Migrant Fertility in Europe: Accelerated Decline During the Recession Period?

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Background

Aggregate-level research on migrant fertility

- Very few comparative studies; mostly focus on individual countries (including on specific migrant groups)
  - Data availability, data quality issues, definitions.
  - Indicators: Period TFR problematic; affected by the timing of migration – interrelation of migration and fertility (Andersson 2004; Toulemon & Mazuy 2004; Parrado 2011; Mussino & Strozza 2012)
  - Aggregate measures not representing any specific group
  - Frequent mismatch between birth data (births by age and migr. status of the mother) and population data (women by age and migr. status)
Background

Past research (e.g., Sobotka 2008; Kulu and Gonzales-Ferrer 2013; Adsera and Ferrer 2014)

- Higher fertility of migrants in Western, Northern and Southern Europe
- Gradual convergence between native and migrant women’s fertility, but huge differences between countries
- Modest positive impact on the TFR in most countries; slight contribution to the TFR increase between the late 1990s and 2008 in some countries (Goldstein et al. 2009; Landschoot et al. 2014; Tromans 2009)
- High & rising contribution of migrants to the number of births
- Within countries: convergence to native F with duration of stay, earlier age at migration & among 2nd G migrants
Migrant fertility during the recession period

Decline in period fertility in most countries in Europe

- Close correlation between unemployment and fertility trends (fertility pro-cyclical)
- Main exceptions: Eastern Europe, France, German-speaking countries

Faster decline in period fertility among migrants?

- Migrant groups often most affected: more vulnerable labour market position, informal work, sharper rise in unemployment
- Stronger fertility reactions to the labour markets downturns?
- Also rapid change in migration dynamics in the most affected countries in Southern Europe
Agenda

   • Convergence between native and foreign-born women?
   • Regional trends
   • Updating & expanding earlier study (Sobotka 2008)

2. Migrant fertility during the recent recession, 2008-13
   • Accelerated decline, especially in the most affected countries (Southern Europe)?
   • Regional differences
   • Contribution of migrants to the observed TFR decline

3. Recent patterns & differentials in migrant fertility (2014)
   • A shift to sub-replacement fertility among migrant women?
   • How strong effect on national TFRs & on the share of births?
Data & measurement

Data

- National statistical offices, official reports & country research studies for the period 1980/2002 – 2015 (9 countries)
- Eurostat data (2016) on births by age of mother & mother’s country of birth (citizenship) and female population by country of birth (citizenship) 2008-14
- 20 countries included, own computations; unknowns usually redistributed
- Data for some countries and years excluded: instability, implausible TFR levels, inconsistencies, high share of unknowns

Indicators:

- Period TFR by country of birth (foreign-born vs. native-born women)
- Citizenship data used for some countries for which data on country of birth not available, especially for the long-term pattern (Austria, Italy, Germany, Greece, Switzerland)
- Also absolute and relative differences between these groups; “net impact” of foreign-born women on local TFR
- Share of births to foreign-born mothers
Country & regional coverage

Covering countries & regions with migration history, higher share of migrants and more reliable data: Western Europe, Nordic countries, Southern Europe

- Central and Eastern Europe largely excluded: mostly low share of migrant women (age 15-49: PL 0.6%, BG 0.8% (citizenship), ROM 1.0% in 2014); limited data availability, unstable estimates; unknown data

Countries analysed within broader regions

- **Western Europe**: Belgium, Luxembourg, **Netherlands**, France, Ireland, **UK**
- **Nordic countries**: **Denmark**, Finland, Iceland, **Norway**, Sweden
- **Southern Europe**: Greece, **Italy**, Portugal, **Spain**
- **German-speaking countries**: **Austria**, **Germany**, Switzerland
- (Central Europe: Czech Republic, Slovenia)
Data issues: Illustrations
Discontinuities, series breaks, definition changes

- Challenges in estimating migrant-origin populations: series breaks & adjustments after pop. censuses (e.g., Germany > 2011, Poetsch 2016)
- Changes in the definition of foreign mothers included in the officially reported data: asylum-seekers in Switzerland around 2000
- Women with unknown country of birth, births with unknown C. of B. of mother

![Graph showing TFR of foreign citizens in Germany and Switzerland](image-url)
Data for country of birth vs. citizenship

• Data for migrant women: Unambiguous definition of country of birth, comparable across countries
• Citizenship data more problematic: Selectivity, also through cross-country differences in obtaining citizenship.
• Smaller group of more recent & less assimilated migrants; often with higher fertility
1 Long-term changes in migrant & native fertility, 1980 - 2015
Western & Northern Europe

TFR among migrant and native women, 1980-2015

Sources: Statistics Netherlands (CBS Statline) 2016, ONS 2016, Toennessen 2014; Statistics Denmark 2016; Eurostat 2017 (own computations)
Southern Europe & German-speaking countries

TFR among foreign F and citizens of the country, 1980-2015

Sources: Geburtenbarometer (Zeman et al 2015), Statistisches Bundesamt 2015, SFSO (Bevnat) 2016; ISTAT 2016; INE 2016; Eurostat 2017 (own computations)
2 Migrant & native fertility during the recession period, 2008 - 2013
A two-stage recession in Europe, 2008-13

Annual GDP change in current prices, ca 220 NUTS2 regions in EU + Switzerland, Norway, Iceland

Computations from Eurostat (2017) data
Change in TFR trends during the recession in Europe (except Eastern Europe)

TFR in broader European regions and in the United States, 2000-2014
TFR trend: migrant vs. native women

TFR change among migrant and native women, 2008 (2009, 10) - 2013

Notes: Data for Switzerland, Greece, Italy and Portugal by citizenship
Sources: Eurostat (2017), own computations and national statistical offices

Notes: Data for Switzerland, Greece, Italy and Portugal by citizenship
Sources: Eurostat (2017), own computations and national statistical offices
Absolute TFR change, 2008-13

Absolute TFR change among migrant and native women, 2008-2013

Notes: Data for Switzerland, Greece, Italy and Portugal by citizenship
Sources: Eurostat (2017), own computations and national statistical offices
Relative TFR change among migrant and native women, 2008-2013, %

Notes: Data for Switzerland, Greece, Italy and Portugal by citizenship
Sources: Eurostat (2017), own computations and national statistical offices
Share of births to migrant women

Share of births to migrant women, 2008 (2009, 10) - 2013, %

Western Europe
Nordic countries
Southern Europe

Notes: Data for Switzerland, Greece, Italy and Portugal by citizenship
Sources: Eurostat (2017), own computations and national statistical offices
Did migrant women contribute to the observed TFR decline during the recession?

- Faster fall in migrants’ TFR could have contributed to “pushing” the TFR of a country to a lower level
- Comparing the size of the TFR decline in the country with the TFR decline among the “native” women
- Absolute contribution of migrant fertility to the TFR change in the country:
  \[
  EMF (t, t+1) = \Delta TFR (t, t+1) - \Delta TFR \text{ native} (t, t+1)
  \]
- Evidence for 13 countries with abs. TFR decline by at least 0.07 between 2008 (2009, 10) and 2013
Did migrant women contribute to the observed TFR decline during the recession?

<table>
<thead>
<tr>
<th>Region</th>
<th>Period</th>
<th>TFR decline</th>
<th>TFR change native F</th>
<th>Net effect of migrants</th>
<th>% contribution migrants</th>
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</thead>
<tbody>
<tr>
<td><strong>Western Europe</strong></td>
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<tr>
<td>Belgium</td>
<td>2010-13</td>
<td>-0.12</td>
<td>-0.10</td>
<td>-0.02</td>
<td>14</td>
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<tr>
<td>Netherlands</td>
<td>2010-13</td>
<td>-0.12</td>
<td>-0.11</td>
<td>0.00</td>
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<tr>
<td>Ireland</td>
<td>2010-13</td>
<td>-0.09</td>
<td>-0.14</td>
<td>0.05</td>
<td>xx</td>
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<tr>
<td>UK</td>
<td>2010-13</td>
<td>-0.09</td>
<td>-0.06</td>
<td><strong>-0.04</strong></td>
<td>40</td>
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<td><strong>Nordic countries</strong></td>
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<tr>
<td>Denmark</td>
<td>2009-13</td>
<td>-0.17</td>
<td>-0.17</td>
<td>0.00</td>
<td>xx</td>
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<tr>
<td>Finland</td>
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<td>-0.12</td>
<td>0.00</td>
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<tr>
<td>Iceland</td>
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<td>-0.29</td>
<td>-0.01</td>
<td>2</td>
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<td>Norway</td>
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<td>-0.20</td>
<td>-0.19</td>
<td>-0.01</td>
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<td>-0.10</td>
<td>-0.09</td>
<td>0.00</td>
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<td><strong>Southern Europe</strong></td>
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<td>Greece</td>
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<td>Spain</td>
<td>2008-13</td>
<td>-0.17</td>
<td>-0.13</td>
<td><strong>-0.05</strong></td>
<td>26</td>
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</tbody>
</table>
3 Recent patterns and differentials in migrant fertility
TFR by migration status, 2014 (2013)

Notes: Data for Germany, Switzerland and Greece by citizenship
Sources: Eurostat (2017), own computations and national statistical offices
Share of births to foreign-born mothers & net effect of migrant fertility on the TFR, 2013

Source: European Fertility Datasheet 2015; www.fertilitydatasheet.org
The link between TFR for native and migrant women, 20 countries, 2014 or 2013

Notes: Data for Germany, Switzerland and Greece by citizenship
Sources: Eurostat (2017), own computations and national statistical offices
## Migrant vs. Native fertility: selected countries with a strong contribution of migrant women, 2014

<table>
<thead>
<tr>
<th></th>
<th>TFR</th>
<th>Net Effect</th>
<th>% births to migrant F</th>
<th>Absolute difference TFR</th>
<th>Relative diff TFR</th>
<th>Net % births</th>
<th>Absolute</th>
<th>Relative diff TFR</th>
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<tbody>
<tr>
<td><strong>Western Europe</strong></td>
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<tr>
<td>Belgium</td>
<td>2.25</td>
<td>1.59</td>
<td>1.73</td>
<td>0.14</td>
<td>30</td>
<td>0.66</td>
<td>1.42</td>
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<td>France</td>
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<td>1.84</td>
<td>2.01</td>
<td>0.17</td>
<td>21</td>
<td>1.26</td>
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<td>0.07</td>
<td>26</td>
<td>0.34</td>
<td>1.20</td>
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<td><strong>Nordic countries</strong></td>
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<td>Norway</td>
<td>1.97</td>
<td>1.74</td>
<td>1.78</td>
<td>0.04</td>
<td>27</td>
<td>0.23</td>
<td>1.13</td>
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<td>Sweden</td>
<td>2.18</td>
<td>1.83</td>
<td>1.89</td>
<td>0.06</td>
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<td>0.35</td>
<td>1.19</td>
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<td>Austria</td>
<td>1.96</td>
<td>1.36</td>
<td>1.47</td>
<td>0.11</td>
<td>31</td>
<td>0.60</td>
<td>1.44</td>
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<tr>
<td>Germany</td>
<td>1.83</td>
<td>1.42</td>
<td>1.47</td>
<td>0.05</td>
<td>26</td>
<td>0.41</td>
<td>1.29</td>
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<tr>
<td>Switzerland</td>
<td>1.85</td>
<td>1.43</td>
<td>1.54</td>
<td>0.11</td>
<td>39</td>
<td>0.42</td>
<td>1.29</td>
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<td><strong>Southern Europe</strong></td>
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<td>Italy</td>
<td>1.83</td>
<td><strong>1.29</strong></td>
<td>1.37</td>
<td>0.07</td>
<td>22</td>
<td>0.54</td>
<td>1.41</td>
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<td><strong>18 countries (pop &gt; 1 mill.)</strong></td>
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<td>Average</td>
<td>1.93</td>
<td>1.56</td>
<td>1.61</td>
<td>0.05</td>
<td>22</td>
<td>0.36</td>
<td>1.24</td>
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Notes: Data for Germany by citizenship; data for Norway for 2013
Sources: Eurostat (2017), own computations and national statistical offices
Summary & discussion
Key findings

Long-term trends
• Convergence, partly also due to modest TFR rise among native women in the 1990s and 2000s
• A shift to sub-replacement fertility among migrants (ex. France)

Recession period
• Accelerated convergence; faster fall in migrant fertility (11 out of 15 countries in abs. and relative terms)
• Very strong shift in Southern Europe, also in the share of births (ex IT)
• Only a limited contribution of migrants to overall TFR declines
• Contrasting influence of declining migrant TFR and their rising share

Recent patterns
• Small “net impact” of migrants on TFR in most countries, but a high and rising share on total births
• Migrant TFR now below 2.3 in all analysed countries except France
Discussion, future research

Data

- Despite data issues rather consistent trends across countries & regions; robust findings
- Also when citizenship data used instead of country of birth
- Many irregularities especially in CEE countries

Future research

- Contribution of different migrant groups to migrant TFR changes
- Going beyond the TFR: finer indicators of fertility tempo and quantum
- Rebounding migrant fertility after the economic recession?
- Closer analysis of business cycles and migrant fertility
Data, texts, graphics, rankings & info on European fertility and population trends

www.fertilitydatasheet.org
www.populationeurope.org
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EURREP website: www.eurrep.org