Diminishing differentials?
Persistent education gradients in fertility in post-transitional countries

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Introduction

Increasing attention to education-fertility relationship and its interpretation in low-fertility settings (& different institutional contexts)

• Long-term gradient in education-fertility differentials documented among women (e.g. Skirbekk 2008), less clear among men
• But unclear how this gradient evolves over time – different conclusions in different studies, some suggesting reversals, U- and V-shaped associations
In the past research exploring the education – fertility links often

- Focused on individual countries
- Used period data that are often affected by *tempo effects* & changing education status of mothers
- Applied a short-term perspective
- Used regression analysis, frequently with a focus on partnered women & single-parity transition

More cross-national comparative papers in recent years (e.g., Wood, Neels & Kil 2014; Klesment et al. 2014, Van Bavel et al. 2015)

Debates on causality

*The “big picture” is often lost*
Research on long-term changes, & inter-country variation in the relationship between education and fertility (and fertility intentions) by the ERC-funded EURREP project (VID / Wittgenstein Centre) & collaborators

- Focus on completed fertility, childlessness and parity distribution of women (and men) aged 40+
- Europe & selected low-fertility settings outside Europe

Selected papers – project & collaborations:
Brzozowska, Zuzanna, Beaujouan, Éva and Kryštof Zeman. “Two is best. The two child family most common across Europe and across education strata” Work in progress
J. Van Bavel et al. “Women’s Education and Cohort Fertility during the Baby Boom” Work in progress
Agenda

• Long-term change in 20\textsuperscript{th} century cohorts: Diminishing education gradient in completed fertility?

• Post-transitional fertility: Contrasts in educational gradients

The *Cohort Fertility and Education* (CFE) database
Data

- Census data (1970s to 2011, full sample or 5-10% samples) and large-sample surveys (France, *Mikrozensus* in Germany)
- Women (& men) aged 40-80
- Completed fertility, parity distribution; women born 1930-1971
- 12 European countries and South Korea; CEE overrepresented
- Data in the *Cohort Fertility and Education (CFE)* database and Belgian Census data
- 3 education levels, using 1997 ISCED categories:
  - LOW: ISCED 0-2, up to lower secondary / second stage of basic educ.
  - MEDIUM: ISCED 3+4: upper secondary & post-secondary education
  - HIGH: ISCED 5+6: tertiary / university education
Diminishing education gradient in completed fertility across cohorts?
Relative fertility differences

Is there a trend towards diminishing relative fertility differences in post-transitional countries?

• Many arguments & theories suggest such a trend (SDT as well as arguments centering on gender egalitarianism and reconciliation policies)

Measuring relative fertility differences

• Relative Fertility Index (RFI): simple measure comparing relative differences in fertility level between two education categories

• Comparing women with Higher (H) and Medium (M) education level for any cohort c: $RFI (H/M) = CTFR (H) / CTFR (M)$

• Comparing women with Medium (M) and Lower (L) education: $RFI (M/L) = CTFR (M) / CTFR(L)$
Relative fertility: High vs. Medium education (RFI (H/M))
Relative fertility: High vs. Medium education (RFI (H/M))
Relative fertility: Medium vs. Low education (RFI (M/L))
Relative fertility:
Summary for European countries
Convergence vs. polarization: Diversity of post-transitional trends in fertility gradients
Diversity in post-transitional gradients

- No consistent trend in relative fertility differences at low fertility levels
- Convergence, increasing polarization or stable pattern can be seen in different countries with different fertility levels
- Persistence of long-term patterns
Convergence

Korea: Convergence – decline to low levels

Belgium: Convergence – stabilization at higher levels
Increasing polarization

Romania: Prominent low-educated Roma minority + ‘reproduction policies’
Strong polarization also emerging in Latin America (Brazil, Chile, Uruguay)
Stable differences

Spain: Stable differences, declining fertility
Switzerland: Stable differences, stable fertility
Seemingly similar overall cohort fertility levels & trends can be fueled by diverse education differentials & trajectories
Conclusions

• No clear convergence in fertility by education
• Contrasting trends between countries, wide differences often persist
• In most countries, a clear negative gradient persists – despite massive changes in educational composition & “meaning” of low / high education
• U-shaped pattern & reversals in education gradients uncommon
• No obvious association with the trend towards gender egalitarianism
• Convergence can occur both at higher (Sweden, Belgium) and Low (Korea) levels
• Cross-country convergence unlikely in the near future → strong path dependency / continuity within countries
Future plans

• Adding more countries including Nordic countries, USA, Japan, Latin America & the Balkan countries; adding more recent data
• Aiming for a more systematic analysis of education gradients
• Studying the role of childlessness
• Trying to “explain” the observed patterns and trends // labour market, inequality, education systems, family policies, ethnic minorities, migrant populations, and gender egalitarianism
Analysing completed cohort fertility and parity distribution by level of education in low-fertility countries

- 15 countries, 43 censuses and surveys; more to be added soon!
- Birth cohorts from around 1900 to the 1971
- Censuses and surveys from 1966 to 2011
- Open access
- Standardised education categories (EDU-3 and EDU-4, ISCED)
- User-friendly interface
  - Dynamic tables
  - Interactive graphs
  - Downloadable csv-files
  - Data documentation

www.cfe-database.org
**CFE database**

**COHORT FERTILITY AND EDUCATION**

Home >> Database >> Database

**DATABASE**

Please select country and survey.

**Dataset:** Country: Germany  Data source: Microcensus 2012  Documentation  Get dataset as CSV

Data aggregation:  Cohorts  Education  Indicators:  Indicators  Filters:  Cohorts  Education

Get filtered table as CSV  Charts

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THANK YOU

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