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Descriptive Finding

**Rudiments of recent fertility decline
in Hungary:
Postponement, educational differences, and
outcomes of changing partnership forms**

Zsolt Spéder

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Rudiments of recent fertility decline in Hungary: Postponement, educational differences, and outcomes of changing partnership forms

Zsolt Spéder¹

Abstract

Our study describes fundamental changes in childbearing behavior in Hungary. It documents current postponement of entry into motherhood (first birth) and uncovers signs of delay in second birth. We place the behavioral modifications into historical time and reveal the basic role of the political, economic, and societal transformation of Hungary that started in 1989-1990 in these modifications. We document postponement as well as differentiation, and mothers' highest level of education will represent the structural position of individuals. We shed light on the different speed of postponement and support the assumption of behavioral differences according to the highest level of education. Particular attention will be paid to changing partnership relations: Fertility outcomes remain to be strongly associated with the type of partnership and its development; profound changes in partnership formation, namely the proliferation of cohabitation and the increasing separation rate of first partnerships, may therefore facilitate fertility decline in Hungary. The analysis is based on the first wave of the Hungarian panel survey "*Turning points of the life course*" carried out in 2001/2002.

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1. Introduction

Since many years, fertility decline and changing childbearing behavior in the post-socialist countries have been leading research topics not only in demography but also in neighboring social science disciplines. A large number of papers and articles describe different features of recent fertility developments: declining period fertility rates, fertility postponement, fertility aging, an increasing share of non-marital births, a changing parity distribution, etc. (cf. Frejka and Sardon, 2003; Kamarás, 2003b; Kohler and Philipov, 2001; Lesthaeghe and Moors, 2000; Macura, et. al. 1999, 2000; Philipov and Dorbritz, 2004; Rychtarikova, 2001; Sobotka, 2002; Zapf and Mau, 1993; and several other articles from a conference book edited by Kotowska and Józwiak, 2003). Alongside descriptive reports and analyses, there emerged a broad range of explanations. Suffice it to mention the newly developed “crisis hypothesis”, the “anomie/disorderliness assumption”, or the extension of the “theory of the second demographic transition” (Kiernan, 2001; Lesthaeghe and Moors, 2000; Lesthaeghe and Surkyn, 2004; Macura and MacDonalds, 2003; Philipov, 2003). Other papers have revealed the effects of educational expansion, the influence of changing labor market relations, and the effects of housing privatization etc. on fertility developments in post-socialist countries. This paper follows the first type of studies. Our aim is to *document* some well-known processes and to *reveal* some new details based on a very recent survey.

Our paper follows studies of *postponement behavior* (Kohler, et al., 2002; Lesthaeghe and Moors, 2000; Sobotka, 2002) and documents the well-known phenomenon of postponement of entry into motherhood. Postponement means that men and women enter parenthood at a later point in life, i.e., they start their fertility careers later. The term suggests that although the start may be a late one, it is followed by a regular course of the usual events. At the same time, postponement is the result of an adjustment process during the course of which people *adjust* their childbearing decisions to new circumstances, new realities of life, and new rules of organizing the function of their household economy and social life. In the course of this adjustment, the people involved set new goals for themselves or they want to realize their old goals in new circumstances. This understanding of postponement stresses the embeddedness of childbearing behavior in a historical, societal, and economic setting.

What was the state of societal transformation around 1990 if not a complete and abrupt change in the functioning mechanisms of production, the labor market, the institutional structures, and profound modifications in family and child related programs (Adamski, et. al., 2002; Andorka, et al., 1999, Kornai, 1993; Offe, 1994)? The regime change impacted the area of life objectives as well: New goals were set and the relative ranking of life goals changed (Füstös, et al. 1994; Rabusic, 2001). The goals

now needed to be realized in the background of changing and new structural circumstances. It is of little wonder, then, that researchers reported growing anomie in the early 1990s, detected and described an incompatibility between goals and available ways leading to them, and discussed the disorientation resultant from societal transformation (Andorka, 1999; Genov, 1998; Kopp et al., 1999). Can we assume that these developments did not and will not have far-reaching consequences on fertility? Naturally, the decline in the period fertility rate reduced our former question to irrelevance. Vital statistics (the period total fertility rate, the mean age at childbirth, etc.) clearly measure the consequences, i.e., postponement, of the adjustment process. However, the kind of childbearing patterns/models that will emerge as a result of this process still remains an issue to be addressed. *One of the main objectives of this paper is to document the process of postponement and to describe some of the features of the adjustment process.*

Although the Hungarian society has been witnessing postponement overall, we assume that different social groups perceiving different pressures and adhering to different values adjust at different pace and perhaps develop differential childbearing behavior to some extent. On the one hand, we assume that the new structures have exerted not only essentially different pressures but that they also have opened different options for the well-off and the poor, for the highly and poorly educated, for those employed in the public or private sector, and for those employed, self-employed, or not-employed (Hobcraft, Kiernan, 1995). On the other hand, we agree with Hakim and others who have pointed out that studies have rarely assumed women not to represent an entirely homogenous group and that heterogeneity may have consequences on fertility decisions (Hakim, 2003). The potential processes of *differentiation along the lines of social structures* will be examined in this paper, using data on the highest level of education attained by the mothers under study (Sections 4).

We devote a separate and more detailed section to the *fertility outcomes of changing partnership formation* (Section 5). During state socialism, entry into parenthood (the event of first childbirth) was practiced mainly within the framework of marriage (Frejka, 1980; NiBorchalain, 1991; Tomka, 2002). Non-marital birth was mainly restricted to particular social groups (the undereducated) and ethnic groups (e.g. Roma) (cf. Pongrácz, S. Molnár, 1994) and to a later post-marital phase in the life course (Carlson, Klinger, 1987). Thus, marriage and childbearing were strongly correlated (Klinger, 1995). Today, the diffusion of cohabitation (especially in first partnership) and the growing variability in and dynamics of partnership formation during the early life course constitute new circumstances for childbearing (cf. Baizan, et. al., 2003; Lasthaeghe and Moors, 2000; Macura, 2003; Philipov and Dorbritz, 2004). Although the literature mentions both types of relations (the effect of partnership formation on fertility outcomes and, conversely, the influence of childbearing decisions

on partnership forms), Section 5 of the paper documents the association between partnership relation and childbearing only and does not attempt to model their casual order. We will show, first, that profound changes in partnership relations have taken place and, second, that cohabitation has witnessed increases in live births. There follows a comparison of the fertility outcomes of different partnership relations defined by their beginning and status in a given period (five years) after their initiation.

The study of the fertility outcomes of partnerships is both about postponement and differentiation. We will show that proliferation of cohabitation and delay in union formation could well play a role in the delay of parenthood. The different fertility rates of the various partnership formations clearly suggest that there indeed is a differentiation, regardless of its underlying causes.

In the course of the description, we will concentrate our efforts on determining the extent to which the developments in demographic behavior are tied in with the change in the political regime, the latter which brought in its wake unprecedented, profound, and rapid changes in the institutional and political setting of Hungary, its economic system, and its social structure. It is our hope that the findings on these changes over time will constitute very useful rudiments for explaining the demographic transitions currently under way in former state-socialist countries.

2. Data and methods

For the purpose of our analysis, we use the data set of the longitudinal research project, *“Turning points of the life course”*. The dataset is the first outcome of a project (cf. Spéder, 2001; Kapitány, 2003) that was developed and carried out by the Demographic Research Institute Budapest under the umbrella of the “Generations and Gender Programme (GGP)”, an international collaborative research project launched by PAU in Geneva.²

“Turning points of the life course” is a representative survey of the Hungarian population aged 18-74 in 2001. There were 16 394 persons interviewed at the turn of

² The research questions, devised along the lines of the GGP, cover a broad range of demographic indicators and are geared towards gaining a deeper understanding of changing demographic behavior in Europe. The follow-up design, the parallel application of objective and subjective variables, and the strong prevalence of attitudinal variables all make for the special feature of the GGP and the Hungarian survey (cf. Vikat, et.al., 2005). The Hungarian survey differs from the GGP, however: The phase of operationalization has been concluded and fieldwork has begun quite early, in 2001, i.e., before completion of the GGP core questionnaire. The differences do not apply to the basic frame but to the construction of target and explaining variables. Whilst working on the concept of the Hungarian survey, we studied intensively several longitudinal surveys on demographic behavior, namely the National Survey of Households and Families (NSHF), and the Intergenerational Panel Survey (IPS). We also looked at the European Community Panel Surveys, the German SOEP, the British BHPS, and the Hungarian Household Panel Survey (HHPS).

2001 and 2002 about the social, economic, demographic, and ideational components of their life. The fieldwork was concluded in mid-2002 and the cleaned-up datasets were made available in 2003. For the purpose of our study, we use questions on partnership, fertility history, and highest educational attainment at the time of interview, but with a focus on fertility outcomes.

We apply cohort and period perspectives in parallel (Imhof, 2003). On the one hand, we concentrate on a description of changes in the *fertility behavior of different birth cohorts* (Frejka and Sardon, 2003). As usual, we group in five-year-intervals women born within this interval. They represent generations formed during the same historical period, generations that have similar experiences and opportunities, and face similar pressures as they age. Abrupt social changes and historical upheaval affect generations at the same points in time during their life course. All of this is especially important to the understanding of behavioral change in a former state-socialist society, such as Hungary. To understand behavioral differences, it is advantageous to look at cohort age at historical marks, in our case 1990.

Table 2.1: Respondents' year of birth, age at interview, and age in 1990 at the start of societal transformation

Year of birth	Age groups at the time of field work, 2001-2002	Age in 1990
1947-1951	50-54	39-43
1952-1956	45-49	34-38
1957-1961	40-44	29-33
1962-1966	35-39	24-28
1967-1971	30-34	19-23
1972-1976	25-29	14-18
1977-1981	20-24	9-13
1982-1983	18-19	7-8

On the other hand, we focus *on period effects* with a particular emphasis on political (economic and social) system change and its consequence on the developments in fertility behavior mentioned above. Period effects are discernible in the changing behavior of the successive cohorts, but they are even more conspicuous when the population is grouped according to important events in family demography (time of first union, time of first childbearing). For example, members of different birth cohorts may respond in the same manner to an economic or institutional change when they are in similar life circumstances (e.g., never in union, after first childbirth). Therefore, we will construct also partnership cohorts and cohorts of entry into motherhood. This

approach will enable us to crystallize out the differences in fertility behavior prior and subsequent to the system change.

Looking at the differences, we analyze the highest level of mothers' education and use four grade levels of education. Those who have primary education not completed (less than 8 completed years) and women with primary education only (8 years) belong to the lowest level. The level of completed vocational training covers 11-12 years of learning. The secondary level, a prerequisite for higher education, covers usually 12 years of learning. The higher (tertiary) level encompasses all completed college and university degrees, i.e., involving 16-17 years of study. We estimate that the vast majority of the female study population reach the highest degree of formal education intended before entering motherhood³, therefore we can assume that the respondents' highest level of education is a good proxy for their social status before first birth.

3. The postponement behavior of post-socialist generations

3.1 Measuring postponement by the mean age of mothers at birth

The mean age of mothers at birth obtained from yearly vital statistics enables us to receive first insights into postponement behavior and provides us with a good starting point for our subsequent analysis.

In the last two decades, the mean age of mothers at birth increased by 2.7 years, from 24.9 years in 1980 (i.e., during state socialism) to 27.3 years in 2002 (Table 3.1). The nineties experienced the largest share of increase and the trend continues unabated. The last two years of our study period have seen an increase by 0.6 years. When it comes to understanding postponement, first birth appears to be most important. The increase in mothers' mean age at first birth provides evidence for postponement of entry into motherhood. We found a delay of the same order regarding second births. Although the mean age at third birth has increased, too, most of the rise took place in the eighties; and no postponement is noted for mothers of fourth and higher-order births (Table 3.1). Third and higher-order births may have an important effect on differentiation; in our study we can not address this issue further, however, owing to the many peculiarities that there are to higher-order births (Pinelli, et al., 2002).

³ We do not have exact data on how many women furthered their education after having had first, second, or higher-order birth. However, based on lifelong learning survey results, we estimated the highest rate of women involved in formal education, with the latter being a prerequisite to increase the level of education. According to this survey, no more than 1.2% of women on maternity leave participated in formal education in 2003 (cf. HCSO, 2004). Based on this estimation, we assume that only a very negligible number of women furthered their level of education after having experienced first birth.

This brief review of vital trend statistics on the mean age of women at birth provides us with evidence that birth postponement during the female life course indeed took place during the last two decades and especially after 1990.

Table 3.1: Mean age of women by live birth-order, 1980-2002

Year	All	Live birth-order			
		1	2	3	4+
1980	24.9	22.8	25.7	28.1	30.8
1985	25.5	23.1	26.5	28.9	31.0
1990	25.7	23.0	26.4	29.4	31.7
1995	26.0	23.4	26.5	29.2	31.6
2000	27.0	25.0	27.5	29.4	31.4
2002	27.6	25.7	28.2	30.0	31.6
Change in years (1980-2002)	2.7	2.8	2.5	1.9	0.6

Source: own calculations, vital statistics data, Hungarian Central Statistical Office

3.2 First and second childbirth up to a given age - an analysis of different cohorts

When analyzing cohort-specific differences at first birth, we need to standardize our data to the exposure period. Thus, with regards to first childbirth we look at the ratio of females in each birth cohort that started its childbearing career (i.e., they have given birth to at least one child) by a certain age (20, 25, or 30).

As a starting point, we need to reveal the childbearing behavior of female cohorts that grew up, became adults, entered matrimony, and had children under state socialism. We treat women born before 1967 as belonging to this category. The four older cohorts in our table, and especially those born 1957-1961 and 1962-1966, have a very similar pattern of entry into motherhood (see Table 3.2). Of these, a majority of women (84-88%) became mothers before the age of 30, having started their childbearing careers in the early twenties. Childlessness was 12-15% among those aged 30. Two-thirds of the women in these cohorts had one child born to them by the early age of 25. The 50-year-olds (born 1947-1951 and belonging to the 50-54 cohort of 2001) had a ratio below that of the other cohorts (66%) and thus lagged behind the other cohorts (71-73%). Lastly, note that in the cohorts born around 1960, one-quarter of women entered motherhood before the age of 20.

Pointing out the differences between the four cohorts mentioned, note that the term “youngest fertility” describes the group born 1957-1961. Over one quarter of females in

this group (27.5%) were mothers by the age of 20; this compares to over two-thirds (73.1%) who entered motherhood by the age of 25. An overwhelming majority (88.5%) were mothers by the age of 30. These patterns aptly describe “early childbearing” behavior under state socialism, a phenomenon that is well known.

The first signs of change emerged in the 1967-1971 female cohort. Compared to women born just a few years earlier, “only” 16.5% were mothers by the age of 20 (this compares to 25% for the preceding cohort). As to motherhood at age 25, they were even more behind the preceding cohort: 57% of them were mothers by the age of 25 as opposed to 72%. By the time the 1967-1971 cohort reached age 30, they had slightly caught up, as 74.8% of them entered motherhood, however still lagging behind (compared to nearly 90% of the preceding cohort). The near future will tell us whether this cohort will eventually catch up or not as it is not at all unthinkable that some women will opt for first childbirth after the age of 30.

The cohorts born after 1971 show a further decline in the risks of entry into motherhood at all cut-off points. There is no stabilization in the ratios characterizing the different cohorts that entered into motherhood, indicating that at the time of the survey (2001/2002) the changes in childbearing behavior had not come to an end in Hungary.

Let us now identify the starting point at which the change in timing regarding entry into motherhood began. The first cohort that was impacted by the historical changes was the 1967-1971 cohort. In 1990, they were in their early twenties (19-23) and most of them had not started their childbearing career at the time of system change. From the point of our measurement and as far as first birth timing is concerned, the change in fertility behavior seems to be strongly linked to the societal transformation from state socialism to a market economy.

Using the same approach, we are able to calculate the ratios of those who gave birth to a second child until they reached the above mentioned cut-off points in the life course (Table 3.5). As expected, the results show the same pattern regarding the different group of women born before 1967: There is a clear stable pattern, if not an increase, in the probability of second childbirth until a given age. Postponement of second birth, i.e., a decrease in the rate, can be noted for females belonging to the 1967-1971 cohort. As with the preceding cohort (they were born five years earlier), nearly two-thirds (64.7%) of women gave birth to at least two children by the age of 30, the corresponding number in the “behavior changing” generation born 1967-1971 is 44.9%. The subsequent cohorts show successively lower numbers by all cut-off points.

Table 3.2: Share of women who had at least one child prior to a specific age, by birth cohort (age group)

Age of women	Date of birth/age in 2001						
	1947-	1952-	1957-	1962-	1967-	1972-	1977-
	1951	1956	1961	1966	1971	1976	1981
	50-54	45-49	40-44	35-39	30-34	25-29	20-24
20 years old	18.8	23.3	27.5	25.0	16.5	13.9	9.1
25 years old	66.1	71.2	73.1	72.3	57.2	43.4	-
30 years old	84.0	86.3	88.5	87.7	74.8	-	-

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

Table 3.3: Share of women who had at least two children prior to a specific age, by birth cohort (age group)

Age of women	Date of birth/age in 2001						
	1947-	1952-	1957-	1962-	1967-	1972-	1977-
	1951	1956	1961	1966	1971	1976	1981
	50-54	45-49	40-44	35-39	30-34	25-29	20-24
20 years old	1.8	3.0	3.7	5.4	2.5	2.6	1.9
25 years old	27.1	32.2	30.8	33.1	22.3	15.7	-
30 years old	55.4	57.6	60.8	64.7	44.9	-	-
35 years old	65.7	66.4	70.5	73.2	-	-	-

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

3.3 The changing risks of second childbirth

An examination of the risks of second childbirth during an unstable, transitory period can only be carried out by projecting these risks onto women who already had a first child.⁴ In order to measure the influence of historical time (period effect) on childbearing behavior after first birth, we constructed groups of mothers on the basis of the time at which the first child was born. Just as historical time places children born in the same year in the same school class or places people experiencing similar events at similar ages into the same generation, the date of first childbirth places people of different ages into a similar life situation, offering similar experiences. For the purpose of our analysis, we standardized the time of exposure, considering second-order births within five years after the first birth.

⁴ On second births in Hungary under state-socialism, see Oláh (2003).

The analyses of our data again take as a starting point the cohorts from the pre-1990 period (here: cohorts of motherhood entry). Our table shows that the 1970s and 1980s were characterized by a relatively stable pattern: Nearly 60% of those who ever had a child also had a second one within five years (Table 3.4.). There are hardly any fluctuations in the percentage points in question. The variation between the lowest (55.4%) and the highest (58.3%) is less than 3%. After system change, the women subject to our study were noticeably less likely to have a second child. Less than half (48.4%) of those who experienced first childbirth between 1992 and 1996 opted for a second child within the five-year period. This represents a decrease by 10% compared to the previous period and is 7% less than the lowest ratio.⁵

The decrease in second birth risk is more moderate than expected when looking at first birth postponement. However, if postponement is understood as a ‘simple shift’ in age in the initiation of the parental career – and this is not an unusual view –, we would expect no change in second birth risks within a given period after the first birth. But to us, changing risks signalize further change in childbearing behavior, i.e., additional postponement and/or lower completed fertility and/or differentiation according to the number of children.

Summarizing our results, we have shown two components of postponement behavior in Hungary after 1990, i.e., in times of societal transition. The increase of mothers’ mean age at first childbirth and the arrival of the first child by a certain age of the mother confirm a *general postponement in starting the fertility career*, i.e. in entering motherhood. We demonstrated yet another type of postponement, if only at a moderate level: a *delay in second childbirth*. This, the second element of postponement (should it continue unabated) may point to qualitative changes in childbearing behavior: The new behavior may not merely be a simple shift in starting a childbearing career.

⁵ Dividing calendar time into three rather than five-year periods, it appeared, that second births declined rapidly from the early to the mid-1990s, since only 45% of the firstborn delivered between 1994 and 1996 had a sibling within five years. However, other fluctuations during the 1970s and 1980s suggest that, as with our sample size, the three-year window does not provide reliable estimates.

Table 3.4: Likelihood of second childbirth five years after first childbirth, by date of birth of the first child, 5-year period, female responses only

Birth of the first child (Cohort of entry into motherhood)	Share of women having given birth to a second child within five years after first childbirth
1972-1976	56.9
1977-1981	56.0
1982-1986	55.4
1987-1991	58.3
1992-1996	48.4

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

4. Educational differences

We also looked at the question whether postponement behavior is a feature of all social groups or of some particular social groups. To formulate a precise and clear reply, we would need to look at several structural variables (such as the labor market status, occupation, income, education, residence) that pertain to the period preceding childbirth. Unfortunately, the first wave of our survey does not give us this option. The majority of the respective structural variables in our data set describe respondents of the 2001-2002 survey period, i.e., parents at a post-childbirth point in time. However, the *highest level of education* recorded at the time of the survey can serve as a good proxy for the social status before the births.

4.1 First and second births and the education level of mothers in 2001

We perform our analysis by differentiating the life tables for first births (Tables 3.2 and 3.3) according to the highest education level of mothers at the time of interview. In doing so, we define the ratio of women who belong to a specific education group (by the highest level of education) and who entered motherhood until a given age. As previously, the cut-off points are ages 20, 25, and 30 (ages 25, 30, and 35 for second births). Table 4.1 shows us the ratios by cohort and level of education.

Let us start by describing the childbearing practice adopted by older cohorts. People timed the birth of their first child at a later age with rising educational qualifications mainly because of a longer stay in the education system. A significant difference is noticeable among all levels of education.

Around half of the relatively poorly educated women born 1957-1966 became mothers before the age of 20. This compares to one third for those with vocational education, and closely one fifth for females with secondary education. When we look at the education breakdown of women who entered motherhood by the age of 25 prior to 1990, we see obvious differences among the groups mentioned above. More than four fifth of the women with a lower education are already mothers, which is true in the same order for women with vocational education. Secondary-educated women have a slightly lower value. Slightly less than half of the higher-educated women entered motherhood before they reached age 25. Naturally, the difference between the two groups is not that large, when we take into consideration that those with a secondary education had seven to eight years to become mothers (when looking at the cut-off point age 25) since they graduated from school aged 17 or 18, while women with a higher degree only had three to four years. By the time they reached the age of 30, the women of higher education, and especially those born between 1957 and 1966, had closely approached but not fully “caught up” with their counterparts of lower education in terms of entry into motherhood. They lagged behind by a mere few percentage points in the pre-transition cohort (1962-1966).

Did the patterns of entry into motherhood change at all after the political system transformation? Our data show that women with different education levels reacted differently to the system transformation as far as postponement of entry into motherhood is concerned; we cannot ignore, however, that these differences may even out at an age level beyond 30, since the starting date of the childbearing careers in question is being pushed further and further back these days. The data show that becoming a mother “spreads” according to the level of education. Let us look at this phenomenon in greater detail.

Compared to the period preceding the change in the political regime, the behavior of the group with the lowest education after 1989/1990 can hardly be said to have altered. On the other end of the educational hierarchy (higher level), clear and abrupt postponement can be noted. Within five years, the percentage of mothers entering motherhood by the age of 25 more than halved: It dropped from 48.9% to 22.1%. Higher educated women seemingly reacted to the new circumstances more readily and the pace of the postponement varied among groups with different education levels. The delay among females with an intermediate level of education started more gradually and then seemed to speed up. There are signs of divergence between the two middle groups. The women with secondary school completion show a stronger decline in the rate than those who have accomplished vocational education. Large differences are revealed among the cohorts of higher education when considering the cut-off point of age 30. Among the 1962-1966 cohort, four-fifths were mothers, this compares to only and slightly half of them (55.8%) as to the subsequent cohort.

The review of second births by a given age seems to support the statement that women of a different social status reacted at a different speed to the new circumstances (Table 4.2.). The higher educated and the secondary educated seem to have adjusted very abruptly after the regime transformation to the new circumstances, especially when looking at the cut-off point age 30. The subsequent analysis of second birth risks will shed light on the additional features of these changes.

The data clearly show that people with different levels of education reacted differently to the new circumstances resultant from the political and economic upheaval. Naturally, in 2001-1002, i.e., at a time at which the survey was carried out, the process of adapting to the new circumstances was far from being over. However, the data foster the assumption that in future childbearing patterns will be differentiated by education levels more so than they used to be, especially with regards to the timing of first childbirth.⁶

Table 4.1: Share of women who gave birth prior to a specific age, by birth cohort and mother's highest level of education

Level of education	Date of birth/age in 2001						
	1947- 1951	1952- 1956	1957- 1961	1962- 1966	1967- 1971	1972- 1976	1977- 1981
	50-54	45-49	40-44	35-39	30-34	25-29	20-24
Prior to age 20							
Primary	32.9	38.9	46.3	54.9	39.6	45.0	41.8
Vocational	21.6	34.1	37.2	30.1	23.0	15.7	13.0
Secondary	9.1	11.5	18.9	15.1	6.9	5.7	1.5
Higher	-	-	-	-	-	-	-
Prior to age 25							
Primary	78.1	84.5	85.3	81.0	79.7	72.7	-
Vocational	74.5	78.5	81.1	84.0	70.0	57.6	-
Secondary	58.2	66.5	71.8	71.7	55.5	35.1	-
Higher	43.0	42.9	48.9	48.9	22.1	16.2	-
Prior to age 30							
Primary	88.0	91.2	92.1	88.7	84.6	-	-
Vocational	85.2	89.7	93.3	92.6	81.5	-	-
Secondary	80.0	84.2	88.2	86.1	75.3	-	-
Higher	82.0	75.9	78.6	82.1	55.8	-	-

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

⁶ At the same time, our data describes a period of transition and by the time the pattern stabilizes, it may well be that there will be a general leveling-off in differences, naturally, when the respondents reach older ages.

Table 4.2: Share of women who gave 2nd birth prior to a specific age, by birth cohort and mother's highest level of education

Level of education	Date of birth/age in 2001						
	1947- 1951	1952- 1956	1957- 1961	1962- 1966	1967- 1971	1972- 1976	1977- 1981
	50-54	45-49	40-44	35-39	30-34	25-29	20-24
Prior to age 25							
Primary	40.8	49.3	45.0	56.0	49.3	40.2	-
Vocational	32.9	38.8	39.4	38.1	27.5	19.1	-
Secondary	17.4	22.4	24.8	27.9	13.8	9.8	-
Higher	8.0	8.3	12.1	7.8	2.6	1.7	-
Prior to age 30							
Primary	69.7	69.7	63.7	71.1	67.6	-	-
Vocational	63.4	63.4	70.7	71.0	50.0	-	-
Secondary	51.6	51.6	57.1	62.5	39.4	-	-
Higher	37.6	37.6	52.1	51.3	25.3	-	-
Prior to age 35							
Primary	71.8	75.3	72.5	77.3	-	-	-
Vocational	64.9	68.1	77.4	79.0	-	-	-
Secondary	59.2	61.8	66.7	69.4	-	-	-
Higher	68.0	56.4	66.9	67.5	-	-	-

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

4.2 Second births within 5 years after first birth

In the debate on postponement, the question often arises whether postponement of first birth results in fewer people opting to have a second child. The decline in second births within a five-year period following the first provides an answer in the affirmative. Does social hierarchy play a role in postponement, too? Let us now turn to an analysis of whether it does so, and if so, to what extent the education level of women does affect the probability of bearing a second child after the first within a specific period (the usual five years).

Under state socialism, no large differences as to the education level of women existed (c.f. Klinger, 1995). We detected only some lag as to women with upper-secondary education (see Table 4.3). These differences are not very significant, however. Highly educated women did not lag behind any other group of females. Once they started their fertility career, they were inclined to have a second child to a similar

extent and speed as other women, if not earlier. All in all, educational differences under socialism were not significant.⁷

Among women who entered first motherhood in the few years immediately preceding system change (1987-1991), the lowly educated clearly have the highest propensity to second childbirth within five years (Table 4.3). The leading position seems not to have been threatened in the 1990s, although the propensity to have a second child slightly declined during the nineties among them. (However, in 1992-1996 it is not lower as at the turn of the 1980s.) The share of women with vocational and secondary education lagged behind the figures for the lowest educated women. Note that these women make up four fifth of the women in the propogative ages. The willingness among higher educated women to have a second child within a certain period after first birth was high and seemed to be above average in the 1990s. (However, caution is well-advised since in this period the sub-sample included only 70 cases.) Further multivariate research can prove that women with higher education, if they opted for a child at all, had a second child born to them with an average or higher likelihood within a given time.

Table 4.3: Share of women giving birth to a second child within 5 years, by date of first childbirth (“first birth cohorts of women”) and highest level of education

Highest level of mother's education	Time of first birth				
	1972-1976	1977-1981	1982-1986	1987-1991	1992-1996
Primary	59.9	58.8	58.2	65.8	58.0
Vocational	58.4	62.3	49.7	58.2	45.9
Secondary	52.0	50.2	55.3	55.8	41.2
Higher	60.0	56.0	60.4	55.1	(55.8)

() case number s between 50-100

Source: own calculations, "Turning points of the life course", *Demographic Research Institute*, 2001-2002:

We can provide only a very limited description of the possible structural differences in postponement, but the analysis of the highest level of education has shed light on the possible results of a further structural analysis. We conclude that women with higher education began to adjust their behavior very rapidly, a behavior that is manifest in very rapid postponement of motherhood, and perhaps opting for alternative

⁷ Here, we could include neither specific social groups (undereducated) nor families with three and more children.

life goals. Despite this, they did not seem to lag behind mothers of other educational groups *once they started* their fertility careers. On the contrary, it is not unlikely that they will speed up and perhaps concentrate their fertility on a shorter time-span (cf. Hoem and Hoem 1988). On the other end of the educational hierarchy, women with a low education adjusted only very moderately to the new circumstances, if at all. They show the highest probability of first and succeeding births. If anywhere, some signs of early fertility can be found among this group. The group with the highest contradiction is that with intermediate education, i.e., with a completed vocational and secondary level of formal education: Postponement and some inertia characterize their patterns of entering into motherhood, and the group also shows the strongest decline in the propensity to second birth. Our earlier analysis suggests that they have the most “fragile” existence in the labor market, negatively impacting fertility (Spéder, 2002). An extended analysis (including labor market activity, partner’s status, etc.) and a more complex one can help us to answer the question as to whether and which kind of differentiation can be found in terms of childbearing behavior (cf. Kreyenfeld, 2002).

5. Changing partnership relations and fertility outcomes

Research concerned with fertility decline inevitably refers to changes in partnership relations and some studies provide a detailed treatment of this topic (Baizan, et. al, 2003; Frejka and Sardon, 2003; Frejka and Ross, 2001; Kamarás, 2003a; Pinelli, et.al., 2002). A review of the relevant considerations often results in the conclusion that cohabitation, because of its lower level of commitment and a higher degree of dissolubility, acts as a deterrent in the decision to opt for childbirth (Pinelli et.al., 2002). This, in turn, contributes to lower fertility rates. Some researchers will naturally argue that there are more facets to this phenomenon than described above, since the propensity to bear children is showing a declining tendency in both marital and long-term cohabitative relationships (Kohler, et.al, 2001:644). Others assume that, given the right kind of institutional environment, it is precisely extramarital childbirth, especially children born into cohabitation, that can improve fertility rates (Jensen 2000).

In this section, we concentrate on partnership relations and partnership dynamics at the very early stages in the life course. Naturally, we cannot attempt to provide a comprehensive overview of the associations between partnership formation and childbearing. It seems obvious that the changes in the timing, form, and stability of partnerships will neither leave childbearing behavior untouched nor the timing of entering motherhood and the number of children without impact. At the same time, we are also aware that childbearing decisions have their own impact on partnerships – for instance, they facilitate the conversion of cohabitation into marriage. Furthermore, we

should not discard the possibility that with some people, decisions about partnership and childbearing occur interdependently and simultaneously. This descriptive paper reviews these interdependent processes from one perspective, namely, just how far changes in partnerships have shaped new circumstances for childbearing and are associated with the decline in childbearing. Therefore, we are not going to concern ourselves with the interplay of effects. We will treat the possible fertility outcomes of partnerships in three stages. First, we review the partnership context of first and second births. Second, we intend to uncover the kind of influence that the type of first partnership (the start of one's partnerships career) has on the childbearing career of a person. Third, we will look at the childbearing outcomes at a given point (5 years after initiation) in the partnership career. As before, the emphasis will be placed in particular on changes *over time*.

5.1 Changes in partnership relations in the context of childbearing

We will briefly review the profound changes that occurred in union formation (cf. Billari, et.al, 2002; Bukodi, 2004; Kantorova, 2004; Kiernan, 2002; Lesthaeghe and Surkyn, 2004; Macura et al., 2002; Sobotka, 2002;).⁸ We will do this in a way that provides sufficient background for the description and interpretation of fertility outcomes. Our review intends to answer the following questions: (1) To what extent does *postponement* describe the formation of first unions? (2) To what extent is the practice of cohabitation in first union a widespread phenomenon? (3) Are there differences in postponement and the type of first partnership according to the level of education? (4) Has the stability of partnerships been modified and has the rate of converting cohabitation into marriage changed? (5) To what extent can these phenomena be regarded a consequence of political regime change, i.e., the socio-economic changes that started with the transformation?

As before, we will first review the changes in the share of women who formed unions by a specific age (20, 25, or 30). In other words, we attempt to detect postponement in partnership formation. Therefore, we first look at the changes in the proportions of women who had never been in partnership (see Table 5.1). With regards to the three age limits, we see an increase in the proportion of never-partnered women, first among those born 1967-1971. The percentage of those who never lived with a partner until they reached their 20th birthday rose continuously from 54.1% to 72.6%, starting with the 1962-1966 birth cohort. Climbing figures are noted for age limits 25

⁸ This section publishes a few essential findings of an earlier, longer study (Spéder 2005), summarized here from the perspective of fertility outcomes.

and 30, too. The findings provide evidence of postponement with regards to first partnership timing.

Table 5.1 uncovers another process, too: The proportion of individuals who entered cohabitation as first partnership is clearly increasing and the proportion of women whose first union has been marriage is declining. The shifts and modifications in partnership are connected to the Hungarian regime transformation in diverging ways. Whereas the postponement in union formation is clearly related to the regime change, the proliferation of cohabitation as first union started prior to this change, gaining impetus after the political-economic transformation, however.

When we divide our data according to the highest level of education obtained, the role that system transformation plays in postponement increasingly comes to light (cf. Table 5.2). Since people who differ in the level of education obtained leave the educational system at different ages, postponement logically does not necessarily take place in the same cohorts at all education levels. Postponement is evident in the 1967-1971 cohort among those with secondary education when we consider the cut-off point to be age 25, and among the higher educated when the cut-off point is age 30. In both cases, the ratio of those never partnered rose by approx. 10% compared to the previous cohort. Placing these developments in the context of historical time, postponement of those with secondary education took place in the early nineties, whereas with the highly educated it began at the second half of the nineties. Among individuals with completed primary education only or with vocational education, the strongest increase in those never partnered can be noticed in the 1972-76 cohort. A further diffusion of postponement as to the secondary and higher educated groups can be seen in the same cohort, too. In summary: Postponement started and gained impetus partly at different life ages according to the highest level of education; here, however, the period of system change (1989-1990) and its relation with special cohorts are crucial.

We analyzed the changing dominance between marriage and cohabitation as first partnership and its relation to the social structure, especially the education level, and the possible underlying processes elsewhere (Spéder, 2005). There we concluded that the diffusion of cohabitation started among individuals with the lowest education, then continued to rise among the highest educated, and most recently cohabitation as first partnership has been characteristic of individuals of all education levels

Members of different birth cohorts experience the same crucial life-event at the same time. In our case, this applies to the profound social transformation of Hungary at a historical point in time (1989-1990). In order to capture the role of historical events, we change the perspective of the further description: We now turn to partnership cohorts. These cohorts are made up of women who formed a partnership during the same time interval.

The distribution of first partnerships between marriage and cohabitation is shown according to the date of partnership formation. Table 5.3 shows that in the 1970s, one-tenth of the respondents commenced their partnership careers with cohabitation; the rate increased to 25% in the 1980s and crossed the 50% mark sometime in the early 1990s. By the end of the nineties, roughly one-third opted for marriage, whereas two-thirds entered cohabitation as first partnership.

Smooth changes and some stability characterize the conversion rates of partnership (Table 5.4). First, the propensity of first partnership dissolution within five years clearly increased around 1990. As early as in the beginning of the eighties, one tenth of first partnerships were dissolved within five years; ten years later, the percentage rose to 14.5. A change in the conversion rate from cohabitation as first partnership to marriage can be seen, too. As many as 65.7% of cohabitations that were entered as first partnerships in 1972-1976 were converted into marriage, the corresponding figure in 1992-1996 is less than 50% (48.6%). In parallel to this process, the rate of continuous cohabitation increased (from 17.1% to 32.7%), as did the rate of dissolved cohabitations as first partnerships (18.6% of cohabitations entered in the 1992-96 period as first partnerships were dissolved within five years.) Finally, there was no significant change in the stability of partnerships that started as marriage. (The increasing tendency of divorce within the five-year span is within the error margin). Around one-tenth of marriages are dissolved within five years. Comparing the fragility of marriage and cohabitation, we clearly see a higher break-up rate of the latter. Considering the level of education, no significant differences can be seen as to the dissolution of partnership and divorce (tables not shown!) The educational differences in the conversion rates of cohabitation are not subject to interpretation because of low sample size.

In summary: Profound changes in partnership behavior are evident. The largest and most far reaching change took place in the form of first partnership: Cohabitation became the dominant form. Other changes are slighter, however they are not insignificant: The start of first partnership shifted to a later age in the life course (postponement); partnership stability and the conversion of first cohabitation into marriage during the early life course decreased. Lastly, the role of system transformation (period effect) is a plausible contributing factor to the changes mentioned. It makes sense to investigate which kind of connection exists between changes in partnership and childbearing behavior, something that we will address in the next section.

Table 5.1: Share of women who established first partnership as marriage or cohabitation, and the share of never partnered prior to a specific age, by birth cohort

Type of first partnership	Date of birth/age in 2001						
	1947-1951	1952-1956	1957-1961	1962-1966	1967-1971	1972-1976	1977-1981
	50-54	45-49	40-44	35-39	30-34	25-29	20-24
Prior to age 20							
Marriage	37.9	37.5	38.7	34.3	19.6	14.0	5.0
Cohabitation	2.8	4.7	6.6	11.6	18.4	19.7	22.3
Never partnered	59.2	57.8	54.8	54.1	61.9	66.2	72.6
Prior to age 25							
Marriage	79.4	79.0	75.7	66.9	49.4	32.6	-
Cohabitation	4.3	6.9	9.8	20.2	29.4	36.6	-
Never partnered	16.4	14.1	14.5	12.9	21.2	30.8	-
Prior to age 30							
Marriage	86.6	85.6	82.5	71.4	55.5	-	-
Cohabitation	5.4	8.5	12.1	22.5	34.1	-	-
Never partnered	8.1	5.9	5.5	5.9	10.4	-	-

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

Table 5.2: Share of woman who established first partnership as marriage or cohabitation, and the share of never partnered prior to a specific age, by birth cohort and level of education (%)

Type of first partnership/ level of education	Date of birth/age in 2001					
	1947- 1951	1952- 1956	1957- 1961	1962- 1966	1967- 1971	1972- 1976
	50-54	45-49	40-44	35-39	30-34	25-29
Prior to age 25						
Marriage as first partnership						
Primary	82.4	78.4	75.3	58.9	41.9	34.8
Vocational	85.2	85.0	79.3	72.7	62.5	43.3
Secondary	78.0	79.2	79.8	72.4	53.0	29.4
Higher	(65.0)	69.2	64.3	56.4	34.4	21.5
Cohabitation as first partnership						
Primary	5.7	11.0	14.7	30.5	49.3	47.3
Vocational	4.7	5.1	11.0	19.4	24.5	36.9
Secondary	2.4	5.0	7.6	15.2	25.1	33.4
Higher	(4.0)	6.1	5.7	18.8	24.0	33.7
Never partnered						
Primary	11.9	10.6	10.0	11.6	8.8	17.9
Vocational	10.1	9.9	9.7	7.9	13.0	19.8
Secondary	19.6	15.8	12.6	12.4	21.9	33.7
Higher	(31.0)	24.7	30.0	24.8	31.6	44.8
Prior to age 30						
Marriage as first partnership						
Primary	86.6	81.3	79.4	61.3	44.6	-
Vocational	94.4	89.3	85.4	77.7	65.0	-
Secondary	88.4	87.6	85.3	75.9	59.9	-
Higher	(83.0)	84.1	78.6	67.2	46.8	-
Cohabitation as first partnership						
Primary	6.3	12.3	16.9	30.5	50.0	-
Vocational	6.0	6.1	11.6	20.0	27.0	-
Secondary	3.1	6.2	9.2	19.4	31.2	-
Higher	(9.0)	9.8	10.7	23.1	32.5	-
Never partnered						
Primary	7.1	6.4	4.7	8.2	5.4	-
Vocational	9.6	4.6	3.0	2.3	8.0	-
Secondary	8.5	6.2	5.5	4.7	8.4	-
Higher	(8.0)	7.1	10.7	19.7	21.7	-

Source: own calculations, "Turning points of the life course", *Demographic Research Institute*, 2001-2002

Table 5.3: Distribution of first type of partnership (cohabiting or marriage) by the time of partnership formation

Period of first partnership formation	Started partnership in	
	marriage	cohabitation
1957-1961	97.6	2.4
1962-1966	95.9	4.1
1967-1971	95.0	5.0
1972-1976	90.9	8.9
1977-1981	87.6	12.4
1982-1986	76.7	23.3
1987-1991	64.3	35.7
1992-1996	50.2	49.8
1997-2001	37.0	63.0

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

Table 5.4: Transition from first partnership until the 60th months after its onset, by the time of first partnership initiation

Development of first partnership	Time of first partnership					
	1967-1971	1972-1976	1977-1981	1982-1986	1987-1991	1992-1996
All type of partnerships						
Intact partnership	92.6	91.8	89.8	89.2	87.3	85.5
Dissolved partnership	7.4	8.2	10.2	10.8	12.7	14.5
Marriage as first partnership						
Continued marriage	92.6	92.7	91.2	91.2	90.3	89.6
Divorce	7.4	7.3	8.8	8.8	9.7	10.4
Cohabitation as first partnership						
Continued cohabitation	-	17.1	17.8	21.2	27.4	32.7
Marriage after cohabitation	-	65.7	63.3	61.3	54.6	48.6
Cohab.→Marr.→Divorce	-	2.1	7.8	5.7	4.3	4.0
Separation of cohabitants	-	15.0	11.1	11.8	13.7	14.6

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

5.2 The partnership context of first and second births

Our database enables us to differentiate between cohabitation, marriage, and single status at the time of birth. We are therefore able to identify and measure the share of two groups of non-marital births in the vital statistics by birth order: the share of births by cohabiting couples and by single women. We can ascertain that it is the rapid dispersion of cohabitation that lies mainly behind the increase in non-marital births. Around the turn of the 1970s and 1980s, 2-3% of first births occurred during cohabitation, and the percentage of births by mothers without a partner was twice as high (Table 5.5). At the last measured time (at the end of the 1990s), the percentage of first births during cohabitation was 14.5% and those to lone parent birth amounted to 12.3%. Although the rapid increase in the percentage of first births during cohabitation is obvious, the rise in non-marital births is not limited to this partnership context: The percentage of lone parenthood according to first births nearly doubled. (Naturally, we are aware that the demarcation lines between lone parenthood and parenthood in cohabitation are not very clear, since the notion of cohabitation is not free of ambiguity in terms of meaning and definition (S. Molnár and Pongrácz, 1998, Manning, Smock, 2005)).

Non-marital birth is more seldom between higher-order births, and if it occurs, it probably does more so during cohabitation, often after marriage. Under state socialism, around 95% of second births occurred within marriage, the remaining 5% is dispersed between cohabitation and lone parenthood, with the latter having a higher share. The situation changed only slightly at the end of the study period: The share of births within cohabitation slightly increased (note that we employed the five-year time window from first births!)⁹

In order to describe the educational differences among mothers who have different partnership relations and because of the low sample size, it was necessary to collapse the two neighboring cohorts in each case (cf. 5.6.Table). As cohabiting mother were rare before the societal transformation, we incorporated in our table only married and lone mothers from the pre-transformation period. Our data indicates that mothers who have experienced first birth alone are recruited from below average educational groups compared to mothers who have given first birth within marriage. This seems to apply to the post-transformation period, too. Surprisingly, mothers having first birth in cohabitation in the 1990s are recruited also from the bottom end of the educational

⁹ In order to measure the share of cohabitation and lone parenthood for all births, we constructed a data-file for all births, using the "Turning points in the life course" data-set. Table A.1 shows the distribution of all births, for the different time-periods. The shifts from lone-parent births to births in cohabitation can be clearly seen, too. As mentioned, the data underestimate all non-marital births (for the period 1999-2001 our data show 24.7 %, although it should be around 29% - the number based on vital statistics from 2000-), however, the increase of births in cohabitation has taken place without doubt.

hierarchy. Their status is more similar to the mothers having first birth without a partner, than to married mothers. Note that the lowest and highest educational groups were the forerunner in the diffusion of first cohabitation (Spéder, 2005), but that those who have the highest level of education give birth only very rarely, whereas the lowly educated very often experience birth in cohabitation.

First and second births clearly have partnership contexts that today are different from the times of state socialism: A differentiation in living arrangements among the population at childbearing age, especially among people who started their partnership career around the end of the 1980s and later, facilitated the profound changes in the increase of non-marital birth. Signs of association among first birth, partnership forms, and the level of education indicate a possible differentiation in childbearing behavior.

Table 5.5: Distribution of first-order live births among partnership relations at the time of birth, by first birth period (1967-2001), females

Period at the time of first birth	Partnership context at first birth			
	Married	Cohabitation	Lone	All
1967-1971	93.3	1.3	5.4	100
1972-1976	91.3	1.1	7.6	100
1977-1981	92.2	2.6	5.3	100
1982-1986	89.4	2.8	7.8	100
1987-1991	86.9	4.4	8.7	100
1992-1996	75.9	13.7	10.5	100
1997-2001	73.1	14.5	12.3	100

Source: own calculations, "Turning points of the life course", Demographic Research Institute, 2001-2002

Table 5.6: Distribution of mothers who have experienced first-order live birth in different time periods and who have lived in different partnership contexts at first birth according to their highest level of education, 1972-2001, females

Highest level of mother's education	Period at the time of first birth						
	1972-1981		1982-1991		1992-2001		
	Married	Lone	Married	Lone	Married	Lone	Cohabitation
Primary	29.7	49.0	17.6	(49.0)	13.8	29.2	37.9
Vocational	21.4	18.3	25.0	(37.1)	31.2	36.8	29.5
Secondary	35.6	23.0	36.5	(16.5)	35.2	23.6	25.0
Higher	13.4	9.6	20.9	(7.2)	19.8	10.4	7.6
All	100	100	100	100	100	100	100

() case numbers between 50-100

Source: own calculations, "Turning points of the life course", *Demographic Research Institute*, 2001-2002

5.3 Fertility outcomes and first partnership forms

Having reviewed the partnership context of first and second births we now turn to the type of first partnership, its early development, and its interrelation with childbearing behavior. Using an unusual point of view (cf. Wu, et.al., 2001), we intend to look at the way in which the kind of first partnership and the development of early partnership are accompanied by fertility outcomes. The fertility outcome is measured by the birth (or lack thereof) of a child to the respondent during a given five-year period following the formation of the first partnership. On the one side, as mentioned earlier, we assume, that cohabitation as first partnership as such and as partnership experience will yield a lower fertility outcome. On the other side, we assume that changes took place as time went by: We presuppose that in the seventies premarital cohabitation had a different meaning and produced different fertility outcomes than today. The same may be true for lasting cohabitation as an alternative form of lifestyle. Furthermore, should we not assume that partnership trajectories starting out with marriage have different fertility consequences than they did 20 years ago? To answer these questions, we look at the fertility outcomes of different partnership types on the basis of first partnership and the ones five years later, separately and simultaneously, with the data broken down by cohort defined by the time the first partnership began.¹⁰

¹⁰ In the following analysis, we disregard births that took place before the first partnership; therefore our account will be limited.

(Type of first partnership) The type of first partnership has an unequivocal bearing on the decision to have a child or not within a determined period of time (cf. Table 5.7). A large majority of people who opted for marriage as their first partnership had a child within the first five years. Comparing birth rates in marriage with birth rates in cohabitation within each period of first partnership initiation (Table 5.7), those who started in marriage usually have a share that is higher by 20% than those who started with cohabitation. (The two first partnership cohorts are an exception; here, the differences range between 10-20%.) Starting with cohabitation thus has a lower rate of entry into parenthood.

Can we detect any difference between the fertility outcomes by type of partnership that started in different historical periods? In search of an answer, let us turn to marriages. Our time-series data show that changes in historical time did not leave the fertility outcomes of marriages unaffected either. Of the women and men who started their first partnership in marriage in the late 1970s and early 1980s, nearly 90% entered motherhood within five years; this compares to only around 80% for equivalent partnerships that began in the early 1990s (Table 5.7). A similar decrease is detectable among those who began their partnership careers with cohabitation: The risks decreased from above 60% to below 60%. Because of the low sample size, caution must be exhibited, however.

(Partnership after 5 years) We are able to receive slightly more insight into the association between partnership forms and fertility outcomes when we consider first childbirth propensity at a definite point in time, i.e., five years into the partnership career. In time, respondents who have started their partnership career will be living in one of three types of partnership arrangements: *marriage*, *cohabitation*, or *living alone* (see Table 5.4). Comparing the collateral fertility situation in the first partnership cohorts, the highest share of women with children is found among the married (Table 5.8). Furthermore, childbirth has been declining since the turn of the nineties among them. The fertility outcome of the two remaining partnership statuses clearly lags behind. Less than half of the respondents living in cohabitation entered parenthood: the corresponding number is the lowest (42.5%) in the most recent cohort. Not surprisingly, these results support our former findings. Cohabitation at a later point in time into the partnership career is associated with a much lower childbearing propensity. Therefore, the growing prevalence of cohabitation as first partnership and the changing conversion rates of this phenomenon (increasing continuity and decreasing conversion into marriage) may have contributed to fertility decline. In addition, to a lesser degree a decline among the married is also observable (see Table 5.8).

Table 5.7: Share of respondents who entered parenthood within 5 years of forming their first partnership, by type of first partnership, during various periods of first partnership, females and males taken together (%)

Period of first partnership	Started partnership in	
	marriage	cohabitation
1967-1971	85.1	(68.1)
1972-1976	86.6	75.5
1977-1981	88.6	62.4
1982-1986	88.1	65.1
1987-1991	85.4	62.6
1992-1996	80.6	57.3

() case numbers between 50-100;

Source: own calculations, "Turning points of the life course", *Demographic Research Institute*, 2001-2002

Table 5.8: Share of respondents who entered parenthood within 5 years of forming their first partnership, by type of partnership status 5 year after initiation of first partnership, females and males taken together (%)

Period of first partnership	Partnership status in 5 year:		
	Marriage	Cohabitation	Living alone
1967-1971	86.2	-	(56.8)
1972-1976	87.5	-	63.6
1977-1981	88.8	-	57.9
1982-1986	88.7	(29,9)	59.8
1987-1991	84.8	45.0	57.7
1992-1996	79.1	47.5	42.5

() case numbers between 50-100 ; - case numbers below 50

Source: own calculations, "Turning points of the life course", *Demographic Research Institute*, 2001-2002

5.4 Summary: changing partnership forms and childbearing behavior

We aimed to receive insights into the association between partnership formation and its early development on the one side, and childbearing outcomes on the other. In doing so, we neglected the partnership consequences of childbearing. We focused exclusively on fertility outcomes: Will the first child be born within a certain period of time after having started a partnership? Will first childbirth depend on the kind of first partnership? Is there any change in the propensity of entering motherhood (parenthood) in time?

Our analysis has revealed that fertility decline throughout the 1990s is clearly associated with changes in partnership relations. We have demonstrated that with cohabitation there is a propensity to first childbirth within a certain period of time that is lower than in marriage. Furthermore, we have shown that people living in cohabitation five years into that cohabitation have a very low propensity of entering a fertility career. We have revealed that cohabitation as first partnership and as continuous partnership has increased as far as early partnership carrier is concerned, possibly making a large contribution to fertility decline. (The “trial marriage/premarital cohabitation” model exhibits a fertility that is lower and/or later than that of marriage; thus the diffusion of pre-marital cohabitation may contribute to fertility decline as well.) The societal transformation in Hungary seemingly did not leave marriage as it was: the traditional partnership form. The propensity to first childbirth has declined, if only moderately, in those who chose direct marriage and are continuing in it around five years later on. Summing up: Shifts in partnership forms, the development of partnerships in the early life course, and a decrease in the childbearing propensity in the partnership forms mentioned are important features of the fertility decline during and after the societal transformation of Hungary.

6. Conclusions

In our paper, we documented some key features of changing childbearing behavior in Hungary. We described the well-known process of postponing entry into motherhood and delaying second childbirth. We concluded that the transition of the behavioral change continues beyond the time of the survey, i.e., the new fertility pattern has not fully evolved yet.

We identified educational differences according to the speed of postponement: Women of higher education adjusted their childbearing behavior to new circumstances at a higher rate. We revealed that higher educated women, when they start their fertility career, seem to bear the second child within a shorter time span. Females with an

intermediate education level seem to lag behind the women at the two opposite poles of the educational hierarchy: They showed a decline in the propensity to the second child. All this stresses the importance of differential approaches to further research.

It is inevitable to consider partnership relations when one wants to understand changes in fertility behavior. We have shown that there are profound changes in partnership formation, especially in the diffusion of cohabitation as first partnership, but postponement in union formation is also evident. We have shown that there are structural differences in the diffusion of cohabitation: It spread first among those of low formal education and then among the highly educated. Cohabitation clearly shows a lower fertility propensity if measured by entering motherhood within a given time interval after union formation. Additionally, we have revealed a slight decrease in fertility among women who started their partnership in marriage. Considering the partnership career within a given period of time (5 years) after the career started, persons living in cohabitation showed a much lower propensity of becoming a parent than those living in marriage. Our overall conclusion is that changes in partnership formation, the gradual replacement of marriage by cohabitation as first partnership, and the declining share of marriages in the early partnership career is accompanied by lower fertility.

Naturally, we are aware that some of our figures may change as a consequence of the continuing adaptation of childbearing behavior to the new social and economic structures in Hungary. Our results may therefore be subject to modification in the future. However, we hope to have shown some valuable rudiments of recent fertility change in Hungary.

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Appendix

Table A.1: Share of marital, non-marital (in cohabitation and as lone parent) births in Hungary, 1973-2001 (%)

All birth periods	Marital births	Non-marital births	
		Cohabitation	Lone parenthood
1973-1975	93.3	1.0	5.7
1975-1977	93.1	1.9	5.0
1978-1980	93.4	2.5	4.1
1981-1983	93.5	1.7	4.8
1984-1986	91.3	3.1	5.6
1987-1989	90.8	2.6	6.6
1990-1992	87.6	5.8	6.6
1993-1995	82.2	10.3	7.4
1996-1998	76.4	13.5	10.1
1999-2001	75.3	18.3	6.4

Source: own calculations, "Turning points of the life course", children data base, Demographic Research Institute, 2001-2002