Is there a reversal of the childlessness trend among highly educated women in Germany?

* Has the educational gradient been overestimated?

International Conference
Education and reproduction in low-fertility settings
Vienna, 2 - 4 December 2015

Martin Bujard
Federal Institute for Population Research, Wiesbaden, Germany
**Trends of childlessness by educational groups**

- Long-lasting educational differences of childlessness – future?
- Effects of Germany’s paradigm change in family policy?
- Different processes by migration background and region

**Theoretical approaches on childlessness**

Labour market: Opportunity costs, late entry, insecure jobs
Culture: SDT, childless lifestyle spreading to lower educational groups
Partner market, parental resources
Family policy and gender institutions
Progress in ART
Data problems in Germany before Micro Census Reform

- No reliable data on parities and childlessness until 2006
- Overestimation in several publications before
- Myth “40 % childlessness of highly educated” in German media

Data used

- Micro Census 2012
- Information on children in the household, Micro Census 2002-2014

Research design

1. Extrapolation of childlessness for the cohorts 1966-1978 by educational groups
2. Trends for educational groups differentiated by region, urbanisation level and migration background
3. Effect of the education variable on $R^2$ in logistic regressions
Childlessness of highly educated women in Germany

Source: Micro Census 2012, straightened by 5 years average.
Postponement and recuperation patterns:
Age specific first birth of highly educated women in Germany

Source: Micro Census 2002-2014, own calculations. Note: The lines are straightened based on the three year average. Note: Data before age 30 has a bias because of late entries in this educational group.
Trends of age specific first birth: highly educated women

Source: Micro Census 2002-2014, own calculations. Note: The lines are straitened based on the three year average.
Extrapolation of the proportion of permanent childlessness for the cohorts 1966-1978

Source: Micro Census 2002-2014, own calculations. Note: The CTFR and CFR lines are straitened based on the three year average.
A strong educational gradient: Cohorts 1967-71

ISCED

1-2  3, 4, 5 B  5 A, 6

Note: 5 B = advanced vocational qualifications, i.e. Meisterbrief, or diploma Berufsschule in the dual system
The potential of large N – for analysing trends

N = 265
N = 5.324 (mean per cohort)

Source: Bujard; Dorbritz; Herter-Escheiler & Lux 2015
Childlessness by education: Western and Eastern Germany

**Western Germany**

- Low education
- Middle education
- High education

**Eastern Germany**

- Low education
- Middle education
- High education

The graphs show the percentage of childlessness over the years from 1938 to 1970 for both Western and Eastern Germany, categorized by education level.
Childlessness by education and urbanisation level of residence

Low education

Medium education

High education

- large cities
- urban districts
- rural districts
Childlessness by education and migration background

**Migration background**

- Low education
- Middle education
- High education

**No migration background**

- Low education
- Middle education
- High education
Childlessness by education and migration background

Germany all

No migration background

- low education
- middle education
- high education
Small educational effect in logistic regression on childlessness

1. Reversal of the childlessness trend?
   - YES.
   - Peak in the cohorts end of 1960s with 28%, end of 1970s 25%

Discussion:
Family policy reforms
reproductive medicine

2. Educational gradient
   - EG low-medium is mainly due to a composition effect of migrants with both low education and low childlessness
   - Catch up of childlessness by low and medium educated women
Thank you for your attention .... and see you in Mainz!

www.epc2016.de

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martin.bujard@bib.bund.de

Federal Institute for Population Research
Friedrich-Ebert-Allee 4; 65185 Wiesbaden, Germany
Tel.: ++49(0)611-75 2883
www.bib-demografie.de
### Transition to 2nd Child

<table>
<thead>
<tr>
<th>Age of first child</th>
<th>Full model</th>
<th>Model with interaction effect</th>
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<tbody>
<tr>
<td>&lt;1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1 - 2</td>
<td>2.68 **</td>
<td>2.69 **</td>
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<tr>
<td>2 - 3</td>
<td>3.31 **</td>
<td>3.31 **</td>
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<tr>
<td>3 - 4</td>
<td>1.64 *</td>
<td>1.63 *</td>
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<td>4 - 5</td>
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<td>1.07</td>
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<td>7+</td>
<td>0.17 **</td>
<td>0.19 **</td>
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<th>Parental Leave Reform 2007</th>
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<th>Model with interaction effect</th>
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<td>0.93</td>
<td>control variables not shown</td>
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<th>Age of mother</th>
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<tr>
<td>&lt;=25</td>
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<tr>
<td>26-30</td>
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<tr>
<td>31-35</td>
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<tr>
<td>36-45</td>
<td>0.77</td>
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<tr>
<th>Interaction age* parental leave reform</th>
<th>Full model</th>
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<td>Reform * &lt;=25</td>
<td>1</td>
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<td>Reform * 26-30</td>
<td>1.19</td>
</tr>
<tr>
<td>Reform * 31-35</td>
<td>1.61</td>
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<tr>
<td>Reform * 36-45</td>
<td>2.32 *</td>
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<thead>
<tr>
<th>Constant</th>
<th>Full model</th>
<th>Model with interaction effect</th>
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<tbody>
<tr>
<td></td>
<td>0.00 **</td>
<td>0.00 **</td>
</tr>
</tbody>
</table>

| Personyears | 64561 | 64561 |
| No. Of persons | 1740 | 1740 |
| Events | 405 | 405 |
| Log Likelihood (0) | -1069.11 | -1069.11 |
| Log Likelihood | -838.2 | -833.39 |