

# Unplanned Postponement of First and Second Births in the Czech Republic

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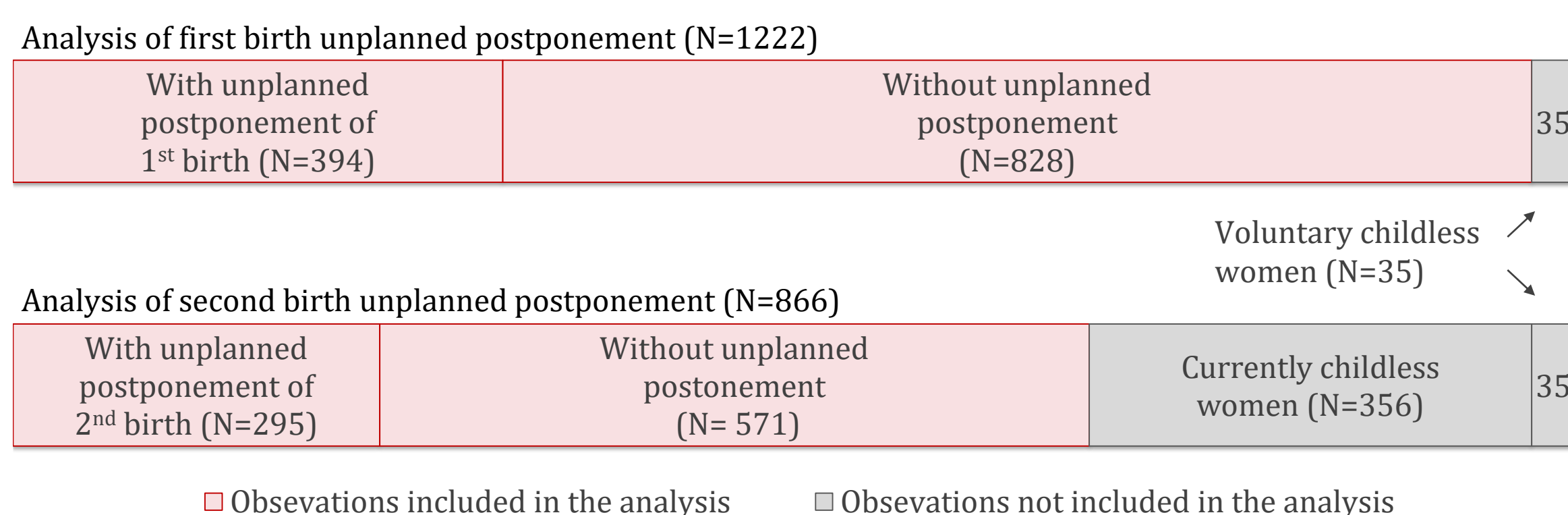
## 1. INTRODUCTION

The reproductive behaviour of Czech women has change considerably since 1990, primarily in terms of the age at which they decide to start a family; the mean age of mothers at first birth shifted from 22.5 years in 1990 to 28.3 years in 2016 (CZSO, 2017). The shift in the mean age was related not only to the planned postponement of first birth but also to the further unplanned postponement of fertility intentions. The paper provides an analysis of the unplanned postponement of first and second births by women and reasons behind postponement based on data from the Women 2016 survey. The women who planned and subsequently realised their fertility intentions, belonged to the transformation cohorts of the fertility postponement process. In addition, the paper analyses the effect of unplanned first birth postponement on the timing of a second birth.

## 2. DATA AND METHODS

- Women 2016 survey (N=1257, women born between 1966 and 1990).
- The dataset was weighted for age, region and education level of the women (with the exception of the Kaplan-Meier survival analysis).
- Women declared an unplanned postponement in a specific survey question.
- The reasons for unplanned postponement were obtained from batteries of questions. The importance of each reason was evaluated on a scale from 1 (completely unimportant) to 4 (very important): (1st birth: 12 reasons, 2nd birth: 14 reasons).
- Consequently, the principal component analysis of these reasons determined the following groups of unplanned postponement factors:
  - Material conditions
  - Work and study
  - No suitable partner
  - Health problems
  - Role of the first child (only for 2nd births)
- Unplanned postponement was analysed via the contingency table chi square test.
- The timing of a second birth was evaluated by means of Kaplan-Meier survival analysis.

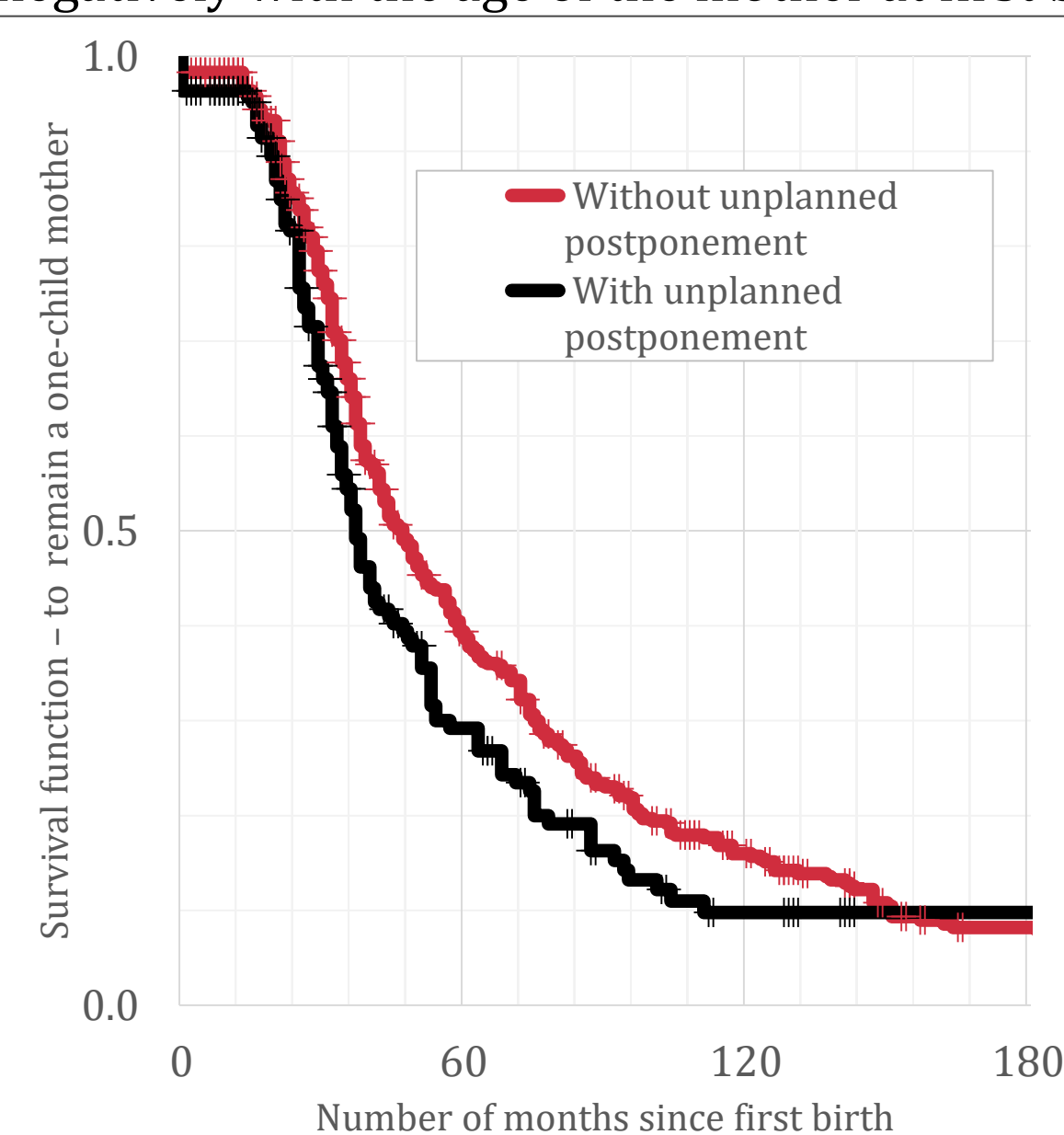
### Scheme of the analysed dataset (weighted data)



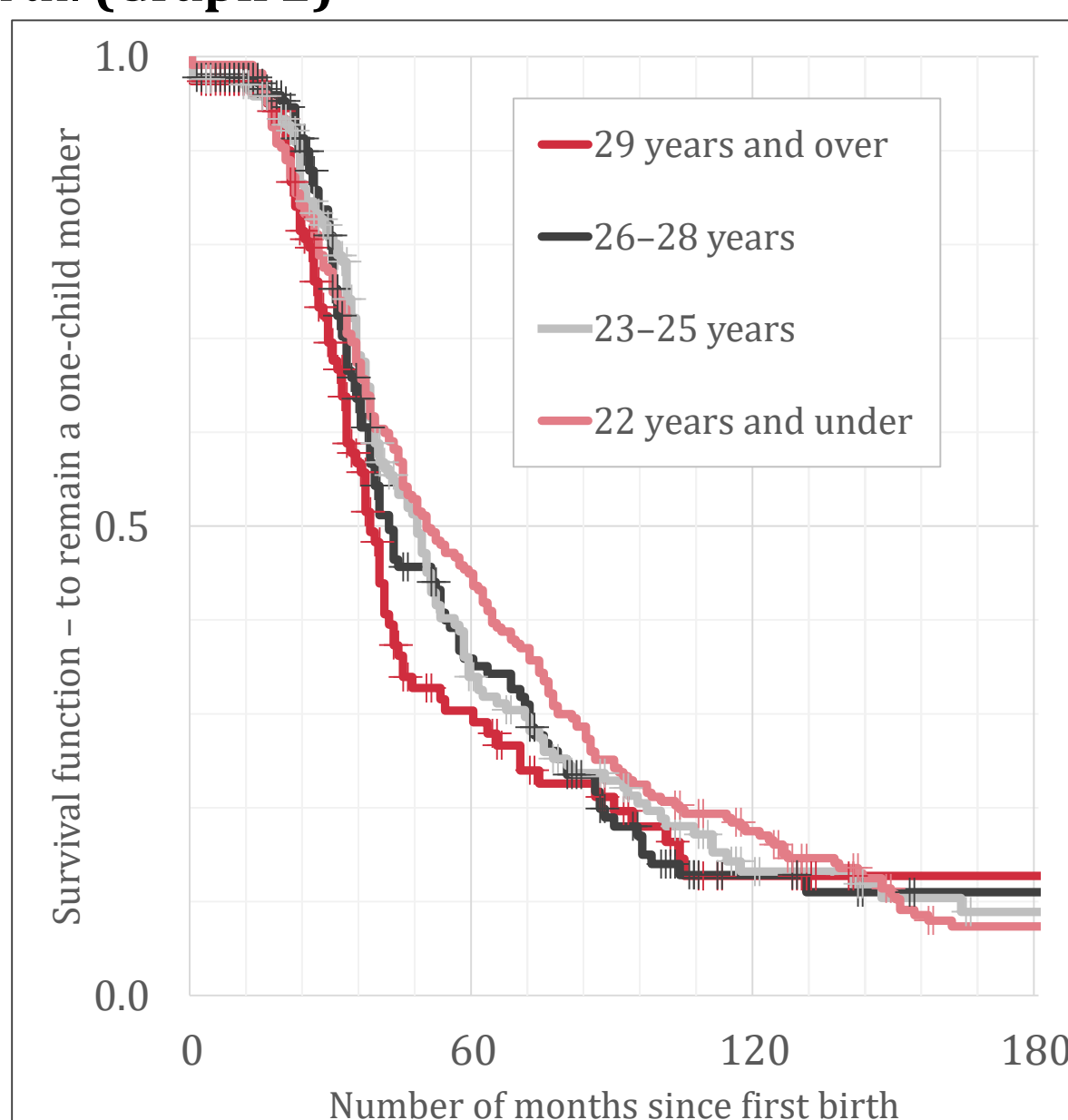
## 4. RESULTS – TIMING OF A SECOND CHILD

The unplanned postponement of a first child impacts the timing of a second order birth. If an unplanned postponement was not declared, the median time between the first and second births was 48 months, whereas if the postponement of a first child was unplanned, the median time duration to a second birth was 10 months shorter. **(Graph 1)**

It was determined that not only the unplanned postponement of a first birth affects the timing of a second birth, i.e. the age of the mother at first birth also plays a significant role. When a child was born to a mother aged up to 22, the median spacing of the first and second births was 50 months. Conversely, a statistically significantly shorter spacing period was observed with respect to women who had their first child aged 29 and over (median 38 months). Finally, the overall probability of having a second child was found to correlate negatively with the age of the mother at first birth. **(Graph 2)**



**Graph 1:** Impact of the unplanned postponement of a first birth on the timing of a second birth



**Graph 2:** Impact of the age of the mother at first birth on the timing of a second birth

## 3. RESULTS – UNPLANNED POSTPONEMENT OF REPRODUCTIVE PLANS

Women from the youngest cohorts (1983–1990) and women with a tertiary education were found to more often delay the birth of first child. Conversely, women from the oldest cohorts (1966–1970) and women with a basic or vocational education delayed a first birth less frequently. With concern to second-birth postponement, educational differences were less marked. Women with a tertiary education and those from the middle cohorts (1971–1982) were found to more often delay a second birth. **(Table 1)**

**Table 1:** Share of women who declared the unplanned postponement of a 1st or 2nd child (%)

		1 <sup>st</sup> child (N=1222)	2 <sup>nd</sup> child (N=866)
Total		32.2	34.1
Cohort	1966–1970	21.7 ---	19.7 ---
	1971–1982	30.4	38.9 +++
	1983–1990	45.5 +++	37.9
Education	Basic and vocational	19.9 ---	30.7
	Secondary with the school-leaving exam	35.8 +	33.7
	Tertiary	44.2 +++	42.5 +

+/- p < 0.5; +/+/- p < 0.01; +++/--- p < 0.001

The youngest cohorts (1983–1990) more often delayed a first birth due to material conditions and the situation surrounding work and study, and less often due to health problems. Second births are more often delayed due to material conditions. The main reason for postponement by this group of women with concern to a second birth consisted of material conditions. Tertiary-educated women more often delayed first birth due to work and study considerations, whereas a second birth was more often delayed due to the delay of the first birth which also included the first-birth postponement itself. **(Table 2)**

**Table 2:** Unplanned postponement of 1st and 2nd children, presence of given reasons for postponement (%)

		Material conditions	Work and study	No suitable partner	Health problems	Role of first child	N
1 <sup>st</sup> child							
Total		45.0	38.1	44.7	48.9	.	394
Cohort	1966–1970	36.4	20.4 --	41.8	56.4	.	55
	1971–1982	38.4 --	27.6 ---	43.3	54.4 +	.	203
	1983–1990	58.1 +++	60.3 +++	48.5	37.5 --	.	136
Education	Basic and vocational	44.7	24.7 --	30.6 --	61.2 +	.	85
	Secondary with the school-leaving exam	45.5	33.9	51.1 +	45.7	.	186
	Tertiary	44.7	53.3 +++	44.7	45.1	.	123
Current number of children	Childless	57.7 +++	58.5 +++	60.0 +++	42.3	.	130
	1 or more children	38.6 ---	28.3 ---	37.1 ---	52.1	.	264
2 <sup>nd</sup> child							
Total		33.1	31.9	33.1	45.8	45.8	295
Cohort	1966–1970	24.4	19.0	31.7	43.9	29.3 -	41
	1971–1982	31.4	32.7	32.4	47.5	47.1	204
	1983–1990	46.0 +	40.0	36.0	40.0	56.0	50
Education	Basic and vocational	29.9	25.0	37.0	44.9	31.8 ---	107
	Secondary with the school-leaving exam	35.0	34.1	35.8	43.9	52.0	123
	Tertiary	35.4	38.5	21.5 -	50.8	56.9 +	65
Current number of children	1 child	48.6 ++	37.8	44.0 +	52.7	56.8 +	74
	2 or more children	27.9 --	29.9	29.4 -	43.4	42.1 -	221

+/- p < 0.5; +/+/- p < 0.01; +++/--- p < 0.001

## 5. SUMMARY

The results of the Women 2016 survey illustrated more frequent unplanned postponement of a first birth by those women born in the youngest cohorts (1983–1990) as well as by tertiary-educated women. These two characteristics are closely related since the youngest of the women surveyed more often had a tertiary-level education. In the case of second births, the middle cohorts of women (born in 1971–1982) more often delayed their plan due to fact that the youngest cohorts (1983–1990) had still not reached the planned age of a second birth. The youngest cohorts (1983–1990) more often delayed fertility because of work and study or material conditions; having remained in education for an extended period of time, they enter the labour market later and, thus, experience unsatisfactory financial conditions to later ages. As a result of the postponement of a first birth to later ages second births occurred within a shorter time period from the birth of the first child.

### Source:

CZSO, 2017. Population – Annual time series. Available at: [https://www.czso.cz/csu/czso/population\\_hd](https://www.czso.cz/csu/czso/population_hd). Accessed: 02. 05. 2018.