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FERTILITY AND STRUCTURAL CHANGE IN HUNGARY

Labour Market Status and Education Level of Childbearing Mothers at the Time of Declining Fertility Rates in the 1990s

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1. Introduction

Today it is a commonly accepted fact that besides fundamental economic and social transformations in the 1990s in Hungary, other, equally far-reaching changes occurred in several domains of life. The same applies to demographic processes, or more specifically to phenomena related to family formation as nuptiality or fertility rates. The present study reveals the findings of a research focusing on lesser known and rarely analysed social factors of childbearing. It is well established that fertility rates declined radically in Hungary between 1990 and 2000. It is also known that the phenomenon is not without European parallels and demographic research has revealed many of the factors behind (Lesthaeghe–Moors 2000; Kamarás 2001; Philipov–Kohler 2001). These efforts have been instrumental in demonstrating that the major factors explaining the decline are the increase in the typical childbearing age and, to a lower extent, the rising rate of extramarital fertility. Demographic literature talks about a change of patterns when documenting these processes. Giving birth at a younger age, a practice prevalent in ex-Communist countries, has been replaced by family formation in later age groups. But is this the whole story? Does this supposedly new mode of behaviour apply equally to all groups? Has the decline in fertility assumed the same pattern in all social strata, in the lower, middle and upper layers? Or are there certain traits that generate different patterns? These are some of the questions we would like to answer to in our study.

We do not think it likely that the changes occurred in all social groups with the same speed and penetration and we challenge the notion that the only difference between them is the speed of diffusion. It might well be that in the future we will have diverging patterns of behaviour for social layers existing side by side. The present study cannot possibly undertake a full analysis of the field and has to confine itself to the measurement and interpretation of the impact of two factors, namely the education level and the labour market status of childbearing mothers. Even though we have carefully and consciously limited the scope of the present paper, it does deal with a rather extensive problem. We would like to argue that changes in fertility behaviour are also the outcome of certain “pressures” and “tensions” emerging from the changes in the social and economic structures (c.f. United Nations 2000). Furthermore, we would like to call the attention to the idea, that there is no reason to believe that this mode of behaviour is of a homogenous and undifferentiated character. Of course, we are aware that for distinguishing and isolating social groups, we need a much more differentiated model of social stratification. We are also aware that in childbearing decisions today ideational processes and mental conditions play a decisive part, either in the form of norms or in preferences applied in fertility decisions. Still, we think it makes sense to talk about

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1 The research was supported by the Hungarian Ministry for Family and Social Affairs.
2 For emphasising these factors see the Scandinavian tradition of analyse fertility trends (Hoem and Hoem 1987; Andersson 2000).
3 This is the basic message of the “second demographic transition” theory (Lesthaeghe, 1995).
social structures when we look at fertility rates through these two chosen very simple, but usually extremely fruitful factors.

2. Labour Market and Childbearing

Only a few attempts have been made to analyse systematically the role played by the labour market in the decline of fertility with far-reaching consequences occurring after the change of regime. One such attempt is by Witte and Wagner, who performed an economic analysis of the changes in the labour market and fertility rates in the eastern part of Germany (Witte–Wagner 1994, 1995). At the same time, there have been numerous attempts to interpret the decline in fertility as a consequence of the collapse of the economic system and the fall of living standards. One such attempt by Macura and others proposed a “crisis hypothesis” (Macura et. al. 2000) but they paid less attention to the labour market than to the drop in economic production levels and the ensuing crisis of confidence.

Still, what else than the labour market was the institution, which transmitted the consequences of economic changes – namely the recession of the transition – to the ordinary people both directly and symbolically. In just a few years, millions of jobs had evaporated and even those employed witnessed a dramatic change in their status, salary and security. Simultaneously, young people had found it increasingly hard to enter the labour market. Most of them had to start their careers in short-term, often insecure jobs. As compared to a labour market characterised by over-demand in the era prior to the transition, the new structures offered greater opportunities as well as greater risks. It is hard to imagine that the complete rebuilding of the mechanisms of this highly influential institution had no part – minor or major – in the changes of fertility behaviour. Before starting the empirical analysis of the data, let us review briefly the approaches that might be helpful to interpret the impact of the labour market on fertility behaviour.

It is impossible to treat the fertility-related consequences of the dynamics of the labour market without considering the theoretical aspects of its economics. The economic approach analyses fertility through the logic of rational decisions, and it compares the “utilities”, “pleasures” resulting from having a child with short and long term related costs (Andorka 1978). In this system, a child is no more than a commodity – possession is joy and it has “utility”, but it is also something that costs money. On the cost side, we have continuous spending and long-term financial commitment because the upbringing and the education of a child are constant strains on the household budget. On the “revenue” side, we have the satisfaction and joy the parents feel with regard to their child, as well as there is the care of the children for their elderly parents. If we are thinking in terms of the classic single-earner household, the proportion of the related costs in the household budget provides the basis for the income-effect thesis. This states that everything else being equal, an increase in the income of the household

4 Of course we can make use of literature analysing labour market changes during changing economic environment (cf. Andersson 2000).

5 Inflation and poverty are similarly important concepts with regard to the change of regime.

6 However, as we shall see, not only the micro-economic approaches are fruitful in the interpretation.
reduces the burden on the budget of the household resulting from child related expenditures, therefore it results in an increase in fertility.\footnote{There are a number of reasons why this income-impact is difficult to demonstrate – for instance, those with higher income regard a higher portion of the budget as necessary to spend on “proper care” of the children (Spéder 2001b). Also, the longer the education period, the longer the child needs familial support. A particular Hungarian phenomenon is the (partial) privatisation of the education system, which is expected to increase the costs of bringing up children.}

In this interpretation, the labour market is confined to an intermediary role – while income reaches the household through the labour market, its quantity is a factor of economic growth. This economic approach has to be modified, when there is an increase in the participation of women in the labour market, therefore the “cost aspect” of the decision to bear children will be fundamentally altered. A rational choice analysis also treats income that remains unrealised temporarily as opportunity costs. This pertains to temporary or long-term loss of income incurred when the woman/mother stays away from the labour market. More recent economic approaches have pointed out the necessity to deal with this factor in a differentiated way. When the mother stays home, there is not only the loss of her income to be reckoned with. But their realisable “human capital” is also devalued, as they cannot follow the developments in their profession, they cannot participate in training programs and so on – in short, their professional skills have lower values.\footnote{Two remarks on this point: first we have to emphasise that here we are dealing with assumptions, to be subjected to further analysis. Secondly, we must not disregard the fact that while staying home raising children, the human capital of mothers actually increases in value as they develop skills that are marketable in the service industry.}

The size of the unrealised income stemming from childbearing varies from person to person, but most of the time it depends on the status of the mother. The more highly paid she is at her work, the more she loses when chooses to bear children. The opportunity costs are lower among those having a lower income or out of the labour market – people staying at home, being dependent or inactive – therefore in these social groups we find less resistance against childbearing from a financial point of view.

There are a number of welfare programs designed to offset the direct costs of childbearing and the continuous cost of raising children. Their impact on population development has been widely discussed in the Hungarian literature (see Tárkányi 1998; Gábos 2000). We are concerned with these only to the degree that they enhance or diminish the influence of the labour-market factors. The family allowance\footnote{Family allowance is a flat rate state support for the partial compensation of expenditures related to bringing up children. It is also related to the number of brought up children.} and the child care allowance (GYES)\footnote{Child care allowance is a flat rate sum provided for a parent staying at home and not being active after the childbirth till the child is 3 years old. The maximum amount of work after the child is one and a half years old is 4 hours per day. It is not related to the number of children younger than three. A person to be entitled for this support shall not be on unemployment benefit or regular social support.} are universal, available to all Hungarian citizens regardless of the employment status. If we disregard everything else, this might eliminate the financial barrier to childbearing in the case of those with low or no income. Furthermore, according to the concept of the “strategic child” elaborated by Gyenei, these forms of family support become sources of income for people near or below the poverty line, for this constitutes a continuous and – when compared to their present household budget – sizeable income (Gyenei 1998). Child care fee (GYED)\footnote{Child care fee is 70 percent of the job related earnings of the mother provided for 2 years. The maximum amount is twice the minimum wage and the mother has to have 180 days of registered job in the previous tow years and her employment cannot be terminated longer than two months before giving birth.} is designed to compensate for financial losses of employed
women resulting from their decision to have a child. Because there is a
maximum limit on this, only in the case of women in medium jobs we can
expect the desired results. Tax deduction\textsuperscript{12} can counterbalance losses only if
there is at least one active earner in the household.

We must also look at the dynamics of the labour market. The overall
result of the incentives and dis-incentives is influenced by the expectations
with regard to employment (Witte–Wagner 1995). Employed women are
more likely to have children (thus to temporarily leave the labour market) if
they think that it will not be difficult for them to find a job to re-enter the
labour market in the future. On the other hand, expectations of a decreasing
demand in the labour market make people worried of losing their jobs and
it motivates them to stick to their jobs. This means that some women delay
childbearing\textsuperscript{13} and highly-paid women aim at an early return to the labour
market.

According to Witte and Wagner, a different mechanism is at work in the
case of the unemployed. Increasing labour market demands will decrease
their willingness to have children, as women want to return to the labour
market without delay. (Witte–Wagner 1995). That is to say, if there is a
better chance for them to find work, they will be less likely to have children
than before. In a converse case, they are more likely to have children as
their chance of getting a job is slim anyway. The current and expected state
of the labour market has no influence on the behaviour of stay-at-home
mothers (“housewives”) and the dependants as they face no direct loss of
income and have no desire to be reintegrated into the labour market. As for
those receiving the above forms maternity benefits we have no assumptions
available in the literature. We can only suppose that the gloomy present and
the bright future prospects increase their willingness to have higher fertility.
The logic then operates in a way similar to what we discussed in the case of
the unemployed.

We cannot ignore the fact that the labour market in Hungary in the 1990s
is a far from that where positions are distributed and selected on a stable
basis. Although during the days of the redistributive, “socialist” system of
economy based on state ownership the labour market functioned as an
allocating mechanism even if in a limited fashion, its character was very
different from the same institution in a market economy based on private
ownership. The differences may be best demonstrated by Kornai’s theory of
markets in disequilibrium, which is an macroeconomic approach offering a
wide array of sociological insights (Kornai 1971, 1980). In his
interpretation, the labour market of the socialist system was characterised
by such phenomena as “suction,” “undersupply” and “overdemand,” while
market economies can be characterised by “pressure”, “underdemand” and
“oversupply.” None of the real markets are in an equilibrium in terms of
supply and demand. But while in the labour market based on state
ownership and characterised by overdemand the supply side (i.e. the
employee) has the upper hand (“the employers are trying to please the
employees”) in the labour market based on private ownership and surplus
supply, the reverse is true. That is to say, employers can pick and choose

\textsuperscript{12} Tax deduction was introduced in 1999. It is a flat rate deduction from the personal income tax and it is
related to the number of children younger than 18.

\textsuperscript{13} This also calls attention to the fact that programs facilitating the reintegration of women into the labour
market might increase their willingness to bear children.
from those seeking employment. It is easy to see that in the former case, the employees are in a good position to realise their interest, in the latter case, the employer dictates the terms of employment and can pick the employee, he or she wishes to have. (Kornai 1980, ch. 11).

Employing Kornai’s approach, it is insufficient to describe the changes in terms of quantity only and to focus on decreasing job supply resulting from regime transition. The structural character of changes should be stressed. In the new era the employees not only had to keep and protect their positions on a drastically shrinking labour market, but they had to face qualitatively different challenges in a labour market, and had to adjust to is. As a consequence the employee became more vulnerable in general. Regarding the working conditions employees also had to work more intensively during their working hours.  

The changes and transformations of the Hungarian labour market described above could have a far-reaching effect on people’s attitude towards childbearing. The employee, who previously had the upper hand, will now find it very difficult to harmonise his/her status as an employee with his/her needs stemming from his/her roles as a spouse and a parent. In other words, in the labour market of the 1990s, harmonising family and work has become much more difficult than it was in the redistributive economy characterised by shortage and intertwined with the second economy in the 1980s. To put it more precisely: when the needs and interest of the workplace and the family clash, there is a decreased chance of the latter to win. So while in the days of planned economy, employees could defend their individual interests within certain limits, employees in the market economy are more vulnerable and their bargaining position is significantly weaker.

For a better understanding of the intricate relationship between the labour market and fertility from a sociological point of view, as our starting point we have to look at female and familial roles in modern societies and how these roles are undermined or strengthened by changes in the labour market. Regarding the division of tasks and labour within the family, we can characterise the two-earner model as generally accepted and desirable.

We know from sociological literature that from a general collection of

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14 Under the circumstances of a market economy characterised by surplus supply people have less time to arrange their private affairs during their working hours, thus participating in the “third and fourth” economies under the state socialism system, described so vividly by Zoltán Zsille. Let a few representative statements suffice here: “The field of the third economy is the same as that of the first. The struggles initiated here are aimed at changing the official conditions, to create a power structure that would allow employees better working conditions, secure salaries, fringe benefits and bonuses, or to create a situation in which the labour will fetch its correct market value at price paid for part-owners or small entrepreneur: …”

In this struggle, even at the cost of diminishing price of labour due to technological or other reorganisations, employees aim at “saving” as much labour as possible. This labour can be taken it home, used for private purposes, removed from the supervision of their employers or employees can control their own job description independently from the will of their managers. The result – later the base – of the struggle is the “second home,” the territory reclaimed from the first economy by the employee.

This makes the work place the “second home” of the labourer who will feel increasingly at ease there, just like he/she would in his/her own workshop, his/her own field and so on. He/she adjusts his work profile according to his/her abilities, taste and knowledge, making it up of profitable kinds of work and he/she performs his/her work at his own pace. In other words, he/she attempts to turn the working hours into a tolerable part of his/her life, partly by converting them into his/her own, free time. In this free time, he/she deals with private affairs, eats, rests, establishes and maintains relationships, participates in public life, even celebrates private events, obtains information and organises the unofficial networks of solidarity. In other words – he/she does not work. (Zsille 1993 [1980], p. 225)

15 Their bargaining position is even weaker than in the Western labour market as the labour movement and trade unions are less influential here.

16 Families not having two earners generally do not opt for the actual arrangement themselves.
female roles, women usually regard more than one set as applicable to themselves (Kontos–Walser 1979; Pieper 1983; Ostner 1982). Here we have in mind, more than anything else, the competing and complementing roles of employee, mother and spouse. Most women no longer define themselves exclusively through their roles as mother and wife and they no longer think this situation normal – just as they no longer devote themselves exclusively to their careers. We also know that in certain phases of life these roles follow each other sequentially, in others, they occur simultaneously (Kohli 1993 [1985]). The question is how women reacted to the situation in which the effects of the transition in the 1990s fundamentally undermined their employment status. Did they mobilise all their energies to hang on to their jobs, as employment had become as integral a part of their identity as it had traditionally been the core of men’s self-identity? Or did they give up their position in the labour market and turned to their families as an alternative scene and identity where they could perform some other socially expected functions? This second version then allowed men/husbands more room to actually fulfil their only legitimate role. For men – even though we lack data on this – the status of “housewife”, i.e. the unemployed father, is hardly regarded as acceptable.17 If the theory of the increasing value of the woman as a housewife holds true, we should be witnessing increased willingness to have (more) children, while if it does not, the reverse process should be observable – everything else being the same, of course.

We already need to indicate the fact that views are divided on this issue: some analyses point to the strengthening of women’s more traditional, family-based roles, while others show an increased preference for the roles requiring the presence of women in the labour market (Kapitány 2001; Pongrácz 2001).

Basic Tendencies in the Hungarian Labour Market during the Transformation: Women’s Chances

Before analysing the economic activity status of childbearing women we quickly review the changes of the labour market focusing on the employment status of women.18 As already told the labour market in the 1990s had shrunk significantly: in 1990 83.3% of men aged 15–59 and 75.5% of women aged 15–54 were employed. These figures dropped by 1993 to 66.1% and 60.3% respectively and by 1996, to 64.2% and 54.1% respectively (Nagy 2001 p. 53). The figure for men stays largely the same for the next years and starts rising in 1999. These figures show that the dramatic decrease in employment took place in the early 1990s, but especially in the case of women this tendency continues. The lowest figure in the case of women was 1997.

17 They are regarded as “weird creatures” or even as people incapable of performing their masculine roles.
18 In this analysis we rely on the article by Nagy (Nagy 2001).
Table 1
Percentage of Employed Women by Age Groups in Hungary between 1990 to 2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Labour Statistics</th>
<th>Labour Force Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 15–54</td>
<td>Age 15–39</td>
</tr>
<tr>
<td>1990</td>
<td>75.5</td>
<td>–</td>
</tr>
<tr>
<td>1991</td>
<td>72.3</td>
<td>–</td>
</tr>
<tr>
<td>1992</td>
<td>66.8</td>
<td>60.8</td>
</tr>
<tr>
<td>1993</td>
<td>60.3</td>
<td>57.7</td>
</tr>
<tr>
<td>1994</td>
<td>57.4</td>
<td>56.1</td>
</tr>
<tr>
<td>1995</td>
<td>55.4</td>
<td>53.8</td>
</tr>
<tr>
<td>1996</td>
<td>54.1</td>
<td>53.0</td>
</tr>
<tr>
<td>1997</td>
<td>53.2</td>
<td>52.8</td>
</tr>
<tr>
<td>1998</td>
<td>53.7</td>
<td>55.1</td>
</tr>
<tr>
<td>1999</td>
<td>–</td>
<td>56.8</td>
</tr>
<tr>
<td>2000</td>
<td>–</td>
<td>57.4</td>
</tr>
</tbody>
</table>


As most women give birth in their twenties, this age group is of particular interest in Table 1. The employment of women aged 20–24 decreased dramatically though this was partly due to a significant increase of women’s increasing presence in education (Nagy 2001 p. 46). While in 1993, only 13.5% of them was enrolled in educational institutions, by 1998 this figure went up to 22.3%. The proportion of the unemployed was rising only slightly to reach the peak point in 1994–1995. In the entire period the decrease of the employment rate of people in their late twenties (25–29) was much lower. The worst year for this age group was also 1995, but the figure for 2000 already exceeded the one for 1992.

Additional insight can be gained from the analysis of another aspect of the labour market: the difference in wages between men and women. It is generally acknowledged that average wages are higher among men as compared to women. What is significant from our particular perspective is the change of this difference over time. According to studies carried out by Galasi, the difference in wages had declined somewhat between 1992 and 1996. As far as the average wage is concerned, the figure representing the male/female ratio went up from around 80% to over 85% (Galasi 2001 p. 25) in the above period. On the basis of this we might assume that the proportion of women’s earnings within the family budget has probably gone up, but it almost certainly has not decreased. 19 Let us now turn to our specific subject and take a look at changes in the economic status of childbearing women.

3. Childbearing in a Changing (Labour) Market and (Family) Policy Environment

At first sight the changes in the economic status of childbearing women appear very similar to those happening in the labour market. In the first year of the socio-political transition 80.7% of mothers giving birth to children were employed. An additional 7.5% received childcare fee or child care allowance and 10.8% of the mothers were classified as “housewives” (see Table 2). The proportion of other types of inactive women or dependants was negligible. Three years later, in 1993, just after the first wave of high

19 The proportion is also related to changes in the profiles of economic activity in the family.
unemployment, the percentage of employed mothers went down by 15%. The changes in ratios were mainly due to the increase in the ratio of unemployed mothers (9.2%) rather than the inactive ones (4.5%), but it also seems that the willingness to bear children was slightly on the rise among those receiving childcare fee or allowance.

Table 2
Live Births According to the Economic Activity of the Mothers, 1990–2000 (Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Active earner</th>
<th>Receiving benefits on the basis of childcare</th>
<th>Unemployed</th>
<th>Housewife</th>
<th>Other inactive earner or dependant</th>
<th>Total number of live birth*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>80.71</td>
<td>7.46</td>
<td>X</td>
<td>10.76</td>
<td>1.07</td>
<td>124 655</td>
</tr>
<tr>
<td>1991</td>
<td>78.98</td>
<td>7.17</td>
<td>X</td>
<td>11.01</td>
<td>2.85</td>
<td>125 630</td>
</tr>
<tr>
<td>1993</td>
<td>65.70</td>
<td>10.08</td>
<td>9.18</td>
<td>10.53</td>
<td>5.42</td>
<td>116 954</td>
</tr>
<tr>
<td>1994</td>
<td>63.69</td>
<td>9.97</td>
<td>9.28</td>
<td>11.77</td>
<td>5.28</td>
<td>115 522</td>
</tr>
<tr>
<td>1995</td>
<td>62.31</td>
<td>10.03</td>
<td>8.44</td>
<td>12.78</td>
<td>6.45</td>
<td>111 950</td>
</tr>
<tr>
<td>1996</td>
<td>59.17</td>
<td>10.36</td>
<td>8.81</td>
<td>14.73</td>
<td>6.93</td>
<td>105 146</td>
</tr>
<tr>
<td>1997</td>
<td>56.64</td>
<td>10.60</td>
<td>8.89</td>
<td>15.68</td>
<td>8.18</td>
<td>99 640</td>
</tr>
<tr>
<td>1998</td>
<td>56.43</td>
<td>11.62</td>
<td>8.37</td>
<td>15.76</td>
<td>7.81</td>
<td>96 716</td>
</tr>
<tr>
<td>1999</td>
<td>59.11</td>
<td>13.68</td>
<td>6.40</td>
<td>15.75</td>
<td>5.06</td>
<td>94 281</td>
</tr>
<tr>
<td>2000</td>
<td>60.71</td>
<td>12.50</td>
<td>6.04</td>
<td>15.83</td>
<td>4.92</td>
<td>97 345</td>
</tr>
</tbody>
</table>

Source: own calculations.

* The totals here are not identical with the figures in the Demographic Yearbook, because this table contains only those births where information on the status of the mother was available.

When the high rate of unemployment became permanent, the proportion of the unemployed among childbearing mothers was no longer on the rise and by the end of the 1990s a slight decrease was observable. As for housewives or other dependant mothers the figure was on the rise until 1997. The weight of these two categories went up from 12% in 1990 to 24% in 1997 – then it started to decline and dropped below 20% by 2000 (Table 2). In addition it is to be noted that in the last two years of the investigated period the proportion of employed clearly went up.

To have a more precise picture of trends in fertility, we need to reflect the activity status of the mothers prior to giving birth onto the activity status of all mothers in maternal age. In order to perform this we formulated several assumptions and made some practical decisions. First we had to harmonise the system of categories applied in labour force surveys (LFS) and vital statistics. Unfortunately due to the fact that we have LFS data only since 1992, our analysis will be limited to the 1993–2000 period. Second, we used the data on labour market for the previous year as a basis for standardisation. In line with the above said, we calculated the figures for

20 For the time span of he analyse see the next footnote.
21 First, we unified the system of categories in the labour force surveys (LFS) and vital statistics. We did nothing to the categories of „employed” and those „receiving child care fee or allowance” as these from a general and labour policy perspectives can be regarded as identical. At the same time, the use of the term unemployed in labour statistics differs significantly from everyday use. This is why we created one category from the unemployed, inactive earners and dependants. This unfortunately produces a rather undifferentiated group, but this is still more reasonable than to calculate the childbearing rate for a thousand women on the basis of figures from two very different categories. Second, we decided to measure childbearing ratios by using data for the economic activity for the year prior to birth. Needless to say, the picture will not be undistorted this way either, but we are convinced that it will be more accurate than what would emerge if we used the distribution valid at the time of birth for the purposes of comparing the status of childbearing mothers to. For our real interest is to find out whether the willingness to bear children remains the same, decreases or increases due to changes in labour market
births per 1000 women by the categories of „employed”, „receiving benefits on the basis of childcare” and „other” (Table 3).

What basic tendencies can be established from the standardised data? The first conspicuous result is that fertility per 1000 women of maternal age (15–39) and being in the same labour market category has obviously declined in all status groups (Table 3). On the other hand, the rate and the timing of the decline are varying by the different statuses of activity.

The fertility of employed women has slowly but steadily decreased. In 1993, there were 76.4 children for every 1000 women in this status group and by 2000 this went down to 69.3. The low point of the trend was reached in 1993 with 66.6 children. This means that the proportion of employed women among all childbearing women went down not only because of the decrease of the proportion of active women in the labour market, but also because of the decrease in the willingness of employed women to have children. It is interesting to note that this phenomenon was not observable between 1993 and 1994. The decrease started in 1995, picked up after 1995 and lasted until 1999. In 2000 however, three more babies were born to every 1000 employed women than in the year before. It seems that the child care fee (GYED) reinstated in 1999 and targeting the fertility behaviour of employed women has contributed to the modification of the negative tendency, but achieved only partial and limited results.

Let us look at the number of babies born to every 1000 employed mothers also by age groups. The decline in the 20–24 group has not stopped to this date: in 1993 the figure was 157, by 1998 it was down to 102, then a year later to 85 and finally, in the last year of the analysed period, in 2000, to 76. The greatest decrease in the figures occurred between 1998 and 1999: the rate decreased by 16 babies per 1000 employed women. In the 25–29

### Table 3

**Live Births per 1000 Women in the 15–39 Age Group by Economic Status, 1993–2000**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employed</th>
<th>Child care allowance and fee</th>
<th>Inactive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>76.45</td>
<td>51.35</td>
<td>45.52</td>
<td>63.02</td>
</tr>
<tr>
<td>1994</td>
<td>78.37</td>
<td>50.82</td>
<td>43.93</td>
<td>62.21</td>
</tr>
<tr>
<td>1995</td>
<td>76.37</td>
<td>48.11</td>
<td>43.64</td>
<td>60.34</td>
</tr>
<tr>
<td>1996</td>
<td>73.08</td>
<td>38.74</td>
<td>44.74</td>
<td>56.88</td>
</tr>
<tr>
<td>1997</td>
<td>69.37</td>
<td>34.65</td>
<td>46.08</td>
<td>54.53</td>
</tr>
<tr>
<td>1998</td>
<td>68.57</td>
<td>36.90</td>
<td>44.26</td>
<td>53.77</td>
</tr>
<tr>
<td>1999</td>
<td>66.63</td>
<td>49.01</td>
<td>38.67</td>
<td>53.50</td>
</tr>
<tr>
<td>2000</td>
<td>69.34</td>
<td>47.54</td>
<td>40.10</td>
<td>55.39</td>
</tr>
</tbody>
</table>

| Lowest point (nadir) | 66.63 | 34.65 | 38.67 | 53.50 |
| Decrease to the lowest point from the level of 1993 | –9.82 | –16.70 | –6.85 | –9.52 |

*Source: own calculation on the basis of data from vital statistics and labour force surveys.*

conditions. (Theoretically, the correct solution would be the analysis of life course histories by childbearing and economic status.) Third, because the numbers in the reference cluster for older women are lower than necessary, we only studied births for the age group 15–39. However, we did calculate the birth ratios for a thousand women in the appropriate category according to 5-year age groups.
age group, with the greatest propensity to bear children, the rate of decline was slower: 34 babies per 1000 employed women. Subsequently it jumped by 10 in one year, thus in 2000, there were 128 babies born to every 1000 employed women in their late twenties. Among employed women in the thirties there was no decline, on the contrary the same rate for this age group grew by 19 in the analysed period to reach 64 in 2000. Among the youngest in the 15–19 age group, the decline was continuous until 1999, to drop from 96 to its half, 48 per 1000 employed women. Last year, the figure went up by 9 per 1000 employed women. On the basis of this we can conclude that there are cohort-specific differences behind the general decline in the propensity to bear children among employed women of maternal age. Among those under 30, we can detect a dynamic decline of various rates until 1999 while after 1999, with the exception of the 20–24 cohort, there is a clear increase.

Table 4

<table>
<thead>
<tr>
<th>Year</th>
<th>Age 15–19</th>
<th>Age 20–24</th>
<th>Age 25–29</th>
<th>Age 30–34</th>
<th>Age 35–39</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>95.9</td>
<td>157.3</td>
<td>151.9</td>
<td>45.5</td>
<td>14.0</td>
<td>76.4</td>
</tr>
<tr>
<td>1994</td>
<td>95.8</td>
<td>154.5</td>
<td>161.1</td>
<td>49.8</td>
<td>14.4</td>
<td>78.4</td>
</tr>
<tr>
<td>1995</td>
<td>80.9</td>
<td>143.6</td>
<td>154.1</td>
<td>51.2</td>
<td>13.4</td>
<td>76.4</td>
</tr>
<tr>
<td>1996</td>
<td>74.7</td>
<td>132.1</td>
<td>145.4</td>
<td>54.9</td>
<td>12.3</td>
<td>73.1</td>
</tr>
<tr>
<td>1997</td>
<td>67.1</td>
<td>119.5</td>
<td>136.4</td>
<td>52.1</td>
<td>12.6</td>
<td>69.4</td>
</tr>
<tr>
<td>1998</td>
<td>64.7</td>
<td>101.8</td>
<td>127.1</td>
<td>58.7</td>
<td>13.2</td>
<td>68.6</td>
</tr>
<tr>
<td>1999</td>
<td><strong>48.4</strong></td>
<td>85.2</td>
<td><strong>117.6</strong></td>
<td>58.2</td>
<td>15.6</td>
<td><strong>66.6</strong></td>
</tr>
<tr>
<td>2000</td>
<td>56.9</td>
<td>75.7</td>
<td>128.1</td>
<td>64.5</td>
<td>17.5</td>
<td>69.3</td>
</tr>
</tbody>
</table>

Change 1993–2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Age 15–19</th>
<th>Age 20–24</th>
<th>Age 25–29</th>
<th>Age 30–34</th>
<th>Age 35–39</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>–39.0</td>
<td>–81.6</td>
<td>–23.7</td>
<td>19.0</td>
<td>3.5</td>
<td>–7.1</td>
</tr>
<tr>
<td>1994</td>
<td>48.4</td>
<td>75.7</td>
<td>117.6</td>
<td>45.5</td>
<td>12.3</td>
<td>66.6</td>
</tr>
<tr>
<td>1995</td>
<td>34.7</td>
<td>2.1</td>
<td>15.5</td>
<td>0.0</td>
<td>–1.7</td>
<td>–9.8</td>
</tr>
</tbody>
</table>

Source: own calculation on the basis of data from vital statistics and labour force surveys.

On the basis of the basic tendencies and the processes characterising particular age groups, we can formulate a number of hypotheses. It seems obvious to us that the structural change (from over-demand to oversupply) of the labour market, and reduction of its size, has led to changes in the fertility behaviour of employed women of maternal age and this change has resulted in a reduced number of births. This process has been gradual and not shock-like as it is shown by the two cohorts of women in their twenties, which are of special importance from the perspective of childbearing. Therefore the phrase „turn” would be inappropriate, as there is no specific year or specific policy action that precipitated the process. Thus we posit that the changes occurred through continuous adaptation (spread of patterns).

What is also suggested by our conclusions that for more and more women, there is a longer period of employment between the age of getting the first job and giving birth to their first child. (This hypothesis nonetheless needs further testing later!)
Apart from the status of „employed” we can specify two more categories: that of those who stay at home, rear their children and receive some sort of maternity benefits and that of the ones in the „other” category. The fertility behaviour in the „maternity benefits” group is drastically different from the trends characterising those in the „employed” status (Table 3). The willingness to give birth did not decline until 1995 but it did not increase either, lingering around 50 children per 1000 women. After 1995, this indicator dropped by 10 and reached the lowest point at 1997 at 34.6 live births per 1000 women. The figures for the period 1995–1997 (around 35–38) are different from the figures both in the preceding and the succeeding periods. In 1999 there was a powerful increase (to 49), which seemed to stabilise around that value the next year. In 2000, there were 47 live births per 1000 women receiving maternity benefits in the childbearing age group (15–39). The changes in the trend can be clearly linked to concurrent changes in family policy. The so-called „Bokros package” of austerity measures had obviously reduced the willingness to bear children, which returned to its previous level after the change of government in 1998.22 All of this gives us grounds to say that those living on maternity benefits are very sensitive to family policy changes.

An analysis by the different age groups provides a more differentiated picture of the dynamics of the changes (see Table 5). The most drastic decline is observable in the age group of 20–24 years. Even though their willingness to have children seemed to be unabated until 1995, a radical shift occurred then: the figure was down by 20 live births the next year and by another 10 the year after – that is, in two years our indicator dropped by more than one-third. The lowest figures were reached in 1997 and 1998, after which an upturn could be witnessed: the number of live births per 1000 women went up by 20. The same years, 1997 and 1998 appeared to be the least favourable for the 25–29 age group as well. The same tendency of prior decrease and subsequent increase is observable here just like in the case of the younger age group, even if the process is a bit more moderate here. In the case of the age group of younger thirties the decrease is not as precipitous and reaches the lowest point in the observed period by 1996. The upturn, however, only takes place after 1998 in this group as well. This is also a significant increase, as the rate increases to 150% of its previous value. The dynamics of increase is very similar in the older thirties-group, even though here we could find a lower absolute value. The number of women on maternity benefits in the 15–19 age group is not significant, but their propensity to bear children can be described by a trend very similar to the ones just reviewed.

22 The „Bokros package” was a substantial cut in state social expenditure and was an attempt to stabilise the financial markets and to introduce a new philosophy in social policy by linking previously universal benefits and allowances to income level. As a result of this „austerity” package, the real value of social benefits decreased, and the rate of decrease was the highest in the case of maternity benefits.
### Table 5
Live Births per 1000 Women Receiving Child Care Allowance or Child Care Fee by Age Groups, 1993–2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Age 15–19</th>
<th>Age 20–24</th>
<th>Age 25–29</th>
<th>Age 30–34</th>
<th>Age 35–39</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>67.5</td>
<td>81.9</td>
<td>54.1</td>
<td>25.0</td>
<td>20.4</td>
<td>51.4</td>
</tr>
<tr>
<td>1994</td>
<td>62.8</td>
<td>75.4</td>
<td>53.4</td>
<td>28.5</td>
<td>20.0</td>
<td>50.8</td>
</tr>
<tr>
<td>1995</td>
<td>57.3</td>
<td>79.9</td>
<td>52.7</td>
<td>25.3</td>
<td>15.7</td>
<td>48.1</td>
</tr>
<tr>
<td>1996</td>
<td>64.8</td>
<td>59.7</td>
<td>44.0</td>
<td>20.9</td>
<td>15.4</td>
<td>38.7</td>
</tr>
<tr>
<td>1997</td>
<td>55.7</td>
<td>50.1</td>
<td>38.8</td>
<td>22.1</td>
<td>11.5</td>
<td>34.6</td>
</tr>
<tr>
<td>1998</td>
<td>67.7</td>
<td>49.9</td>
<td>40.6</td>
<td>25.9</td>
<td>13.4</td>
<td>36.9</td>
</tr>
<tr>
<td>1999</td>
<td>92.6</td>
<td>61.5</td>
<td>48.5</td>
<td>40.1</td>
<td>23.9</td>
<td>49.0</td>
</tr>
<tr>
<td>2000</td>
<td>92.4</td>
<td>60.3</td>
<td>47.4</td>
<td>38.7</td>
<td>26.3</td>
<td>47.5</td>
</tr>
</tbody>
</table>

**Change 1993–2000**

<table>
<thead>
<tr>
<th>Change</th>
<th>Age 15–19</th>
<th>Age 20–24</th>
<th>Age 25–29</th>
<th>Age 30–34</th>
<th>Age 35–39</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993–2000</td>
<td>24.9</td>
<td>-21.6</td>
<td>-6.7</td>
<td>13.7</td>
<td>5.8</td>
<td>-3.8</td>
</tr>
<tr>
<td>The lowest point (nadir)</td>
<td>55.7</td>
<td>49.9</td>
<td>38.8</td>
<td>20.9</td>
<td>11.5</td>
<td>34.6</td>
</tr>
<tr>
<td>Decrease from the level of 1993</td>
<td>-11.8</td>
<td>-32.0</td>
<td>-15.3</td>
<td>-4.1</td>
<td>-9.0</td>
<td>-16.7</td>
</tr>
</tbody>
</table>

At this point we can ask the question whether the income effects discussed earlier should not have the greatest impact on those receiving maternity benefits. Partly yes, because for them, the loss of income is direct and does not only materialise in the form of opportunity costs. On the other hand if we are to look at specific policy actions we need to know when and how the regulation in question had come into effect. Furthermore we think that in the case of this particular social group, administrative actions carry a broader meaning, going beyond the boundaries of the actual regulation. The “Bokros package” in 1995 marked the end of the stability in the system of family care administration, while from the moment it took office in 1998, the Orbán government advocated the reconstruction of family care programs.

The category of “other” is a heterogeneous one. It comprises people being unemployed, supported by somebody else, housewives and inactive earners – so we must exercise extra caution when stating anything about them. The development of the number of live births for 1000 inactive women is rather uneven and seems to be fluctuating. At the same time we must point out that the maximum variances are below the level measured in the other two status groups. Two time periods merit special consideration (Table 6). The fertility behaviour of this group seems unaltered until 1997–1998. Between 1993 and 1998 the difference between the highest and lowest values of the ratio is 2.5. Subsequently, the fertility among women not active and on maternity benefits seems to decline.

Can we detect differences in the behaviour of the various age groups of this “other” category? The fertility behaviour of the age group of 15–19 can be characterised by a decline in the entire period. In the age group of 20–24 there was a strong fluctuation between 1993–1997. In the age group of 25–29 the fertility was stable and somewhat growing until 1997 and finally, the 30–34 age group can be characterised by a clear increase. With the exception of the youngest and oldest age groups, the decline was significant in all groups between 1998 and 1999.

### Table 6

23 This particular area is to be further investigated.

24 Before analysing those being in the inactive status, we must point out that the decrease in the fertility of mothers receiving child care allowance to have more children might have contributed to a delay or avoidance of the birth of the second child.
Live Births per 1000 Women in the “Other” Category by Age Groups, 1993–2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Age 15–19</th>
<th>Age 20–24</th>
<th>Age 25–29</th>
<th>Age 30–34</th>
<th>Age 35–39</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>24.7</td>
<td>98.4</td>
<td>109.0</td>
<td>45.5</td>
<td>21.6</td>
<td>45.5</td>
</tr>
<tr>
<td>1994</td>
<td>24.1</td>
<td>89.1</td>
<td>106.6</td>
<td>45.7</td>
<td>19.6</td>
<td>43.9</td>
</tr>
<tr>
<td>1995</td>
<td>22.5</td>
<td>86.5</td>
<td>113.3</td>
<td>50.3</td>
<td>18.4</td>
<td>43.6</td>
</tr>
<tr>
<td>1996</td>
<td>20.7</td>
<td>94.2</td>
<td>117.1</td>
<td>54.6</td>
<td>21.1</td>
<td>44.7</td>
</tr>
<tr>
<td>1997</td>
<td>19.4</td>
<td>87.6</td>
<td>115.8</td>
<td>67.6</td>
<td>24.0</td>
<td>46.1</td>
</tr>
<tr>
<td>1998</td>
<td>18.3</td>
<td>78.9</td>
<td>109.2</td>
<td>64.9</td>
<td>23.2</td>
<td>44.3</td>
</tr>
<tr>
<td>1999</td>
<td>17.1</td>
<td>58.8</td>
<td>90.2</td>
<td>56.2</td>
<td>21.3</td>
<td>38.7</td>
</tr>
<tr>
<td>2000</td>
<td>18.4</td>
<td>55.0</td>
<td>100.4</td>
<td>56.3</td>
<td>23.1</td>
<td>40.1</td>
</tr>
</tbody>
</table>

Lowest point (nadir): 17.1 55.0 90.2 45.5 18.4 38.7
Decrease to the lowest point from the level of 1993: –7.62 –43.40 –18.75 0.00 –3.20 –6.85

Before summing up our findings concerning this extremely heterogeneous social group, we need to point out that in the investigated period there was an expansion in the higher education. From this perspective the composition of the analysed group must have changed, especially in the age groups of 15–19 and 20–24. If we assume that the roles of a mother and a student are incompatible and therefore the fertility among university students approaches zero, then we must modify our notions of the fertility behaviour of the non-student – i.e. mostly unemployed and housewife – women. Assuming an increase in the proportion of students within the group, there is a possible greater propensity to bear children among non-students under 24! That is to say it is likely that “unemployed,” “dependant,” and “housewife” women had an increased fertility until 1996 but perhaps even until 1997. This trend seems to have reversed afterwards although we should note that the reversal is not as characteristic as Table 6 would make us believe.

We are in not in an easy position when attempting to understand the dynamics of the process. We need to separate the effects of two factors. On the one hand, signs of relief appear in the labour market in 1998 after the low points of 1996 and 1997 (Table 1). While in 1997, 44% of the 20–24 year-old women were employed, the figure rose to 48% in the following year. The same figures for the age group of 25–29 are 48% and 52%. On the other hand, the government getting into power in 1998 introduced a more favourable family policy package for the employed parents, conflicting the interests of those not employed and not receiving maternity benefits. This might have contributed to the radical decline in 1998–1999 in this latter group.

The above part of the study has focused on the relationship between the fertility of women in childbearing age and their economic status. With the help of our method applied, a number of significant relationships could be demonstrated. The fertility among employed women clearly decreased, among those on maternity benefits it fluctuated sharply following the changes in the system of family/maternity benefits while among those in the “other status” category it varied irregularly. But it is also reasonable to

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25 We think it safe to assume that these women are using contraception and family planning the most consciously as having children will alter their careers the most.
assume that until the mid-1990s among housewives and unemployed women the willingness to have children rose. It is worthwhile to raise the question again whether the sociological approach or the classic economic (socio-economic) one is more instructive in interpreting the changes in the trends. The answer to this question is not easy due to the fact that we could not study the effects of value changes and institutions here. In other words we could not investigate the factors stressed in the theory of the “second demographic transition.”

Given all these limitations, the following observations could be made.

*Employed* women of childbearing age, those under the age of 30 exhibited the most evident decline in their propensity to have children. Their motivation could only be fully understood through a causal analysis, but we assume that changes in the labour-market played an important role in this respect. First of all the quality of this institution has changed. The significance of the shift in the balance of power between employers and employees is demonstrated by the fact that while the labour market got more balanced in 1995–1996, fertility rose later: precisely at the time when child care fee (GYED) is reinstated to compensate for the loss of income. What also goes against the classic economic considerations is that the reorganisation of family policy institutions in the framework of a liberal “stabilisation” package in 1995 changed the behaviour not so much of the employed mothers but those receiving maternity benefits. (While, of course, also affecting the behaviour of the employed mothers as well.) At the same time, the tendencies upward, appearing in 1998–1999 for those over 30 (especially in the 30–34 group) seem to support the economic argument as this took place simultaneously with the improvement of the labour market situation. But we should not forget about an additional, less emphasised component of changes in patterns of behaviour. What we see here is perhaps more than the postponement of childbearing decisions – we may possibly be witnessing the effects of changes in the timing of family and labour market career phase in one’s life course. The continuing fertility decline in the 20–24 age group should be attributed to the phenomenon that a long and stable period of employment is now inserted between the end of education and motherhood. (As we have noted, the reinstatement of the child care fee (GYED) ensured that the 20–24 age group would suffer the least from the loss of income or opportunity costs. Nonetheless, not this group, but the older ones have increased their fertility.)

The changes in family policies were most effective in restructuring the attitudes of those receiving maternity benefits: their willingness to have children was evidently dampened by the above mentioned stabilisation package but it has been increased by the change in policy in 1998.

The heterogeneous group in the “other” category exhibited fluctuating attitudes. However, we need to take into account that students constitute the highest proportion in this particular group, so it seems quite possible that the fertility of the unemployed and mothers staying at home increased until the mid-1990s. This seems to fit into both sociological and classic economic assumptions. The logic of an alternative set of roles would suggest — regardless whether the choice is voluntary —, that woman prefers motherhood to unemployment. At the same time it satisfies that assumption of economics. Namely, if relatively more jobs were available then the unemployed would choose the return to the labour market.

26 Here we have not touched upon such issues as the spread of cohabitation or extramarital births, even though these undoubtedly play an important part in the decision to have children.
As we have indicated, no final conclusion may be reached using cross-sectional analysis. What we are trying to articulate on the basis of our findings and considerations is that there is no single form of behaviour equally applicable to all social groups.

4. Level of Education among Childbearing Mothers

Running the risk of oversimplification, we could describe the period preceding the 1990s as one when childbearing patterns seemed to converge toward a unified pattern. The spread and dominance of the two-children family model played a crucial role in this process (Szukicsné 2000, 445), both as a practice as an ideal. (Kamarás 1996; S. Molnár 2001). The breakdown of fundamental tendencies by specific aspects showed that certain groups had been left out of the homogenisation process. For instance, the fertility behaviour of mothers not finishing primary education departed from the general tendencies (Szukicsné 2000). However, it seemed reasonable to assume that as family planning becomes more conscious and education levels improve, the weight of the divergent social groups will become less significant.

Processes concurrent with the social and political transition indicate the spread of new family models. The question is whether the transition in the 1990s in Hungary has created a new but homogenous model of family or whether differentiation is the dominant tendencies. Opinions emphasising a simple temporal delay of childbearing, implicitly opt for the evolution of a single family behaviour pattern. But the coexistence of multiple models is assumed in other studies, which point to the different impact of the transition on different social groups, or record the irreversible spread of non-traditional models of cohabitation (Szűcs 1999, Bukodi 2002), as well as those, which propose the recognition of a plurality of cohabitation patterns since the 1990s (Lesthaeghe 1995).

In the first part of our study, we have established that women of divergent economic activity status showed different fertility patterns in the investigated period. At the same time we are well aware that a specific economic status is not the same in the whole life and that individuals might be moving between groups along their life-course. Therefore we have to rely also on a relatively stable characteristic of an individual in contemporary Hungary. Such variable is the (completed) education of women.

Level of education is an important part in the formation of one’s social status in modern societies and in the attainment of one’s desired position in the social hierarchy. An approach utilising this aspect will give us a more detailed impression of the extent of structural changes due to a radical decline in fertility. In other words, we have clearer picture about the uniformity or diversity of fertility behaviour in the different social groups.

This approach is particularly interesting with regard to the 1990s when there was an expansion in secondary and higher education. This phenomenon must have had a direct impact on childbearing due to the incompatibility of the roles of mother and student. It also changed the composition of the female population of childbearing age by education levels. Thus the changes we find with regard to fertility behaviour and education not only indicate the changes in attitudes but also contain the effects of changes in the composition of the group. First we analyse the
structure of the childbearing female population by education levels, as we are then able to determine the significance of the different groups in the total fertility figures.

If we group childbearing women by education levels, we can notice two significant structural changes. On the one hand, the number of those with only primary education went down by 4% and on the other, the number of mothers with college or university degrees went up by the same percentage. We also need to point out that the proportion of those not completing primary education remained basically the same and there is no fluctuation in the proportion of mothers with vocational or secondary education. It is interesting that the majority of children were born to women in the middling three categories (Table 7) and it is instructional to note the high proportion of women with primary education.

Table 7

Childbearing Mothers by Level of Education, 1990–2000 (Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mother’s highest completed education level</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not completed primary</td>
<td>Primary</td>
</tr>
<tr>
<td>1990</td>
<td>4.8</td>
<td>28.2</td>
</tr>
<tr>
<td>1991</td>
<td>4.8</td>
<td>28.2</td>
</tr>
<tr>
<td>1992</td>
<td>4.8</td>
<td>28.2</td>
</tr>
<tr>
<td>1993</td>
<td>4.9</td>
<td>27.2</td>
</tr>
<tr>
<td>1994</td>
<td>5.1</td>
<td>28.0</td>
</tr>
<tr>
<td>1995</td>
<td>4.9</td>
<td>27.0</td>
</tr>
<tr>
<td>1996</td>
<td>5.0</td>
<td>26.4</td>
</tr>
<tr>
<td>1997</td>
<td>5.3</td>
<td>26.6</td>
</tr>
<tr>
<td>1998</td>
<td>5.0</td>
<td>25.8</td>
</tr>
<tr>
<td>1999</td>
<td>4.9</td>
<td>24.5</td>
</tr>
<tr>
<td>2000</td>
<td>4.6</td>
<td>23.9</td>
</tr>
</tbody>
</table>

As we have indicated, the analysis on the basis of education levels is made more difficult by the massive expansion of higher education in the 1990s. Twice as many men and women in their early twenties attend colleges and universities than ten years ago. As we lack precise data on the education levels for the entire population, in our analysis we used estimated data for determining educational levels by age groups on the basis of the 1990 census and the 1996 micro-census. We used this data to calculate the (estimated) total fertility rate by level of education. On the basis of the thus estimated and measured total fertility rate, we can identify the following trends (Table 8).

The fertility of mothers with the lowest completed education level (i.e. those who dropped out of school before the age of 14) differs sharply from all other groups. It is well above the average (Table 8). We are encountering differences when looking at the timeline of changes – as with this group, fertility not only failed to decrease, but was rising till the midpoint of the investigated period. While in 1990, the total fertility rate of mothers with less than primary education was at 2.245, this number rose to 2.719 by 1994. It is true that the closing value was 2.335, a decrease compared to the highest value, but this rate is still higher than the opening one for the period. Of the motives of the undereducated to bear children, we can form a

---

27 I must express my gratitude to László Hablicsek, who by estimating the composition of the population by educational level, made it possible to calculate the estimated total fertility rate differentiated by educational level.
detailed impression on the basis of the descriptive sociological work of Durst (Durst 2001) and the considerations put forth by Gyenei (Gyenei 1998).

In the other educational groups the tendency of decline seems to be very strong and uniform at the first sight. In 1990, the figures varied around 1.8, in 2000 around 1.3. The dynamics of change was however different by educational levels and this suggests a shift in childbearing patterns. To scrutinise this, we should start with the 1990 data. That year, the highest rate is that of women with vocational school education (1.915) followed by the figure for those finishing higher education (1.858). The fertility of those completing primary education is very close to the ones with higher educational level, while fertility is the lowest among those, who finished secondary education (1.731). The ranking of the groups changes somewhat by 2000. Those having finished secondary schools continue to show the lowest figures, while the rates for the other three groups have become very similar to each other. Within a narrow range the figure for those finishing primary school is the highest, followed by the group with higher educational level and finally the group with vocational school level.

The changes in the ranking of this last-mentioned four categories are due to the divergent dynamics of changes. The change in fertility was smallest among those finishing the primary school (–0.42) and accomplishing higher educational requirements (–0.49).\(^\text{28}\) The most drastic decline could be observed in the group with completed secondary school (–0.61) and among those having vocational training (–0.57). The decline, however, did not take place in the same rhythm and one will notice asynchronicity between the groups from this perspective. The brunt of changes reached the group of higher educational level already after 1992, while in the case of the two middle groups, this happened only after 1994. In the case of those with primary education, the most dramatic change occurred between 1997 and 1999.

### Table 8

*Estimated Total Fertility Rate by the Education Level of Mothers, 1990–2000*

<table>
<thead>
<tr>
<th>Year</th>
<th>Not completed primary</th>
<th>Primary</th>
<th>Vocational</th>
<th>Secondary</th>
<th>Higher</th>
<th>Total (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2.245</td>
<td>1.815</td>
<td>1.915</td>
<td>1.731</td>
<td>1.858</td>
<td>1.846</td>
</tr>
<tr>
<td>1991</td>
<td>2.322</td>
<td>1.845</td>
<td>1.899</td>
<td>1.738</td>
<td>1.903</td>
<td>1.862</td>
</tr>
<tr>
<td>1992</td>
<td>2.357</td>
<td>1.776</td>
<td>1.816</td>
<td>1.607</td>
<td>1.825</td>
<td>1.772</td>
</tr>
<tr>
<td>1993</td>
<td>2.455</td>
<td>1.686</td>
<td>1.794</td>
<td>1.519</td>
<td>1.694</td>
<td>1.692</td>
</tr>
<tr>
<td>1994</td>
<td>2.719</td>
<td>1.759</td>
<td>1.755</td>
<td>1.417</td>
<td>1.560</td>
<td>1.652</td>
</tr>
<tr>
<td>1995</td>
<td>2.706</td>
<td>1.684</td>
<td>1.654</td>
<td>1.334</td>
<td>1.548</td>
<td>1.578</td>
</tr>
<tr>
<td>1996</td>
<td>2.662</td>
<td>1.561</td>
<td>1.524</td>
<td>1.209</td>
<td>1.486</td>
<td>1.464</td>
</tr>
<tr>
<td>1997</td>
<td>2.668</td>
<td>1.510</td>
<td>1.439</td>
<td>1.108</td>
<td>1.385</td>
<td>1.386</td>
</tr>
<tr>
<td>1998</td>
<td>2.447</td>
<td>1.435</td>
<td>1.382</td>
<td>1.088</td>
<td>1.347</td>
<td>1.341</td>
</tr>
<tr>
<td>1999</td>
<td>2.344</td>
<td>1.354</td>
<td>1.352</td>
<td>1.071</td>
<td>1.308</td>
<td>1.300</td>
</tr>
<tr>
<td>2000</td>
<td>2.335</td>
<td>1.400</td>
<td>1.350</td>
<td>1.120</td>
<td>1.364</td>
<td>1.337</td>
</tr>
</tbody>
</table>

In the overall decline of fertility the most factor was the above-the-average fertility decline of the middle educational level categories. These categories supply the majority of women of childbearing age and they exhibit the least willingness to give birth.

\(^{28}\) Further research using individual data can answer the questions whether there is higher fertility among people with higher educational level as found in Sweden by Hoem–Hoem 1987.
Needless to say, we cannot, on the basis of our data, give a definite answer to the problem of how plural fertility patterns have become. Simultaneously with the general decline, we have seen this taking place at different tempo in the different groups we created – and actually some tendencies appear to be reversed. In other words, there are signs pointing to differentiation, but the character of the period is dominated by a general decrease. The low level of fertility suggests that the two-child family model is hardly likely to regain its all-pervasive status in expectations and family plans. At the same time we presume that neither this, 29 nor the model of three or more children is going to disappear. While at the same time the paradigm of the lone child household will proliferate.30

5. Summary

Demographic behaviour in Hungary and in Eastern Central Europe has undergone tremendous changes in the 1990s. Extramarital cohabitation has become a widespread practice, women start childbearing later in their lives and children born out of wedlock are no longer the exception. As a result of these and other processes, the number of children has declined along with the willingness on the part of women to bear children. In this study, we have attempted to analyse some social structural factors behind this phenomenon. In other words: we have asked whether groups occupying different positions in the social structure behaved homogeneously and if not, what kind of differences might be detected in their demographic behaviour. Using two criteria – economic activity and level of education – we have been able to show that in the 1990s different social groups acted in various ways. Even though the fundamental tendency was that of decline of fertility, we have been able to spot exceptions with regard to both dimensions. Furthermore, the scope and rate of decline have varied by the different groups, which resulted in structural changes in fertility behaviour. As far as the causes behind these changes are concerned we can only formulate some hypotheses. Causal analysis based on individual level may be successful in establishing the weight of circumstances (social structure) and value choices (desires and intentions) behind the processes described above.

The possible causal mechanisms of the two variables have been explained above, so here we would like to stress a hitherto not stressed relation. It seems that the decrease in the number of childbirth among employed women is less attributable to highly qualified women, and has more to do with the decisions of women with medium educational level. (This is suggested by the data on age). As for the management of the conflict of interest between work and family, we shouldn’t necessarily be thinking in terms of barriers to career advancements, or entrepreneurial successes, but simply the harmonisation of family tasks with the security and rhythm of employment.

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29 “It is important for the child to have siblings!”
30 “The joys of having children are attainable through having only one.”


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