrease can be found in either one according to individual mortality levels, since the depression indices vary a great deal between the highest (1^{st}) and the lowest (4^{th}) categories and here a clear trend can be seen: the ratio of the psychologically healthy increases while that of the depressed decreases as the mortality rates improve.

But on average we can say that depression is higher in areas with worse mortality rates than in those where relatively less people die. In subregions with the lowest mortality rates, the ratio of the mentally healthy is 16% higher than the countryside average, and some 30–50% higher than in subregions with high mortality rates. Or to put it the other way around: the ratio of the severely depressed in subregions with better mortality rates is one fifth lower than the countryside average, and it is only two thirds to three fifths of those living in areas with high mortality rates.

As a result, the average depression rate in areas with the best mortality rates remains 8% below the countryside average and about one fifth below that of subregions with very high and high mortality rates. The linear relationship with regard to depression is clearly indicated by the fact that the highest depression average occurs in subregions with very high and high mortality rates (where this is 17% above the countryside average), while in subregions with the highest mortality rates depression 'surplus' is a lot less than this (only 8% more

than the countryside average, and thus it remains 8% below the two categories with higher depression values.

Table 10

Occurrence of depression by the mortality levels of subregions (based on the representative data of Hungarostudy-2002)

Mortality level	Standard mortality index	Healthy	Slightly depressed	De-pressed	Severely depressed	Depres-sion average
	As a % of the countryside average					
1. Highest	116	90	109	108	119	108
2. Very high	109	77	120	117	131	117
3. High	105	83	113	122	121	117
4. Medium	102	93	106	108	108	106
5. Average	98	108	95	90	88	93
6. Low	95	113	88	86	85	95
7. Lowest	90	116	86	82	78	92
Countryside total	100	100	100	100	100	100
Budapest	86	113	91	82	80	83

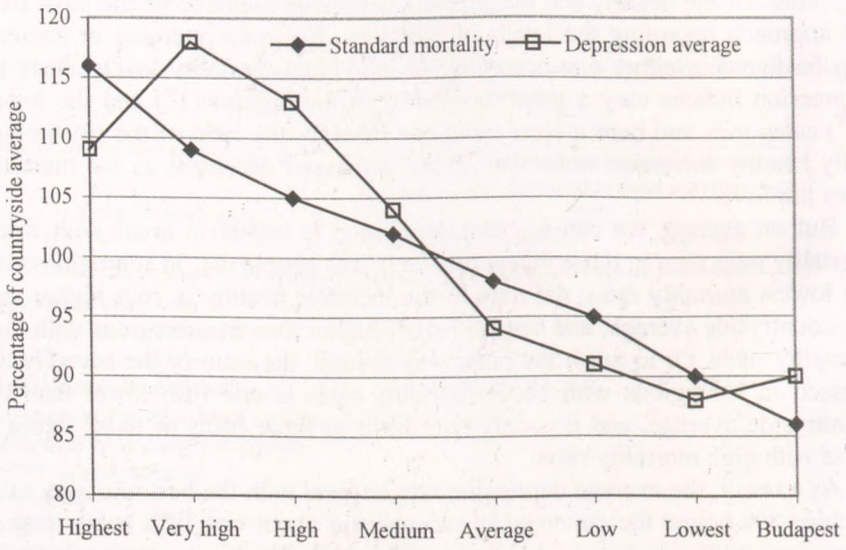


Figure 4

Mortality indices and average depression indices in subregions

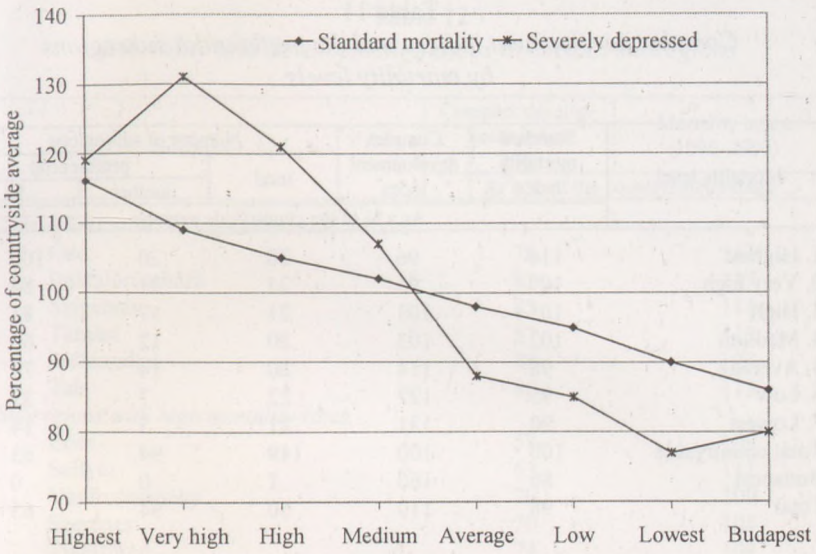


Figure 5
Mortality indices and depression levels in subregions

The average depression index in Budapest is somewhat lower than the countryside average (by 17%). The reason for this is that the ratio of healthy people is much higher (by 13%) and that of the depressed and severely depressed is much lower (by one fifth).

MORTALITY RATES AND THE LEVELS OF DEVELOPMENT

There is a strong correlation between the mortality rates of the subregions and the general level of development. The *complex development index* is the lowest in subregions with high mortality rates, while it is the highest in subregions with low mortality rates. This relationship means that the less developed a region is, the higher its mortality rate will be.

The complex development level is worse than the countryside average in subregions with the highest and high mortality rates (categories 1 and 2), but it is nearly one third higher in subregions with the lowest mortality rates (category 7), and it is better by more than a quarter in the subregions with low mortality rates (category 6). The relationships among the indices can be seen below:

Table 11
Complex development indices and the preferential subregions by mortality levels

Mortality level	Standard mortality index	Complex development index	Number of subregions		
			total	preferential	
				number	%
	As a % of the countryside average				
1. Highest	116	96	20	20	100
2. Very high	109	93	25	21	84
3. High	105	103	21	17	81
4. Medium	102	103	20	12	60
5. Average	98	114	20	14	70
6. Low	95	127	22	7	32
7. Lowest	90	131	21	3	14
Total countryside	100	100	149	94	63
Budapest	86	160	1	0	0
Total	98	110	50	94	63

Naturally there are certain exceptions in the general relationship between a high level of mortality and a low level of development, and between low mortality rates and a high level of development, which could perhaps be explained by some further analyses (especially by the study of the composition of the population):

The Nagykáta and Siklós areas belong to the highest mortality categories (category 1, with mortality indices of 115 and 113%, respectively), yet their complex development indices are 111–113% of the countryside average. Similarly, with relatively high mortality indices (116 and 113%) the development indices are also high (106–107%) in the Szob, Kisvárda and Letenye subregions. The contradictions are even greater in the following category (number 2, high mortality rate): in the Tatabánya subregion the complex index is 135%, but the mortality index is 110%. In the Monor, Dabas and Várpalota subregions the development levels are more than 20% higher than the countryside average, yet the mortality levels are some 8–11% higher than the countryside average.

The opposite tendency can be found in areas with the lowest mortality rates. Thus the development level of the Balmazújváros subregion is only 89% of the average, while its mortality index is 91%. Levels of development are even lower in the Pétervásár, Sarkad and Polgári subregions (83–87%) but their mortality indices are relatively good (93–96%).

The subregions below show general trends (with the strange phenomenon that in the category with 'high' mortality rates (no. 2) we find lower development levels than in the category with the 'highest' mortality rates (no. 1).

Table 12
Mortality and development indices in certain subregions

Subregion	Complex development index 2001	Mortality index (1996–2000)
	As a % of the countryside average	
1. Subregions with the highest mortality rates		
Ózd	78	113
Baktalórántháza	82	117
Szigetvár	85	114
Tamási	87	113
Mátészalka	88	120
Tab	88	113
2. Subregions with high mortality rates		
Encs	58	109
Sellye	63	111
Vásárosnamény	70	109
Szerencs	70	108
Tiszafüred	74	108
Sátoraljaújhely	75	112
7. Subregions with the lowest mortality rates		
Szentendre	152	88
Győr	151	90
Pilisvörösvár	150	92
Balatonfüred	149	80
Balatonalmádi	149	82
Szeged	149	91
Veszprém	146	90

Budapest fits well into this last category because the development index of 160% for Budapest is in harmony with a mortality index of 86%.

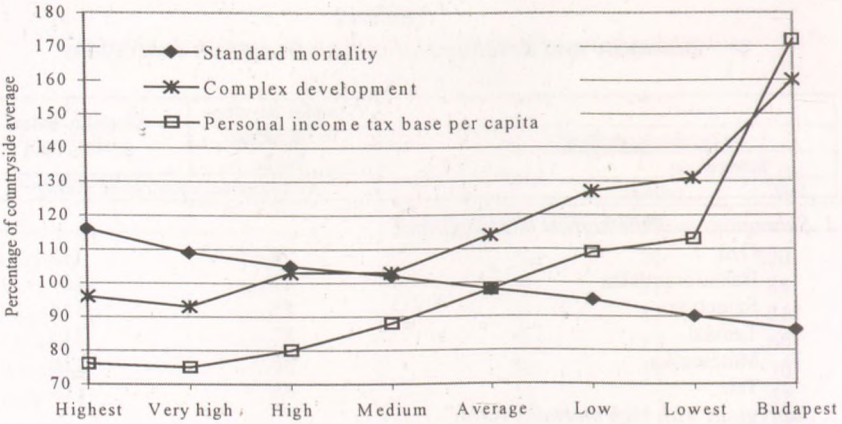


Figure 6
Mortality indices, levels of development and income in subregions

Correlations similar to the development index can be found if we compare the criteria for *preference (underdevelopment)* with the mortality level. This too, shows total correlations. All the subregions with the highest mortality rates are considered to be 'preferential', that is, underdeveloped. More than four fifths of subregions in the following two categories (2: very high and 3: high) belong among the underdeveloped ones. Yet only 3 are preferential from among the 21 areas with the lowest mortality rates (equal to 14%). The Monor, Tatabánya, Dabas and Várpalota subregions are not within this general coincidence, where mortality rates are very high (108–111%), but these are not preferential. A counter tendency prevails in the Szarvas, Balmazújváros and Hajdúböszörmény subregions: these are preferential ones but their mortality rates are among the lowest ones (91%-os).

MORTALITY RATES AND INCOME LEVELS

It is important to analyse the different elements of the complex development index separately. From among them, the first one we analysed was the impact of *income*. We took the amount of the personal income tax base per one permanent resident based on the 2000 tax returns as the basis for our calculations. We then compared this to the countryside average. The income differences which emerge from this are strongly correlated – negatively – with the standard mortality indices. The lower the per capita residents' income in the given subregion, the higher the mortality rate. In subregions with the highest and very high mortality rates (categories 1 and 2) the level of personal income tax is only

three quarters of the countryside average. Yet this level is 13% higher than average in subregions with the lowest mortality rates. The difference between the maximum and the minimum values is 51% (which is over the 41% difference found with regard to the complex development index). This also means that the difference in the income levels might have a greater impact on the mortality level than the level complex development. This is also true for the Budapest-countryside relation. The per capita income in Budapest is 72% over the countryside average, while for the complex development index there is only a 60% surplus in Budapest.

Table 12
Levels of income and development in subregions by mortality levels

Mortality level	Mortality index	Per capita income	Complex development
	As a % of the countryside average		
1. Highest	116	76	96
2. Very high	109	75	93
3. High	105	80	103
4. Medium	102	88	103
5. Average	98	98	114
6. Low	95	109	127
7. Lowest	90	113	131
Total countryside	100	100	100
Budapest	86	172	160
Total	98	113	110

Naturally, certain subregions do not fit into this general trend. Thus for instance in the subregion with the highest mortality rate – Kisbér (125%) – the per capita income is also high: 110% of the countryside average. The same is true for the Tatabánya and Tiszaújváros subregions of the category 'very high', where there is a 116% income index next to the 108–100% mortality index. This is countered in the Balmazújváros subregion, listed among the lowest mortality rates, where the mortality level is 91% yet the average income stands only at 64%. The Szarvas and Hajdúböszörmény subregions show a similar situation, where the per capita income is only 75–77% of the countryside average, but the level of mortality remains well below it (with a mortality index of 91%).

The indices indirectly defining the *poverty* level of the subregions show that the impact of income on mortality is negative. We can show two of them here:

- The proportion of the unemployed receiving social benefits but due to the length of the unemployment no unemployment benefit;
- The proportion of those receiving free medication from public funds.

In both cases it is absolutely evident that high mortality goes with poverty; in areas of lower mortality poverty is much less frequent. Thus in the case of countryside subregions, in areas with the highest mortality rates the proportion of those receiving social benefits is about one and a half times higher than the countryside average; in those where mortality is high, it is double. In the same places about one fifth to one quarter more people receive free medication from public funds. In subregions with the lowest mortality rates the former index is only about half of the countryside average, while the latter one is about four fifths of it. Thus there is a nearly fourfold and a one and a half time difference between the extreme values respectively.

In addition to income indicating the standards of living for the moment indices describing *wealth* are also very typical of the standards of living in the given area. It is difficult to give a complete picture of the situation but the ownership of certain durable consumer goods may indicate the level of wealth. We can show three such indices for the subregions and for the subregion groups:

- Number of passenger cars per 1,000 inhabitants;
- Number of fixed telephone lines per 1,000 inhabitants;
- Number of those having cable television per 1,000 inhabitants;

We can add some other indices to these which characterise housing and also suggest wealth:

- Number of homes built per 1,000 inhabitants;
- Proportion of flats built with 4 or more rooms;
- Proportion of flats with pipeline sewage system;
- All-comfort flats as a % of all the inhabited flats;
- Flats without comfort as a % of all the inhabited flats;

All eight indices clearly highlight the fact that low income and high level of poverty increase the probability of death, just as much as it decreases with wealth and affluence. All of these indices are lower because they increase in subregions with high mortality rates as mortality decreases.

With regard to almost all of these indices, the level of wealth in the subregions with the highest mortality rates is about three quarters of those in the

lowest ones. The difference is outstanding as regards the sewage system, which has a direct impact on the public health situation: this is only four fifths of the countryside average in the areas with the highest mortality rates, and one quarter of the subregions with the best mortality levels. The proportion of all-comfort flats in subregions with good mortality indices is two thirds higher than in those with the worst rates. In the subregions with the highest mortality rates, on the other hand, the relative frequency of flats without any comfort is nearly three times as much as in regions with the best mortality situations. The difference in the availability of cable television is also more than double between the two extreme values.

Table 13

Levels of wealth by mortality levels in subregions

Mortality level	Standard mortality index	Passenger cars	telephones	Cable TV	No. of flats built	As a % of sewage pipeline	All-comfort flats	Flats with no comfort
		Per thousand inhabitants					As a % of inhabited flats	
	As a % of the countryside average							
1. Highest	116	86	85	57	86	42	74	145
2. Very high	109	83	86	69	86	65	84	138
3. High	105	84	89	53	95	60	80	130
4. Medium	102	90	92	76	100	77	104	102
5. Average	98	98	98	86	95	91	102	94
6. Low	95	129	109	100	114	107	112	74
7. Lowest	90	110	111	118	114	119	122	49
Total countryside	100	100	100	100	100	100	100	100
Budapest	86	139	152	121	90	212	126	36

MORTALITY RATES AND UNEMPLOYMENT

Even if we cannot find a direct correlation between unemployment and mortality rates, unemployment rates can be used indirectly as an index for the average level of economic development in a region, thus the level of unemployment could be a determining factor regarding the mortality rate. Therefore it is worth comparing the unemployment rates in the last few years (2000–2001) to the mortality indices and drawing certain conclusions.

As a general statement we can say that with regard to larger groups it is clear that if there are more unemployed, the mortality rate is higher. On average we can find the highest number of unemployed in the subregions belonging to the three high categories (1st 2nd and 3rd). This is especially true for the subregions in the 'very high' (2nd) category, where the unemployment rate is more

than one and a half times of the countryside average, but even in the 'highest' and 'high' categories (1st and 3rd) the surplus is one third. This index reaches only three quarters of the average in the lowest (7th) category. The difference is double between the highest and the lowest levels. The Budapest index in this regard is even better: unemployment rate in Budapest is just one third of that in the countryside.

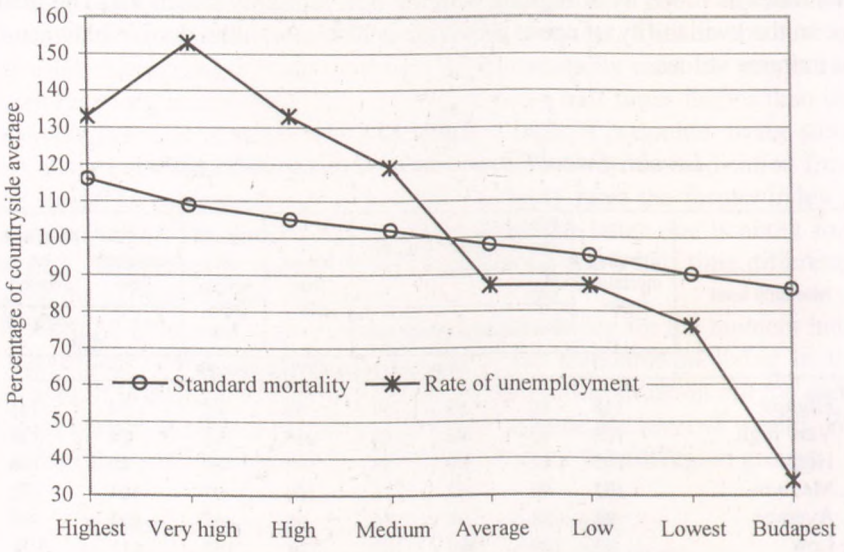


Figure 7
Mortality indices and unemployment in the subregions

The relationship between levels of mortality, complex development and unemployment in the subregions were as follows:

Table 14
Unemployment rate and level of development by mortality levels in the subregions

Mortality level	Mortality index	Unemployment rate	Complex development
	As a % of the countryside average		
1. Highest	116	133	96
2. Very high	109	153	93
3. High	105	133	103
4. Medium	102	119	103
5. Average	98	87	114
6. Low	95	87	127
7. Lowest	90	76	131
Total countryside	100	100	100
Budapest	86	34	160
Total	98	89	110

There are certain contradictions in some subregions regarding unemployment and mortality, but this is less surprising because job opportunities in certain areas differ from what might otherwise we ecpected considering the level of social development. Thus there are certain subregions with the highest (1st category) mortality rates where unemployment rate reaches only two thirds of the countryside average (Szob, Nagykáta), even though the mortality index is very high (116–115%). But also we can find high unemployment rates among subregions with the best mortality situations. In the Balmazújváros subregion unemployment is higher than average by three quarters, in Hajdúböszörmény it is some 40% higher than the countryside average, yet their mortality index is only 91%.

MORTALITY RATES AND THE COMPOSITION OF EMPLOYMENT

Mortality differences related to social differences can be seen in the composition of employment by the different sectors of the economy. We can divide subregions into three groups according to the sectoral composition of employment:

- those in the agricultural sector;
- those in industry and construction;
- those in the service sector (trade and commerce, catering, transportation, telecommunication, finances, public administration, education, health care, personal services).

If we look at the proportions of the above three branches of economy a major finding is that in countryside subregions where the ratio of those in agricul-

ture is high, levels of mortality are also usually high or medium. However, in areas with good mortality rates, there are relatively fewer people working in agriculture. This correlation is especially true for the two highest mortality categories, where the ratio of those working in agriculture is 40–35% higher than the countryside average. On the other hand, in subregions where mortality rates are low, this is less then a quarter but in the lowest mortality category it is the same as the average.

The ratio of those in industry hardly shows any clear correlation with mortality rates. Yet the ratios in services indicate a strong correlation. In subregions with high and average mortality rates, the proportion of those in the 'third sector' is relatively low. In the low mortality subregions, however, this index is very high; the difference between the two extreme values is 30%.

Relationships are even clearer between the mortality level and the type of job. In subregions with high mortality rates the proportion of blue collar workers is higher, but in the low mortality areas white collar workers are in the majority. The ratio of white collar workers in the subregions with the highest mortality rates is one fifth less than the countryside average, and that of blue collar workers is 12% more. In subregions with the lowest mortality rates the situation is the converse: the proportion of white collar workers is 37% over the countryside average, while that of the blue collar ones remains 22% less/below. Clearly, there is an enormous difference between the two extreme values: in the case of white collar workers it is more than 70% in favour of the subregions with the best mortality rates, in the case of blue collar workers, the surplus is 44% in subregions with the highest mortality rates.

Table 15

Ratio of the employed by sectors of the economy, by quality of job and by mortality levels in subregions

Mortality level	Standard mortality index	Agricultural	Industry and construction	Services	White collar	Blue collar
		sector			job	
	Ratio of employed as % of the countryside average					
1. Highest	116	140	99	98	80	112
2. Very high	109	135	104	98	86	109
3. High	105	128	97	88	94	104
4. Medium	102	76	94	107	104	97
5. Average	98	125	110	91	90	106
6. Low	95	76	99	108	107	95
7. Lowest	40	101	78	121	137	78
Total countryside	100	100	100	100	100	100
Budapest	86	7	65	136	159	64
Total	98	81	92	107	112	93

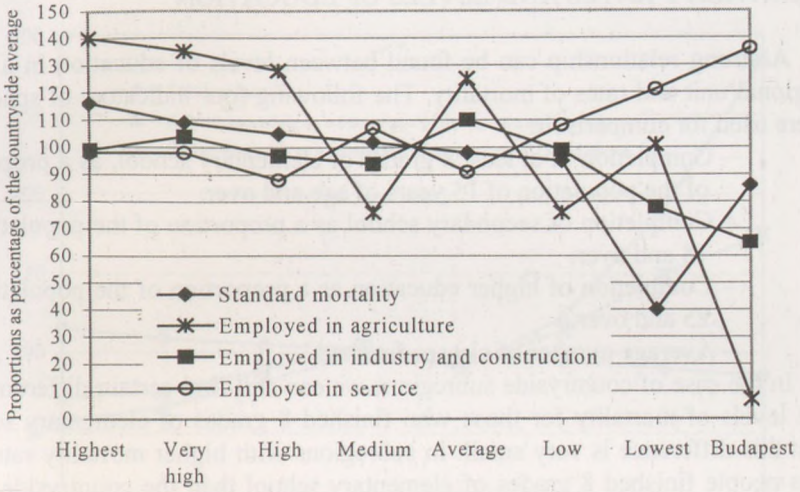


Figure 8
Mortality indices and the sectors of economy of the employed population in the subregions

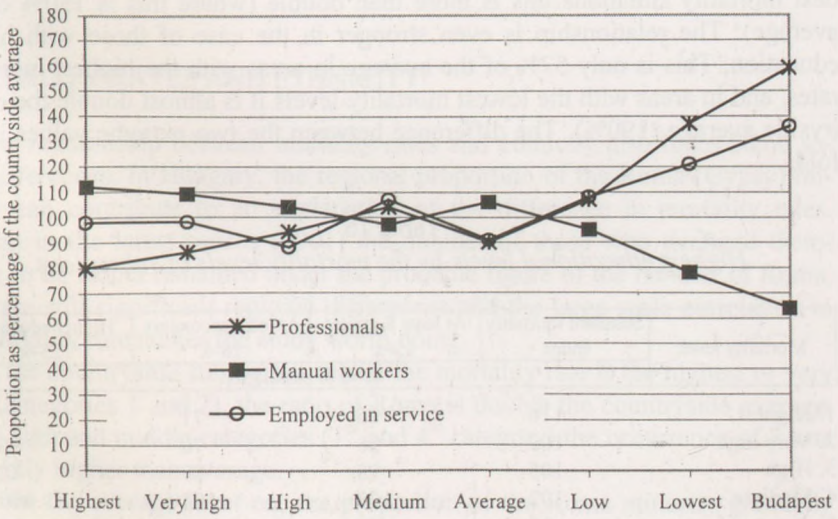


Figure 9
Mortality indices and the quality of jobs of the employed population in the subregions

MORTALITY RATES AND LEVELS OF EDUCATION

A strong relationship can be found between levels of education in a given regional unit and rates of mortality. The following four indicators of schooling were used for comparison:

- Completion of at least 8 grades of elementary school, as a proportion of the population of 15 years of age and over;
- Completion of secondary school as a proportion of the population of 18 and over;
- Completion of higher education as a proportion of the population of 25 and over;
- Average number of classes finished.

In the case of countryside subregions we can still find certain differences in the levels of mortality for those who finished 8 grades of elementary school. But this difference is very small: in subregions with higher mortality rates 4% less people finished 8 grades of elementary school than the countryside average; among those with the lowest mortality levels, 8% more than average did the same. The difference between the two extremes is one eighth. However, there is a significant difference in the case of those with secondary and higher education. The ratio of those with at least secondary education in subregions with the highest mortality rates is only 71% of the average; in areas with the best mortality situations this is more than double (where this is 150% of the average). The relationship is even stronger in the case of those with higher education. This is only 57% of the average in areas with the highest mortality rates, and in areas with the lowest mortality levels it is almost double the countryside average (190%). The difference between the two extreme values is 3.3 fold.

Table 16

Highest educational levels by the mortality levels of subregions

Mortality level	Standard mortality index	At least 8 grades 15–x	At least secondary 18–x	Higher education 25–x
	as % of population			
1. Highest	116	96	71	57
2. Very high	109	96	76	66
3. High	105	98	89	82
4. Medium	102	100	104	100
5. Average	98	99	91	90
6. Low	95	103	114	122
7. Lowest	90	105	150	190
Total countryside	100	100	100	100
Budapest	86	108	175	285
Total	98	101	114	125

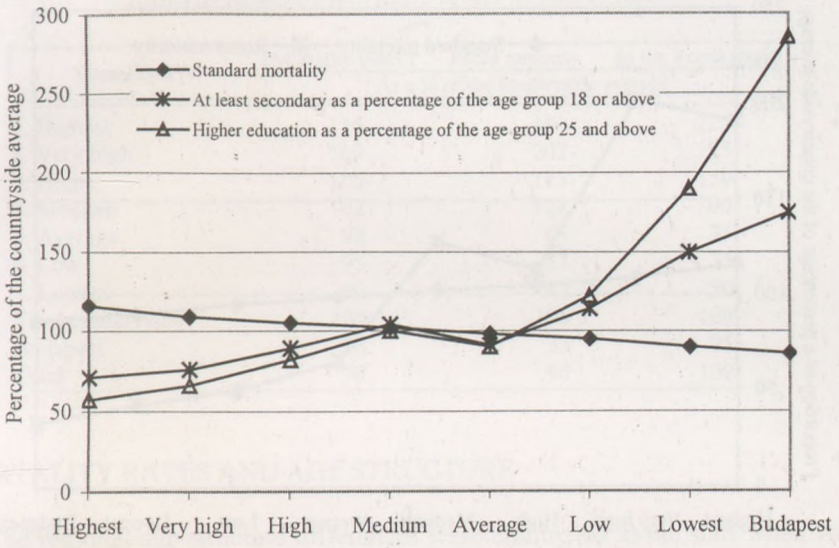


Figure 10
Mortality rates and the level of education in subregions

MORTALITY RATES AND ETHNICITY

The relationship between mortality rates and ethnicity also hides some social differences. In Hungary, the regional proportion of the Roma (Gypsy) minority can contribute to an explanation of the difference in mortality rates. Though in the latest census (2001) the number of those who declared themselves to be Roma remained under the probable figure of the number of Roma, there are still significant regional differences and the large scale correlation to the mortality rate makes the study worth doing.

In the countryside subregions where the mortality rate is the highest or very high (categories 1 and 2), the ratio of Roma is double the countryside average. In the high and middle categories (3rd and 4th category) the occurrence of Roma is slightly higher than average.

From the average level on, the proportion of the Roma minority gradually drops, and in subregions with the best mortality levels their ratio is only two fifth of the countryside average. Thus in areas with the highest mortality rates, there are nearly five times as many Roma as in areas with better mortality. The (declared) ratio of Roma in Budapest is only one third of the countryside average.

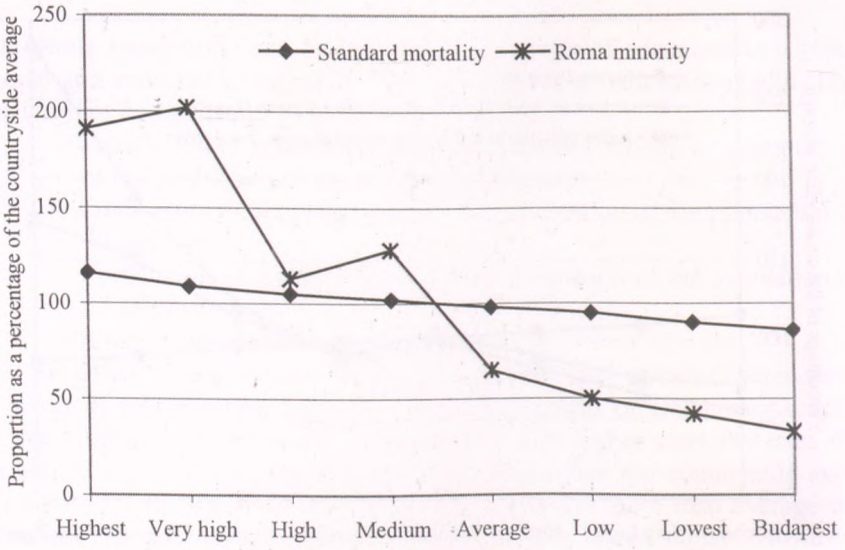


Figure 11
Mortality indices and the Roma minority in subregions

Relationships are similar if we look at those Roma who do not declare their ethnic identity, but claim to speak Roma and follow Roma traditions (even if they claim to be of Hungarian nationality). Thus if we take 'those belonging to the Roma' as a basis, their presence in subregions with the highest mortality rates is 225% of the countryside average, while in subregions with the lowest mortality levels they carry only a 50% weight. The difference between these two mortality levels is 4.5 fold.

Relationships between mortality rates and the ratio of Roma in the subregions are as follows:

Table 17
Ratio of Roma by mortality levels in subregions

Mortality level	Mortality index	Roma minority	In the Roma group
	As a % of the countryside average		
1. Highest	116	191	225
2. Very high	109	202	125
3. High	105	113	150
4. Medium	102	128	100
5. Average	98	65	75
6. Low	95	53	75
7. Lowest	90	42	50
Total countryside	100	100	100
Budapest	86	33	25
Total	98	90	100

MORTALITY RATES AND AGE STRUCTURE

The regional age structure differences were eliminated at the start when we adopted the standard mortality index. Yet the differences in the regional age structure can also be used as an independent variable when determining the levels of mortality.

The age composition of the different subregions was studied for three large age groups:

– *Children:* 0–14 years of age;
– *People of working age:* 15–59 year olds;
– *Old people:* 60 year olds and older.

Having studied the differences in the proportions of these three age groups by mortality levels in the countryside subregions, we found no significant differences. We could say in general that in subregions with higher mortality rates children and people of working age represent a higher proportion of the population; in areas with lower mortality levels these people are less frequent. Differences are significant only in the case of children: the maximum value for the proportion of the 0–14 year old age group in the two categories with the highest mortality (1st and 2nd) is 109, while the minimum in the two categories with the lowest levels of mortality (6 and 7) is 95–93%. Thus the difference between the two extreme values is only 17%. The ratio of those of working age in all categories is about average. And there are practically no differences in the categories with regard to old people. The distribution can be found in the 7th category between 96 and 104:

The correlations between mortality rates and the age structure are as follows:

Table 18
Age structure of the population by the mortality levels in subregions

Mortality level	Mortality index	0–14	15–59	60–x	0–14	15–59	60–x
		Year olds as a % of the countryside average			Year olds as a % of the total population		
1. Highest	116	109	99	99	18	62	20
2. Very high	109	109	97	100	19	61	20
3. High	105	101	97	104	17	62	21
4. Medium	102	102	100	98	17	63	20
5. Average	98	100	100	100	17	63	20
6. Low	95	95	102	101	16	64	20
7. Lowest	90	93	102	98	16	64	20
Total countryside	100	100	100	100	17	63	20
Budapest	86	75	101	117	13	64	23
Total	98	95	100	103	16	63	21

The ratio of children in Budapest is much lower (by one quarter) than in the countryside, while that of the older people is higher (by 7%).

The differences in age structure – besides differences in mortality levels – are strongly influenced by differences in birth rates as well. However, these differences in the fertility rates can be used as independent variables. There is a strong relationship between the birth rate and the standard mortality level. In general, a bad mortality level goes with a slightly higher number of live births than average. In subregions with the highest and high mortality levels the proportion of live births measured in the last few years was 10% over the countryside average, yet at the same time in the categories with average, low and lowest mortality levels it was 10% lower. This led to a difference of nearly 25% between the two extreme values.

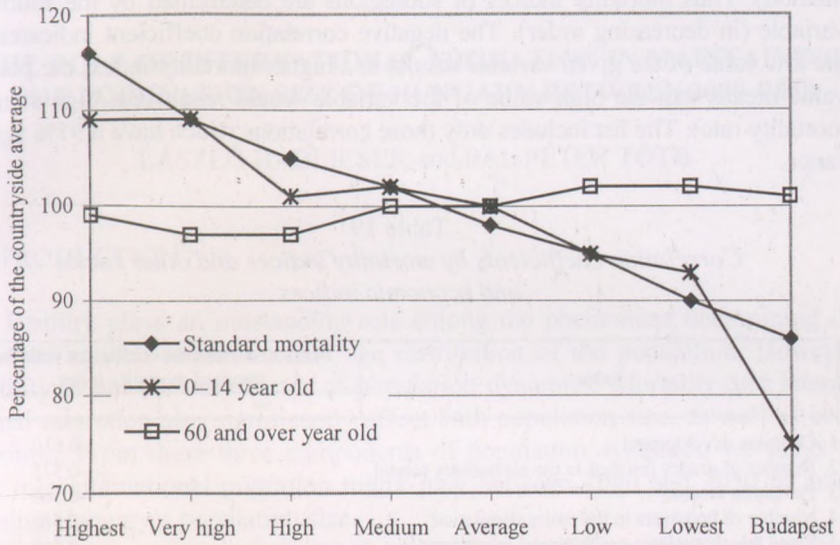


Figure 12
Mortality indices and age structure in subregions

The 'younger' age structure of areas with higher mortality rates is influenced by different fertility rates as well. The completed fertility rate measured in the last census in 2001 (the number of children born for every 100 women of the age of 45–49) is higher in subregions with worse mortality levels than in those with better ones. This indicator was 5–6% over the countryside average in subregions with the highest and high mortality rates, while in subregions with the lowest mortality levels it is 11% less.

The difference between the maximum and minimum values is 19%. The case is similar in the Budapest districts. Here, the fertility level in the districts with high mortality rates is 7% higher than the Budapest average (but in those ones with the highest rates this is only 1%). Women living in districts with the best mortality rates have 6% fewer children than the Budapest average, and this is 12% under the maximum level.

CONCLUSION

If we wish to characterise the individual impacts of certain social and economic phenomena on the mortality rates of subregions, the best is to calculate the correlation coefficient between the standard mortality index and the subregional variable which is typical of the given phenomenon (using the *Pearson*

method). Thus mortality indices of subregions are determined by the following variable (in decreasing order). The negative correlation coefficient indicates that the low value of the given variable results in a higher mortality index, the positive value means that the high value of the variable would result in a high standard mortality rate). The list includes only those correlations which have a 95% significance.

Table 19
Correlation coefficients by mortality indices and other social and economic indices

Index	Pearson correlation coefficient with the standard mortality index	
	+	–
1. Complex development		–0.610
2. Number of grades finished in the elementary school		–0.575
3. Per capita income		–0.566
4. Number of taxpayers in the entire population		–0.564
5. Fixed telephone lines per thousand inhabitants		–0.560
6. Flats covered by the sewage system		–0.521
7. Passenger cars per thousand inhabitants		–0.482
8. Unemployment rate	0.469	
9. Live birth rate	0.437	
10. Ratio of people receiving free medication from public funds	0.433	
11. Long term unemployment rate	0.420	
12. Ratio of Romas	0.377	
13. Secondary school students per thousand inhabitants		–0.376
14. Ratio of those working in agriculture	0.347	
15. Ratio of those working in services	0.303	
16. Rate of depression		–0.328
17. Average population size of settlements		–0.312
18. Number of flats built per thousand inhabitants		–0.298
19. Cable TV subscribers per thousand inhabitants		–0.284

We can say that of the 19 significant indicators showing social and economic relations we can find 12 where the correlation is negative, that is, their magnitudes are in reverse relationship to the standard mortality index. The 7 highest values can be found among these negative correlations. It is no coincidence that from among them the highest one is the complex development index (which is –0.610) because it includes the crude death rate. Disregarding this, the level of schooling/education and the per capita income show the highest correlation with the level of mortality.

Translated by Ildikó Várkonyi

THE ROLE OF INTERNATIONAL MIGRATION IN MAINTAINING THE POPULATION SIZE OF HUNGARY BETWEEN 2000–2050

LÁSZLÓ HABLICSEK and PÁL PÉTER TÓTH

INTRODUCTION[1]

Fertility plays an outstanding role among the phenomena determining the number as well as the sex and age distribution of the population. However, fertility is not the only factor of population dynamics. Mortality and international migration also significantly affect both population size, as well as composition. From these three components of population dynamics, we focus on the role international migration might play between 2000 and 2050 in maintaining Hungary's population size.

Hungary's male population has been decreasing since 1980, and the total population of both sexes since 1981. There is a consensus in Hungary that population decline indicates unfavourable socio-economic consequences. Therefore, among other goals modern population policy aims at the maintenance of population size, and its target is to slow down, stop and reverse the country's population decline. Principally it can be ensured by higher fertility, lower mortality and / or positive net migration.

The idea of compensating the decline with immigration is not new to Hungary. This 'method' has been used in our history several times with different aims and causes. Immigrants were necessary for repopulating the country after various catastrophes (1239–1290, 1550–1670). They had a crucial role in populating areas that had been rarely inhabited previously. The Cumanians, the Jazygians and, after the end of the Turkish occupation, the Germans provide examples of immigrant groups that repopulated Hungarian territory. This form of international migration played a significant role in the growth of Hungary's population and affected the sex and age composition as well (Tóth 2001).

International migration was critical for sustaining Hungary's population not only in the distant past, but also in the 20th century. For example, at the end of World War II, Székelys from Bukovina in Eastern Transylvania were resettled in Hungary. Of course, there are substantial differences between these historic examples of one-time settlements and today's seemingly natural international

[1] This study is based on the following paper published in Hungarian: Hablicsek and Tóth (2001). (Cseh-Szombathy and Tóth 2001, 395–428). The data and the projections / scenarios mirror the population situation before the 2001 population census. The census results, however, do not influence significantly the findings of the paper.

migration (Tóth 2000). Yet, even today significant resettlement takes place following wars and natural catastrophes.

In this paper, we consider the potential of international migration to contribute positively to the population replacement in Hungary. This involves a break with the idea of closed population used until now in population projections. By elaborating population scenarios with possible migration patterns, we seek answers to the following questions:

a) Provided that the present immigration and emigration remain constant, how many years are needed to slow down or to stop the decline and the ageing of population?
b) In case we intend to have the same population size in 2050 as today and we intend to reach this goal by a one-time significant settling of migrants, then what number and composition (sex and age) of foreign citizens should be settled in 2000?
c) According to the baseline variant of Hungarian population projections what are the migration volumes that could offset the accelerating decrease and ageing of the population (Hablicsek 1998)?
d) What fertility, mortality and migration conditions could lead to a more sustainable development of the population?

In this paper the main tool for studying the demographic impact of international migration is the scenario-method. However, as a first experiment, this role is analysed only with regard to the population size and age structure. This means, among others, that we do not take into consideration the ratio of Hungarian and non-Hungarian emigration, or the composition of immigrants in terms of country of origin. We do not address the consequences for the communities left by the immigrants nor the possible consequences of increasing number of immigrants and thus their relative proportion in the population of Hungary – except for the simple demographic consequences. The main goal of the study is the identification of the general levels of the phenomena (first of all migration) necessary for having a more or less constant population size in Hungary in the next decades.

METHODOLOGICAL PROBLEMS

It is well-known that there are serious deficiencies of the data on population movement. International migration belongs to that category of phenomena most difficult to measure statistically. As a result, the interpretation of existing data is much more complicated than for other demographic data of population dynamics. Therefore an exact projection of migration and its effects on population development seems to be impossible. Furthermore, there is a danger that projections multiply errors in the measurement of current migration patterns. Thus

we have to be very careful to formulate and apply assumptions on international migration.

Due to the difficulties in measuring migration processes accurately, data on migration show greater uncertainty than data on natural processes of population change. Perhaps the biggest problem for the analysis concerns the emigration and return of Hungarian citizens. Besides the small group of those declining their Hungarian citizenship, there is a lack of data on Hungarian citizens emigrating and then returning. We have neither annual breakdowns, nor total figures for any given time period.

It is not only the data on emigration by Hungarian citizens that raises concern, but the data on immigrating foreigners as well. Generally, these data are also incomplete and inexact. For instance, the data contains neither the number of those arriving here illegally, nor those with visa exemptions extending their stay in the country.

Because of the above circumstances, we cannot determine with any precision the real balance of migration to and from the country or the number of those participating in international migration. And thus, we cannot answer unambiguously the question on whether the international net migration is positive or negative. Therefore, one may reasonably ask, whether the current state of our migration data allow us to use projection techniques in assessing potential role of international migration in reversing current population decline in Hungary.

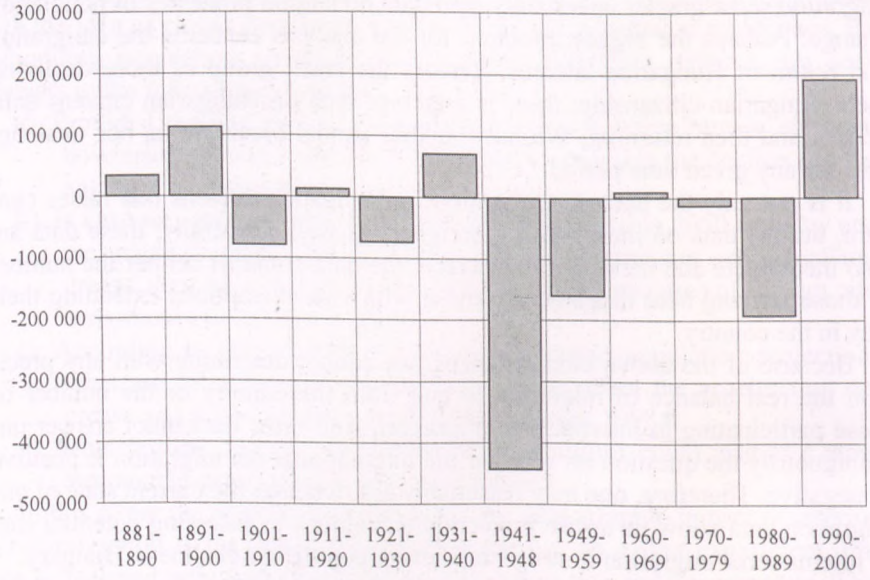
Despite the possible inaccuracy, incompleteness, and uncertainties of the migration data, we can still arrive at a basic answer to our questions. Our objective is not to produce an exact estimation, but rather to formulate general tendencies from existing data. Our experiment will have proven successful if we can conclude some expectable tendencies of international migration as well as volume estimations of immigration which would be necessary to balance natural population decrease using the scenario method based on existing data.

MEASURING INTERNATIONAL MIGRATION

Census net migration

In the following, we briefly examine the effect of census net migration on the size of Hungary's population between 1881 and 2001. Census net migration is the difference between the change of population size and the sum of annual natural increases (the difference of live births and deaths in the given year) between two (successive) censuses. It is not a direct effect of international migration, because census errors from one side and births and deaths losses and surpluses caused by movement from the other side affect strongly these figures.

Here and in the following parts of the study all the data refer to the recent territory of Hungary.



Source: Hablicsek and Tóth 1996, 162.

Figure 1
Migration balance between censuses, Hungary, 1881–2001

In the above figure, we can see, first of all, the fluctuating character of the migration differences over the last century. *However, significant negative net migration figures have been observed for certain time periods*. Emigration was outstandingly high after World War II and following the 1956 Revolution. Between 1960–1979 the census net migration is very small, while there are data on significant illegal emigration. The census net migration between 1980 and 1990 and also between 1990 and 2001 seem to mirror Hungary's socio-economic and political transformation starting in the last decade.

We can also use model estimations to measure the impact of international migration. For example, starting with the 1921 population figures and using the valid mortality and fertility parameters as assumptions for population projection, we can estimate a population development without migration. This scenario gives a population of 11.4 million by 1981, and one of 11.1 million for 1991, which is by 700 thousand persons (7 per cent of the recent population)

higher than the census population. On this basis we can state that the impact of international migration was not negligible during the last century.

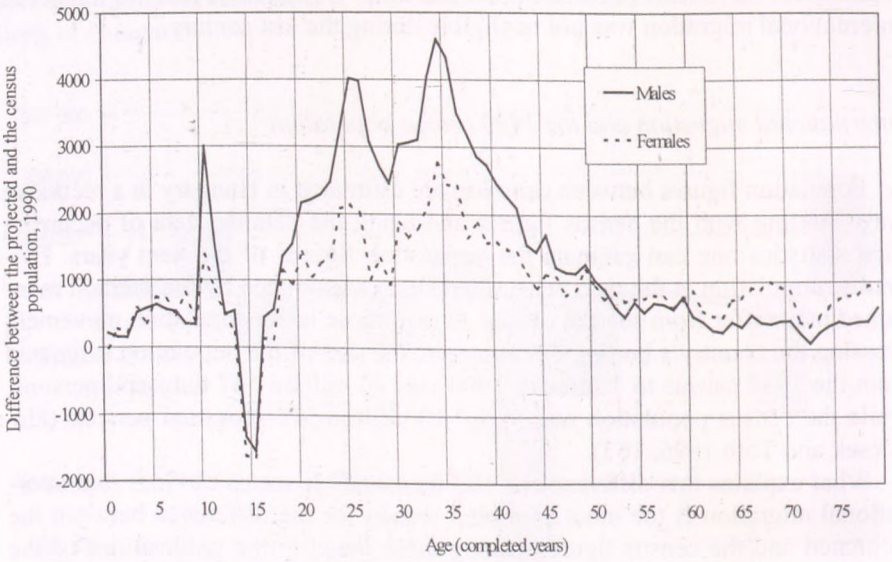
International migration and the 1990 census population

Population figures between censuses are estimated in Hungary in a recursive way. Starting with the census figures and using the detailed data of occurring vital statistics one can estimate the population figures of the next years. Evidently, population at the next census and figures estimated by the method mentioned may differ from several causes. One of these is the population movement crossing the country's border. For example, the size of the population estimated from the 1980 census to 1 January 1990 was 10 million 567 thousand persons, while the census population was 'only' 10 million 375 thousand persons (Hablicsek and Tóth 1996, 163).

What explains this difference of 192 thousand? It seems obvious that international migration is the most important reason for the difference between the estimated and the census figures among those listed in the publications of the 1990 census. This conclusion is supported by looking at the differences between the expected and the census population by age and sex. These differences shape a curve more or less characteristic of the impact of migration in general[2].

Of course, the differences seen in Figure 2 between the projected and the census populations are not wholly the result of international migration. 'Irregularities' can be seen in the 10 year-old population where the projection is significantly higher than the census population, and in those aged 14–15 years where the census population exceeds the extrapolated one. Despite these, the projected population still shows a surplus, compared to the census population, and this difference seems to be result of emigration from Hungary.

[2] More accurately, the curves in Figure 2 are similar to age-specific migration patterns superposed between the censuses.



Source: Hablicsek and Tóth 2001, 401.

Figure 2
Differences by gender and age between the population projected from the 1980 census and the population of the 1990 census (1 January 1990)

The immigrants and foreigners with permanent residence in Hungary

For the purpose of the analysis, we divide those arriving to the country into three general categories. The first one contains those with an official immigrant status. The second category covers those who reside in the country longer than one year for reasons other than immigration. The third group are citizens who were naturalised between 1990 and 1997. This last category includes both individuals moving from immigrant status to Hungarian citizenship as well as re-naturalised Hungarians.

In order to determine what net migration figure we shall use in our analysis, let us examine what data characterised international migration in Hungary between 1990 and 1997.

Entries

Between 1990 and 1997, the aggregate number of immigrants (category 1) and those residing in the country for longer than one year (category 2) was 139,970. The number of persons with immigrant status was 79,527, while the number of those belonging to the second group was 60,443. The majority, 56.8 percent, of the migrants belonged to the first group. This is important to note because new Hungarian citizens are essentially recruited from this group.

Table 1
Number of entries by status and gender (1990–1997)

Year	Entries (number)						
	Immigrant status		Other status		Together		Total
	Male	Female	Male	Female	Male	Female	
1990	11 188	10 995	6 299	4 197	17 487	15 192	32 679
1991	7 763	6 990	4 698	2 743	12 461	9 733	22 194
1992	4 905	5 235	3 061	1 831	7 966	7 066	15 032
1993	4 850	5 340	3 647	2 064	8 497	7 404	15 901
1994	3 525	4 163	4 732	2 834	8 257	6 997	15 254
1995	2 488	3 289	5 896	3 337	8 384	6 626	15 010
1996	2 019	2 816	6 038	3 630	8 057	6 446	14 503
1997	1 650	2 311	3 287	2 149	4 937	4 460	9 397
1990–97	38 388	41 139	37 658	22 785	76 046	63 924	139 970

Source: Hablicsek and Tóth 2001, 402.

Table 2
Distribution of entries by status and gender (1990–1997)

Year	Entries (percentage of total)						
	Immigrant status		Other status		Together		Total
	Male	Female	Male	Female	Male	Female	
1990	34.2	33.6	19.3	12.8	53.5	46.5	100
1991	35.0	31.5	21.2	12.4	56.1	43.9	100
1992	32.6	34.8	20.4	12.2	53.0	47.0	100
1993	30.5	33.6	22.9	13.0	53.4	46.6	100
1994	23.1	27.3	31.0	18.6	54.1	45.9	100
1995	16.6	21.9	39.3	22.2	55.9	44.1	100
1996	13.9	19.4	41.6	25.0	55.6	44.4	100
1997	17.6	24.6	35.0	22.9	52.5	47.5	100
1990–97	27.4	29.4	26.9	16.3	54.3	45.7	100

Source: Hablicsek and Tóth 2001, 403.

Concerning the sex distribution of migrants for the entire period, the sex ratio differs more or less significantly among arrivals with the immigrant status and other entrants. 54.3 percent (76,046 persons) of the total migrants are male, while 45.7 percent of them (63,924 persons) are female. However, there is a female surplus in the immigrant status category, the proportion of men is 48.3 percent, while that of the women is 51.7 percent. Among other entrants not having immigrant status but residing in Hungary for more than one year, however, males represent a significantly greater share. In this group (category 2), men account for 62.3 percent. It clearly reflects the different labour market situation of men and women in Hungary. The vast majority of this category are employees and occasionally managers (along with their family members) of multinational firms and other companies and institutions. However, latest information shows a more balanced sex distribution also in the group of asylum seekers.

The development of annual numbers of those in immigrant status and other arrivals depict two distinct patterns. For both men and women, the number of those receiving an immigrant status decreased gradually from 1990 onwards. In the case of other entries, there have been fluctuations. The number of men in this category decreased significantly from 1990 to the end of 1992. In 1993, however, there were almost six hundred more men in this category than in the preceding year. From here on, their number has increased year by year. At the end of 1996, men remaining in Hungary for more than one year without immigration status surpassed six thousand again (6038). Since then, however, the observed figures show a significant decline. It is important to note that the annual trends have been similar for women.

Between 1990 and 1997, 139,970 persons entered Hungary for a period longer than one year from at least 164 different countries. The wide variety in the countries of origin might suggest that Hungary is extremely attractive. However, there were only 13 countries from which at least one thousand migrants arrived. It takes 87.7 percent of all migrants to Hungary and only 12.3 percent arrived from the remaining 151 countries. Considering only migrants arriving from the seven neighbouring countries, we account for 100,917 or 72.1 percent of the migrants. Among those arriving from the neighbouring countries, 72,258 persons have been granted immigrant status. This means that 71.6 percent of those arriving from the neighbouring seven countries supposedly came with the intention to become a Hungarian citizen.

New citizens

The migrant status can be terminated in basically two ways. One is when a foreigner permanently residing in Hungary leaves the country, the other is

when person with immigrant status applies for Hungarian citizenship and receives it at the end of the official procedure (Parragi 1993, 249; Parragi and Ugróczky 1994, 248).

During the examined eight years, the migrant status of 108,233 persons was terminated. 29,681 persons, or 27.4 percent of these, left the country. The rest (78,552 persons) became Hungarian citizens. Among people with an immigrant status, the percentage of those not receiving Hungarian citizenship and leaving the country instead is insignificant. They accounted for only 1.6 percent of those in the immigrant status category (79,527 persons).

In the following, we take a closer look at the data of the citizens of the 119 countries from which the new Hungarian citizens were naturalised between 1990 and 1997. There is a central group of countries from where new Hungarian citizens have arrived. They are the neighbouring countries. Among the 78,552 persons who received Hungarian citizenship, 69,253 persons, that is 88.2 percent of the new citizens, were previously the citizens of one of the seven neighbouring countries. Although we lack data on the nationality of entrants, we can assume that the vast majority of migrants from neighbouring countries are of Hungarian origin.

The distribution of the new citizens by age and sex is shown in Table 3. Between 1990 and 1997, 53.4 percent of all the persons receiving Hungarian citizenship were women. So while 45.7 percent of the total migrants were women, there are almost eight percent more women than men among the new citizens. (Recall that, within the immigrant status group, the proportion of women is 51.7 percent.)

15.4 percent of the new citizens are younger than 19, 74.3 percent are between 20 and 59 years of age, while the proportion of those over 59 is 9.5 percent. We do not know the number of the families and the number of children per family, nonetheless we find the proportion of those younger than 19 (12,702 persons) significant.

Table 3
Age and gender composition of persons naturalised as Hungarian citizens (1990–1997)

Age	Men		Women		Total	
	Number	Percent	Number	Percent	Number	Percent
0–4	346	0.9	367	0.9	713	0.9
5–9	1 493	4.1	1 315	3.1	2 808	3.6
10–14	2 082	5.7	2 046	4.9	4 127	5.3
15–19	2 530	6.9	2 488	5.9	5 018	6.4
20–24	2 590	7.1	2 415	5.8	5 005	6.4
25–29	4 487	12.3	5 018	12.0	9 505	12.2
30–34	4 121	11.3	4 668	11.1	8 789	11.2
35–39	3 867	10.6	4 777	11.4	8 644	11.1
40–44	3 988	10.9	5 329	12.7	9 317	11.9
45–49	3 302	9.0	4 323	10.3	7 625	9.7
50–54	2 605	7.1	2 986	7.1	5 591	7.2
55–59	1 698	4.6	1 849	4.4	3 547	4.5
60–64	1 015	2.8	1 302	3.1	2 317	3.0
65–69	696	1.9	984	2.3	1 680	2.1
65–70	538	1.5	813	1.9	1 351	1.7
75–79	382	1.0	555	1.3	937	1.2
80–84	230	0.6	289	0.7	519	0.7
85–89	181	0.5	208	0.5	389	0.5
90–94	79	0.2	146	0.3	225	0.3
95–	32	0.1	83	0.2	115	0.1
Total	36 262	100.0	41 961	100.0	78 223	100.0

Source: Hablicsek and Tóth 2001, 405.

Exits

Two clearly distinguishable groups of emigrants can be established: Hungarian citizens leaving the country and foreigners returning to the country of origin or moving to another country. Let us consider the data available immediately before 1990 and between 1990–1997.

Concerning emigration of Hungarian citizens, we have to rely on estimates, despite the change of law after the establishment of the conditions of free travel abroad in 1997, which requires Hungarian citizens to report to their local government office their residence abroad for periods longer than three months[3]. This system does not work. Therefore, with the exceptions of those who re-

[3] See the following acts and regulations on the entrance, the stay and immigration of foreign citizens: Act 1993/LXXXVI. Governmental Decree no.64/1994 (April 30.), Decree of the Ministry of Interior 9/1994. (April 30.).

nounce their Hungarian citizenship, we do not have exact information on emigrants beside this group. We can only suppose that there were at least as many emigrants annually after1990 as before 1990.

Between 1960 and 1990, the number of legal and illegal emigrants fluctuated between 1,405 and 6,555 persons annually. The arithmetic average of these two extreme values is close to 4,000. On this basis, we can suppose that after 1990 the annual increase in the number of Hungarian citizens residing abroad for an extended period along with those renouncing their Hungarian citizenship probably could not have been less than three-four thousand persons. This also means that between 1990–1997 at least 24,000 Hungarian citizens left the country.

Besides 'stating' the annual number of emigrant Hungarian citizens it is also necessary for us to determine the annual number of non-Hungarian citizens leaving the country. Without this estimate we cannot determine the balance of international migration.

Prior to the change of political and economic systems, that is before 1990, immigrants lived in Hungary as well. In 1989, for example, 1,441 Hungarian citizens left the country legally and illegally. In addition, 1,368 persons terminated their Hungarian citizenship. Thus, the number of Hungarian citizens leaving the country was 2,809. In the same year, 901 Hungarian citizens returned among those who had previously emigrated. Together with naturalisation and re-naturalisation, 1083 persons became Hungarian citizens. Finally, 23,493 immigrants were registered in 1989. Thus, the total number of migrants entering Hungary as a result of international migration was 25,477 (24,493+901+1,083), and of this the number of foreign citizens was 23,493. All this meant that the balance of international migration in 1989 was positive. Migration increased the population of the country by 22,668 (25,477–2,809) persons. This figure provides a starting point for our analysis.

As previously mentioned, 29,681 persons left the country from among the entrants in the examined eight years. This means that 21.2 percent of the total 'entrants', that is almost every fifth 'entrant', leaves Hungary for some reason. (We state this simply as a fact without further interpretation even though we are well aware that from the point of view of domestic migration policy, the nationality, age, and occupation of entrants deciding to leave as well as the duration of their stay are important.)

Table 4

Number of the exits by the status of entry and by gender (1990–1997)

Year	Exits of foreigners from the status group of				Together		Total
	immigrants		others				
	Male	Female	Male	Female	Male	Female	
1990	32	31	7 010	3 013	7 042	3 044	10 086
1991	85	68	3 006	1 701	3 091	1 769	4 860
1992	75	56	2 848	1 269	2 923	1 325	4 248
1993	90	66	1 601	867	1 691	933	2 624
1994	95	73	1 409	599	1 504	672	2 176
1995	25	36	1 228	471	1 253	507	1 760
1996	203	177	1 354	652	1 557	829	2 386
1997	84	87	1 001	372	1 085	459	1 544
1990–97	692	594	19 452	8 944	20 146	9 538	29 684

Source: Hablicsek and Tóth 2001, 407.

The number and percentage of entrants with an immigrant or other status who decide to leave the country are critical indicators for our analysis. While 1,285 of those belonging to the first group, that is only 1.6 percent of those with immigrant status, decided to leave the country, 28,396 or 47 percent of those belonging to the second group left. Men comprised the majority of those leaving from both groups. However, while men accounted for 53.8 percent of those leaving with immigrant status, they accounted for 68.5 percent of the emigrants from the 'other entrants' category (Hablicsek and Tóth 2002).

Table 5

Distribution of annual number of exits by the status of entry and by gender (1990–1997)

Year	Exits of foreigners from the status group of (percentage of total)						Total
	Immigrant		Other		Together		
	Male	Female	Male	Female	Male	Female	
1990	0.3	0.3	69.5	29.9	69.8	30.2	100
1991	1.8	1.4	61.9	35.0	63.6	36.4	100
1992	1.8	1.3	67.0	29.9	68.8	31.2	100
1993	3.4	2.5	61.0	33.0	64.4	35.6	100
1994	4.4	3.4	64.8	27.5	69.1	30.9	100
1995	1.4	2.0	69.7	26.7	71.2	28.8	100
1996	8.5	7.4	56.7	27.3	65.3	34.7	100
1997	5.4	5.6	64.8	24.1	70.3	29.7	100
1990–97	2.3	2.0	65.5	30.1	67.9	32.1	100

Source: Hablicsek and Tóth 2001, 408.

Among the entrant foreigners, 139,970 remained in Hungary during the eight years from 1990 to 1997. Of this group, 56.1 percent or 78,552 persons received their Hungarian citizenship. Thus, they 'exchanged' their immigrant status for citizen status (category 3).

* * *

The data presented to this point provides important clues for the interpretation of Hungary's 'pull' effect. Two factors from among the numerous components seem to be the most critical.

One of these – and presently we find this one the decisive one – is the peace treaties after each of the two world wars, as a result of which significant numbers of people of Hungarian origin live in the neighbouring countries as minorities. As previously noted, 56.8 percent of those who migrated to Hungary had immigrant status.

The other factor is the new political and economic system formed after 1990. This new situation made it possible for foreign employers and employees (and their family members) to appear in the domestic labour market.

COMPOSITION OF THE MIGRANT POPULATION – ASSUMPTIONS FOR PROJECTION

Migration not only affects the size of the entire population, but the composition as well. For instance, it is well-known that the special age structure of the migrants certainly has an effect on the age pyramid of the country's population, making it younger in most of the cases. Besides this, immigration and emigration composition can also differ from one another by sex and age and by other characteristics.

Other than the direct effect on the population, migration may have more distant – so called multiplicative – effects. For example, immigrants may have newborns and some of them may die, thus there would be more children born in the country and more people would die. Of course, the effects concerning emigration would be opposite. Therefore, the population growth and structure may be modified also indirectly by migration, even substantially in the longer run, depending on the difference between reproduction characteristics of the migrant and the native population. Thus, it is not simple to assess the impact of migration on the population. The full future effects are impossible to estimate without some kind of projections.

The data available on international migration requires a projection method as simple as possible in terms of population movement. It means that assumed net migration figures will be added to the population by sex and age. Thus, we

should have assumptions on the total volume of net migration, on the ratio of sexes and on the age distribution of the migrants. Usually, the volume of the net migration should be included to the main hypotheses of the projection and suppositions on sex and age distribution are variables in the background.

Composition by gender

On the basis of the migration data of Hungary, it seems, that we have to dismiss the hypothesis that men and women participate in migration more or less equally. As we have mentioned, between 1990–1997, the overall share of males among the total immigrants was 54.3%, thus significantly exceeding that of the females. The difference is even more obvious among those not arriving with the aim of immigration (category 2): the proportion of males among them was 62%. At the same time, there was a small female majority in the case of those with an immigrant status (52% female).

In the case of those leaving the country, the situation is slightly different. While the sex ratio among those leaving the country with an immigrant status category continues to be similar (53% men, 47% women), the sex ratio among those leaving the country looks very different: more than 2/3 of them are men. This ratio, however, does not play a significant role in the overall proportion of sexes because of the recognized and assumed low volume of emigration (3,000 persons annually).

It should be noted, however, that the proportion of sexes is much more balanced looking at net migration figures. The difference of male immigrants and those emigrated is 55,942 between 1990–1999, while this difference is 54,386 among females. It means that, under normal conditions, we can assume an equal share of men and women participating in international migration in Hungary. However, using very different assumptions on migration, it seems better to apply the observed male-female participation rates. Thus, 54 per cent of males and 46 per cent of females as constant proportions are set for immigration and 62 and 38 per cent for emigration, respectively.

Composition by age

Besides the distribution by sex, the other important effect of international migration is related to the age composition of migrants. The mobile population is usually young, sometimes very young.

If we examine the averages of age composition, migrants appear older in the case of Hungary. The average age of the migrants is rather high. The average age of entrants is 32–33 years, while that of the exiting population is 35–37 years. At the same time, in 1998 the average age of the Hungarian population was 36.3 in the case of men, and 40.2 for women (Table 6).

Table 6
Average age of migrants (1990–1997) and the national average (1998) (age in years)

Average between 1990–1997	Entrants		Exiting population	
	Men	Women	Men	Women
Immigrant status	32.4	33.0	33.9	32.6
Other administrative status	34.6	32.0	36.8	35.2
Total	33.5	32.7	36.7	35.0
Population of Hungary	36.3	40.2		

Source: Hablicsek and Tóth 2001, 410.

As far as the age difference between the entrants and the exiting population is concerned, the data, at least for the foreigners, are very familiar. From among the foreigners arriving with the aim of immigration, the low number of those exiting the country stay in Hungary only for a short time, as transit migrants. The situation is different with the foreigners who come with purpose other than immigration and then leave the country. It seems that they wait a couple of years before migrating further or returning to their country of origin. On the whole, we can find the average difference in age between those arriving and then leaving to be 3.2 years in the case of men and 2.3 years in that of women.

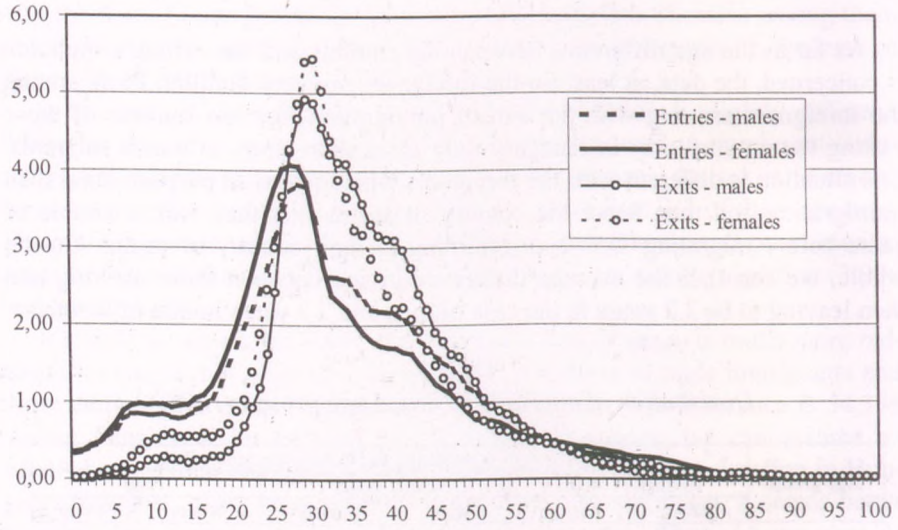
Table 7
Distribution of migrants by broad age groups (1998)

Age group	Proportion of the entering and exiting foreigners (%)					
	Immigrant status		Other status		Total	
	Male	Female	Male	Female	Male	Female
			Entries			
Total	100.0	100.0	100.0	100.0	100.0	100.0
0–19	22.7	20.6	8.3	13.1	15.6	17.9
20–39	48.3	50.5	60.6	63.8	54.4	55.2
40–64	24.2	22.6	29.4	20.5	26.8	21.9
65+	4.7	6.3	1.7	2.6	3.2	5.0
			Exits			
Total	100.0	100.0	100.0	100.0	100.0	100.0
0–19	17.2	21.5	2.9	6.5	3.4	7.4
20–39	51.7	50.7	63.8	66.4	63.3	65.5
40–64	28.9	23.6	31.8	24.1	31.7	24.1
65+	2.2	4.2	1.5	2.9	1.5	3.0

Source: Hablicsek and Tóth 2001, 411.

A more detailed picture can be seen from the distribution by larger age groups (Table 7). A vast majority, 55–65 percent, of the entrants belong to the age group of 20–39. The share of entrants in older working ages (between 40–64) is also rather high, 20–30 percent. However, the proportion of younger age groups and especially of elderly is low.

The distribution of the entering and the exiting population by single ages gives a more complete picture about the age characteristics of the migrants. Here, because of the small number of cases, it is necessary to make some corrections beforehand where 3-term moving averages have been used. The smoothed age distributions are shown by Figure 3.



Smoothed by 3-term moving average.
Source: *Hablicsek–Tóth* (2001) p. 412.

Figure 3
Age distribution of entering and exiting foreign citizens

We supposed the same age distribution for emigrating Hungarian citizens as for the foreign exiting population.

STARTING POINTS, ADDITIONAL ASSUMPTIONS FOR THE SCENARIOS

For measuring future consequences of international migration we can use two basic methods. First, we can elaborate assumptions on international migration beside ones on fertility and mortality, then prepare scenarios (projections) and analyse the results. Second, we can make inverse scenarios (projections). Assuming a special result of the population projection we can find the appropriate migration (fertility, mortality) hypotheses.

As a first method national population projections provide starting points for the analyses. These widely used, regularly updated projections contain basic assumptions for international migration. Variants with or without migration or variants with different migration assumptions can be compared for the analyses of migration effects. It is also possible to change the original hypotheses of the national projections and apply, for example, higher or lower migration volumes.

Second, in case of inverse projections, we have some questions concerning future population development. One such basic question for the developed countries can be the following: How the population size can be maintained, what assumptions lead to a more or less stable total population size. In the introduction of the study such kinds of questions have been asked. In these cases the result of the scenario i.e. the population stagnation is assumed, and the challenge is to determine the appropriate assumptions using a goal seeking process in general.

Basic migration hypotheses of the national population projection

The most recent projections of the Demographic Research Institute of the Hungarian Central Statistical Office applied three migration hypotheses (Hablicsek 1998). We consider these as basic assumptions. As far as the volume of migration is concerned, these can be calculated by the help of the table below:

Table 8
Basic migration scenarios and their components

Components of the scenario	Low	Medium	High
Total entrants	4000	12000	20000
Exiting foreigners	4000	3000	2000
Exiting Hungarian citizens	5000	4000	3000
Net migration	*-5000*	*5000*	*15000*

Source: Hablicsek Tóth 2001, 413.

The medium variant is based on the most recent observations. The significant immigration in the early years of the 1990s fell to 15 thousand persons by the middle of the decade, and fell below 10 thousand persons by 1997. According to the hypothesis, its future level will be around the average of 1996 and 1997. Therefore, the number of exiting foreigners – taking into account the estimated arrival-exit ratio of 4:1 – can be taken as being 3,000 persons annually. The number of exiting Hungarian citizens is annually 4,000 according to the medium hypothesis. Together this supports the medium (baseline) assumption of a moderate, 5,000 person migration surplus annually.

The low variant, on the other hand, supposes a migration deficit. According to this hypothesis, immigration further decreases and will be permanently at a level below that of the most recent years. At the same time, the decreasing attractiveness of Hungary from the point of view of migration also implies an increasing emigration of foreign and Hungarian citizens as well. Together, the result is an annual deficit of 5,000 persons.

Whereas in the high variant – resulting from among other things a successful EU accession – the number of immigrants increases and stays permanently at the level of the beginning of the 1990s. The number of exiting foreigners changes proportionately, while the number of Hungarian citizens exiting, as a result of economic prosperity in this variant, decreases.

In the National Population Projections the male and female participation in international migration is assumed to be equal. The future age distribution is the same shown in Figure 3.

In the projection, we suppose that fertility and mortality of the entering and the exiting population will correspond to that of the national average. This also means – according to our assumptions – international migration does not modify the average intensities of the phenomena, even in the case of large volumes. However, it can be projected that, as a result of the younger and more concentrated age distribution, there will be more children born and relatively less people dying in the population increased by the migrants. Thus, migration changes the national tendencies not only by its annual volume, but also through certain multiplicative effects.

Migration hypotheses have to be added to corresponding fertility and mortality assumptions to create projection variants. Here the main assumption of the national projections is that economic prosperity is accompanied by demographic consolidation. Thus higher migration volumes are related to higher number of children, whereas low fertility and migration deficit represent another scenario connecting more or less with deteriorating future perspectives. The characteristics of each variant are presented in the following table:

Table 9
Variants of national population projections

	Young	Baseline	Old
Fertility	High	Medium	Low
Life expectancy	Low	Medium	High
Net international migration	High	Medium	Low

Source: Hablicsek and Tóth 2001, 414.

For a better understanding of the different variants it is important to clarify the fertility and mortality assumptions of the National Population Projections. It is well-known that the first decade of the economic transition of Hungary – the 1990s – can be characterized by a falling total fertility rate and a stagnation of mortality. The levels at the end of the century are 1.3 by TFR and 66.8 and 75.3 years by male and female life expectancy, respectively. These levels are assumed to change more or less gradually up to their final values in 2050. Total fertility rate is assumed to be 1.3, 1.6 and 1.9, while male life expectancy at birth is set to 67, 75 and 83 years, and the female one to 77, 82 and 87 years.

Special migration scenarios

Naturally, beside the assumed migration hypotheses, other volumes of net migration are also possible. Because of Hungary's specific history, there is a significant population in the surrounding countries whose mother tongue and ethnicity is Hungarian. According to this, for example, in case of an economic success story, or simply a policy supporting immigration, the migration inflow can be significantly higher than in the national projections based on data of the 1990s. It is not excluded that net migration can also counterbalance the natural decrease of the population.

In the following, we shall outline three such possibilities in the form of scenarios. In a fourth case, we look for a more balanced scenario that considers simultaneous changes in fertility, mortality and international migration. The goal of all these scenarios is to analyze the maintenance of the population size in the long run. The following variants will be examined:

Immigration variant
Settlement variant
Migration target variant
Sustainable variant

Immigration variant

Here we consider within what period of time immigration based on current trends can slow or even reverse the decline and/or ageing of the population in Hungary. For this purpose we combined the average migration characteristics observed in the period between 1990–1997 with the baseline variant of the national population projections and extended its time period to 2100.

The main idea behind this variant is the assumption of a continuous and significant immigration surplus. It supposes a turn in demographic thinking and history in Hungary characterised mainly by emigration in the 20th century. Only the last decade of the century showed an immigration surplus in the first years due to the impact of the Balkan war. Between 1990 and 1997 the migration figures can be summarized as follows. The average annual number of entrants was 17,500 persons, while 3,700 foreign citizens left the country. Adding to this the Hungarian emigration calculated at a level of 3,000 persons, the migration gain is estimated to 10,800 persons annually. This level is supposed to remain till 2050.

The immigration scenario combines this migration assumption with the medium fertility and mortality hypotheses (average number of children: 1.6, average life expectancy at birth: 75 and 82 years). The calculations should be continued for the period after 2050 as well. With regard to this scenario it is assumed that migration surpluses of the 1990s are insufficient for a sustainable population growth.

Settlement variant

In this scenario, we combine the baseline population projection with a one-time very significant immigration, i.e. with a large scale settlement movement. The question is what effects such a settlement would have on the overall population. Such a scenario might occur, for example, if Hungary becomes a member of the European Union within a couple of years, whereas the inhabitants of the surrounding countries expect a more distant accession. In this case, Hungary might experience significant migration pressure.

Such jumps in population development seem to be quite unrealistic. However, statistics often produce such dramatic changes. For example, population size and structure are estimated in Hungary from the latest census and vital statistics. Therefore, there is a smaller or greater difference between the estimated and surveyed figures at the next census. In 2001, the population size estimated was 10 million while the preliminary census figure is 10.2 million.

In this scenario, we examine how many foreign citizens should be settled down in Hungary in the year 2000 in order to reverse the current declining

trend. It is obvious that, to pose the question sensibly, some complementary assumptions are necessary. We suppose that the fertility and the mortality of the population entering for a one-time settlement do not differ from those of the Hungarians. Furthermore, we are looking for a one-time migration volume that would result in a total national population of just 10 million in 2050.

Migration target variant

Here we are looking for what constant annual volume of net migration would be necessary for maintaining a population figure of 10 million in 2050. We have to stress the word 'constant', because we do not want to counterbalance the natural decrease annually. We are looking for a level combined with the baseline variant of the national population projections, which, in its total effect, would maintain the population size over the next 50 years.

Thus, this variant would show a kind of a migration limit value which in a certain period of time – in the next half century – would balance the population decline and the increasing ageing of the population. The assumption behind this variant is that the necessary migration surplus is too high in the light of Hungarian circumstances (economic possibilities, social attitudes, etc.). Therefore immigration itself is insufficient for a sustainable population growth.

Sustainable variant

As a consensus among Hungarian demographers, a more promising policy approach requires simultaneous change in all three basic demographic components: fertility, mortality and international migration. Recent trends, like the significant population decline, reinforce the validity of this position. One of the first steps to elaborate a more complex population policy is to determine the extent of the changes in demographic trends necessary for maintaining sustainable population development. Here, the question is, what rise in fertility, additional decrease of mortality, and increase in migration surplus are needed to stop the decline of the population.

Obviously, for a better posed question we should have additional assumptions on the participation or weight of the factors. The simplest weighting of the components is that one phenomenon, e.g. fertility brings the whole necessary effect and the other two components influence the population growth normally (i.e. as in the baseline scenario). In case of migration, it is the migration target variant defined above. Two additional scenarios can be prepared on this basis: a fertility and a mortality target variant, in what fertility (mortality) changes in such a way that the population size is kept on 10 million by 2050.

We can create also more sophisticated variants, too. Among them, the so called sustainable variant will be presented. Here each phenomenon has approximately the same magnitude of effect. Levels of fertility, mortality, net migration shall be calculated to achieve a third of the desired effect, to stop the decrease of the population at the recent level until the middle of the century.

RESULTS OF THE PROJECTIONS AND SCENARIOS

National population projection

The size of the population, according to the baseline variant, is 10 million 46 thousand persons at the beginning of the year 2000. By 2010, the number is projected to be already substantially below 10 million (9.66 million), and by 2050 may decrease to 8 million. We have to stress that this number contains a not negligible migration surplus, calculated for 1997–2050, which – together with the multiplicative effect (because of the age composition of the immigrants, there is also a surplus in births) – totals 300 thousand persons. Contrasted with this, the size of the population by 2050 is 7.4 million in the old variant and 8.8 million in the young variant.

Thus, for this period of time, the three projection variants define a narrow interval of 7.4–8.8 million persons for the population size, with the difference between the baseline and the extreme variants being 0.6–0.7 million persons, which is hardly more than a statistical margin of error.

The scenarios show rather interesting relations between the fertility and mortality levels and the sizes of the population. We have already suggested that the effect of mortality and fertility on the population may be in balance. To a certain extent the increase of the life expectancy may balance the decrease in the number of children in the long term, by increasing the number of people having a longer life span. Obviously, this has a price: additional (serious) ageing of the population.

Limit of the population size

To estimate the limits of population size, we also prepared the low and high scenarios in which the highest number of children is combined with the highest life expectancy and the largest immigration surplus. And the other way around: for the minimum development of the population we supposed the lowest number of children, life expectancy and immigration surplus.

According to this the lowest number of population appears to be 6.0 million by 2050, while the maximum population of Hungary may be 10.4 million per-

sons by the middle of this century on the basis of conditions which seem almost impossible.

Demographic trends

The development of the number of births will be characterized by low level and fluctuations. In the baseline variant, the annual number of births will be around 90–95 thousand newborns until 2015, and then will gradually decrease to 70 thousand by 2050. This level, together with the by then actual life expectancies, projects a population of 5–6 million people by 2100, thus showing a further significant decrease of the population. The halting of the decrease of the population in the medium variant is not ensured even in the very long run.

Table 10
Main results of the national population projections
Baseline variant

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	9657,8	9342,4	8977,1	8508,0	8040,9
Number of live births	92,3	96,5	93,0	79,8	76,3	72,8
Number of deaths	138,8	135,2	129,0	128,5	129,3	124,7
Net migration	5,0	5,0	5,0	5,0	5,0	5,0
Natural increase	-46,5	-38,7	-36,0	-48,7	-53,0	-51,9
Population growth	-41,5	-33,7	-31,0	-43,7	-48,0	-46,9
Total fertility rate	1.3	1.4	1.6	1.6	1.6	1.6
Life expectancy at birth – male	66.8	68.4	70.5	72.4	73.9	75.0
Life expectancy at birth – female	75.3	76.8	78.4	79.8	81.0	81.8
Size of the age group 0–19	2370,1	2041,3	1894,7	1824,1	1646,3	1534,1
Size of the age group 20–64 year olds	6205,8	6108,7	5717,4	5348,3	4949,1	4411,0
Size of the age group 65–x year olds	1470,0	1507,8	1730,3	1804,6	1912,6	2095,9
Percentage of the age group 0–19	23.6	21.1	20.3	20.3	19.4	19.1
Percentage of the age group 20–64	61.8	63.3	61.2	59.6	58.2	54.9
Percentage of the age group 65–x	14.6	15.6	18.5	20.1	22.5	26.1

The number of births in the old variant falls dramatically in the next half-century. The annual number of births decreases to 74 thousand by 2020, to 51 thousand by 2040, and to 44 thousand by 2050. All this indicates a population less and less able to reproduce itself. The 44 thousand births projected for 2050 is less than the number of newborn girls in 1997.

The young variant shows a completely different picture. The number of births in this variant varies around 105 thousand persons, thus the reproduction of the population – after a longer transition period – is ensured.

The annual number of deaths stays at the 1990s level of 145–150 thousand persons in the young variant (very modest increase in the life expectancy). In the baseline projection, the number of deaths decreases gradually to the level of 130 thousand. In the old variant, this figure manifests approximately 110 thousand after 2015, based on the assumed steady rise in life expectancy.

It is well-known, that the natural increase of the population has switched to a natural decrease in Hungary since the beginning of the 1980s, i.e. number of deaths exceeded the number of births in the last two decades. The total natural decrease between 1980 and 2000 reached 470 thousand, 4.5 per cent of the population.

In spite of the fact that we assumed a significant migration surplus, and calculated with improving mortality, low fertility continues to produce a population decline all the way to 2050. The average annual rate of decrease during this period is approximately 40–45 thousand persons in the baseline variant, however, with fluctuations. The rate of decline decreases after a temporary period in the young variant, while increases according to the old scenario. By 2050, the annual population decrease reaches the level of 20 thousand persons in the young variant and 70 thousand (!) persons in the old one.

Development of the age composition

National population projections emphasize processes affect the population figures and ratios, but the initial population structure and socio-cultural interpretation do as well. When the starting population is old, we can expect a low number of births even in case of relatively high fertility and a high number of deaths also under very good health conditions. Thus, we have to face a decline because the initial population is old. Furthermore, under modern demographic conditions the decline of an old population even accelerates the ageing process.

The solution seems to be obvious: more births and young immigrants are needed. However, the demographic transition shows that special attention must be paid to mortality, too. One of the essential features of the transformation of mortality in the 20th century is the increase of the number of survivors, the survival of a larger and larger proportion of the newborn babies till a higher and higher age. Thus the age pyramid 'stretches' upward, and if the level of fertility does not become too low, this process may accommodate even an average number of children substantially below the replacement level.

What can we do, however, if the population becomes too old, i.e. when economic and social consequences of ageing appear to be too serious? One

particular solution is the reinterpretation of who is old. Redefinition of the old and the working age groups (and creating the appropriate conditions) may help in sustaining the country's development.

In other words, we should understand that ageing is not a completely unfavourable process. On the contrary, it is part of the demographic transition, the basic process of the population development in the last two centuries. It is important to emphasize, since otherwise the future looks dark: the ageing process will not only continue, but enter a new phase. All these are illustrated with the development of the age pyramid of the population (Figure 4).

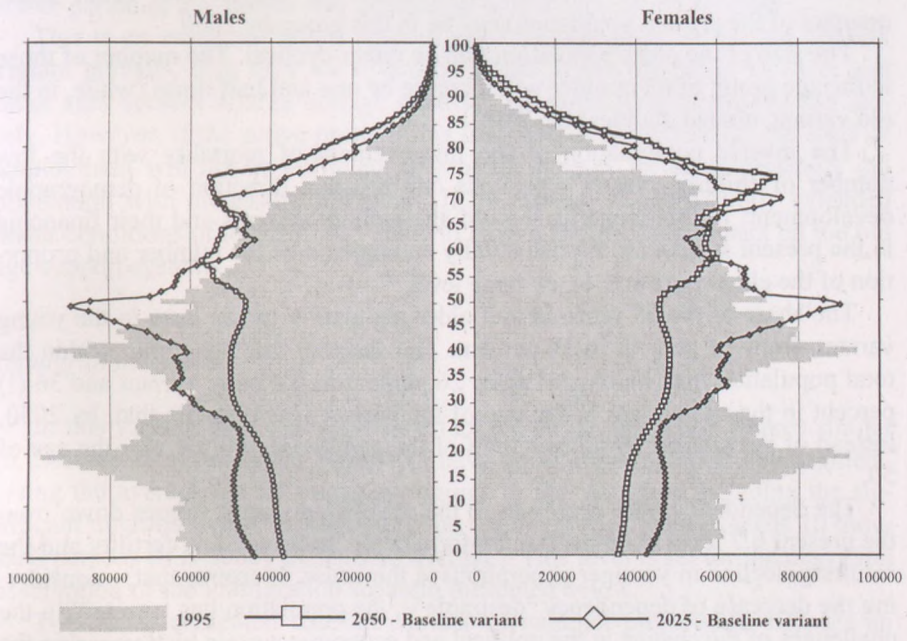


Figure 4
Age pyramid of the population, 1995, 2025, 2050
Baseline variant

The number of persons between the age of 0–19 will be definitely less than the present level. In the old variant (with the lowest fertility), the number of persons in this age group decreases by half in 50 years. The medium/base variant also shows a substantial decrease, and the number of persons in the age group does not reach the 1995 level in 2050 even in the young variant.

The relative proportion of the age group 0–19 in the population shows a similar picture to that of their absolute number. The share of young people decreases rapidly from their present 26 percent, and will be approximately 21 percent around 2010. In the medium/base variant it further decreases from this level to 19 percent. In the old variant, however, this share decreases to below 14 percent by 2050, while in the young variant it rebounds and approaches 24 percent.

The working age population (those between 20–64) decreases significantly after 2010, as the large cohorts born in the 1950s leave the workforce. Following this, another decrease may be expected when the generations born in the 1970s retire. Using the medium/base variant we project that about three-quarters of the present population may be in this group by 2050.

The size of the older population will be rather cyclical. The number of those in the age group of 65 or older will increase by one and half times (while, in the old variant, almost doubles) by 2050.

The inverse combination of the improvement of mortality with the low number of children clearly represents one possible direction of demographic development. In this scenario, the old age welfare systems and their financing in the present system are fundamentally endangered as the number and proportion of the elderly grow to an extreme level.

The share of the 65 year-old and older population grows even in the young variant, from 14 percent to 19 percent. The share of this age group within the total population may be much larger, 26 percent in the basic variant and 36 (!) percent in the old variant at the end of the period. It is possible that, by 2050, instead of the present 30 percent, half of the population will be over the age of 50.

The dependency ratio decreases in the next two decades. It goes down from the present 0.7 level to below 0.6. Unfortunately, however, low fertility and the resulting decline in younger generations is the cause. It seems, that – considering the decrease of dependency 'desirable'–, the population has 'reacted' to the challenges of the change in the political and economic system by decreasing the number of children.

This picture, however, changes as we approach 2050, and shows an opposite tendency. The rate of dependency increases in all the variants, especially in the old variant. In this period, growth of the older population exceeds the counter-veiling effect of the low number of children. As a result of this, the decrease of the number of children proves to be an ineffective strategy for reducing the dependency ratio.

This highlights two significant characteristics of demographic trends. First, after the first and the second demographic transition, dependency between the generations should become stronger. Therefore, it may not be so unrealistic as

it may appear today for the life expectancy and the number of children to increase at the same time.

Second, it is obvious that increasing life expectancies creates a new situation in the division of the life course into phases. Using the mortality hypothesis of the medium/base variant along with the present ages of retirement, we calculated the average period that the pension system and the old age provision systems in general should provide for. By the middle of the next century, these systems must provide at least 22 years of life annuity and services for the average male pensioner and 37 years for the average female pensioner. From today's perspective, this is clearly not sustainable. As we see, the length of the active period of life cannot stay unchanged as life expectancy increase.

This is an important lesson learned from the scenarios. If the low fertility variant prevails, then only the extension of the active life phase to older and older ages secures a large enough working age population to support the elderly. However, if the active phase of the life cycle is not extended, the level of employment will not be sufficient to provide support for an increasingly old population with increasing life spans. If live spans are increasingly extended under conditions of low fertility, this will have a catastrophic impact on the old age support systems.

Immigration variant

In this variant, we examine what effect higher net migration figures similar to those experienced in the 1990s will have on future population development. Using the average annual migration figures of the 90s (thus including the significant migration wave of 1990–91), the net migration figure exceeds 10 thousand persons (it is 10800 persons on average). This level is set for the migration assumption of the immigration scenario presented below.

The above presented baseline variant of national projections includes an annual surplus of 5,000 entrants into Hungary. Thus, immigration variant, applying the medium fertility and mortality assumptions, examines to what extent a higher immigration volume will change the size and the structure of the population till the middle of the next century.

Table 11 summarises the results of the scenario. The size of the population is 8.4 million persons by the middle of the next century, which is by 300–400 thousand higher than that of the baseline variant (8.0 million). This means, however, that immigration volume observed in the 1990s is not sufficient to stabilise the population size in the future.

Table 11
Main results of population scenarios
*Immigration variant**

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	9718,6	9468,8	9170,4	8767,5	8364,4
Number of live births	92,3	97,5	94,7	82,0	79,1	76,1
Number of deaths	138,8	135,6	129,8	129,9	131,3	127,7
Net migration	10,8	10,8	10,8	10,8	10,8	10,8
Natural increase	-46,5	-38,1	-35,1	-47,9	-52,3	-51,6
Population growth	-35,7	-27,3	-24,3	-37,1	-41,5	-40,8
Total fertility rate	1.3	1.4	1.6	1.6	1.6	1.6
Life expectancy at birth – male	66.8	68.4	70.5	72.4	73.9	75.0
Life expectancy at birth – female	75.3	76.8	78.4	79.8	81.0	81.8
Size of the age group 0–19 year olds	2370,1	2052,4	1920,6	1864,7	1698,0	1597,0
Size of the age group 20–64 year olds	6205,8	6155,7	5810,8	5485,3	5125,4	4617,1
Size of the age group 65–x year olds	1470,0	1510,5	1737,4	1820,4	1944,2	2150,3
Percentage of the age group 0–19	23.6	21.1	20.3	20.3	19.4	19.1
Percentage of the age group 20–64	61.8	63.3	61.4	59.8	58.5	55.2
Percentage of the age group 65–x	14.6	15.5	18.3	19.9	22.2	25.7

* Net migration equals the average volume observed between 1990–1997.

Naturally, the question arises: if not in the next 50 years, then when will this annual 10 thousand migration surplus be sufficient to maintain the population size? According to the calculations, certainly not before 2100. Namely, the projection with unchanged conditions (using the same characteristics as for 2050) shows a slowly changing demographic situation until 2100. The size of the population decreases to 6 million, and the annual decreases are not lower than 30 thousand persons. Another 50–80 years would have to pass until the size of the population would decrease to a level that the present 11 thousand person migration surplus can influence the annual rate of growth substantially.

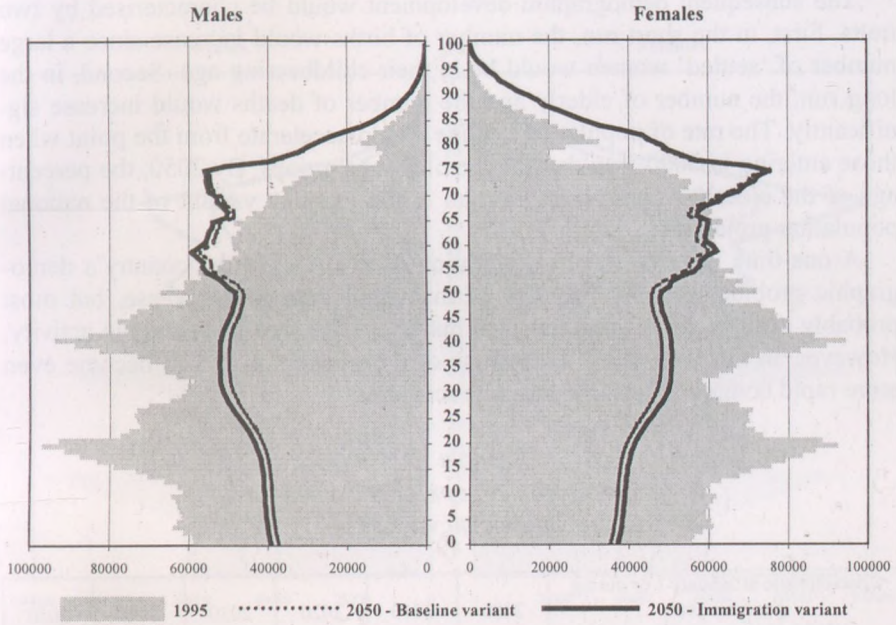


Figure 5
Age pyramid of the population in 1995 and 2050
Immigration variant

Settlement variant

In this variant, while we consider the migration pattern experienced in the 1990s as valid after 2000, we assume that in 2000 there is a one-time large inflow. We know that this is a completely unrealistic assumption: it falls into the category of 'almost impossible' events.

Applying the goal seeking method, we can determine this one-time volume necessary to keep the population size above the 'magic' level of ten million persons until 2050. This volume is estimated at 1.8 million persons. This amount of immigrants should have arrived in 2000 for the size of the population not to decrease below 10 million by 2050 under fertility, mortality and migration hypotheses of the immigration variant.

This 'settlement' would increase the size of the population immediately to 11.8 million by 2001. The working age population would rise by 1.4 million because of the special age composition of the immigrants.

The subsequent demographic development would be characterised by two traits. First, in the short run, the number of births would increase since a large number of 'settled' women would be in their childbearing age. Second, in the long run, the number of elderly and the number of deaths would increase significantly. The rate of population decline would accelerate from the point when those entering in 2000 would reach the older age groups. By 2050, the percentage of the elderly would be larger than in the baseline variant of the national population projections.

A one-time, large volume immigration does not solve the country's demographic problems either. The size of the population may increase, but most probably at the cost of great tensions mainly in the area of economic activity. However, in the long run, the decrease of the population would become even more rapid compared with the baseline scenario.

Table 12
Main results of population scenarios
*Settlement variant**

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	11646,2	11433,7	11074,4	10591,6	10021,5
Number of live births	92,3	121,2	108,3	96,9	95,6	88,0
Number of deaths	138,8	149,0	146,8	151,6	159,5	162,1
Net migration	1793,3	10,8	10,8	10,8	10,8	10,8
Natural increase	-46,5	-27,8	-38,5	-54,7	-63,9	-74,0
Population growth	1746,8	-17,0	-27,7	-43,9	-53,1	-63,2
Total fertility rate	1.3	1.4	1.6	1.6	1.6	1.6
Life expectancy at birth – male	66.8	68.4	70.5	72.4	73.9	75.0
Life expectancy at birth – female	75.3	76.8	78.4	79.8	81.0	81.8
Size of the age group 0–19 year olds	2370,1	2433,1	2362,8	2177,8	1990,8	1904,7
Size of the age group 20–64 year olds	6205,8	7605,3	7161,5	6757,0	6072,5	5361,1
Size of the age group 65–x year olds	1470,0	1607,8	1909,4	2139,6	2528,3	2755,7
Percentage of the age group 0–19	23.6	20.9	20.7	19.7	18.8	19.0
Percentage of the age group 20–64	61.8	65.3	62.6	61.0	57.3	53.5
Percentage of the age group 65–x	14.6	13.8	16.7	19.3	23.9	27.5

* One-time, large volume immigration surplus in 2000 and annual migration volumes in line with the average level of 1990–1997 are sufficient to maintain the population size of 10 million till 2050.

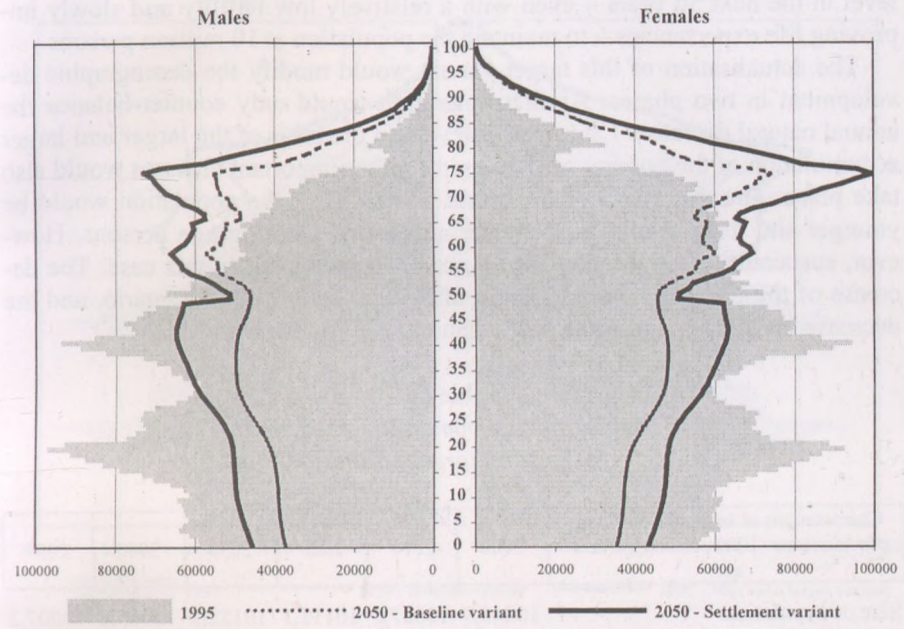


Figure 6
Age pyramid of population in 1995 and 2050
Settlement variant

Migration target variant

Alternative migration policies exist to the one-time settlement policy. If a country 'organizes itself' to ensure the necessary annual migration surpluses, 'erosion' of the country's population may be stopped in the long run. The necessary migration volumes, naturally, depend on the demographic condition of the given country. Where the population is younger and there are still reproduction reserves, then even a minor migration surplus is sufficient to balance the natural decrease. In Hungary, however, this is not the case. In the course of its demographic development in the 20th century, the reserves for population growth have disappeared almost completely. Thus, only a relatively high annual migration surplus could maintain the current level of the population. According to this scenario, this annual net migration volume is 40 thousand persons. If we consider the volume of emigration as well, this may mean 47 thousand immigrants and 7 thousand emigrants annually. Thus, the international

migration affecting Hungary would have to rise to and stay permanently at this level in the next 50 years – even with a relatively low fertility and slowly improving life expectancies – to maintain the population at 10 million persons.

The actualisation of this target variant would modify the demographic development in two phases. At first, migration would only counter-balance the annual natural decrease. Later on, however, on the basis of the larger and larger accumulation of the number of immigrants, other important changes would also take place. The age composition would be modified, the population would be younger and there would be a greater number of working-age persons. However, sustainable reproduction would not be formed even in this case. The decrease of the population would begin after 2050 even in this scenario, and the decrease by 2100 would equal more than one million persons.

Table 13
Main results of population scenarios
*Migration target variant**

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	10027,3	10111,1	10152,7	10085,8	10007,2
Number of live births	92,3	102,3	103,3	93,0	93,1	93,0
Number of deaths	138,8	137,5	133,9	136,6	141,7	143,0
Net migration	40,3	40,3	40,3	40,3	40,3	40,3
Natural increase	-46,5	-35,2	-30,6	-43,6	-48,5	-50,0
Population growth	-6,2	5,2	9,7	-3,3	-8,2	-9,7
Total fertility rate	1.3	1.4	1.6	1.6	1.6	1.6
Life expectancy at birth – male	66.8	68.4	70.5	72.4	73.9	75.0
Life expectancy at birth – female	75.3	76.8	78.4	79.8	81.0	81.8
Size of the age group 0–19 year olds	2370,1	2108,4	2051,6	2070,0	1959,8	1915,9
Size of the age group 20–64 year olds	6205,8	6394,6	6285,5	6181,5	6020,9	5663,8
Size of the age group 65–x year olds	1470,0	1524,3	1774,0	1901,1	2105,1	2427,6
Percentage of the age group 0–19	23.6	21.0	20.3	20.4	19.4	19.1
Percentage of the age group 20–64	61.8	63.8	62.2	60.9	59.7	56.6
Percentage of the age group 65–x	14.6	15.2	17.5	18.7	20.9	24.3

* The constant annual migration surplus is sufficient to maintain the population size of 10 million until 2050.

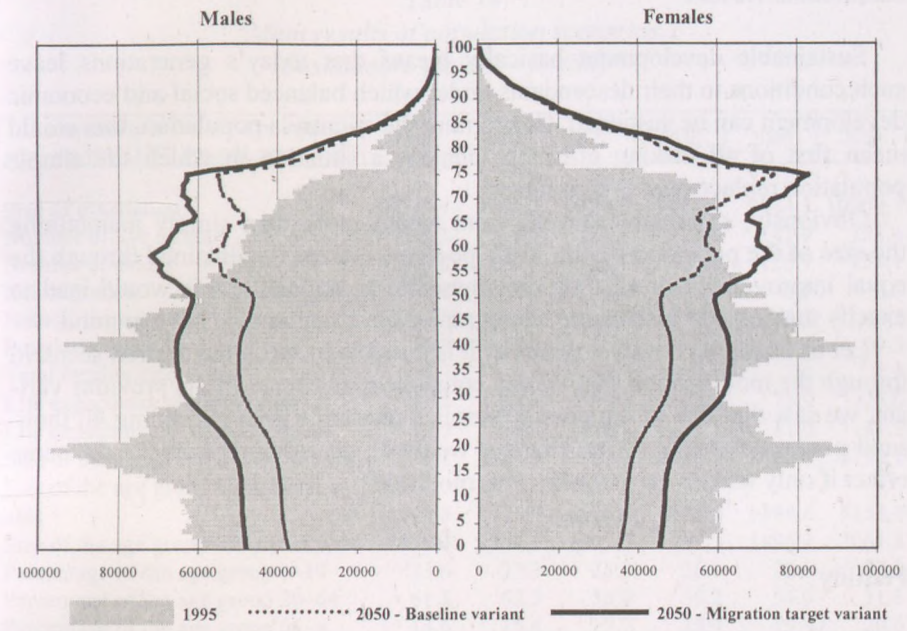


Figure 7
Age pyramid of population in 1995 and 2050
Migration target variant

Thus, increased migration with at least an annual net migration figure of 40 thousand persons, might stabilize the population for an extended period of time. This might change one of the negative tendencies in Hungary's 20th century demographic development: the emigrant character of the country. This kind of a permanent immigration volume would have a positive impact on the country's demographic development in the long run, but still would not eliminate the causes of the population decline. And though this 40 thousand-person volume most probably exceeds the country's current capacities, the demographic facts show that Hungary should make efforts to raise immigration to substantially higher levels. This requires formulating adequate migration policies into the country's long-term strategy.

Sustainable variant

Sustainable development basically means that today's generations leave such conditions to their descendants under which balanced social and economic development can be sustained. Concerning the country's population, this would mean first of all making efforts to achieve a situation in which the simple population replacement is guaranteed.

Obviously, sustainable development means more than simply maintaining the size of the population. Still, if the population size is maintained through the equal improvement of all three demographic components, this would lead to exactly that kind of sustainable demographic development we have in mind.

Let us examine, however, whether it is possible to reach the desired scenario through the modification of only one component at a time. In the previous variant, we saw that one of the possibilities is a migration gain exceeding 40 thousand persons annually. What changes would be necessary to achieve the same effect if only fertility or mortality was modified?

Fertility

Similar to the migration target variant, we defined a fertility target scenario. The goal of this scenario is to find such a future trend of fertility which, together with the medium assumption on mortality and zero migration, would result in a population size more or less constant around 10 million. Of course, there is an infinite number of such paths. We can find, however, a trend in line with the baseline projection. The results of the scenario are presented in Table 14 and Figure 8.

As far as the number of children is concerned, replacement of the population would imply having simple reproduction in the 2010s, and, by the middle of the next century, reaching a high fertility rate of 2.5 children.

Seeing the present tendencies, we do not have to demonstrate the unlikely character of this assumption. Thus, this scenario proves that it is unlikely for Hungary to stop the anticipated population decline exclusively through increased fertility.

Table 14
Main results of population scenarios
*Sustainable variant – fertility**

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	9751,2	9728,9	9751,2	9784,7	10009,3
Number of live births	92,3	121,5	135,1	127,0	141,9	153,4
Number of deaths	138,8	135,1	128,7	128,0	128,7	124,1
Net migration	0,0	0,0	0,0	0,0	0,0	0,0
Natural increase	-46,5	-13,6	6,4	-1,0	13,2	29,3
Population growth	-46,5	-13,6	6,4	-1,0	13,2	29,3
Total fertility rate	1.3	1.8	2.3	2.5	2.5	2.5
Life expectancy at birth – male	66.8	68.4	70.5	72.4	73.9	75.0
Life expectancy at birth – female	75.3	76.8	78.4	79.8	81.0	81.8
Size of the age group 0–19 year olds	2370,1	2171,2	2359,9	2577,9	2605,0	2794,1
Size of the age group 20–64 year olds	6205,8	6075,9	5646,6	5381,0	5284,6	5153,4
Size of the age group 65–x year olds	1470,0	1504,1	1722,5	1792,3	1895,2	2061,8
Percentage of the age group 0–19	23.6	22.3	24.3	26.4	26.6	27.9
Percentage of the age group 20–64	61.8	62.3	58.0	55.2	54.0	51.5
Percentage of the age group 65–x	14.6	15.4	17.7	18.4	19.4	20.6

* The increase of the number of children is sufficient in itself to maintain the population size of 10 million until 2050.

However, if such a scenario would develop in the future, not only the population decline would be stopped in the long run, but very remarkable changes would take place in the age structure. The population would rejuvenate in such a way that the share of youth and the elderly would increase significantly and only the proportion of the middle age group would decrease. The share of elderly would grow to 20.6 per cent, while the proportion of those aged below 20 to 27.9 per cent. The average age of the population would still increase from 38.7 years (2000) to 39.4 years (2050).

Obviously, the changes would lead to a high dependency ratio. The rate of dependency (the quotient of those below and above the working ages to those aged 20–64) is 0,68 in 2000 and would be 0,82 in 2050.

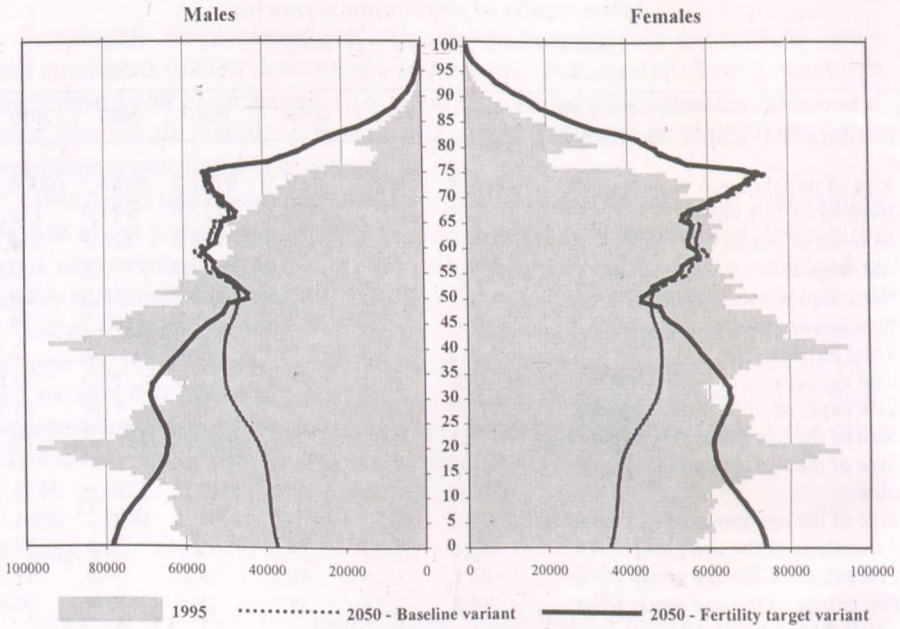


Figure 8
Age pyramid of population in 1995 and 2050
Fertility target variant

Mortality

It is widely known that the improvement of mortality no longer leads to reproduction reserves under modern conditions. We should not underestimate its effect, however, since different cohorts have significantly different life expectancies. Even the experiences of countries pioneering the second demographic transition show that mortality may or should have a role in maintaining the size of the population.

If, however, mortality would be the sole factor in maintaining the population, then an extreme increase in life expectancy would be necessary. According to the calculations, in this case, average life expectancy at birth would have to approach 100 years.

Such a variant, naturally, would imply an extreme ageing of the population. The number of those over 65 would surpass 40 percent, as practically nobody would die before the age of 50. The age pyramid would 'stretch' upward, there

would be four-five generations living in one population. The average age of the population would grow by 15–16 years to above 54 years.

Very dramatic changes would take place in the dependency ratio, too. It would be 1,27 in 2050. Due such an increase the burden of the elderly would be hard to manage. This scenario especially would imply a necessary redefinition of the broad age groups. If we define those aged 0–19 as young, we should define those in the 20–77 age group as middle-aged maintaining the ratio of the middle aged on the level in 2000. If, however, the upper limit of the youth increases to 29 (as a consequence of longer education, for example), the middle age group should be defined at 30–83 years under the conditions mentioned.

Table 15
Main results of population scenarios
*Sustainable variant – mortality**

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	9739,2	9724,6	9821,8	9928,0	10003,5
Number of live births	92,3	95,5	91,0	77,2	73,2	69,1
Number of deaths	138,8	107,3	82,7	67,0	62,6	68,1
Net migration	0,0	0,0	0,0	0,0	0,0	0,0
Natural increase	-46,5	-11,9	8,3	10,2	10,6	1,0
Population growth	-46,5	-11,9	8,3	10,2	10,6	1,0
Total fertility rate	1.3	1.4	1.6	1.6	1.6	1.6
Life expectancy at birth – male	66.8	72.5	78.7	84.7	90.3	95.5
Life expectancy at birth – female	75.3	80.9	86.6	92.1	97.4	102.3
Size of the age group 0–19 year olds	2370,1	2027,3	1868,0	1782,4	1590,7	1465,7
Size of the age group 20–64 year olds	6205,8	6128,8	5789,6	5448,1	5026,3	4405,9
Size of the age group 65–x year olds	1470,0	1583,1	2067,1	2591,2	3310,9	4131,9
Percentage of the age group 0–19	23.6	20.8	19.2	18.1	16.0	14.7
Percentage of the age group 20–64	61.8	62.9	59.5	55.5	50.6	44.0
Percentage of the age group 65–x	14.6	16.3	21.3	26.4	33.3	41.3

* The increase of the life expectancy is sufficient in itself to maintain the population size of 10 million until 2050.

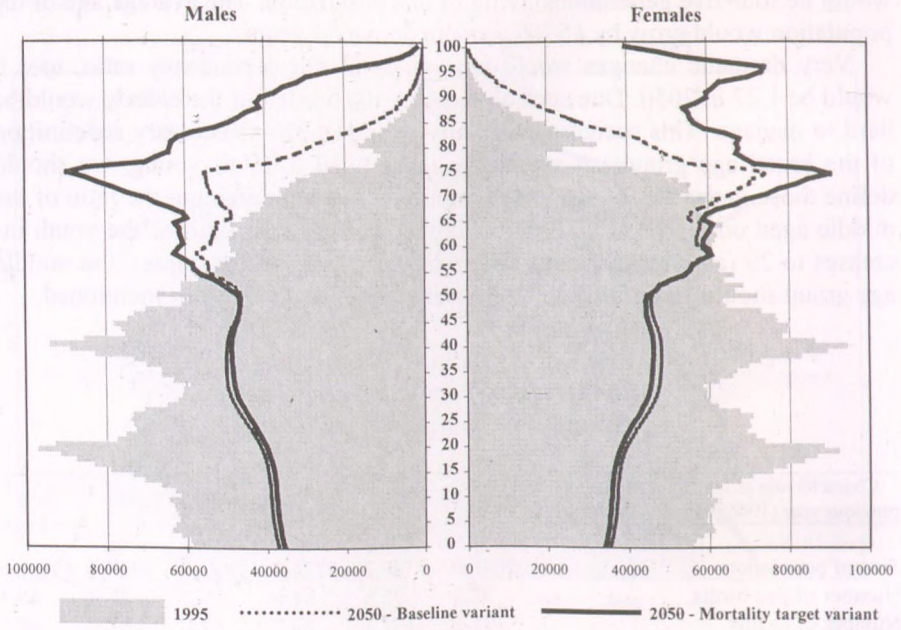


Figure 9
Age pyramid of population in 1995 and 2050
Mortality target variant

Main variant

Finally, let us present the variant which divides the 'duties' of stopping the decrease of the population equally among the three demographic components. This scenario contains such changes whereby fertility, mortality and migration have more or less the same volume effect in maintaining the size of the population. This we call the sustainable variant.

In this variant, the number of children increases continuously, slowly but not necessarily approaching the level of simple reproduction. The final number of children settles at around a level of 1.9 from the 2030s. Life expectancy also increases gradually, to over 80 years in the case of both sexes, and to almost 90 years in the case of women. Neither does the immigration surplus seem so impossible to reach as in the single other variants: the annual gain is 13–14 thousand persons, which involves a still considerable, 20 thousand-person immigration volume.

This variant shows to be balanced in all respects. The number of births may be permanently over 100 thousand persons, and the natural decrease, if it occurs at all, is not disturbingly significant either. The size of the population would be more or less maintained after 2050 as well. Under these conditions, the Hungarian population would be approximately 9.7 million persons even by 2100.

Table 16
Main results of population scenarios
*Sustainable variant – all three components together**

Characteristic at January 1 or during previous year (1000 persons, percentage)	2000	2010	2020	2030	2040	2050
Size of population	10045,9	9841,8	9867,9	9936,2	9960,1	10029,3
Number of live births	92,3	106,9	111,2	100,5	103,3	105,3
Number of deaths	138,8	126,6	115,1	111,0	112,9	108,9
Net migration	13,5	13,5	13,5	13,5	13,5	13,5
Natural increase	-46,5	-19,6	-3,8	-10,6	-9,6	-3,6
Population growth	-33,0	-6,1	9,7	2,9	3,9	9,9
Total fertility rate	1.3	1.5	1.8	1.9	1.9	1.9
Life expectancy at birth – men	66.8	69.7	73.2	76.5	79.3	81.8
Life expectancy at birth – women	75.3	78.1	81.1	83.9	86.5	88.6
Size of the age group 0–19 year olds	2370,1	2108,4	2110,2	2175,1	2085,6	2081,2
Size of the age group 20–64 year olds	6205,8	6196,2	5909,2	5691,2	5501,3	5165,6
Size of the age group 65–x year olds	1470,0	1537,3	1848,5	2070,0	2373,3	2782,5
Percentage of the age group 0–19	23.6	21.4	21.4	21.9	20.9	20.8
Percentage of the age group 20–64	61.8	63.0	59.9	57.3	55.2	51.5
Percentage of the age group 65–x	14.6	15.6	18.7	20.8	23.8	27.7

* The increase of the number of children, the life expectancy, and the net migration together are sufficient to maintain the population size of 10 million until 2050.

The changes in the age structure are less dramatic than in the other variants. The proportion of those aged 65 and over would remain under 30 per cent, the share of the youth above 20 per cent. However, the dependency ratio is the second highest among the presented scenarios.

Modern populations are beyond a long period of demographic transition and this period may be characterised by a low dependency. More sustainable future development, however, requires higher reproduction, which will lead to higher dependency. Thus, our sustainable variant shows that for a more balanced future population development modern populations should gradually accommodate a higher burden of support.

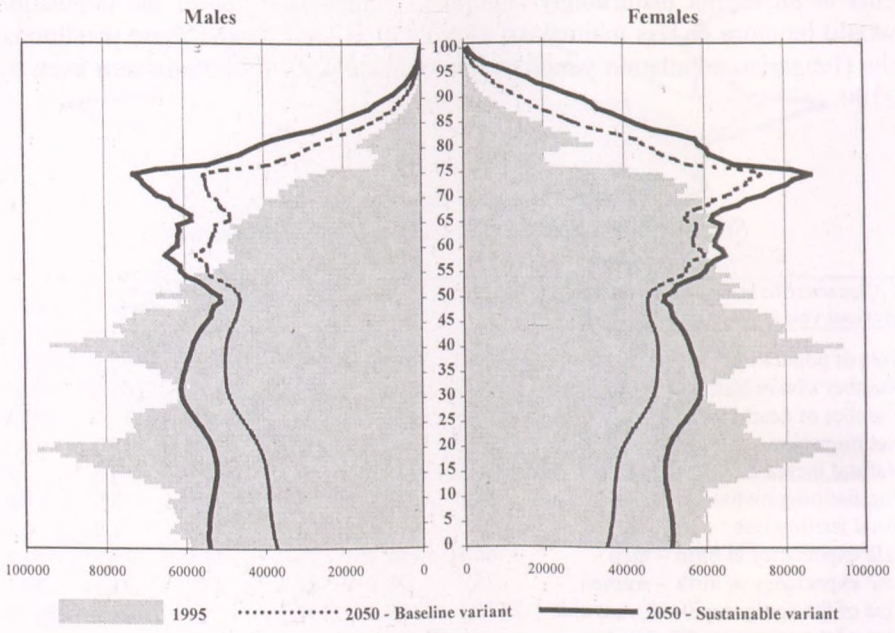


Figure 10
Age pyramid of the population in 1995 and 2050
Sustainable variant

CONCLUSION

In the above paper, primarily the role of migration in maintaining the size of the population has been studied. The main method of examination has been the use of population projections, scenarios. We have abandoned the concept of a closed population, and analysed the volume and rate of migration that might be expected over the next 50 years and the effects of migration on the Hungarian demographic trends. The approach involved projections with both realistic and almost impossible assumptions.

The baseline variant of the national population projections shows a rather pessimistic picture in this respect. Even using the immigration surplus of the most recent years along with the most realistic fertility and mortality rates, these calculations result in a population of 8 million by 2050 which means a 20 per cent decline as compared to the recent one.

The possible role of international migration in maintaining the population is outlined in four variants or migration scenarios.

In the immigration scenario we projected the high annual migration surplus of 10 thousand persons experienced in the 1990s. This scenario does not modify the future of the population substantially, and can slow the population's decrease only at a much later point (two hundred years later) when the overall population size is already significantly lower.

The settlement scenario assumed a one-time large immigration. For the population not to decrease below 10 million by 2050, 1.8 million immigrants should have arrived in 2000. However, even this would not maintain the number of the population in the longer run. Instead, the decrease of the population becomes much more intensive after a certain time.

With the migration target variant, we looked for a constant immigration level at which the number of the population would stay around 10 million until 2050. This would mean a net migration figure of 40 thousand persons annually, with a possible volume of annual immigration around 47 thousand persons. This immigration volume would bring positive elements into demographic development on the long run, but it would still not eliminate the causes of the decrease of the population. Although this magnitude of 40 thousand migrants annually seems to exceed the current country's capacities, because of its demographic situation. Hungary has to make efforts to intensify immigration to levels substantially higher than today's.

Besides migration, we also examined the role of fertility and mortality in maintaining the size of the population. According to this, a fertility rate of 2.5 children, an average life expectancy around 100 years and a constant migration surplus of 40 thousand persons are equivalent from the point of view of maintaining the size of the population. These extreme values demonstrate that sustainable, long term demographic development can only be achieved through simultaneous and gradual changes in all three components.

The sustainable variant, which may be considered as the final conclusion of this study, supposes an annual immigration of 20 thousand persons, the gradual achievement of 1.9 average number of children, and an average life expectancy exceeding 80 years. The realisation of such a variant would bring a permanent and significant reversal of current negative Hungarian population trends.

Translated by Károly Tardos

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CHANGES IN DEMOGRAPHIC PROCESSES IN HUNGARY

LÁSZLÓ CSEH-SZOMBATHY

INTRODUCTION[1]

Governments influence the size and composition of the population, its quality and its day-to-day activity in a number of direct and indirect ways. Specialised ministries or specialist institutions are in charge of certain areas of the life of the population (such as its state of health or questions relating to the education of children and the care for the old). There are also ministries which handle certain inter-relations between these fields. The present demographic situation of Hungary, however, is one that demands a more targeted co-ordination than that currently operational. What is required is a mechanism which would weigh connections between economic and social decisions and processes on the one hand and the number and composition of the population and its predicted long-term changes on the other hand *from the point of view of demographic effects*.

It is not possible to resolve some of the consequences of social and economic processes without an approach based on modern demographic research. The aim of the present study is to offer a basis for such an approach. The text and the conclusions formulated here are based on concrete research. The research examined the inner and yet interactive dynamic of the basic demographic processes such as mortality, fertility and migration from the point of view of how they influence the reproduction of the population, in other words changes in the size of the population. The knowledge of these connections also led on to the question whether it is at all necessary and possible to influence these processes.

The first part of the present study aims to present an overall image of the changes in the Hungarian population, the second part explores connections and offers a diagnosis, while the third part proposes possible directions for action and weighs their relative feasibility.

DECREASING POPULATION IN HUNGARY

Hungary's population has been decreasing consistently year by year since 1980 for men and 1982 for women. The extent of the decrease shows signifi-

[1] This paper was presented to the ad-hoc Governmental Committee on Population, Budapest, 2001.

cant variation across regions. On January 1st 2000 the size of the population was 665 thousand lower than it had been in 1980. This is a consequence of the facts that mortality was high and the number of births was low. The third component of population changes, international migration, has played an insignificant role in the past decades compared to the other two factors. The shrinkage mentioned above refers to persons who have a permanent address registered in Hungary, as present statistical census mechanisms do not allow us to take account of persons who live abroad and have their permanent address in another country, even if they are Hungarian citizens and of Hungarian nationality.

Throughout the 20th century Hungary's population was characterised by continuous growth until 1980. This process was interrupted only by the tragedy of the Trianon treaties, the huge loss of lives in the First and the Second World War and the genocide committed during the Second World War. However, even during this long period of growth there were harbingers that the process would come to a halt by the end of the century. Poets and writers were foremost among those who drew attention to the declining fertility of certain regions and social groups. Attention was mainly focussed on mortality, particularly on high infant and child mortality, as well as on the devastating effect of tuberculosis. Thus it is understandable that the reduction of these factors after the Second World War largely assuaged the anxiety of the general public for a period of time and only in the second half of the century was another factor, the change in fertility, given broader public attention.

In the meantime it had become clear that the favourable processes in the area of mortality were not bound to continue automatically. International comparisons showed that from the mid-1960's onwards Hungary began to slide toward the end of the mortality ranking list which expressed the state of health of European countries. Life expectancy at birth is a generally accepted and easily understood indicator of the general state of health. In terms of this indicator the average life expectancy of men at birth is only lower in successor states of the former Soviet Union than it is in Hungary. In Central European countries, which had been on a level with us in 1938, this expected life span is 6–8 years longer than it is in this country. For women the discrepancy is somewhat smaller, but even here the situation is far from reassuring: the average life expectancy of Austrian women, for example, is 5 years longer.

In terms of mortality influencing the age structure of the population, the most alarming figure was a mortality rate of almost 50% in the 35–64 year-old band: an age group which we can still consider more or less active. When reasons for such a high figure were sought, it became clear that circumstances restricting people's choices have become the chief factor regulating mortality. Individual choices and social factors both played their part. The type of work people do, the type of consumption allowed by their income, their housing conditions and their environment in the broader sense as well as regional varia-

tions all contributed significantly to the changes in state of health and to the way in which illnesses occurred and continued in their later course. While the great epidemics of the Middle Ages killed people regardless of their social status, in the 20th century equality in death is a thing of the past. Mortality figures have become a crucial indicator of social differences. In order to change this situation for the better, we must pay particular attention to groups where mortality rates are outstandingly high. We must be aware of the fact that no long-term population policy can be formulated without changing the circumstances which condition the demographic situation from the mortality side.

To solve this problem requires extreme effort, and only gradual improvement can be expected. We are actually talking about correcting the disastrous consequences of four decades of a communist attempt at modernisation. Politicians of the other post-communist countries face the same task: mortality in those post-communist is of roughly the same level as it is in Hungary, falling far behind those Central and Southern European countries with which they used to be level thirty to forty years ago. The conditions of life in all of these countries were such as to shorten people's lives.

Efforts made in order to improve the population's state of health play a significant role in stabilising the size of the population. But if we wish to maintain population numbers, we need to have a sufficient level of fertility as well as successfully curb mortality. No politician of any conviction, no representative of the different disciplines can call this into doubt. The debate is around the necessity of ensuring the reproduction in order to maintain unchanged numbers of population and around the degree to which a decrease of the population is seen as a danger.

There are several arguments which prove the negative consequence of a population loss. According to the most widely accepted reasoning, a continual decrease in the number of the population changes the proportion of various age groups, in other words the population's age structure, in such a way as to increase the proportion of inactive old people. This obviously makes ever increasing demands on the country's national income.

Old people have a right to the claim that they created the foundations for today's productivity and thus expect decent care and a share of the goods produced year by year. At the same time, if the portion of the national wealth spent on this segment goes beyond a certain limit it begins to curb further growth. This means that a decrease in the number of the population leads to a change in the ratio of the active to the inactive, which causes the gradual decrease of the population producing the old age pensions.

The decreasing number of births can momentarily improve the ratio of the active to the inactive population as there are fewer children to support. In the long run, however, this is not a way out but a disastrous enhancement of the crisis.

Becoming inactive is not rigidly connected to the specific chronological age of old people and it would serve the interest of the whole society to provide the opportunity for activity for all those people who wish to and are able to participate productively in the social division of labour. As the years go by, there will be an increasing number of old people who fail to pick up the pace dictated by technical development, by increased time pressure in economic activity and by the spreading of new knowledge. We must be aware that as the population ages, there also comes a decrease in the rate of young people open for innovation – young people who could answer the challenge of modernisation and possess modern skills and knowledge. The aging of the population influences the mechanism of social decision-making – it lends strength to forces which tend to anchor old solutions and show indifference toward questions of the future. A growing population, on the other hand, is a driving force in itself which is capable of pressing innovation and enhancing people's willingness for fresh initiative. Social scientists who analysed the post-WW II boom of developed countries largely attributed the development to an explosive growth in the number of births. This created fresh demands which in their turn gave a chance for expansion in all other areas such as education and training. Another advantage enjoyed by more populous generations is that these give a higher chance to the occurrence of talented individuals and encourage competition.

A decrease of the population also has a negative effect on the expansion and functioning of the social networks. An aging process aggravated by the differing mortality of the two sexes has already produced a huge number of old people in need of care and assistance. In shrinking societies people have a smaller and smaller number of friends and relatives. This is characteristic of the entire life cycle but its harmful effect becomes most painfully evident in old age when the lack of a sufficient number of relatives not only causes emotional isolation but also a shortage in the sources of help. Family ties could play a great part in the life of old people who grow increasingly in need of care. We must add here that amid circumstances of the progressive loosening of ties between the generations, aggravated by the confused family relations caused by divorce, we can only create dignified and civilised conditions for old people who are more and more unable to look after themselves if we reinforce social solidarity and ensure the active participation of NGOs.

A decreasing population also brings emotional crises. The shrinkage shows a decreased vitality and vigour amid the population of the country – people see no point in worrying about reproduction. The most important factor from the point of view of population decrease is that the number of births has sunk to a level which is insufficient to reproduce the population. A particularly alarming calculation is that unless the willingness to have children moves above its present-day level, in fifty years time the population of the country will be two million lower in numbers, i.e. it will have decreased by twenty per cent. This

would not be altered significantly by a much-hoped-for increase in mortality rates or by such immigration as is acceptable to the country's economic, social and cultural structure.

International migration, i.e. immigration and emigration, have only played a noteworthy role in the changes of the size of the population from the end of the communist regime, but they are still secondary compared to fertility and mortality.

Retaining and maintaining the present size of the population thus mainly depends, from the point of view of economic potential, on balancing births and deaths. This also means ensuring the continuity of our thousand year old culture which has been and is still carried by a great number of people of alien origin who have either become assimilated or become autonomous parts within the Hungarian majority of the country. It is on the basis of such a comprehensive interpretation of the population of the country that we can consider the task of elaborating a framework for a population policy.

A DIAGNOSIS OF POPULATION DECLINE

The key issue must be to identify the causes for the decrease in the number of births and to stop or at least curb this decrease.

Early signs presaging a lasting low in Hungarian fertility were already visible in the last decades of the 19th century but the birth movement suffered its first truly deep wound during the First World War. The number of live births fell back to less than half during the war years. In the years directly following the war many people expected the number of births to return to its pre-war level but this did not come to pass. Instead, a slow but steady decrease became visible which was accelerated in the years of the great international economic crisis. It became clear that a decreased number of births was not merely the effect of the war but that economic factors were also exerting a most powerful influence. By the beginning of the 1930's, the level of fertility was only half that measured at the turn of the century.

Such a heavy drop in the number of births, to which a high number of miscarriages and pregnancies at a very young age also contributed, obviously led to the question of birth control as well. In certain regions birth control had come to play its part in the early 19th century but it only became widely used after the First World War. It became clear that birth control was not the cause of a decrease in fertility but a means of preventing unwanted pregnancies. Between the two wars abortion came to be the most widely used method for birth control even though it was prohibited by law. A more severe enforcement of the law in the 1950's led to some increase in number of births but 1956 brought along a complete change by the unconditioned permission of abortions. As modern

means of contraception were not available for a while to come, the number of abortions rose rapidly. Thus from the 1960's onwards the number of births began to fall below the level required for simple reproduction. This was signalled by fertility indices although it was another two decades before the number of the population actually began to fall.

The insufficient level of fertility, which has now been characteristic for four decades, can be traced back to a number of factors. Foremost among them is the change that has taken place in the structure and operation of the family. This change was analysed in detail by the draft for family-related policies issued by the Ministry of Social and Family Affairs of the previous government, thus we do not think it is necessary to discuss it here. We merely wish to point out that the socio-demographic conditions of the family are decisive factors influencing children's development and maturation and that the normal growth and intellectual development of children reflects clearly the population's condition from the point of view of health and biology in a broader sense. Beside this, we also wish to draw attention to those phenomena which concern the family's role in child-bearing.

In Hungary during the past centuries, but even in the first half of the 20th century, the majority of children were born within a marriage, contrary to Austria and the Scandinavian countries where the number of births outside of marriage had always been high. In Hungary the change became noticeable in the mid 1980's and today a quarter of live-born children come from parents who have not married before the birth of a child. The majority of them live in cohabitation and do not consider it necessary to legalise their relationship. From the point of view of the fertility and reproduction necessary for ensuring a stable preservation of population size, these partnerships represent a loss because in this family forms the partners volunteer for a smaller number of children than those living in a marring.

The other serious negative impact on the reproduction of the population is the increasing divorce rate. In the last few decades, 2/5 of Hungarian marriages are expected to end in the divorce courts. (By 1998 there were 547 divorces to 1000 new marriages!) When partners go down a troubled path full of conflicts and leading eventually to divorce, their willingness to have children is usually diminished. However, while it is true that the majority of divorced people start a new relationship and finally have a 'joint child', thus allowing the previously interrupted process of having children to be completed, there is rarely more than one child in these new families. In the final balance therefore, divorced families mean a loss in terms of the population's overall willingness to propagate.

Another significant change is that while in the first half of the 20th century women used to have their first child soon after they got married, around the age of 20, contrary to Western and Northern European practice, today the most

common age for childbearing is between 25 and 29. This should not necessarily lead to a decreased number of children. Longitudinal studies, however, have shown that young women only partially fulfil their plans as to how many children they would like to have during their life. The later they start, the more frequently their plans remains a dream fully or partially unfulfilled. Thus a delay in childbirth is not indifferent from the point of view of reproduction.

At the same time, the delay in childbirth characteristic today as opposed to past periods is not related to some futile fashion but to a very positive social change which at the same time carries a number of negative consequences for fertility. We are talking of the progress whereby women have acquired equal chances with men with respect to the division of labour, come to enjoy the same access to professional education in the field of their choice and also to have equal chances in the job market. This means that while at the beginning of the 20th century even women with an affluent family background had to content themselves with the skills provided at one or the other of those institutions aimed at training 'the angel in the house,' by the end of the century women became a majority in most universities offering the highest level of training available. Accordingly there are few professions which are not open to them, at least in theory.

Such progress, however, has its price. Women have to spend a longer period in education, they work more intensively and family roles have also become transformed; family life has been restructured according to a new model. This model does not easily accommodate having a great number of children. Childless women are still clearly at an advantage from a career point of view, in working life and in the utilisation of their professional knowledge over equally well-qualified and equally ambitious women who are mothers.

Despite the above facts, a deliberate choice of remaining childless, in other words a conscious rejection of the option of having children, is still not characteristic in Hungary. Demographic surveys indicated only a very low percentage of women who do not want to have any children. Most women in the survey were planning on having two children, there were very few who were satisfied with the idea of just one child, but the number of those thinking of having 4 or more children was also a rarity. The real problem has been the same for decades: namely, that these plans are not actually realised and the number of children women have in reality is lower than the number they had originally dreamed of. Women whose plans are to have two children finally give birth to one, those who want three actually stop after two. According to researchers of the question, the main reason for this is that after childbirth couples experience a change in their lifestyle which they had not previously appreciated and which comes as a shock to them. This is what finally makes them revise their objectives.

In Hungary the changes in lifestyle are mainly related to the fact that the financial circumstances of families are already rather limited at the outset, when a previous partnership becomes stabilised and leads to marriage. The couple are short of freely available resources. Thus increase in the number of family members brings along acute financial difficulties. This is characteristic of rather a wide circle of people, yet we have to be cautious in accepting explanations which blame the low number of children in families purely on restricted financial conditions. We must take care not lose sight of the fact that around 1965 the whole of Europe saw the beginning of a process of population decrease. As a result of this, the total fertility rate dropped below 2 (the level needed for simple reproduction) in poor and rich countries alike and stayed under the standard necessary for replacing population loss year by year.

It is no comfort that several countries with a far higher national income than Hungary show even worse reproduction rates than this country, but at any rate, international comparison might help us identify the possible reasons for the phenomenon. It can at least prevent us from explaining these difficulties with the idea of a national or nation-wide pessimism. This is far from denying the significance of ideas and emotions but remains a warning that even in this field we need purer and more clearly defined constructs.

In the past few decades a new tendency has been observed in the thinking of European and North American people. The predominant tendency to explain 'things' or events through rational attributions seems to have come to an end or at least to have become marginalized. The rational world view had seen the world, and thus the operation and the changes of families, as predictable. The selection of partners had its characteristic motives which may have been different across social groups but remained stable within those settings. There were well established norms for the expectations and duties that tied each member of the family to the others. Society, in its turn, sanctioned behaviour forms which went against these tacit roles and rules. These prescribed functions included having children, looking after them, bringing them up and preparing them for their future life, the course of which was more or less predictable. In the 20th century the two World Wars, the great economic crisis, constant tensions and yet more disasters as well as the entirely new types of danger have undermined the belief in stability, in the individual's capability to understand the connections between the events and in the predictability of the future. They opened the way to distrust, a loss of faith, permanent improvisations and a resulting sense of instability. To accept and adapt to unpredictable changes has become a standard norm of behaviour and this means that people have had to become accustomed to unpredictability in general.

As far as family life is concerned, this new attitude, which is often referred to as post-modern, brought along a loss of stable structures. It is no accident that as a part of this attitude cohabitation have taken the place of marriage. If I

cannot even come to know myself whether or not should be prepared for unexpected changes in the behaviour of those in my direct surroundings, then it is meaningless and self-deceptive to commit myself formally through marriage. It makes more sense to live in a less restrictive relationship with my temporary partner. The high rate of divorced couples proves that 'till death do us part' is seen as meaningless if it stands in the way of self-fulfilment or the ambition to satisfy new desires. Children, toward whom we have duties laid down by law, can be even more of an obstacle in the realisation of perfect freedom. Also, children can change even more radically than partners – they can reveal having character traits which may have been latent before and thus come as a surprise, causing profound confusion in the previous lifestyle of the parent. All this unpleasantness can be avoided if we refuse to have children in the first place and choose a childless way of life as a driving force underpinning our lifestyles.

Childlessness is at present only the ideal for a very small group of people. Those who refuse to have children actually form a very small minority. However, there are other European countries, such as Germany, where approximately one third of young people consciously reject the option to have children and envisage their life accordingly as one without children. Population policy must be prepared for the spread of this ideal in Hungary as well and in order to counter such a shift in values it must foster the influence of social groups which perceive children as a value potentially able to enrich human life.

We have identified high mortality as one of the reasons for a worsening demographic situation. Surveys in this field have found that symptoms of the crisis were a dramatic drop in the general state of health throughout the last three decades, an increasing rate of early deaths and an accumulation of various diseases. People found it difficult to cope with the confusions of social norms and the sudden increase in expectations with mind and body still healthy. They felt that they were under too much pressure which they were unable to address. Staying alive became a risk in itself and life could only be carried on at the cost of accumulating maladies and ever greater losses.

These crises were particularly damaging to groups which were more vulnerable in a social sense. International statistics prove it as clearly as domestic experience that those who have a smaller share of social goods, those who live under oppression, those people whose lives are permanently fenced in by financial, economic, cultural and political restrictions are not only poorer – they are also less healthy. Increased social disadvantage brings with it decreased life span. A closer look at Hungary's shocking mortality averages shows that the more extreme figures in the statistics coincide with extreme differences in social conditions – they reveal the drastic vulnerability of groups of people living in poor social conditions.

Socialism as a system became a dead-end street of social development not merely because it failed to offer its nations an efficient economy but also be-

cause it was unable to provide true solidarity. It created conditions for life where people died much earlier than the population of the Western part of Europe and where people suffered from more diseases during their considerably shorter life span.

Hungary, with its crude death rate of 14.2 ‰ for 1999 can be considered a country with a high mortality rate: in the decade beginning in 1990 this meant the death on average, of 145 thousand people per year. Three decades earlier barely more than a hundred thousand people died each year. Of this 45 thousand increase in the number of deaths, 25 thousand new deaths can be attributed to the aging of the population, but the death of about 20 thousand people can be put down to worsening life chances in certain age groups. In most Western European countries the aging of the population has progressed further than it has in Hungary yet their mortality is lower than ours because an improvement of life chances affecting all age groups has 'absorbed' the potentially higher mortality rate that would follow from a higher proportion of old people within the population. In fact, as life chances have mainly improved in the older age groups, in a number of countries mortality has actually gone down despite the aging of the population.

Looking at the whole of the 20th century, we can ascertain that the economic and social development of the first two thirds of the century improved life expectations beyond all recognition in the industrialised countries. This was of course mainly due to the decreased proportion of deaths caused by infectious diseases and Hungary took her share of this achievement.

After this period however, non-infectious, chronic, degenerative diseases came to the fore. People usually develop such conditions as a consequence of their lifestyle which in turn is related to their social position. Thus the difference between men and women in life expectancy at birth has also increased. In Hungary this discrepancy reached 9 years by the end of the century. Such a large gap can be attributed mainly to different occupational risks as well as to differences in the proclivity for self-destructive behaviour forms such as alcohol consumption and smoking. Differences in health culture are also significant between the two genders. If we look at various age groups, we find that women's chances for survival are better in every age group than men's.

Apart from a small number of exceptions, diseases which cause a high number of deaths are more widespread among men. Exceptions include diabetes, Alzheimer's disease, multiple sclerosis or osteoporosis. One remarkable feature of the chronic epidemiological crisis which has developed in the last three decades is increased mortality among men between the age of 35 and 64. Had these critical age groups retained the mortality rate of the first half of the 1960's, there would have been almost 20 thousand fewer deaths in 1998 alone; within this figure the surplus number of deaths for men was approximately 16 thousand, while women's share was just under 4 thousand. The surplus number

of deaths of men accumulated over these decades amounts to 466 thousand, while for women the figure is around 114 thousand. Altogether this amounts to 580 extra deaths which means losing people at the zenith of their lives.

The structure of various causes of death is similar in Hungary to that of industrial countries with the same level of health culture. About 50% of deaths are caused by disorders of the cardio-vascular system, 25% by cancers. The rate of deaths caused by infectious diseases is only half a percent.

The relative importance of causes of death does not merely depend on how many victims they have but also on the age at which they end the life of a person. The younger a person is at the time of their death, the higher number of potential more potential life years are lost. In terms of international comparison, this rate is only higher than Hungary's in the successor states of the one-time Soviet Union.

In identifying the causes for this extremely high mortality rate, we should not be satisfied with examining the direct causes of death but should expand our analysis to the circumstances which caused the illness leading up to death. One such cause deserving special attention is depression. We are not talking here of a special episode of depression, in other words we do not mean clinical cases, but a more prolonged state whose main elements are a feeling of helplessness, a sense of having lost control, a loss of interest in other people, an inability to make decisions, a feeling of guilt and a feeling of hopelessness regarding the future. Depressed people cannot think in terms of the future, they feel that their position is hopeless and are unable to take active steps in order to improve their situation. Depression can have grave somatic consequences. It increases health hazard both through self-destructive behaviour forms such as suicide and addictions, and through its direct physiological effect. An important aspect of depression is that the person creates high expectations of himself or herself which then they fail to live up to, as well as holding feelings of hostility and distrust toward other people. A new source of problems is the spread of drug use, the consequences of which cannot at this stage be foreseen. To curb the expansion of this phenomenon is not merely the job of the health system but a task of the whole of society.

The past few decades have seen a serious breach in the balance between man and his environment. The present health service system is not suitably prepared to deal with illnesses. The recognition of symptoms is far from complete even though without catching up in this area we cannot hope for a significant improvement in the activity of population policy aimed at reducing mortality. The area of health protection is one where there is particular need for serious effort. The development of the health system is important not only because of the growing number of old people. The protection of young people, particularly those in disadvantaged circumstances, requires far more extensive care than had been characteristic.

Of all the phenomena that determine the size and composition of the population, the most difficult to measure and interpret is international migration. The most serious factor of uncertainty comes from the fact that we do not possess compounded data of Hungarian citizens emigrating from or re-migrating to Hungary either annually or for any clearly outlined period. Beside the figures regarding emigrating Hungarians, those regarding immigrating foreigners are also not precise. A special problem is that data does not include the number of illegal immigrants, nor those who spend a long time in the country because they do not need a visa to do so. Because of these confusing factors, we should beware of trying to make numeric estimates on the basis of migration figures, however, it is possible to talk of certain tendencies.

Our aim is mainly to form an estimate of the extent of surplus migration, and its composition by age and gender, that is required for stopping or slowing down the loss of the Hungarian population, or for the present tendency to become reversible. We base this estimate on census data and we shall compare the difference between the two censuses with the figure that emerges after corrections are made using birth and death figures. Between 1981 and 1990 this difference was negative, in other words, migration led to further loss of population instead of replacing it. Migration was not noticeably beneficial in terms of the age composition of the population, either. Although immigrants are usually quite young, people in their thirties, their age and circumstances give no basis for the hope that they might add to the fertility of the population.

A FRAMEWORK FOR POPULATION POLICY

We know that Hungary's population has been decreasing continuously for 20 years, and are thoroughly acquainted with the factors which may be identified as causes for this decrease. We are also aware that it is possible to influence these factors, thus our diagnosis should necessarily lead to the conclusion that there is no need to accept the present situation passively: we should attempt to reverse this tendency. In other words, we should install and operate an active population policy.

The areas which can be dealt with in a population policy, such as birth, death, migration, concern the most intimately private sphere of every person's life. Despite this however, it is inevitable that even in a democratic society institutions should interfere with these spheres of life. In cases of illness and death we take it for granted that authorities make preventive interventions such as vaccinations or the isolation of infectious patients, and we criminalize assistance in suicide. We make international migration and re-settling dependent on permission. Thus we cannot consider it an impermissible transgression of the boundaries of the private sphere if, beyond actions concerning the single indi-

vidual, the society at large recognises problems which concern the entire population and formulates a population policy in order to handle these problems, provided that its objectives and means are in harmony with our key democratic principles. It is necessary to emphasise this because the Germany of the National Socialist period or the Hungarian communist population policy of the early 1950's defamed the notion of population policy for a long time.

In several European countries where the government uses an active population policy, they do so under the heading of 'family policy.' The French government is the only one which has openly formulated a population policy for several decades now. It is questionable whether we need to be quite so shy about this question – the general public of the majority of European countries clearly considers the demographic changes of the past few decades seriously problematic. This is shown by public opinion surveys on population issues and also by the fact that the majority of the population has approved family policy measures of recent years which clearly have a wider demographic objective.

It is important for political parties to be in agreement over the necessity of a population policy as this is one of the basic criteria for operating such a policy. It is also important to appreciate that no intervention is able to bring about changes in the fertility and mortality of the population overnight. This is clear even on the basis of the diagnosis. It will require decades to change the present tendency. To launch a reverse tendency is, however, urgent as any delay will leave an increasingly difficult legacy for the coming generations.

Positive and negative interventions of the past decades prove that reducing the financial burden entailed by having children plays a distinguished role among population policy steps for increasing fertility. Looking at the entire society, this means that in redistributing the national income, the government invests a significant portion in ensuring that after several decades there will be enough people to produce the goods to be consumed at a future point in time. We are not talking of the central budget taking up the full burden – even the most generous child or family support can only help by easing this burden. Thus various monetary benefits, beside their actual financial value, also carry a significant symbolic message: they indicate the solidarity of society and the prestige of bringing up children.

The positive outcome of financial help in France after the Second World War and in Sweden in the 1980's are beyond doubt. In each case a significant amount of money was invested in helping with the costs of bringing up children. The system of benefits introduced from the late 1960's onwards in Hungary and developed over the subsequent years had a significant effect when compared to women's average wages. These processes, however, were negatively influenced when, in the mid 1990's steps were taken to withdraw earlier family benefits that served a clear demographic objective and to transform them into devices of social policy. Although in the last few years some benefits have

been reinstated, there is still reason to fear that the effect of these may not be as significant as it was in the 1970's and 80's. The reason for this is that people have lost an earlier sense of stability – they do not see clearly what extent of support they can rely on for the future.

An important factor that has to be taken into account in Hungary when talking about families having children is the extent to which the size of the home influences the planned number of children. Flats consisting of one larger and one smaller room in panel blocks, the manufacture of which was standard practice for decades, do not allow sufficient space for families. Thus cheap housing loans offered to young people are a significant achievement potentially lightening the weight of one of the factors repressing fertility.

The employment of mothers is a problem still waiting to be solved. One possibility in this respect is to elaborate a system of subsidies for employers who offer part-time jobs to mothers. In talking about part-time employment we also have to think of grassroots initiatives which might replace childcare institutions maintained by the authorities. As we have pointed out on the basis of public opinion surveys, the majority of the population is 'pro child.' This attitude, however, is far from being unshakeable. In fact, it is easy to manipulate. This is why it is important for the mass media also to speak out in the interest of health promotion, the reversal of our present negative demographic situation and a higher number of children and to present the joy and happiness which having children offers along with the unquestionable troubles and burdens. In our view, having children is not merely a sacrifice and a matter of money but a pleasure, a gift and a source of help. In other words, children are a value for the entire community. Thus, beside state contribution to the expenses of bringing up children, it is important to pay attention to the 'maintenance' of child-related values.

The improvement of mortality figures is mainly the task of health politics – an area in which a change of approach is long overdue. In this field the overall population policy can assist by acting to reduce mortality through drawing attention to those groups of society which are particularly endangered and where timely intervention may protect and cure social substrata which are still potentially active and play a key role in the functioning of society. We are talking of two main groups in this context: the age group of people between 35 and 64 on the one hand, and the inhabitants of certain regions and people employed in certain professions on the other hand.

In the 35–64 age group, each age year brings along a higher number of people living a stressful life in order to attain a higher living standard. Both successful and unsuccessful people often collapse under the effort and spend their remaining years struggling with various returning health defects. Depression takes its victims from among those who do not consider themselves successful from this angle. This can have multifarious consequences – they may experi-

ence a disintegration in their interpersonal relationships, they may become addicts or they may come to see their whole life as pointless and entertain thoughts of suicide. None of these problems have a definite cure but it can be assumed that by adopting methods of health retention that have proved effective in Western European countries, and a more intensive, more widespread psychiatric care which is better accepted by the patients themselves, would prevent the worsening of these illnesses.

Hungarian epidemiological surveys have established alarming differences in the mortalities of various regions – not only those far removed from each other but even some which are relatively closely situated. An often quoted example is that a child born in the 2nd district of Budapest has the life expectance of a coeaval person in Germany, while a child born in the 8th district faces a Syrian future. Population policy should be active in this area, too, in order to ensure that in view of these differences future developments guarantee priority to inhabitants of the underprivileged regions.

The somewhat increased rates of international migration that have been characteristic from the end of the communist era are not sufficient to counterbalance the population decrease occurring as a result of low fertility and increasingly high mortality. This can be easily demonstrated if we try to calculate, purely theoretically, i.e. on the basis of a model, the extent of immigration that would be required for the population size to remain near ten million until 2050, provided that present fertility and mortality rates prevail unchanged. On the basis of such a hypothetical calculation we could formulate two possible versions. One possibility would be if by the year 2000 1.8 million people had immigrated to our country – this is obviously absurd. The other possible variant is if in the 50 years between 2000 and 2050, an annual 47 thousand people would settle in Hungary. It is easy to see that this, too, would exceed the country's capacity (creating jobs, providing homes and services etc.). Thus we cannot rely on the compensating force of international migration any more in the future than we have done in the past.

The overall demographic objective of retaining the present size of the population until the middle of the 21st century can presumably only be attained if we manage to achieve progress in all three fields of population development. In terms of fertility and the willingness of families to have children we must continue to aim at Hungarian families reaching the reproduction level required for keeping a constant population size on the long term. Apart from this, a large degree of improvement is required in order to raise life expectance at birth gradually to over eighty years for both sexes. In view of the successes attained by other European countries in the recent decades, this is not impossible if a successful health policy is carried out and a number of other criteria are also fulfilled. If this is supplemented by an annual immigration surplus of 13 to 14

thousand, conditions for which are possible to create, the country's population would be ten million not only in 2050 but also in 2100.

The above described scenario admittedly reflects an optimistic approach but it is far from unrealistic. At the same time, we should be prepared that to attain the objectives laid down above will require an ever-increasing investment which will grow in proportion to the national income. Yet, those who think in terms of a longer perspective must not be alarmed by this knowledge. If demographic thinking becomes increasingly wide-spread and ignorance on matters of population problems is eradicated, it is possible to expand that camp of people who see an opportunity and a worthy aim in retaining the population which carries Hungarian culture.

Hopefully the scientifically based statements of this policy framework also draw attention to the fact that wide discrepancies in social and economic conditions prevailing in different regions of the country, and changes to these conditions, are likely to launch complex processes in terms of the size and composition of the population. No large-scale social or economic programme can avoid having noticeable demographic consequences in the shorter or longer term. However, these effects are mutual: the success of social and economic programmes also depends on the 'demographic responses' that the population will give in reaction to them.

Because of the importance of long-term effects we consider it a basic principle that population policy must not be associated with fiscal or governmental periods, nor can it be restricted to the competency of one (or a few) of the ministries. Instead, it must operate as the complex and multi-layered area of a governmental activity which represents a definite 'demographic value system.'

The government can serve this aim by implementing a plan of action, still waiting to be created, which incorporates demographic objectives into all social, economic, cultural, educational and development programmes and make them an organic part of these programmes. We are aware that because of its effects a population policy which covers a long period of time and is effective in the long term requires a great deal of circumspection and constant monitoring of changing data. However, we should not avoid this task. In formulating and operating the above mentioned plan of action, and in creating the conceptual foundations of the plan, scientific tools are indispensable such as precalculations of the possible effects of population policy and measuring the real effects and maintaining a detailed picture of population development.

Translated by Orsolya Frank

CHRONICLE

DEMOGRAPHIC COMMITTEE AT THE HUNGARIAN ACADEMY OF SCIENCES

At the Hungarian Academy of Sciences academic departments are divided according to branches of the sciences or according to interdisciplinary fields. Part of the scholarly tasks of the departments are performed by the scientific committees of the various disciplines. The Demographic Committee, functioning within Department No. 9., is one of the latter. Members of the Committee are academic active in this field of studies as well as members of the general membership of the Academy (members with academic degrees) elected by the Doctors of the Academy active in the field of demography. The mandate of the Committee lasts for three years, presently consisting of 16 members.

The academic committee is the highest academic forum of the given scientific field. Thus it is responsible for performing the tasks of the Academy for the given field. The Demographic Committee:

- monitors the situation of the discipline in Hungary
- organises academic sessions,
- formulates a position in questions relating directly to the field of demography as well as in academic, policy, organisational or personnel type questions affecting the discipline.

In addition, it is also the responsibility of the Demographic Committee to express its opinion regarding the activity of the research institutes and subsidised research posts functioning in the discipline as well as about such projects of these institutions as may be relevant from a demographic point of view.

The Committee also acts as an academic forum in that it plays a part in conducting the procedures related to awarding the title of Doctor of the Hungarian Academy of Sciences, and that it makes proposals regarding the Department's publication plan for books and periodicals.

Members discuss the debates and research results of their field at the meetings of the committee as well as general questions regarding academic public life and the organisation and functioning of the Academy in terms of their own discipline. The Demographic Committee of the Hungarian Academy of Sciences has thus made it the priority issue of their programme for 2003/2004 to discuss the most important demographic problems. Its statement which aims to further the solution of the problems relating to decreasing fertility in Hungary was published on July 11th, the UN Day of Demography. In the remaining part of the year the Committee will be discussing questions connected to mortality and the state of health, as well as to the international migration movement. It will also evaluate the publishing activity of the periodical *Demográfia* over the last ten years.

Pál Péter Tóth
President

DEMOGRAPHIC RESEARCH INSTITUTE

The institutional background to Hungarian demographic research has developed gradually from the late 1950's, reaching a high standard which has characterised research projects and allowed their co-ordination and publication during the last two decades.

Topics related to demography are researched in a number of different places (at university departments, in research institutes of academic disciplines bordering on demography, within business and endowment organisations devoted to research in the social sciences). In Hungary the Central Statistical Office (CSO) and the Demographic Research Institute (DRI) functioning under the supervision of the former have become significant centres of demographic research.

The legal predecessor of DRI, the Demographic Research Group was founded by the then President of the CSO (György PÉTER) on the initiative of the Presidential Committee of the Hungarian Academy of Sciences (HAS). The research group started operations in 1963 and the DRI dates from then. In 1967 the Group was granted the rank of an Institute and since January 1st, 1968 its name has been the Demographic Research Institute at the Central Statistical Office.

The establishment of DRI was rendered necessary by the increasing popular interest in demographic studies. Demographic problems became a focus of public debates in Hungary as early as the beginning of the 20th century. The problematic of the single child and the related practice of birth control that occurred in peasant society exercised the minds of public figures between the two World Wars. The reduction of fertility which took place in the 1960's and was unique world-wide, the dilemma of 'baby or car' was another occasion for wide-ranging debates. The early surfacing of these and other demographic processes and their perception by the wider public provided very favourable conditions for the establishment of the Institute.

The task and competence of the Institute is the theoretical and practical cultivation of the discipline of demography, which includes carrying out basic and applied research; studying population and demographic processes; scientific identification and investigation of interactions between social and economic development and population processes; laying the scientific basis for population policy and developing methods of demographic research. Thus the Institute, while supervised by an institution of state administration, functions partly as an 'academic research institute.' The Hungarian Academy of Sciences (HAS) has generously supported the Institute throughout a long period, and the Demographic Committee of HAS pays special attention to the professional activity of DRI.

Marshalling a group of researchers of varying number and composition, and renewing its activity from time to time, the Institute has become a centre of research acknowledged both in its own country and on the international scene. DRI is a research institute of medium size. At present the number of researchers in full-time employment is 15, two research scholars work part-time, while 8 persons make up the library, secretarial and administrative staff and another three researchers work within the Institute as members of a research team financed by HAS. More than half of the researchers are PhDs, 50% are under 40 years of age.

As is common in research institutions of this size, DRI's research profile, priorities, and network of contacts are heavily influenced by the interests and opportunities of its directors. DRI's first director was Egon SZABADY (1962-1977), followed by Kálmán TEKSE (1977-78) and László MOLNÁR (1978-80). István MONIGL was head of DRI between 1980 and 1990. Directors after the collapse of the communist regime were Károly MILTÉNYI (1990-

1994), Magdolna CSERNÁK (1994-1997) and Tamás FARAGÓ (1997-1999). Zsolt SPÉDER has been at the head of DRI since 1999.

A number of famous researchers, lecturers, and civil servants started their career in DRI or carried out research in the field of demography. These included György VUKOVICH and Tamás KATONA who were then presidents of CSO through one cycle each and Egon SZABADY and Gabriella VUKOVICH who proceeded to be deputy presidents of CSO. Internationally acknowledged scholars of the discipline such as Rudolf ANDORKA, László CSEH-SZOMBATHY, János NEMESKÉRI, Dezső DÁNYI and Emil VALKOVICS have also carried out significant research within this Institute.

Besides research scholars of DRI, several scholars of the departments of CSO devoted to social statistics have been involved in demographic research, achieving considerable esteem both in Hungary and abroad. This has increased the capacity of Hungarian demographic studies considerably but the resulting concentration has also acted against the development of research work in a number of areas.

From the beginning of the 1980's material and personal conditions of research work started to deteriorate to such an extent that in certain periods the functioning of the Institute was secured essentially by the grants received by the research scholars, primarily from the National Research Fund (Országos Tudományos Kutatási Alap, OTKA). The research staff also decreased in number. From the early 1990's onwards this period was followed by significant positive changes. The Institute became re-housed in a reassuring fashion for the long term, an up-to-date IT background became established and research work was given a new impetus. Increasing funding from CSO, data collection financed by the Statistics National Programme, the grants won from the National Research and Development Programmes and the ever-growing support from OTKA created a new background to the execution and organisation of research.

Present research within DRI is dominated by classical population issues. It carries on research into basic demographic processes (fertility, nuptiality, divorce, mortality, migration). Researchers examine the structural characteristics of the population, the connections that surface therein (ageing, the transformation of family and household structures, regional variation, levels of education, economic activity, special groups of the population). Finally, population projections are made. These studies mainly consist in processing the data of population movements and censuses.

Survey-based research also has significant traditions within the Institute and these were given a further push by the phenomena categorised as the second demographic transition and the rapid differentiation of family forms. In the last decade targeted research was carried out into the position of teenage mothers and the social composition of women giving birth outside marriage. DRI continually monitors the opinion of the population on particular demographic events (abortions, family and demographic policy measures).

Research in the fields of historical demography and bio-demography also play a great part in the work of the DRI and form an essential part of the research programmes.

In the last few years DRI has carried out several important waves of data collection. In 2000 the Institute joined a large-scale European comparative survey project (Population Policy Acceptance). Within this project DRI studies the demographic behaviour of the population; gender roles, relevant values, connections between the various generations, the quality of marriages and co-habitations and, finally, the acceptance of alternative population and family policy measures.

A new, significant undertaking by the Institute is the demographic panel survey project launched in 2001 with the title 'Turning points of our life course.' In 2001 and 2002 the first wave of the panel survey was completed, questioning over 16 thousand people. This survey, which contains a wide scale of subjective and objective information and a broad thematic

range, is a part of the recently launched comprehensive, Europe-wide comparative survey series entitled Gender and Generation. The second wave of the survey will probably be carried out in 2004.

Surveys were completed with the support of the National Research and Development Programmes - basic research was completed regarding divorce, the reception of foreigners in Hungary and the integration of immigrants.

The results of the research projects carried out by the Institute find their way to the public through a number of channels. Detailed results of research projects are published in the series *Kutatási Jelentések* (Research Reports). A wider professional audience is targeted by the quarterly journal *Demográfia*. A quarterly newsletter entitled *KorFa* facilitates understanding of basic demographic connections and knowledge to political decision-makers, journalists and the interested scholarly community. In the series *Working Papers* the studies are published in English. The research findings of the Institute are also published in other forms not organised by the Institute, in international and Hungarian books and in periodicals.

The headquarters of the Demographic Research Institute DRI is located 77. Angol utca, Budapest XIV. The Institute's website can be accessed at www.ksh.hu/nki and will be available in English by the end of 2003.

DEMOGRAPHIC SECTION OF THE HUNGARIAN STATISTICAL SOCIETY

The main job of the Demographic Section, reorganised in 1996, is to provide a professional and public forum for scholars working in the fields of population statistics, basic and applied demographic research or who are involved in other professional uses of demographic expertise. It also fosters and promotes the emergence and circulation of information relevant to the field of demography; it is responsible for organising and conducting conferences and participating at these in order to allow members to publish and become acquainted with contemporary views on demographic questions.

The prime activity of the Department is to organise and conduct conferences and other professional events. Beside events organised solely by the Department, symposia are held in conjunction with other departments (those of social statistics, regional studies or historical statistics), aiming to draw the most topical demographic problems to the attention of the public. A list of events organised last year and this year follows below.

2002

1. 'Lifestyle and living conditions at the millennium' was the title of a two-day conference organised jointly with the Department of Social Statistics on May 14th and 15th. The conference gave a chance to present the analyses based on the 1999/2000 survey on lifestyle and time budget and the research which identified the main demographic processes in relation to the former. Speakers representing our department were Marietta Pongrácz, Zsolt Spéder and Balázs Kapitány. The event was hosted by the Central Statistical Office.

2. The conference entitled 'Millennium – Hungarian Reality – Censuses' organised by the Hungarian Statistical Society enabled participants to present the latest demographic developments and problems. Ferenc Kamarás outlined challenges arising in relation to fertility and mortality, László Hablicsek discussed the connection between censuses and

population projections, while Sándor Illés concentrated in his talk on internal and international migrations affecting Hungary. The conference was held in Balatonfüred on 14th-15th October.

3. Members of the Department participated at the debate of the demographic panel survey 'Turning points of our life course' held on the 21st October. Members also participated in circulating the report entitled 'Demographic processes and social environment' published in the series *KSH NKI Műhelytanulmányok* (CSO DRI Working Papers) in Hungarian.

2003

On June 10th, 2003 the section discussed the research plan for the project 'Social inequality and exclusion,' at a meeting held at the Central Statistical Office and organised jointly with the Department of Social Statistics.

2. On November 19th, 2003 an interdisciplinary event will be held on an acute demographic problem, 'ageing.'

3. In December 2003 a half-day debate was organised under the title 'Encounter of Generations,' where young researchers who have become members in the past three years, will be given a chance to present their research achievements.

Sándor Illés
Secretary

GOVERNMENTAL COMMITTEE ON POPULATION

In 2001 the government of the Republic of Hungary decided to set up an ad hoc committee in order to present and evaluate the demographic situation and to identify ways of influencing unfavourable processes in fertility, and mortality. The scientific evaluation was carried out with the leadership of academician László CSEH-SZOMBATHY, and after the relevant debate the government ruled that a National Population Programme be elaborated and the Governmental Committee on Demographic Affairs be set up (Government Decree 1069/2001 (July 10)).

During the process of creating this programme a number of valuable research and analysis projects were launched and expert studies written. The government reviewed the activity of the Governmental Committee on September 14th 2002 and defined forthcoming tasks. The deadline for elaborating the National Population Programme was defined as December 31st 2003. Furthermore the Committee is responsible for

- formulating a plan of action designed to influence demographic processes in a positive direction and a plan for the means of execution;
- making proposals to further decision-making with respect to population policy, encouraging the creation of family-friendly forms of employment and enterprise, harmonising measures of population and family policy, the taxation system, contribution payments, income redistribution and subsidies;
- monitoring and analysing the short and long-term effects of measures of population and family policy;
- formulating an opinion and a clear viewpoint in questions concerning the demographic situation.

The head of the Committee is the Prime Minister, its secretary is the general political state secretary of the Prime Minister's Office, its members are the Minister of Home Affairs, the Minister of Health, Social and Family Affairs, the Minister of Labour and Employment, the Minister of the Economy and Transport, the Minister of Child, Youth and Sports' Affairs, the Minister of Environmental Protection and Water Affairs, the Minister at the head of the Prime Minister's Office, the Minister of the National Cultural Heritage, the Minister of Education, the Minister of Finance, the President of the Central Bureau of Statistics and seven noted personalities from various academic fields invited by the Prime Minister to be a member of the Committee.

The academic members of the Committee since 2002 have been Szilveszter E. VIZI, President of the Hungarian Academy of Sciences, Academician Zsuzsa FERGE, Lajos BESENYEI, Rector of the University of Miskolc, sociologist Zsuzsa HEGEDŰS, physician and demographer Péter JÓZAN, statistician and demographer Tamás KATONA, Academician László CSEH-SZOMBATHY.

The Committee is an organ of the Government designed to offer advice, prepare decisions and make proposals.

The Government Committee meets as least four times a year. Its agenda is compiled on the basis of proposals by the secretary of the Committee and the secretary's office and the Committee is called up on the basis of this pre-arranged agenda by the head of the committee, the Prime Minister.

Members of the Committee receive a written proposal, a summary and professional background material, relevant studies on the topic, in accordance with the agenda of the meeting. The expert members of the Committee and the researchers, experts and relevant leading government officials invited for the occasion make short verbal additions to the material distributed in written form. On the basis of the written and oral information, the Committee discusses the topic of the agenda, puts questions to the experts present and forms proposals for further continuing the work of analysis and proposal-making.

At its sessions during 2002 and 2003 the Committee discussed, among other topics, the demographic situation of Hungary and the main characteristics of demographic processes; it gathered information about the characteristics of women's employment in Hungary and internationally; it reviewed the processes related to illness and mortality in Hungary; discussed the Béla Johan National Health Maintenance Programme; discussed the results of the research projects on internal and external migration; organised an international conference entitled 'On the cross-roads. The situation of demographic policy at the beginning of the 21st century.' The Committee has also organised a number of round-table talks, launched research projects, commissioned and published papers.

Ágnes Varga
Secretary of the committee

PUBLICATIONS OF THE DEMOGRAPHIC RESEARCH INSTITUTE 1990–2003

CSO DRI RESEARCH REPORTS (KSH NKI Kutatási Jelentések)

No. 37 István Monigl (ed.), *Népesedési viták Magyarországon, 1960–1986. A KSH Népességtudományi Kutató Intézet tudományos vitaülése Budapest, 1988. június 2.* (Debates on Population Development in Hungary, 1960 – 1986. Proceedings of the debate at the Demographic Research Institute of KSH, June 2nd, 1988).

No. 38 Edit S. Molnár–Eszter Virágh, *Közvélemény–kutatás népesedési kérdésekről – 1989* (Public opinion survey on population issues – 1989).

No. 39 Marietta Pongrácz – Edit S. Molnár, *Abortuszkérdés Magyarországon – 1991.* (The abortion question in Hungary, 1991).

No. 40 Kálmán Joubert– Éva Gárdos, *Terhesek és csecsemők egészségügyi és demográfiai vizsgálata. (A kutatási program általános ismertetése)* (Health and demographic survey of pregnant women and infants. A general description of the research programme).

No. 41 Marietta Pongrácz – Edit S. Molnár, *Sokgyermekes családok* (Families with many children).

No. 42 László Hablicsek, *A magyarországi hosszú távú népességfejlődés vizsgálata* (Examining long-term population development in Hungary).

No. 43 János Fóti – Sándor Illés, *A munkanélküliség demográfiai vonatkozásai* (Demographic aspects of unemployment).

No. 44 Béla Falussy – Károly Miltényi – Mrs Pál Móritz – András Paksy, *Az egészségi állapot összefüggései az életmóddal és az időfelhasználással* (The relationship of health to lifestyle and the use of time).

No. 45 Marietta Pongrácz – Edit S. Molnár, *Összefoglaló a terhességmegszakításról tartott 1992. júliusi közvélemény–kutatás főbb eredményeiről* (A summary of the main results of the public opinion survey on abortion held in July 1992).

No. 46 Mrs József Csernák – Marietta Pongrácz – Edit S. Molnár, *Élettársi kapcsolatok Magyarországon* (Cohabitation in Hungary).

No. 47 Marietta Pongrácz – Edit S. Molnár, *Kisgyermekes szülők. (Egy nemzetközi összehasonlító vizsgálat főbb magyarországi eredményei)* (Parents with young children. An international comparative survey and its results for Hungary).

No. 48 Klára Szukics Serfőző, *Iskolázottságunk alakulása a népszámlálási adatok tükrében* (Changes in levels of education as reflected in census data)

No. 49 Pál Péter Tóth, *Nemzetközi vándorlás – Magyarország* (International migration. Hungary).

No. 50 Sándor Illés, *Miért költöztek az emberek Pásztóra 1989–91–ben?* (Why did people move to Pásztó between 1989 and 1991?)

No. 51 Klára Szukics Serfőző, *A szülők és gyermekeik iskolázottsága* (Education levels of education of parents and their children).

No. 52 Marietta Pongrácz – Edit S. Molnár, *Kisgyermekes anyák és apák szülői, családi attitűdjei négy európai országban* (Parental and family attitudes of mothers and fathers with young children infou European countries).

No. 53 Marietta Pongrácz – Edit S. Molnár, *Serdülőkorban szült anyák társadalmi, demográfiai jellemzőinek longitudinális vizsgálata* (A longitudinal study of the social and demographic characteristics of teenage mothers).

No. 54 László Hablicsek, *Az első és második demográfiai átmenet Magyarországon és Közép–Kelet–Európában* (The first and the second demographic transition in Hungary and in Central and Eastern Europe).
No. 55 Klára Szukics Serfőző, *Az egyszülős családok társadalmi–demográfiai jellemzői* (Social and demographic characteristics of single parent families)
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