DIFFERENTIATION OF RUSSIAN REGIONS AND CITIES BY MEDIAN AGE OF POPULATION AS A CONSEQUENCE OF INTERNAL MIGRATION

Ilya Kashnitsky
National Research University Higher School of Economics
Institute of Demography
Moscow
Scientific adviser: Nikita Mkrtchan

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Swansea, Great Britain

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Maps of Russia

- Built on Census 2010 data
- Municipal district administrative level (2343 items)
- Consequence of migration (mainly)
Appendix 1. Mean age of the population

Mean age of the population, years
The whole population
- less than 30
- from 30 to 32.5
- from 32.5 to 35
- from 35 to 37.5
- from 37.5 to 40
- from 40 to 42.5
- from 42.5 to 45
- more than 45
Appendix 3. Median age of the population
male population
Appendix 4. Median age of the population female population
Appendix 2. Median age of the population

Median age of the population, years
The whole population
- less than 25
- from 25 to 30
- from 30 to 35
- from 35 to 37.5
- from 37.5 to 40
- from 40 to 42.5
- from 42.5 to 45
- more than 45
The demographic structure of the Kurchaloevskiy municipal district, Dagestan Republic. Median age: 20 years.
The demographic structure of Norilsk, Krasnoyarskiy Krai. Median age: 33.7 years.
Median age of the population, years

The whole population
- less than 25
- from 25 to 30
- from 30 to 35
- from 35 to 37.5
- from 37.5 to 40
- from 40 to 42.5
- from 42.5 to 45
- more than 45
Selectiveness of migration (age issue)

Age specific profiles of intraregional migration (inflow, age group share in the total number of migrants). Source: Rosstat, current migration record, 2010.
Appendix 6. Sex ratio young population
Women per 1000 men

- less than 700
- from 700 to 800
- from 800 to 900
- from 900 to 1000
- from 1000 to 1100
- more than 1100
Appendix 8. Burden on the working age population
Burden per 100 person of working age population

- **less than 50**
- **from 50 to 60**
- **from 60 to 70**
- **from 70 to 80**
- **from 80 to 90**
- **more than 90**

This map shows the distribution of burden per 100 person of working age population across various regions, with different colors indicating the range of burdens.
Share of youths (16-29 years)

This age group is responsible for 40,5% of all interregional resettlements and 40% of all intraregional migrations recorded in 2010 in Russia.

<table>
<thead>
<tr>
<th>Region</th>
<th>Share of the youth age group (16-29 years) in intraregional movements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altai Krai</td>
<td>39,9</td>
</tr>
<tr>
<td>Kostromskaya obl.</td>
<td>36,9</td>
</tr>
<tr>
<td>Kurskaya obl.</td>
<td>48,2</td>
</tr>
<tr>
<td>Rostovskaya obl.</td>
<td>41,3</td>
</tr>
<tr>
<td>Bashkortostan Rep.</td>
<td>54,7</td>
</tr>
</tbody>
</table>

Source: Rosstat, current migration record, 2010
Share of population aged 16-29 years, %

- **less than 15**
- **from 15 to 17.5**
- **from 17.5 to 20**
- **from 20 to 22.5**
- **from 22.5 to 25**
- **from 25 to 30**
- **more than 30**
Share of population aged 16-29 years, %

- less than 15
- from 15 to 17.5
- from 17.5 to 20
- from 20 to 22.5
- from 22.5 to 25
- from 25 to 30
- more than 30
The demographic structure of Pustoshkinskiy municipal district, Pskovskaya oblast'. Median age: 48.8 years (51.4 for women!).
Share of population aged 16-29 years, %

- **less than 15**
- **from 15 to 17.5**
- **from 17.5 to 20**
- **from 20 to 22.5**
- **from 22.5 to 25**
- **from 25 to 30**
- **more than 30**
Share of population aged 16-29 years, %

- **less than 15**
- **from 15 to 17,5**
- **from 17,5 to 20**
- **from 20 to 22,5**
- **from 22,5 to 25**
- **from 25 to 30**
- **more than 30**
The demographic structure of Tomsk, Tomskaya oblast’. Median age: 32.9 years.
<table>
<thead>
<tr>
<th>Group of territories</th>
<th>Women per 1000 men</th>
<th>The whole population median age</th>
<th>Men</th>
<th>Women</th>
<th>Burden on the working age population</th>
<th>The share of the young (16-29 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>Regional centers</td>
<td>1218</td>
<td>36,3</td>
<td>33,6</td>
<td>39,1</td>
<td>57</td>
<td>24,5</td>
</tr>
<tr>
<td>More than 250 K</td>
<td>1169</td>
<td>37,6</td>
<td>34,8</td>
<td>40,5</td>
<td>58</td>
<td>22,1</td>
</tr>
<tr>
<td>More than 100 K</td>
<td>1160</td>
<td>37,7</td>
<td>34,7</td>
<td>40,7</td>
<td>64</td>
<td>21,6</td>
</tr>
<tr>
<td>Towns (&lt; 100 K)</td>
<td>1140</td>
<td>37,6</td>
<td>34,7</td>
<td>40,6</td>
<td>64</td>
<td>20,7</td>
</tr>
<tr>
<td>Municipal districts</td>
<td>1118</td>
<td>39,7</td>
<td>36,7</td>
<td>42,6</td>
<td>70</td>
<td>19,1</td>
</tr>
<tr>
<td>Closed areas</td>
<td>982</td>
<td>33,7</td>
<td>30,7</td>
<td>37,4</td>
<td>50</td>
<td>26,7</td>
</tr>
<tr>
<td><strong>RUSSIA</strong></td>
<td><strong>1125</strong></td>
<td><strong>39,0</strong></td>
<td><strong>36,0</strong></td>
<td><strong>42,0</strong></td>
<td><strong>67,8</strong></td>
<td><strong>19,8</strong></td>
</tr>
</tbody>
</table>

*Source: Census 2010 data*
The goal of the research is

- to see how the demographic structures form under the influence of migration
- to look the differences on municipal level caused by internal migration
- to evaluate the scale of centripetal youth migration
Cohort research on youth migration

- **5 regions:**
  Altai Krai, Kostromskaya oblast’, Kurskaya oblast’, Rostovskaya oblast’ and Bashkortostan Republic

- **5 cohorts:**
  from 1988 to 1992 years of birth

- **2 Censuses:**
  2002 and 2010
## Statistic discrepancy

<table>
<thead>
<tr>
<th>Region</th>
<th>Altai Krai</th>
<th>Kostromskaya oblast'</th>
<th>Kurskaya oblast'</th>
<th>Rostovskaya oblast'</th>
<th>Bashkortostan Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in 2002</td>
<td>183477</td>
<td>51412</td>
<td>84398</td>
<td>297503</td>
<td>346412</td>
</tr>
<tr>
<td>Population in 2010</td>
<td>172493</td>
<td>44446</td>
<td>74400</td>
<td>335303</td>
<td>324327</td>
</tr>
<tr>
<td>Dead in 2003-2010</td>
<td>1617</td>
<td>430</td>
<td>587</td>
<td>1968</td>
<td>2967</td>
</tr>
<tr>
<td>Change by the Censuses</td>
<td>-10984</td>
<td>-6966</td>
<td>-9998</td>
<td>37800</td>
<td>-22085</td>
</tr>
<tr>
<td>Registered migration in 2003-2010</td>
<td>-5880</td>
<td>-1435</td>
<td>-583</td>
<td>1428</td>
<td>-1066</td>
</tr>
<tr>
<td>Discrepancy</td>
<td>-3487</td>
<td>-5101</td>
<td>-8828</td>
<td>38340</td>
<td>-18052</td>
</tr>
<tr>
<td>Unaccounted change, %</td>
<td>-1.9</td>
<td>-9.9</td>
<td>-10.5</td>
<td>12.9</td>
<td>-5.2</td>
</tr>
</tbody>
</table>

Source: the Censuses 2002 and 2010, Rosstat, the current record.

Change in cohort size, %
- Decrease: more than 60
- Decrease: from 60 to 40
- Decrease: from 40 to 20
- Decrease: from 20 to 0
- Increase: from 0 to 20
- Increase: more than 20
Regional center’s migration attractiveness

• **The idea:**
  to compare the cohort intensity of intraregional migration by several adjacent one-year cohorts (from 1988 to 1992 in our case)

• **The task:**
  to calculate the intensity of migration for every age of every cohort in every possible calendar year

• **The hypothesis:**
  by the means of this analysis we can roughly judge the dynamics of regional center’s (centers) migration attractiveness
Results

- Migration proves to be the main factor of changes in the demographic structures
- The most depressive districts have lost more than 60% of school graduates during the last inter-Census period
- The remoteness of the peripheral district determines the level of its depressiveness
- Every big center of migration attraction forms a depressive ring around itself
- Author’s method of apprising the dynamics of regional center’s (centers) migration attractiveness
Links for the maps

The whole gallery of maps (18) can be viewed and downloaded here:

Via Google Drive
https://drive.google.com/folderview?id=0B1Cid1hm5YLRRk5oQ09Zd3FJX00&usp=sharing

Via Yandex Disk
http://yadi.sk/d/4RNwbvgb6NGoo

Via Dropbox
https://www.dropbox.com/sh/uxp809hqos4gtyk/po1grLna-w

Ilya Kashnitsky
ilya.kashnitsky@gmail.com
+7(916)-037-38-12

National Research University
Higher School of Economics
Institute of Demography
Moscow, Russia