Cohort fertility transition in Slovakia. The postponement and recuperation process.

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Introduction

• The collapse of the communist system and the following period of social and economic transformation of society caused dramatic profound changes in the reproductive behaviour in the Slovak Republic (and in other Visegrad countries).

• Postponement of important life course transition with connection to the reproduction – leaving the parental home, resident and economic independence, enter to the marriage and parenthood became widespread among young people born in 1970s and 1980s.

• Since the early 1990s, fertility trends in Slovakia (and other Visegrad countries) have been dominated by the shift in childbearing to later ages – often described as fertility postponement.
Introduction

• Questions:
  1.) will recovery really take place? *(if yes)*
  2.) what portion of postponed births will be recovered?
  3.) what changes can we expect in the completed fertility and parity structure?

• The main aim of our presentation is to analyse changes in the cohort fertility trends in Slovakia in the past two decades.
Data and methods

• We focused on the postponement and recuperation process using the basic benchmark model (Sobotka et al. 2011ab).

• For benchmark cohort we have chosen first cohort that experienced an increase in the mean age at first birth that continued for at least five cohorts (cohort 1965).

• The postponement and recuperation process was measured by age (and birth order) for any cohort of interest, which was compared with an older benchmark cohort.
Data and methods

• Basic benchmark model (Sobotka et al. 2011ab).

• For benchmark cohort we have chosen first cohort that experienced an increase in the mean age at first birth that continued for at least five cohorts (cohort 1965).

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Data and methods

- Postponement represents cumulative fertility decline (absolute or relative) in all ages when fertility has fallen in comparison with selected benchmark cohort (postponement measure).

- Postponement measure reflects the maximal gap between the cohort of interest and the benchmark cohort – the depth of the decline in cohort fertility at younger ages.

- Recuperation express fertility increases in all ages when fertility has increased (recuperation index). (absolute or relative increase of cohort fertility at older ages from the age when postponement reached maximum to end of reproductive period)

- Final difference = permanent decline (or oncrease in situation of overcompensation), derived from postponement and recuperation measure.
Data and methods

- Each of indicators was specified by birth order.

- Four important indicators:
  1) initial fertility level (from benchmark cohort),
  2) cumulative fertility decline at younger ages
  3) relative degree of fertility recuperation at older ages
  4) final (permanent) decline of CTFR

- Order and age-specific cohort fertility data originate from the Human Fertility Database, Vital statistics data in 2010 - 2014 provided by Statistical office of the Slovak Republic
A simplified model of the postponement and recuperation of fertility in a cohort perspective

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Former character of cohort fertility

- The specific patterns of demographic behaviour during communist society led to the situation that Slovakia in the late 1980s still belonged to the countries with the highest fertility in Europe (CTFR > 2 children per woman).
- Cohort fertility:
  - a) concentrated at very beginning of the reproductive period,
  - b) relatively high (decline 2.5 to 2.0 C1940 – C1968)
  - c) stable reproductive model (women born in 1940s – 1960s),
  - d) gradually intercohort accepted two child family (1960s),
  - e) very low proportion of women with one child (11 – 13 % ),
  - f) childless women (7 – 10 %),
  - g) more often larger families.
Changes in cohort fertility

- Postponement – fertility decline across younger ages.

- Recuperation (recovery, catching-up) – fertility increase across older ages.

- Decline in the level of completed fertility, changes in tempo and parity structure.
Age-specific cohort fertility rates by birth order, selected cohorts

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Age-specific cohort fertility rate by birth order, selected cohorts

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Total cohort fertility rate and mean age at first birth in cohorts 1940 – 1974
Cumulated differences in the cohort fertility rates of selected cohorts compared to the benchmark cohort of 1965 (first and second births)

CTFR2 (1965): 0.72
Cumulated differences in the cohort fertility rates of selected cohorts compared to the benchmark cohort of 1965 (third and higher-order, all births)
Absolute cumulative fertility decline at younger ages (postponement)
Recuperation index by birth order, women born in 1966 – 1979

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Permanent decline in cohort fertility by birth order

Contributions to permanent decline by birth order
Observed and projected CTFR by different scenarios

Cohort

Children per woman


- Observed
- constant IR
- average IR
- 5 % increase IR
- 10 % increase IR
- 15-10-5 % increase IR

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Observed and projected parity structure (constant, average scenario)

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Observed and projected parity structure (15-10-5 % scenario)
Conclusions

• The process of postponing fertility into the late 20s and early 30s in Slovakia started among the cohorts in the first half of 1970s.

• Cohorts born in 1970s and especially in second half of 70s are characterized by intensive fall of fertility in younger ages with inter-cohort increase of the cumulative fertility gap.
Conclusions

• In cohort born in 1980s the dynamic of inter-cohort spreading the postponement process was less pronounced.

• The force of fertility recuperation differs widely by birth order: relatively strong recuperation in first birth rates and significantly lower force of recuperation in second and higher-order.

• The dominant position has postponement of the first-order births - the final overall decline of the cohort fertility will be mainly saturated by low recuperation of the second and higher-order births.
Conclusions

• Transition in cohort fertility of women born in the 1970s and 1980s indicates that their completed fertility will be certainly below two children per woman and the proportion of women with one child or no children will increase (at the expense of two child families).
References
