

Causes of Fertility Postponement in the Czech Republic for Birth Cohorts from 1966 to 1990

Slabá Jitka, Šťastná Anna , Kocourková Jiřina

Charles University in Prague,

Faculty of Science, Department of Demography and Geodemography

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Outline:

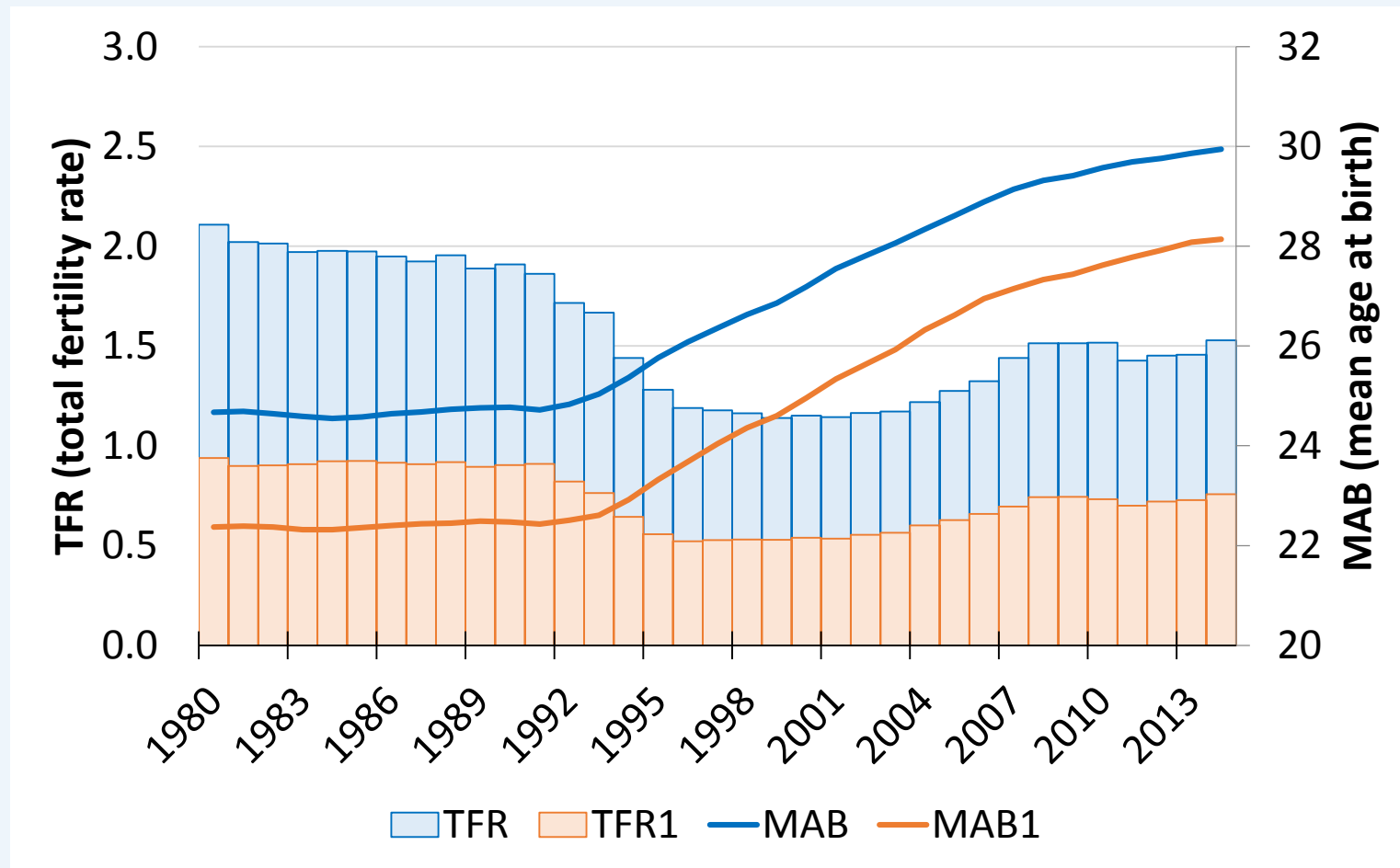
- Motivation and Background
 - fertility in the Czech Republic since 1980
- Survey Women 2016
- Results – Causes of postponement

Motivation

- Situation in the Czech Republic:
 - Declining of TFR during the 90s (to 1.14. in 1999) and slightly increasing of TFR since 1999 to 1.53 in 2014
 - BUT - MAB has grown continuously since 1990
 - From 25 year-old mothers at birth in 1990 to 30 year-old in 2014
- The situation is similar at first birth (= family settlement).
- The question is:
 - What is the main cause of postpone first births to later ages?
 - Is it only effect of the changing social values? OR Are there any new causes of postponement?

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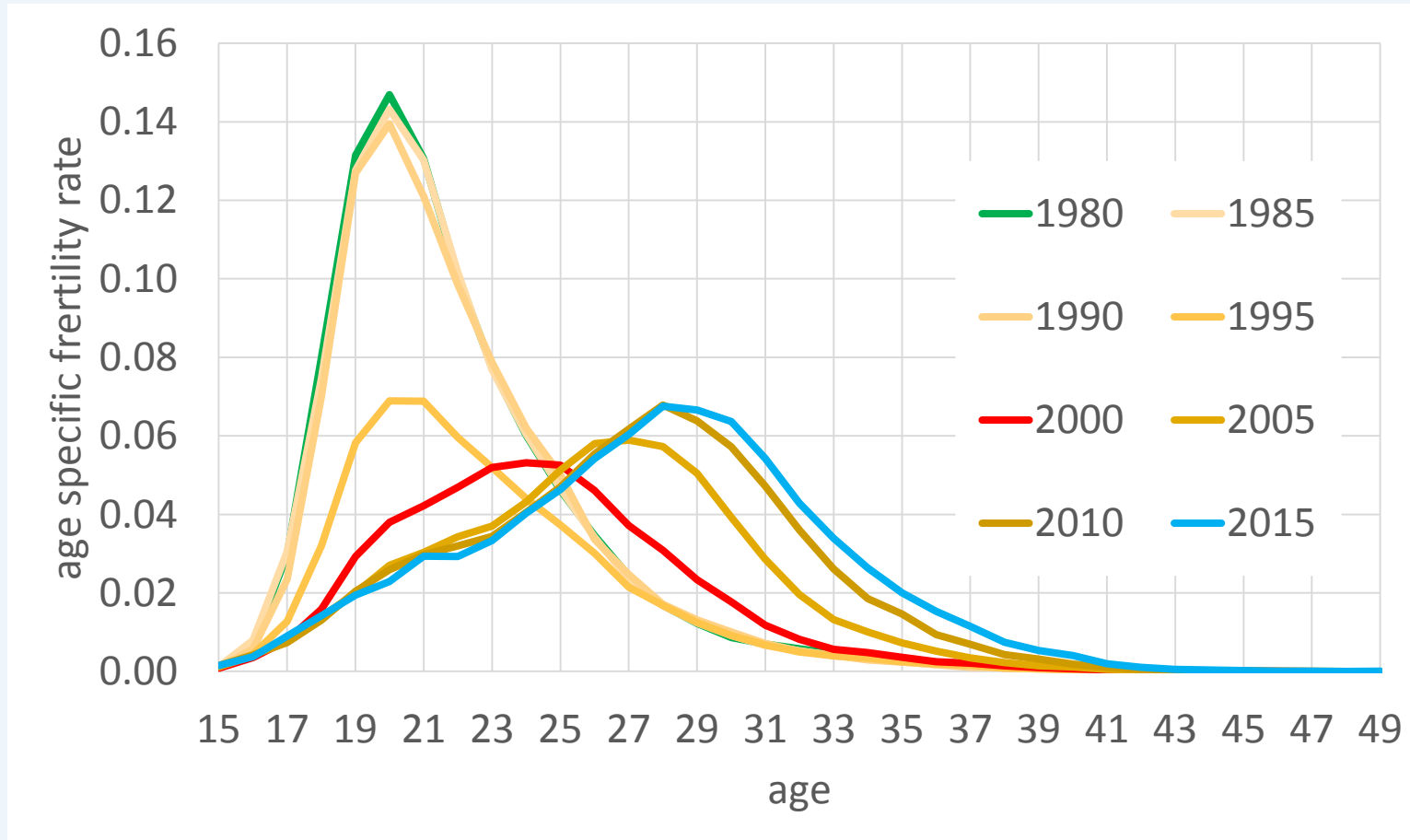
Fertility in the Czech Republic 1980 - 2014



- Declining of TFR and increasing of MAB after 1990
- 1980:
 - TFR 2.11
 - MAB 24.7
- 1990:
 - TFR 1.91
 - MAB 24.8
- 1999:
 - TFR 1.14
 - MAB 26.9
- 2014
 - TFR 1.53
 - MAB 29.9

Graph Data: Human Fertility Database

Intensity and timing of the first birth



- Age specific fertility rates for 1st birth
 - CZE 1980-2015
- Decline of intensity
- Shift of modal age at 1st birth

Motivation

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Women 2016

- Survey was realized in 2016
 - Basic characteristics about respondent
 - Timing of children: opinions (ideal, real and planned age) / postponement (1st/2nd)
 - Perception of social/family policy
 - Partnership history
- Number of respondents: 1257
- Weighted for age, region and education

Key questions

- 1222 respondents
 - 35 were eliminated – they don't have any children and they don't want any children
- Timing of the 1st birth – plan and reality
- Realization of the 1st birth plan
 - Declared postponement
- Postponement factors and their importance
- Birth cohorts
- Education
- Planned children
- Actual children

Planned age of mother at 1st birth

		Planned age of mother at 1st birth (%)						
		24 years and less		25-29 years		30 years and more		N
TOTAL		41.7		42.1		16.2		1222
Birth Cohort	1966–1970	73.7	+++	23.9	---	2.4	---	254
	1971–1982	39.8		44.6	+	15.6		668
	1983–1990	18.6	---	51.8	+++	29.6	+++	300
Education	without "maturita" exam	65.7	+++	27.1	---	7.2	---	428
	"maturita" exam	36.8	--	48.0	+++	15.2		518
	university degree	13.8	---	54.3	+++	31.9	+++	276
Planned children	1 child	31.9	---	37.1		31.0	+++	232
	2 children or more	43.9	+++	43.3		12.7	---	990

Data: Women 2016

Signed scheme based on adjusted residuals. +++/--- significant differences at the 99.9 % CL, ++/-- 99 % CL, +/- 95 % CL

- Cohort difference at planning birth
 - Postponement
- Education difference
 - Related with cohort
- Planning of one child → planned age is higher than 29 for almost 1/3 of women

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Education and Birth cohorts

		Education (%)			Total (N)
		without "maturita" exam	with "maturita" exam	university degree	
Birth Cohort	1966-1970	45.7	40.9	13.4	254
	1971-1982	38.5	44.4	17.1	667
	1983-1990	17.9	39.2	42.9	301
	Total	34.9	42.4	22.7	1222

- Change of education structure between cohorts

Data: Women 2016

Who delayed/is delaying 1st birth?

Declaration of realization planned age at 1st birth (%)										
		later		planned		before		DK		N
TOTAL		32,2		44,2		19,0		4,6		1222
Planned age at 1st birth	< 24 years	19,8	----	51,9		23,0	+++	5,3	+++	509
	25–29 years	38,8	+++	38,8	+	18,8	---	3,5	-	515
	30 years <	46,7	+++	38,2	---	9,5	---	5,5	-	198
Birth Cohort	1966–1970	21,7	---	40,6		29,1	+++	8,7	+++	254
	1971–1982	30,4		48,1	++	18,0		3,6		668
	1983–1990	45,5	+++	38,8	-	12,7	--	3,0		300
Education	without "maturita"	19,9	---	47,4		28,3	+++	4,4		428
	"maturita" exam	35,8	+	42,6		16,8		4,8		518
	university degree	44,2	+++	42,4		9,1	---	4,3		276
Planned children	1 child	36,9		32,2	---	12,0	--	18,9	+++	232
	2 children or more	31,1		47,1	+++	20,6	++	1,2	---	990
Current number	without child	62,2	+++	25,4	---	1,0	---	11,5	+++	209
	one child or more	26,1	---	48,1	+++	22,7	+++	3,2	---	1013

- The youngest generation
- The most educated
- 130 women are delaying 1st birth
- 264 women delayed 1st birth
- = 394 delayed 1st birth
 - → analysis of postponement factors

Data: Women 2016; Signed scheme based on adjusted residuals. +++/--- significant differences at the 99.9 % CL, ++/-- 99 % CL, +/- 95 % CL

Why women delayed/are delaying 1st birth?

- Questioned causes (rate for their importance, 1 - really unimportant to 4 - really important):
- Spontaneous question on cause of delaying confirms the completeness of the list of causes questioned.
- (1) My or my partner's health condition
- (2) To become pregnant takes more time than we expected
- (3) My partner wants to have a child later
- (4) Study limitation
- (5) Work limitation
- (6) I worry about unemployment
- (7) Hobby limitation
- (8) Unsatisfactory housing condition
- (9) Lack of finance
- (10) I don't have a right partner
- (11) I broke up with partner
- (12) Other reason

Importance of factors

Reason	Importance (N=394)
(1) My or my partner's health condition	2.13
(2) To become pregnant takes more time than we expected	2.29
(3) My partner wants to have a child later	1.73
(4) Study limitation	1.68
(5) Work limitation	1.74
(6) I worry about unemployment	1.74
(7) Hobby limitation	1.39
(8) Unsatisfactory housing condition	1.94
(9) Lack of finance	2.07
(10) I don't have a right partner	2.30
(11) I broke up with partner	1.80
(12) Other reason	1.39

- Importance
 - 1(unimportant) to 4(important)

Data: Women 2016

TOP 3 factors

Reason	Importance (N=394)	TOP 3 (%) (N=394)	TOP 3 (%) with child (N=264)	TOP 3 (%) without child
(1) My or my partner's health condition	2.13	24.09	26.28	19.65
(2) To become pregnant takes more time than we expected	2.29	29.62	34.50	19.71
(3) My partner wants to have a child later	1.73	10.23	10.69	9.31
(4) Study limitation	1.68	8.56	5.45	14.87
(5) Work limitation	1.74	7.62	4.91	13.11
(6) I worry about unemployment	1.74	6.63	4.89	10.17
(7) Hobby limitation	1.39	2.53	2.30	3.01
(8) Unsatisfactory housing condition	1.94	16.11	15.97	16.39
(9) Lack of finance	2.07	14.28	10.18	22.59
(10) I don't have a right partner	2.30	32.26	28.13	40.64
(11) I broke up with partner	1.80	15.26	11.82	22.24
(12) Other reason	1.39	9.33	10.36	7.25

- Importance

- 1(unimportant) to 4(important)

- TOP 3

- % of respondents who chose the factor in their TOP 3 causes of postponement

Latent factors

PCA - Rotated component matrix				
Reason	Material conditions	Work and study	Absence of right partner	Health condition
(1) My or my partner's health condition				0,856
(2) To become pregnant takes more time than we expected				0,837
(3) My partner wants to have a child later	0,536		0,256	
(4) Study limitation	0,371	0,684		
(5) Work limitation	0,348	0,788		
(6) I worry about unemployment	0,500	0,633		
(7) Hobby limitation	0,446	0,465		
(8) Unsatisfactory housing condition	0,846			
(9) Lack of finance	0,817			
(10) I don't have a right partner			0,866	
(11) I broke up with partner			0,854	
(12) Other reason		0,628		

- Too much factors for analysis → Principal Component Analysis, Varimax rotation
 - 4 latent factors:
 - Material conditions
 - Work and study
 - Absence of right partner
 - Health conditions
- → set up new variable
 - **Main factor of postponement:** factor with higher regression estimates of factor score

Data: Women 2016

Differential importance of latent factors

- Differential level of importance for latent factors

Reason	Importance (N=394)	Main factor of postponement			
		Material conditions	Work and study	Absence of right partner	Health condition
(1) My or my partner's health condition	2,13	1,77	1,73	1,90	2,98
(2) To become pregnant takes more time than we expected	2,29	1,88	1,91	1,61	3,58
(3) My partner wants to have a child later	1,73	2,37	1,63	1,68	1,30
(4) Study limitation	1,68	1,85	2,37	1,43	1,18
(5) Work limitation	1,74	1,85	2,65	1,42	1,18
(6) I worry about unemployment	1,74	2,03	2,33	1,48	1,25
(7) Hobby limitation	1,39	1,67	1,71	1,19	1,08
(8) Unsatisfactory housing condition	1,94	3,23	1,86	1,55	1,25
(9) Lack of finance	2,07	3,02	2,07	1,85	1,43
(10) I don't have a right partner	2,30	2,16	1,95	3,75	1,35
(11) I broke up with partner	1,80	1,44	1,72	2,91	1,15
(12) Other reason	1,39	1,05	2,18	1,34	1,09

Data: Women 2016

Differential postponement – main factors

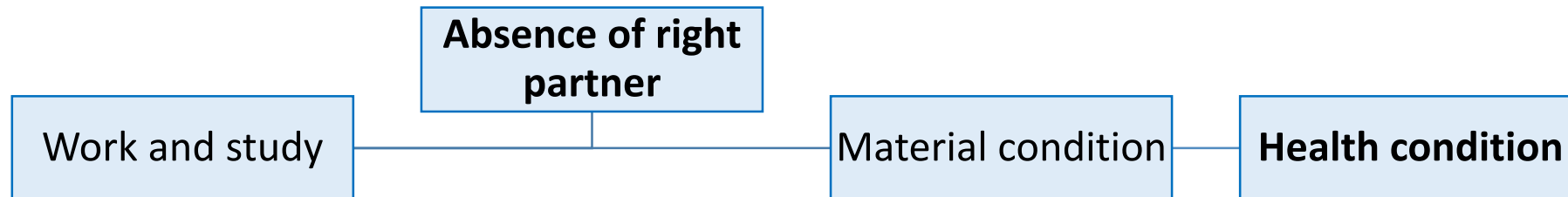
		Main factor of postponement (% of respondents)							N
		Material conditions		Work and study		Absence of right partner		Health condition	
TOTAL		45,0		38,1		44,7		48,9	394
Planned age at 1st birth	< 24 years	43,1		27,5	-	36,6		49,5	101
	25–29 years	46,5		40,0		43,0		47,0	200
	30 years <	43,0		45,2		57,0	++	51,6	93
Birth 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	without "maturita" e	44,7		24,7	--	30,6	--	61,2	85
	"maturita" exam	45,5		33,9		51,1	+	45,7	186
	university degree	44,7		53,3	+++	44,7		45,1	123
Planned children	1 child	50,0		41,9		48,2		60,5	86
	2 children or more	43,5		37,0		43,8		45,5	308
Current number of children	without child	57,7	+++	58,5	+++	60,0	+++	42,3	130
	one child or more	38,6	---	28,0	---	37,1	---	52,1	264
TOTAL		38,6		27,9		37,1		52,1	264
Real age at 1st birth	< 24 years	48,0		22,4		26,0		46,9	50
	25–29 years	35,5		26,4		24,3	---	45,9	110
	30 years <	37,5		32,0		56,3	+++	61,2	104

- Health condition:
 - Small difference between observed variables
 - Probably causes for planning only 1 child and for later realization
- MC + WS + ARP
 - are observed often for childless women → these factors lose their importance with realization
- WS relates with more educated and younger cohorts
- MC relates with the youngest cohorts without children

Data: Women 2016; Signed scheme based on adjusted residuals. +++/--- significant differences at the 99.9 % CL, ++/-- 99 % CL, +/- 95 % CL. This table contains only count for presence of latent factor.

Summary

- **Social postponement** (planned later) x **Individual postponement** (later realization than plan)
- **4 causes of postponement** are distinguished
 - The most important are “absence right partner” and “health conditions”
- There is a hypothesis that it is possible to order postponement factors by life cycle with predominant influence
 - AND:
 - All factors lose their importance by time (bigger importance of factor for younger cohorts)
 - WS + MC lost their importance after realization of 1st birth



- “Work and study” more determine the most educated and the youngest group of women
- “Material condition” do not differ by education (income predictor)

Thank you for your attention

This research was supported by the Czech Science Foundation,
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for family policies?“.