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Czech fertility postponement at the turn of the millennium

Lab talk, 19. 11. 2019

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Department of Demography and Geodemography

Research groups:

- Center for Survival Studies and Data Analysis
- Center for Population Forecasting and Applied Demography
- Center for Historical Demography
- Centre for Development Demography
- **Centre for Fertility Study**



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- **Research project:**

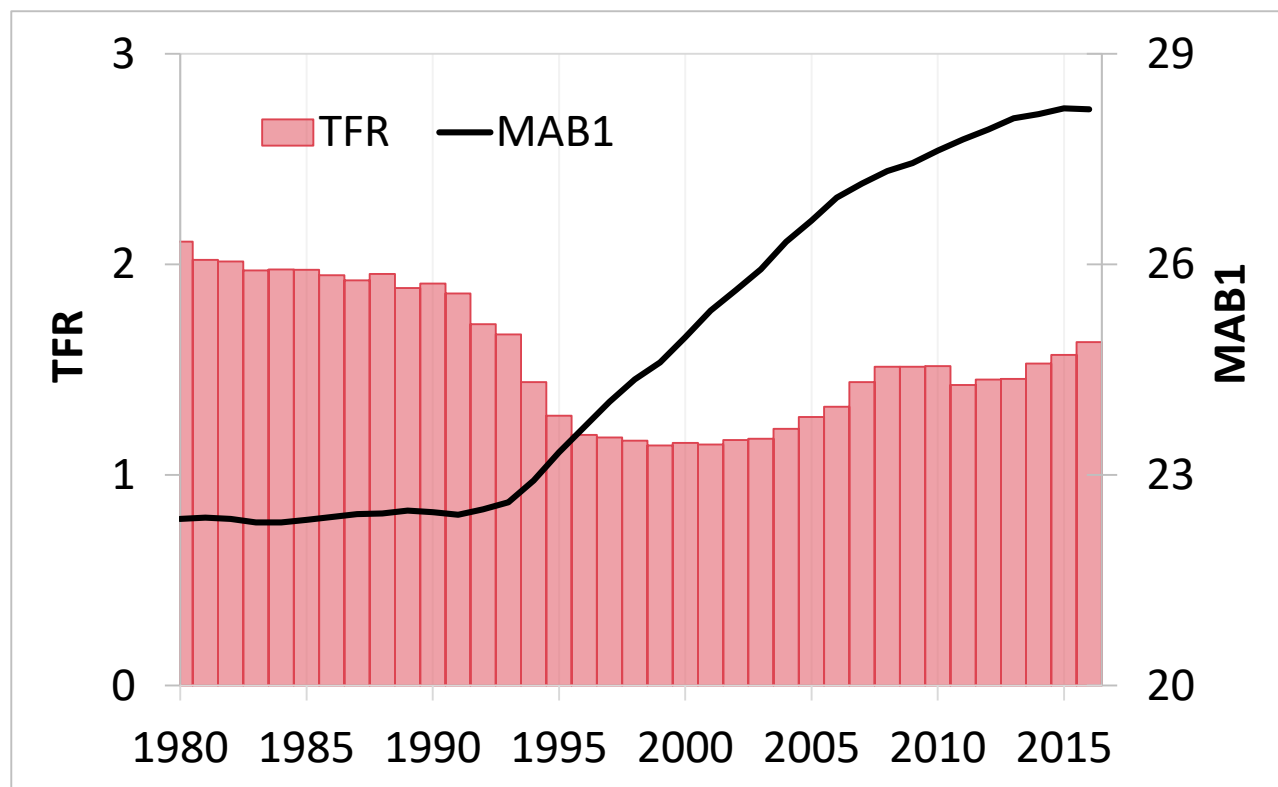
- Czech Science Foundation, 2015-2017, Project no. 15-09443S:
Risks of childbearing postponement: A new role for family policies
- Czech Science Foundation, 2018-2020, Project no. 18-08013S:
Transition towards the late childbearing pattern: individual prospects versus societal costs
- Grant Agency of Charles University, 2019, Project no. 378219:
Unemployment as a cause of a fertility postponement

CONTENTS

- **Fertility development in Czechia**
- **Data**
- **Results**

CZECHIA: FERTILITY DEVELOPMENT

The development of TFR and MAB1, Czechia, 1980–2016



(year – MAB = cohort)

1990 – 22 = 1968

2016 – 28 = 1988

Source: Human Fertility Database [07. 06. 2019]



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DATA AND METHODS



**ŽENY
2016**

Women 2016 Survey

- 1257 respondent
- Representative for age, region and education
- Women born between years **1966 and 1990**

Cohort groups:

1966–1970

N = 260

1971–1982

N = 687

1983–1990

N = 310

Used methods

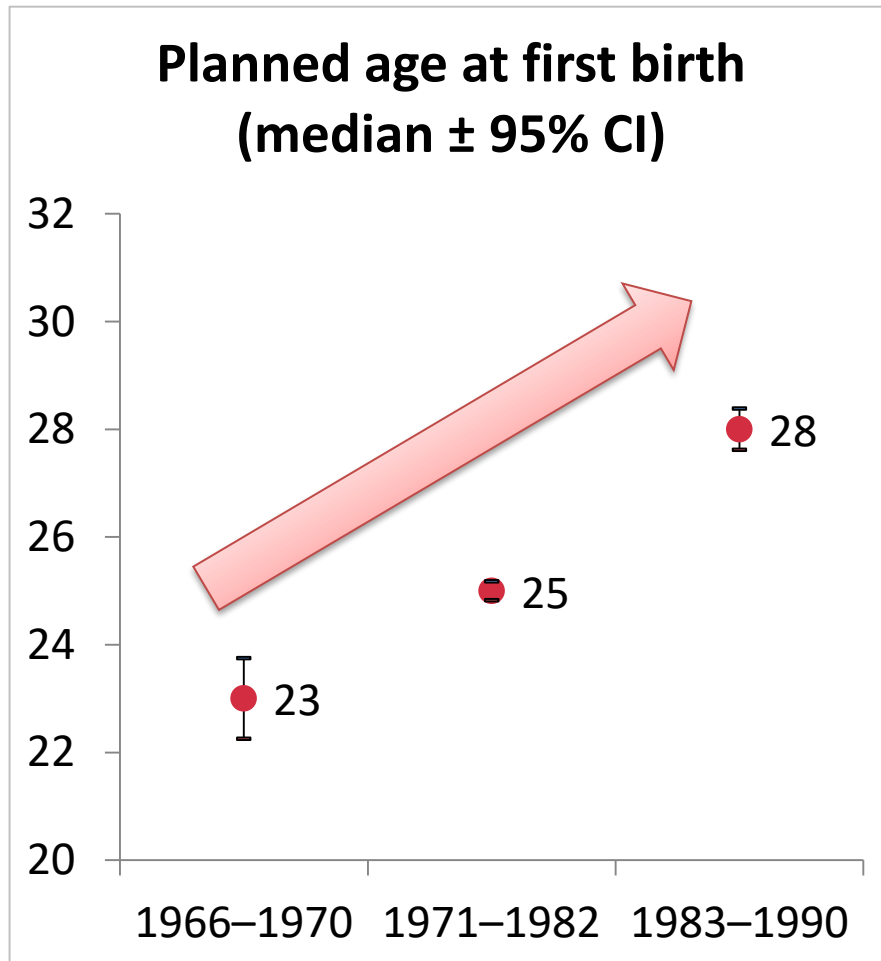
- Contingency tables: chi-square test
- Binary logistic regression
- Kaplan–Meier survival analysis



RESULTS 1

PLANNED AND UNPLANNED POSTPONEMENT

POSTPONEMENT OF PLANNED AGE AT FIRST BIRTH



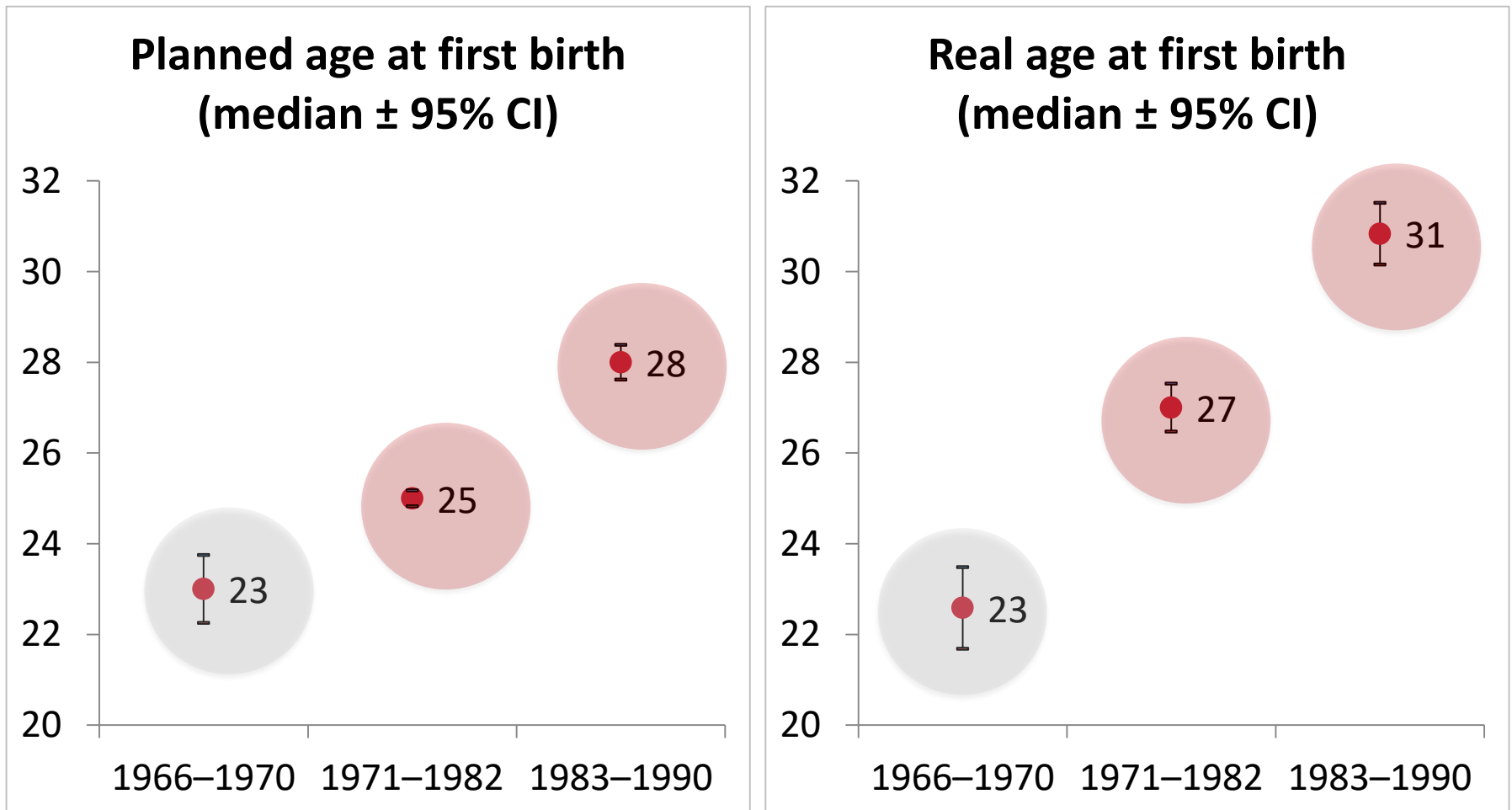
**What was the age at which
you planned to have your
first child?**

**PLANNED
POSTPONEMENT**

Women 2016 Survey, Kaplan-Meier, unweighted dataset



PLANNED AND REAL AGE AT FIRST BIRTH



Women 2016 Survey, Kaplan-Meier, unweighted dataset

UNPLANNED POSTPONEMENT

RESULTS 2

DECLARED UNPLANNED POSTPONEMENT OF FIRST BIRTH (sub-group's variation and reasons)

Šťastná A., Slabá, J. Kocourková J. 2017. Plánování, načasování a důvody odkladu narození prvního dítěte v České republice. (English title: **The planning, timing, and factors behind the postponement of first births in the Czech Republic**). Demografie, 59, 207–223.

<https://www.czso.cz/documents/10180/46203816/stastna.pdf/0cf15559-1e0a-4b47-a7d6-e8faeb236404?version=1.0>

SELECTED RESULTS – UNPLANNED P. OF FIRST CHILD

Compared to the planned age, your first child was born/will be born:

	Declaration of unplanned postponement of 1st child (%)				N
	later	according to plan	earlier	don't know	
Total	32.2	44.2	19.0	4.6	1222

Women 2016 Survey, weighted dataset



SELECTED RESULTS – UNPLANNED P. OF FIRST CHILD



Factors explaining a first birth occurring later than planned and the presence of the given factor within selected socio-demographic categories, %

		Material	Work and		No suitable	Health		N
Celkem		45.0	38.1		44.7	48.9		394
Planned age at second birth	24 and under	43.1	27.5	-	36.6	49.5		101
	25–29 year	46.5	40.0		43.0	47.0		200
	30 and over	43.0	45.2		57.0 ++	51.6		93
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
Planned number of children	1 child	50.0	41.9		48.2	60.5 +		86
	2 or more children	43.5	37.0		43.8	45.5 -		308
Current number of children	Childless	57.7 +++	58.5 +++		60.0 +++	42.3		130
	1 or more children	38.6 ---	28.0 ---		37.1 ---	52.1		264
Celkem		38.6	27.9		37.1	52.1		264
Real age at the first birth	24 and under	48.0	22.4		26.0	46.9		50
	25–29 year	35.5	26.4		24.3 ---	45.9		110
	30 and over	37.5	32.0		56.3 +++	61.2 +		104

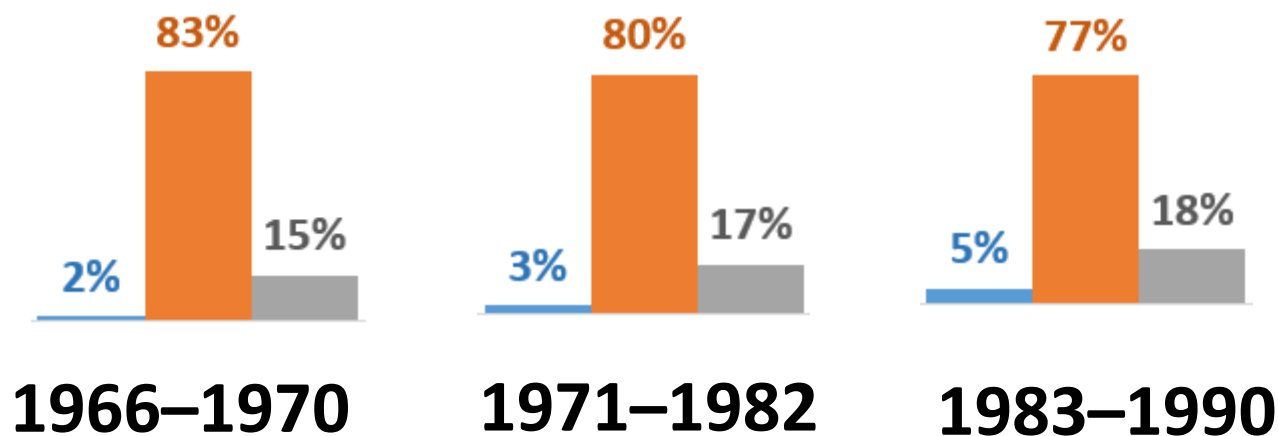
RESULTS 3

DECLARED UNPLANNED POSTPONEMENT OF SECOND BIRTH (sub-group's variation and reasons)

Šťastná A., Slabá, J. Kocourková J. 2019. Druhé dítě – neplánovaný odklad a časování jeho narození. (English: **Reasons for the unplanned postponement and timing of the birth of a second child**). Demografie, 61, 77–92. <https://www.czso.cz/documents/10180/91917740/13005319q2_77.pdf/b0972342-7094-4feb-bf85-f0acb04e1f30?version=1.0>

SELECTED RESULTS – IDEALS

Ideal family size (N=1257)



No child or 1 child

2 children

3 or more children

Women 2016 Survey, weighted dataset



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SELECTED RESULTS – UNPLANNED P. OF SECOND CHILD

		Declaration of unplanned postponement of 2nd child (%)								N
		later		according to plan		earlier		don't know		
Total		34.1		43		16.7		6.2		866
Planned age at the 1st birth	24 and under	28.9	--	46.7	+	19.9	+	4.5	-	443
	25–29 year	40.1	++	38.4	-	14.4		7.1		353
	30 and over	35.7		42.9		8.6		12.9	+	70
Planned age at the 2nd birth	24 and under	30.4		54.4	++	13.3		1.9	-	158
	25–29 year	32.5		42.7		20.7	++	4	-	372
	30 and over	37.4		38	-	13.9		10.7	+++	337
Cohort	1966–1970	19.7	---	49.5	+	23.6	++	7.2		209
	1971–1982	38.9	+++	41.3		14.3	-	5.5		526
	1983–1990	37.9		40.2		15.2		6.8		132
Education	Basic and vocational	30.7		42.5		20.4	+	6.3		348
	Secondary with s	33.7		43.8		15.9		6.6		364
	Tertiary	42.5	+	42.5		10.5	-	4.6		154
Current number of children	1 child	46.5	+++	17.6	---	1.9	---	34	+++	159
	2 and more children	31.3	---	48.8	+++	19.9	+++	0	---	707
Unplanned postponement of 1st	No	27.4	---	46.9	+++	19.9	+++	5.8	+++	654
	Yes	54.9	+++	31.5	---	6.6	---	7	---	213

Women 2016 Survey, weighted dataset



SELECTED RESULTS – UNPLANNED P. OF SECOND CHILD



Factors explaining a second birth occurring later than planned and the presence of the given factors

and socio-demographic characteristics

		Work and study		Material condition		No suitable partner		Role of the first child		Health problems		N
Celkem / Total		31.9		33.1		33.1		45.8		45.8		295
Planned age at second birth	24 and under	26.5		27.1		49.0	++	33.3		38.8		48
	25–29 year	24.0	-	33.1		33.1		44.6		46.3		121
	30 and over	42.1	++	34.9		26.8	-	51.6		48.0		126
Cohort	1966–1970	19.0		24.4		31.7		29.3	-	43.9		41
	1971–1982	32.7		31.4		32.4		47.1		47.5		204
	1983–1990	40.0		46.0	+	36.0		56.0		40.0		50
Education	Basic and vocational	25.0		29.9		37.0		31.8	---	44.9		107
	Secondary with the school leaving exam	34.1		35.0		35.8		52.0		43.9		123
	Tertiary	38.5		35.4		21.5	-	56.9	+	50.8		65
Current number of children	1 child	37.8		48.6	++	44.0	+	56.8	+	52.7		74
	2 or more children	29.9		27.9	--	29.4	-	42.1	-	43.4		221
Unplanned postp. of the 1st birth	No	37.4	++	38.2	+	36.5		31.3	---	46.4		179
	Yes	23.1	--	24.8	-	27.4		68.4	+++	44.4		117
Real age at the first birth	24 and under	29.8		34.6		38.2		31.5	---	43.5		130
	25–29 year	36.0		35.1		24.3	-	45.9		44.1		111
	30 and over	29.6		24.1		38.9		79.6	+++	55.6		54

Note: + and - indicate statistically significant differences between the observed and the expected frequency, $p < 0.001$: +++/---; $p < 0.01$: ++/--

Source: Ženy 2016 (Women 2016 Survey), N=295 women who stated that they had/will have their first child later than planned

RESULTS 4

SPACING OF FIRST AND SECOND CHILD

Šťastná A., Slabá, J. Kocourková J. 2019. Druhé dítě – neplánovaný odklad a časování jeho narození. (English: **Reasons for the unplanned postponement and timing of the birth of a second child**). Demografie, 61, 77–92. <https://www.czso.cz/documents/10180/91917740/13005319q2_77.pdf/b0972342-7094-4feb-bf85-f0acb04e1f30?version=1.0>

SELECTED RESULTS – SPACING OF FIRST AND SECOND CHILD



Fig. 1: Timing of 2nd birth by age at first birth

PLANNED + UNPLANED POSTPONEMENT

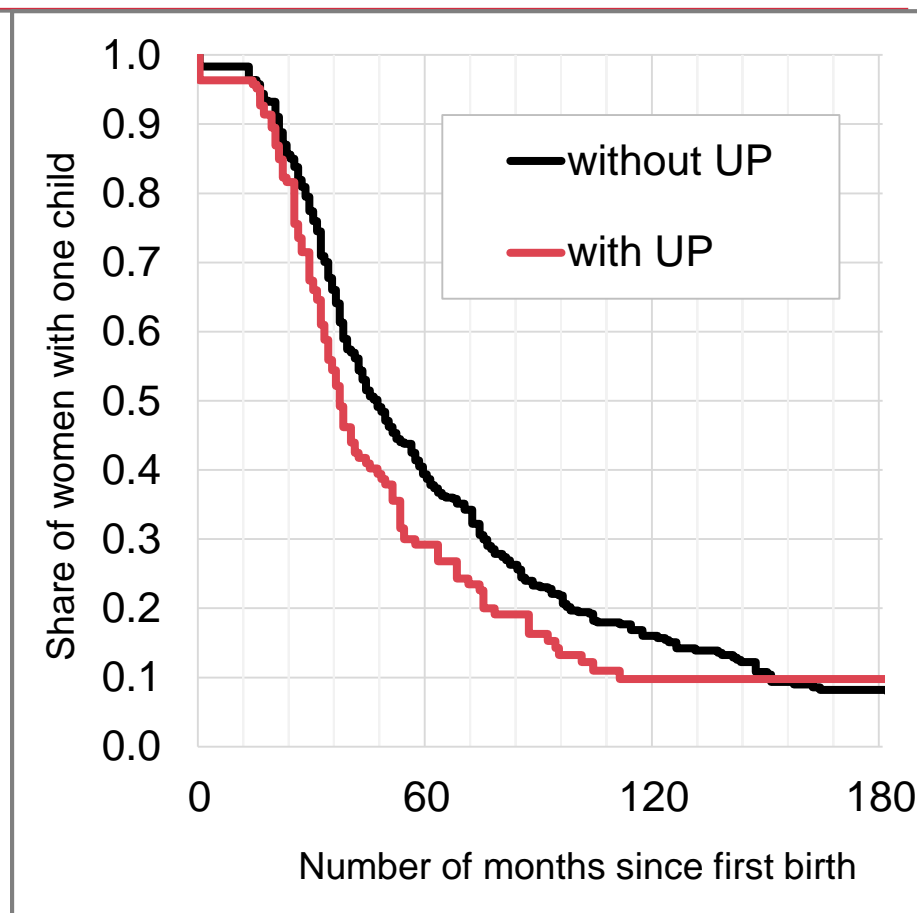


Fig. 2: Timing of 2nd birth by unplanned postponement of first birth

UNPLANNED POSTPONEMENT (UP)



RESULTS 5

INDIVIDUAL EXPERIENCE OF UNEMPLOYMENT AS A CAUSE OF FIRST BIRTH POSTPONEMENT?

Slabá, J. (in review). Nezaměstnanost ženy jako příčina odkladu založení rodiny? (English title: **Unemployment as a cause of first birth postponement?**). Sociológia.

UNEMPLOYMENT → 1ST BIRTH POSTPONEMENT

MOTIVATION

- Almost 1/3 of women additionally postpone their plan of 1st birth
- The subjective reasoning of this postponement is:

ŽENY
2016



- How does the individual life experience influence the fertility plan?
- Is it possible to “predict” unplanned postponement?

GGP
2008



ŽENY
2016

UNEMPLOYMENT → 1ST BIRTH POSTPONEMENT

THE RELATIONSHIP OF INDIVIDUAL UNEMPLOYMENT EXPERIENCE AND FERTILITY TIMING

- **EDUCATION** - the highly educated women postpone X for low educated women it initiate fertility
(Yu – Sun 2018; Schmitt 2012; Kreyenfeld 2010; Kreyenfeld 2005; Vikat 2004; Meron – Widmer 2002)
- **THE LENGTH OF UNEMPLOYMENT** – heterogeneous effect
(Meron – Widmer 2002; Vikat 2004; Kravdal 2002)
- **PREVIOUS STATUS** – not unemployment but job loss lead to postponement
(Del Bono – Weber – Ebmer 2015)
- **SUBJECTIVE UNCERTAINTY** - macroeconomic context: financial crisis effect on TFR? / temporary job contracts
(Kreyenfeld 2005; Gutiérrez-Domènech 2008; Kocourková a kol. 2019; Adsera 2011; Billingsley 2010)

DIFFERENT RISK OF UNEMPLOYMENT

- Generally: young and low educated have high risk of unemployment

UNEMPLOYMENT → 1ST BIRTH POSTPONEMENT

TOTAL NUMBER OF RESPONDENT = 1212

188 RESPONDENTS WITH INDIVIDUAL EXPERIENCE OF UNEMPLOYMENT

The unemployment occurrence across the educational and cohort group

		Model	
		Exp(B)	S.E.
Education	Secondary and less	ref.	
	Tertiary	0.464***	0.174
Cohort	1966–1982	ref.	
	1983–1990	1.652**	0.170
Constant		0.123***	0.251
Nagelkerke R		0.032	

THE UNPLANNED POSTPONEMENT OF FIRST BIRTH

Higher odd for:

- **HIGHLY EDUCATED**
- **YOUNGER COHORTS**

Who experienced (**exp(B)**):

- **JOB LOSS (1.811*)**
- **UNEMPLOYMENT IN 2008 or later (1.888**)**

Not significant for women who experienced:

- UNEMPLOYMENT without specification (1.371)
- UNEMPLOYMENT for 6 months or more (1.236)

Women 2016 Survey, unweighted dataset



Association with unplanned postponement reasoning

Reasoning	TOP 3		High Edu		cohort 1982–1990		Job loss		Unempl. in 2008 or later	
	N	%	%		%		%		%	
My or my partner's health	85	19.9	15.7	--	13.3	---	14.6		17.0	
It took longer to get pregnant than I expected	103	24.1	21.2	-	19.2	--	22.0		19.1	
My partner wished to have a first child later	42	9.8	8.8		10.6		NPDA		NPDA	
Because I was a student/was improving my qualifications I could not have a first child earlier	55	12.9	19.0	+++	18.8	+++	9.8		14.9	
My work and professional activities prevented me from having a first child earlier	48	11.2	14.6	++	16.1	+++	14.6		10.6	
Concerns about unemployment/losing one's job/ending up in a worse job	39	9.1	12.0	+	12.2	++	NPDA		NPDA	
My interests prevented me from having a second child earlier	13	3.0	4.7		4.3		NPDA		NPDA	
Unsuitable housing situation	65	15.2	13.1		15.7		26.8	+	31.9	+++
Lack of money	63	14.8	14.2		17.6	+	22.0		27.7	++
I didn't have a suitable partner	157	36.8	36.1		36.9		39.0		36.2	
Broke up with/divorced my partner	72	16.9	17.5		19.2		24.4		21.3	
Other important reason	34	8.0	8.4		7.1		NPDA		NPDA	

WHAT IS NEXT?

- Qualitative research: in-depth interviews about “unplanned” postponement of first birth
 - Specification of unplanned postponement reasoning
 - Life stage: specific reasoning of unplanned postponement?
 - Sequential character of unplanned postponement reasoning?
- Education and Partner history influence on the unplanned postponement of first birth



Šťastná A., Slabá, J. Kocourková J. 2017. Plánování, načasování a důvody odkladu narození prvního dítěte v České republice. (English title: **The planning, timing, and factors behind the postponement of first births in the Czech Republic**). Demografie, 59, 207–223. <<https://www.czso.cz/documents/10180/46203816/stastna.pdf/0cf15559-1e0a-4b47-a7d6-e8faeb236404?version=1.0>>

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Šťastná A., Slabá, J. Kocourková J. 2019. (in progress). **Family planning and unplanned postponement of childbearing.**

