The emergence of cohabitation in transitional socio-economic context: evidence from Bulgarian and Russian GGS

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5th GGP IWG meeting, Ljubljana, 18-20 January 2007
Outline

- Introduction
- Research question
- Data and method
- First results
- Conclusions
- Further steps
Introduction

How did Bulgarian and Russian family formation patterns change during the years of transition from patterns observed during the state socialist time?

- family formation development because:
  - family formation model in the post-communist countries has been changing simultaneously with the changing political and economic environment;
  - little is known about the recent Bulgarian and Russian family formation models and the emergence of non-marital relationships;

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Introduction

- Bulgaria and Russia because:
  - family formation patterns in Bulgaria and Russia have been studied mainly using aggregated data from official statistics, giving the answer WHAT has changed;
  - the two countries lack analysis on WHO were the people that changed their behavior and WHY they did so;

  - in common:
    - Orthodox religion, Slavic culture, similar language and alphabet, common socialist past – state-run economy, welfare states.
  - different:
    - political and economic development since the beginning of 1990s.
Research Question/s

- How did Bulgarian and Russian family formation patterns change during the years of transition from patterns observed during the state socialist time?

- How different are the two countries in the family formation development after the beginning of the transition?

- Who are the forerunners of the new family formation patterns in Bulgaria and Russia?
Theoretical Considerations

• why do people marry?
  – marriage as a social institution
  – marriage as an economic unit

• why do people cohabit?
  – value changes (the notion of Second Demographic Transition)
  – economically favorable (Becker, ..)

• who cohabits?
  – family of orientation and cohabitation
  – educational enrolment/level of education and cohabitation
Data

GGS is a powerful data source, which consists of fertility and family formation histories;

- allows us to use event history analysis to reveal the country-specific factors influencing those phenomena in Bulgaria and Russia;
- to study the development of cohabitation over calendar time;
- to reveal WHO are the people that have chosen cohabitation instead of marital family;
- to highlight the nature of cohabitation as a new (or newly registered) phenomenon in the two countries of interest;
Data

**GGS - Bulgaria**
12886 people aged 18-85
5862 men, 7024 women

**GGS - Russia**
11203 people aged 18-79
4216 men, 6987 women

Women, aged **18-49** at the interview
Bulgarian and Russian ethnicity/nationality only
complete partnership histories

3982 women – 984 in cohabitation
1872 direct marriage
1126 never in a union

3603 women – 955 in cohabitation
2044 direct marriage
604 never in a union

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## descriptive results

Proportion of first unions beginning in cohabitation* over calendar time

<table>
<thead>
<tr>
<th>Year of union formation</th>
<th>Bulgaria</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975-79</td>
<td>25.5</td>
<td>17.5</td>
</tr>
<tr>
<td>1980-84</td>
<td>27.4</td>
<td>18.8</td>
</tr>
<tr>
<td>1985-89</td>
<td>29.1</td>
<td>25.1</td>
</tr>
<tr>
<td>1990-94</td>
<td>39.6</td>
<td>36.0</td>
</tr>
<tr>
<td>1995-99</td>
<td>53.1</td>
<td>47.1</td>
</tr>
<tr>
<td>2000-04</td>
<td>64.9</td>
<td>59.2</td>
</tr>
</tbody>
</table>

GGS data, own calculations

*cohabitation followed by marriage within 4 months is considered a direct marriage
Kaplan-Meier estimates for transformation of cohabitation into marriage, by year of union formation

- In Bulgaria - most cohabitations are transformed into marriage within a short period of time
- In Russia - cohabitation is more of an alternative to the marital family

GGS data, own calculations

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descriptive results

First birth by union status of the woman (women with children only)

<table>
<thead>
<tr>
<th>Union status</th>
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</tr>
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<tbody>
<tr>
<td>lone parenthood</td>
<td>8.5</td>
<td>5.7</td>
<td>6.9</td>
<td>8.6</td>
<td>10.8</td>
<td>8.9</td>
</tr>
<tr>
<td>cohabitation at first birth</td>
<td>6.1</td>
<td>8.8</td>
<td>26.7</td>
<td>7.9</td>
<td>13.0</td>
<td>18.1</td>
</tr>
<tr>
<td>cohabitation/conception/marriage/birth</td>
<td>4.4</td>
<td>7.9</td>
<td>14.2</td>
<td>2.6</td>
<td>5.3</td>
<td>10.0</td>
</tr>
<tr>
<td>conception/direct marriage/birth</td>
<td>11.4</td>
<td>15.4</td>
<td>15.0</td>
<td>9.2</td>
<td>10.4</td>
<td>13.0</td>
</tr>
<tr>
<td>direct marriage/conception/birth</td>
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<td>62.2</td>
<td>37.2</td>
<td>71.7</td>
<td>60.5</td>
<td>50.0</td>
</tr>
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GGS data, own calculations

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GGS data, own calculations

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model

a piece-wise log-linear intensity regression model for:

transition to first cohabitation ←→ first direct marriage

\textit{time} since age 14 of the respondent

covariates
region of residence at the age 15
mother’s highest level of education
father’s highest level of education
parents lived together at the age 15
N of siblings
level of education (t. v.)
parity (t. v.)
calendar year (t. v.)
First results

First union formation intensities for Bulgaria and Russia by calendar year*

- In Bulgaria – decrease in the first marriage intensity already before 1989.
- In Russia – changes in entering a cohabitation (or ‘not registered marriage’) as a first union appear already in 1970s and 1980s.

* Standardized for region, parents’ education, parents lived together, # of siblings, education and parity

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### Results - BG

<table>
<thead>
<tr>
<th></th>
<th>Cohabitation</th>
<th>Direct Marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Background</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's highest level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>1.15</td>
<td>1.18**</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>High</td>
<td>1.10</td>
<td>0.86</td>
</tr>
<tr>
<td>Father's highest level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>1.28**</td>
<td>0.89**</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>High</td>
<td>0.99</td>
<td>0.76***</td>
</tr>
<tr>
<td>Parents lived together</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>1.55***</td>
<td>0.78**</td>
</tr>
<tr>
<td># of siblings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 or 1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2 or more</td>
<td>1.30***</td>
<td>0.90*</td>
</tr>
</tbody>
</table>

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mother’s education*calendar time spline

- changes in the profile of people starting their union with cohabitation
  → shifted effect of mother’s education over the calendar time

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results-BG

person’s education*calendar time

- changes in the profile of people starting their union with cohabitation
  → drop in the risk of forming cohabitation among the low educated women

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## results-RU

<table>
<thead>
<tr>
<th>family background</th>
<th>cohabitation</th>
<th>direct marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>mother’s highest level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low</td>
<td>1.16*</td>
<td>0.92</td>
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<tr>
<td>middle</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>high</td>
<td>0.99</td>
<td>1.03</td>
</tr>
<tr>
<td><strong>father’s highest level of education</strong></td>
<td>1.08</td>
<td>1.06</td>
</tr>
<tr>
<td>low</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>middle</td>
<td>0.90</td>
<td>1.01</td>
</tr>
<tr>
<td>high</td>
<td>1.08</td>
<td>1.06</td>
</tr>
<tr>
<td><strong>parents lived together</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>no</td>
<td>1.17</td>
<td>0.97</td>
</tr>
<tr>
<td><strong># of siblings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 or 1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2 or more</td>
<td>1.38***</td>
<td>1.05</td>
</tr>
</tbody>
</table>

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mother’s education*calendar time spline

- no changes in the profile of people starting their union with cohabitation

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results-RU

**person’s education*calendar time**

- no changes in the profile of people starting their union with cohabitation
  → higher education remains a significant factor for entering cohabitation
Conclusions

- Cohabitation existed in both countries already in the pre-transitional period, but in Bulgaria the changes in the beginning of the 1990s are more pronounced.
- An increase in the direct marriage intensities is observed in Russia for the period 1970-1989, while in Bulgaria the marital family is already losing its universality.
- Parental family characteristics are shown to be an important factor for spreading the cohabitation in Bulgaria; We didn’t find evidence that family of orientation is an important predictor of the individual family formation behavior in Russia.
- In Bulgaria low educated women have a 70% higher risk to start their first union in cohabitation (compared to those with medium education). This trend decreases in the second half of 1990s, combined with an elevated risk for the other two educational categories.
- In Russia cohabitation risks are 40% higher among highly educated women. This pattern remains stable over the years of transition in Russia (becoming even more pronounced).
next steps

adding

- transition out of first cohabitation – transition to subsequent marriage vs. transition to separation

- contextual covariates from CDB (aggregated statistics on the economic development of the two countries – GDP per capita, level of unemployment, etc.)
Thank you!

Questions and comments?

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model II

- limitations of using **level of education** as covariate

no complete histories on education in the first wave of GGS
year of finishing the highest level of education

- imputing age of finishing previous levels of education according to the educational systems in the two countries;
- assumption that the respondent has not interrupted her education before she completed the highest level of education;