NTA in Russia. Current situation and projections

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Lifecycle deficit in Russia: Current (2013) situation
Sources of information for NTA construction

- **SNA (System of National accounts)** as macro level controllers
  
  "Floating to the international standards"

- **Household surveys:**
  - RLMS (semi-longitudinal) for the dynamics,
  - For recent years, Rosstat Social Programmes Participation surveys, education market observation and financial behaviour observation

- **Administrative data:** Federal budget, Treasury, Medical Insurance Fund; Some not available annually

- Demographic projections
Annual Lifecycle deficit per capita, 2013 (RUB)
Annual Lifecycle deficit, 2013 (mln. RUB)
Normalized labour income ([30-49] = 1) by different countries (2003-2013 rr.)
### Age of “net supporters”

<table>
<thead>
<tr>
<th>Country (year)</th>
<th>Lowest</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA (2003)</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>Germany (2010)</td>
<td>27</td>
<td>57</td>
</tr>
<tr>
<td>Mexico (2003)</td>
<td>32</td>
<td>49</td>
</tr>
<tr>
<td>S. Korea (2000)</td>
<td>23</td>
<td>56</td>
</tr>
<tr>
<td>S. Korea (2010)</td>
<td>27</td>
<td>55</td>
</tr>
<tr>
<td>Russia (2013)</td>
<td>22</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: [www.ntaccounts.org](http://www.ntaccounts.org)  NTA Data
Normalized consumption \([30-49] = 1\) by different countries (2003-2013 rr.)
Labour income structure

Per Capita Values, Local Currency ( Thousands )

Aggregate Values, Local Currency ( Billions )

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Earnings

Self-employment Labor Income

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Earnings

Self-employment Labor Income
Consumption structure (private)

Per Capita Values, Local Currency (Thousands)

Aggregate Values, Local Currency (Billions)
Consumption structure (public)

Per Capita Values, Local Currency (Thousands)

Aggregate Values, Local Currency (Billions)
Characteristics of the Russia lifecycle deficit

- Relatively “young” income profile
- Low consumption at older ages
- Relatively low entrepreneurial activity concentrated at middle working ages
- High public consumption
## Income and Consumption by aggregated age groups (2013)

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>0-19</th>
<th>20-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deficit</strong> (bln. RUB)</td>
<td>3 473</td>
<td>8 303</td>
<td>-9 282</td>
<td>4 452</td>
</tr>
<tr>
<td><strong>Consumption</strong></td>
<td>43 010</td>
<td>8 460</td>
<td>29 259</td>
<td>5 290</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>39536</td>
<td>157</td>
<td>38 541</td>
<td>838</td>
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<tr>
<td><strong>Per capita (annual, RUB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deficit</strong></td>
<td>24 203</td>
<td>275 335</td>
<td>-98 063</td>
<td>238 047</td>
</tr>
<tr>
<td><strong>Consumption</strong></td>
<td>299 706</td>
<td>280 553</td>
<td>309 137</td>
<td>282 854</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>275 502</td>
<td>5 219</td>
<td>407 201</td>
<td>44 807</td>
</tr>
</tbody>
</table>
Transfers covering the deficit: Russia 2013
Public transfers
Public transfers, by main category

- Per capita, th. RUB
- Total, bln. RUB

Graphs showing trends of public transfers by main category, including:
- Others (in cash)
- Others (in kind)
- Pensions
- Health
- Education

Y-axis for per capita graph: RUB
Y-axis for total graph: bln. RUB
X-axis represents years from 1990 to 2000.
Characteristics of public transfers

- Children receive benefits (important, but not large in comparison with EU)

- Growing pensions for people age 80+ (still not so visible for the whole population due to low survival rates and waves)
Private transfers

Per capita, th. RUB

Total, bln. RUB
Characteristics of private transfers

Inter-household transfers:
• After age 40-44, conversion from acceptors to donors, with a peak of acceptance at 20-29 (young families with children)
• The special role of the oldest categories as important donors (selectivity)

Intra-household transfers:
• Main donors younger population (until 25-29) and oldest (75+)
• Plateau for the children (18-)
Sources to finance the deficit

- Public transfers
- Private transfers
- Private assets reallocation
- Public assets reallocation

Per capita, th. RUB

Total bln. RUB
Resource reallocation between generations, 2013

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Total (bln. RUB.)</th>
<th>0-19</th>
<th>20-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers</td>
<td>-298</td>
<td>7587</td>
<td>-11626</td>
<td>3741</td>
</tr>
<tr>
<td>Public</td>
<td>245</td>
<td>4741</td>
<td>-8899</td>
<td>4403</td>
</tr>
<tr>
<td>Private</td>
<td>-543</td>
<td>2846</td>
<td>-2727</td>
<td>-662</td>
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<tr>
<td>Assets reallocation</td>
<td>3772</td>
<td>715</td>
<td>2345</td>
<td>711</td>
</tr>
<tr>
<td>Assets income</td>
<td>14055</td>
<td>290</td>
<td>13107</td>
<td>659</td>
</tr>
<tr>
<td>Saving</td>
<td>10284</td>
<td>-425</td>
<td>10762</td>
<td>-53</td>
</tr>
<tr>
<td>Lifecycle deficit</td>
<td>3473</td>
<td>8303</td>
<td>-9282</td>
<td>4452</td>
</tr>
</tbody>
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<th>20-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers</td>
<td>-2078</td>
<td>251615</td>
<td>-122837</td>
<td>200008</td>
</tr>
<tr>
<td>Public</td>
<td>1707</td>
<td>157236</td>
<td>-94024</td>
<td>235405</td>
</tr>
<tr>
<td>Private</td>
<td>-3785</td>
<td>94379</td>
<td>-28812</td>
<td>-35397</td>
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<tr>
<td>Assets reallocation</td>
<td>26281</td>
<td>23720</td>
<td>24773</td>
<td>38039</td>
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<tr>
<td>Assets income</td>
<td>97945</td>
<td>9620</td>
<td>138483</td>
<td>35207</td>
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<tr>
<td>Saving</td>
<td>71664</td>
<td>-14100</td>
<td>113709</td>
<td>-2832</td>
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<tr>
<td>Lifecycle deficit</td>
<td>24203</td>
<td>275335</td>
<td>-98063</td>
<td>238047</td>
</tr>
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</table>
Lifecycle demographic projections: Russia
The main challenges

- Demographic structure with waves

- Young pension age (55 and 60 plus different special retirement categories)
Russian population pyramid: Waves and ageing

<table>
<thead>
<tr>
<th>Year On 1.01</th>
<th>0-14</th>
<th>15-59</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>16.2</td>
<td>64.2</td>
<td>19.6</td>
</tr>
<tr>
<td>2030</td>
<td>16.7</td>
<td>58.3</td>
<td>25.0</td>
</tr>
<tr>
<td>2050</td>
<td>17.3</td>
<td>53.3</td>
<td>29.4</td>
</tr>
</tbody>
</table>
Important characteristics of population dynamics in Russia by age groups, 1990-2050 (mln): Fluctuations

Age groups:
- 0-14
- 15-29
- 30-44
- 45-59
- 60-74
- 75+
Population in working ages, Russia, 1959-2031 (men 16-59, women 15-54): Several dividends

Number of people (thousands)

Proportion in total population (%)

Thousands

Percentage


Proportion in total population:

- 2031: 62.0%
- 1959: 50.0%

Number of people (thousands):

- 2031: 90000.0
- 1959: 60000.0
Ratio of dependent young (0-14) and old (60+) to working-age population (15-59) per 100: Tendency towards ageing
Russian deficit projections: Prices and per capita figures for 2013

[Graph showing deficit projections for different years (2013, 2025, 2035, 2045, 2055) with y-axis ranging from 0 to 600,000 and x-axis ranging from 0 to 90.]
Income-consumption age profile, 2013 and 2035 (projected)
Life circle deficit growth (2013=100): 2022 1.5 growth, 2034 2 times, mid-2050s stable “old society” picture
Solution

• Pension reform: Since 2019 retirement age increases, with 6-months increases up to 65 (for men) and 63 (for women)

• High conflict and expected tax avoidance behavior
NTA projections

Assumptions

• The models take into account low levels of elderly consumption and their role as donors in the private transfers system

• Labour income age profiles?
Russian income distribution model is sustainable ([30-49] = 1)
If we compare normalized income in 2013 with the other years.
Age profile manipulation?

- Salaries at the early pension ages (becoming pre-pension) are still relatively low

- If we look at the models with changing retirement age, the effect will be unclear

- Possible that the demographic projections were not so accurate
Employment, by 5-year age groups

Male

Female

- 2011
- 2013
- 2016
Effects on labour force participation

Active age population, %

Employed population, %
NTA effect: The age of deficit will shift from 55 to 59
Additional opportunities

• Consumption?

• Salaries?
By gender, labour income

Male

Female
Salary dynamics

Male

Female
Salaries and labour income

- There is a tendency to shift income toward older ages

- For women, age 50-54 looks like the new salary peak, but their labour force participation declines at this age

- The penalty for older workers (1990-early 2000s) does not exist (or at least is not clearly pronounced)

- There is a high heterogeniety
Conclusions

Current situation

• The Russian lifecycle deficit is shifting to younger ages
• The lifecycle deficit is covered mainly by assets (public assets), but the role of older generations in private transfers is high
• The lifecycle deficit in Russia is moderated by relatively low levels of consumption for older persons

Near future

• The lifecycle deficit is expected to double in less than two years
• Under these conditions, the level of consumption at older age and distribution will be under pressure
• The pension age increases as of 2019
• The growth in employment rates should be followed by higher salaries at older ages
• Personal savings and property income for the younger generations should be crucial factors in the new model