Childlessness trends in 20th-century Europe: limited link to growing educational attainment

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VID International conference, Vienna, 2-4 December 2015
Motivation
Trends in childlessness, coh. 1916-65: Decrease, then increase/stabilisation

Source: authors' computations
CFE database
Massive educational expansion, particularly of secondary education

Source: authors’ computations
CFE database
Studies of childlessness by level of education: no comprehensive and long term view

- Existing studies
  - Country comparisons: not by level of education (Frejka 2008, Rowland 2007, Sardon and Robertson 2002)
Change in levels of ultimate childlessness
Educational differences in the East and the West across cohorts

- For cohorts born at the beginning of the century we anticipate similar educational differences in the East and West
  - Childlessness rates were high in both areas;
  - and like in the West, in the East family forms and structures seemed to be largely determined by socio-economic factors.
- For women born in the 1930–1960s, we expect gradients to be generally smaller on the Eastern side of the Iron Curtain
  - Indeed reproductive careers took place mainly under state-socialism when women had rather standard options with regard to family and career trajectories.
- For younger women who lived part of their reproductive life after the collapse of communism, the contemporary explanations of childlessness let us expect educational differences in childlessness to be country-specific rather than East-/West-specific (work-family reconciliation...).
Focus: changes in the East, in the West

- General trends across birth cohorts in each educational group
  - were they education-specific or similar to the overall trends?
- Change over cohorts and countries in educational gradient
  - Were the levels of childlessness among women with medium and low education becoming more similar across cohorts, in time of very large upward mobility?
  - Did childlessness among highly educated decrease with time as they were becoming less and less selective?
- Participation of the change in educational structure and in childlessness rates within groups to the overall change in childlessness
Data and Methods
Data & Methods

- (Micro)Censuses & two large-scale surveys
- Conducted in the 1990s and 2000s
- 13 European countries
  - See Cohort Fertility and Education (CFE)-database

Methods of descriptive demography
- Trends
- Standardisation (direct and indirect)

- Low = Isced 0-2 (primary – lower secondary)
- Medium = Isced 3-4 (higher secondary)
- High = Isced 5-6 (tertiary)
Data & Methods

The blank map downloaded from www.youreuropemap.com
Trends in education and childlessness
A common trend in childlessness for all educational groups, more marked for medium and high-education.

Source: authors' computations
CFE database
A strong positive educational gradient between high and low educated...

Source: authors’ computations
CFE database
... but consisting in a vanishing gradient low-medium and a stable/increasing gradient high-medium

Source: authors’ computations
CFE database
Structure versus rate effect
Change in the educational structure explains relatively little of the change in childlessness

- **Direct standardisation** = keeping educational structure constant
  - In all countries, very small impact of the change in the educational structure
  - Explains 2-4 percent points of childlessness variations over the whole period studied
  - Same in East and West

- **Indirect standardisation** = keeping within educational groups childlessness rates constant
  - Much larger change due to educational-specific change
  - Particularly in the earliest period, rates drove almost all the initial decline
  - Becomes much more varied afterwards, large country-variation, less contribution in the West
Conclusions
Conclusions (1)

- Universal decline in cohort childlessness up to the 1936-40 cohorts, East-West divergence only afterwards
  - From then on, levels remained lower than in the West in all CEE countries under study
  - Similar trends observed in all educational groups
Conclusions (2)

- Overall educational gradient (high vs low) lessened across cohorts
  - But in fact, this hides a convergence between low and medium educated...
  - ... and the group of high educated remained distinct from medium educated despite its gradual growth, becoming even more different in the East
- Note a very strong continuity in the changes in educational gradient, e.g. no trace of the baby boom
Conclusions (3)

- The dramatic increase in female educational attainment in the second half of the century pushed up the proportion of childless women much less than one could have expected.
- In the period under study the overall level of childlessness was rather driven by the childlessness trends within the educational groups.
Discussion

- Cultural and socioeconomic changes affected family formation in all educational strata
- There seems to have been a process of entry into motherhood specific to women with high education
  - University degree holders stayed childless much more often than the other groups on both sides of the Iron Curtain
  - Economic disparities much smaller in the East than in the capitalist democracies during State socialism, but social inequalities and differences remained quite strong
- Future trends in childlessness
  - Will the East reach up Western childlessness levels, once the effects of State socialism have vanished?
  - We observe that a disparity (already present in the past) re-emerges in the East
THANK YOU

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This research was supported by the European Research Council under the European Union’s Seventh Framework Programme (FP7/2007-2013) / ERC Grant agreement n° 284238 (EURREP).

www.eurrep.org
www.cfe-database.org
Educational structure of the childless

- Comparing the educational structure of childless women with that of all women (in each country separately)
- and expressing the difference in relative terms

\[
\frac{\% \text{ low educated among chL} - \% \text{ low educ. among all}}{\% \text{ low educated among chL}}
\]

- > 0: overrepresentation (more women with low edu in the childless population than in the whole)
- < 0: underrepresentation (fewer women with low edu in the childless population than in the whole)
Change in the educational structure explains relatively little of the change in childlessness

Direct standardisation: proportion in education kept constant

Indirect standardisation: childlessness rate within education groups constant

Reference cohort: 1936-40

Relative difference = (stdsed - real) / real