Family planning and unplanned postponement of second births

Anna Šťastná, Jitka Slabá, Jiřina Kocourková

Department of Demography and Geodemography, Faculty of Science, Charles University Albertov 6, Prague 2, Czech Republic

Contact e-mail: anna.stastna@natur.cuni.cz

Extended abstract

Childbearing postponement constitutes a key demographic change that has been experienced by most European countries. One of the countries that experienced the most dynamic changes in the age profile of fertility is Czechia. There is a vast body of literature dealing with the reasons for family planning to older age; however, childbearing postponement can also be the result of a failure of the original individuals' plans. In this paper, the unplanned postponement of second births is analysed since the two-child family constitutes the most common family model in Czechia where around 55% of women born between 1950 and the late 1960s had two children, which was somewhat unusual at the time in the European context even though the two-child family ideal became popular throughout Europe. The fertility postponement process is generally linked to the postponement of first births; however, the postponement of second births was more pronounced than that of first births with concern to those cohorts of Czech women that initiated fertility transition (1966-1973). At the same time, the recuperation of delayed second births is lower compared to the recuperation of delayed first births (with recuperation index surpassing 80% for cohorts born after 1969 in Czechia concerning the first birth but only 70% in the case of second-birth order).

The paper considers the reasons why women postpone second childbirth to a later age than originally planned and the effects of the various factors behind this postponement on the length of the birth interval between the first and second child. We employ data from the 'Women 2016' survey, which includes questions on childbearing plans and timing, the subsequent realisation of these plans and reasons for their non-fulfilment. The 'Women 2016' survey partly follows up on the Generations and Gender Survey (GGS) which was conducted in Czechia in 2005 and 2008. In 2016, women born in 1966-1990 included in the database of respondents from the second wave of GGS in 2008 were reinterviewed using a questionnaire designed specifically for this research. In total, 1,257 women were interviewed. In this paper, we analyse women who already have or planned at least two children and already have at least one child.

Binary logistic regression is employed to identify the unplanned postponers, and factor analysis is used to assess reasons for the unscheduled delay in childbirth. Kaplan-Meier survival analysis is employed to assess how the unplanned childbirth postponement and different factors behind the unplanned postponement influence second birth timing.

In Czechia, a third of women in the cohorts born between 1966 and 1990 indicated in the survey that their first/second child was born or would be born later than they had initially planned to have children. The length of the unplanned delay among mothers was moreover found to be significant. The first child was born on average 3.4 years later than the age at which women initially planned to have children (median three years). The second child was born on average three years later than initially planned (median two years).

Table 1: The timing of first/second births compared to the planned age (%)

	Compared to the planned age, the woman had her first/second child:				
	later	according to plan	earlier	don't know	
Birth of the first child	32.2	44.3	19.0	4.5	1222
Birth of the second child	34.1	43.0	16.7	6.2	866

Source: survey Women 2016

The unplanned postponement of second birth is most pronounced among 1971-1982 cohorts controlling for other characteristics of women. Their chances of unplanned postponement of second birth are 1.9 times as high as for women born in 1966-1970. Women born between 1971 and 1982 represent cohorts that could be labelled as the 'engine' of the postponement transition process in Czechia. They exhibit the most profound and fast postponement (as being measured by e.g. the postponement measure at younger ages employed within the framework of the basic benchmark model; Sobotka et al. 2011) of both the first and second births. Obviously, unplanned delays in family planning are part of this fertility postponement process, which can both boost and be strengthened by the process. The unplanned postponement of the first birth also manifests itself in the timing of second births. The chance of unplanned postponement of a second birth for women who already experienced an unplanned postponement of first birth was found to be 3.8 times as high as for women who had their first child according to their time plan.

Table 2: Unplanned postponement of the 2nd birth: odds ratios (binary logistic regression model)

		В	Exp(B) Sign.	
Cohort	1966-1970	0	1	
	1971-1982	0.625	1.87*	
	1983-1990	0.444	1.56	
Education	Basic and vocational	0.188	1.21	
	Secondary with the school-leaving exam		1	
	Tertiary	0.310	1.36	
Planned number of children	2	0	1	
	3 and more	-0.154	0.86	
Real age at first birth	22 and less	-0.035	0.97	
	23-25	0	1	
	26-28	0.161	1.18	
	29 and more	0.206	1.23	
Unplanned postponement of first birth	no	0	1	
	yes	1.323	3.76***	
Constant		-1.624	0.20***	

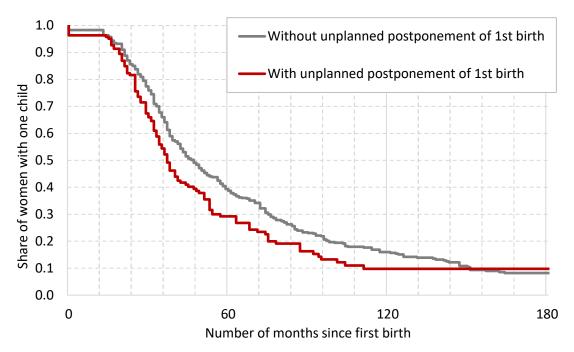
Source: survey Women 2016, women who plan to have at least two children and already have at least one child

A quarter of unplanned postponements of second child were due mainly to health problems, while 23% of postponements were due mainly to the unplanned postponement of the first child and/or the demanding care required by the first child; the "first child" factor was most common with respect to

women with a tertiary education, women who postponed the birth of their first child and women who had their first child at age 30 and over. A further 23% of unplanned second birth postponements were attributed to "work and study" (mainly women who planned a second child at age 30 and over and women who did not postpone their first child).

The birth interval between the first and second child is influenced both by the timing of the first birth and the various factors behind the unplanned postponement of the second birth. Women who have a first child before the age of 22 have a second child one year later than those who give birth to a first child after the age of 29 (birth interval median: 50 versus 38 months). The unplanned postponement of a first birth renders the spacing between the first and second birth significantly shorter (38 versus 48 months; Figure 1). In contrast, the unplanned postponement of a second birth results in a much longer birth interval (86 months versus 38 months for women who delay neither their first or second births). The longest birth interval was determined for women who are forced to postpone the second birth due to the breakdown of a partnership or the absence of a partner (117 months; Table 3).

Figure 1: Share of women who stayed with one child, by the unplanned postponement of the 1st child, survival function (Kaplan–Meier)



Source: survey Women 2016, women who plan to have at least two children and already have at least one child

Table 3: Median length between first and second birth, by the strongest factor of unplanned postponement of the second child (Kaplan–Meier)

The strongest factor of unplanned postponement of the second child	Observations where the 2nd child have been born	Censored observations	Total observations	Estimate of median (in months)	95% confidence interval of median	
Work and study	39	22	61	86	55.5	116.5
Material conditions	16	18	35	88	60.0	116.0
No suitable partner	23	11	34	117	73.4	160.6
Role of the first child	43	26	69	40	35.3	44.7
Health problems	49	15	64	65	48.9	81.1
Without postponement	356	99	465	38	36.2	39.9

Source: survey Women 2016, women who already have or planned at least two children, and already have at least one child