Russia’s Fiscal Gap

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RUSSIA’S FISCAL GAP

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This paper is dedicated to the memory of Yegor Gaidar
Fiscal policy is a hot topic today
- Most advanced economies are in really bad fiscal shape

Emerging economies are doing better
- But they also face problems

Russia’s current fiscal stance seems solid
- But what about long run perspectives?

Fiscal gap – is a good measure for long run fiscal imbalances
Fiscal gap – fiscal policy sustainability indicator

FISCAL GAP = G – T + B

- **G** – present value of all future government spending
- **T** – present value of all future government revenues
- **B** – current government net debt
To get Fiscal Gap value we should have projections of future government expenditures and revenues.

**Very important note!**

- Fiscal Gap is derived under assumption of *no major changes in fiscal policy*
  - Since it is designed to evaluate sustainability of CURRENT fiscal policy regime.
- Budget expenditures and revenues are linked to demographics, labor productivity and GDP
  - Pensions, healthcare defense, housing, corporate tax revenues etc

- We build economic and demographic projections to 2100
Major uncertainty
- Population
- Labor productivity
- Oil price and reserves

Three scenarios to capture uncertainty
- Pessimistic, Intermediate, Optimistic

Rely on Rosstat and Ministry of economic development projections
- Demographic (Rosstat, 2013) and economic (MED, April 2013) projections to 2030
Demographic projection to 2100
- Total population, Labor force, Number of Pensioners

Labor productivity projection
- GDP per worker

GDP = [ LABOR FORCE ] X [ PRODUCTIVITY ]

GDP projection
- Derived from demographic and productivity projections
Demographic projections

- Explicit demographic projections to 2100
  - Total population (age and sex), Labor force, Pensioners

- Rosstat projections (to 2030)
  + extrapolation (after 2030)

- Scenarios differ in assumptions about life expectancy, fertility, migration
Demographic projections

- Population increases only under optimistic scenario

![Total Population Projection (in millions)]
Demographic projections

- Labor force declines in all scenarios

**Working-Age Population (in thousands)**

Yearly projections from 2011 to 2098 are shown, with three scenarios: Pessimistic, Intermediate, and Optimistic.
Productivity projections

- Need labor productivity to get GDP projections from demographics (after 2030)

- Exogenous productivity growth
  - Productivity growth converges to 1.7%
  - 1.7% - annual productivity growth in US after 2022 (Congressional Budget Office, US)
Productivity projections

Labor Productivity Growth Rate (%)
Finally we get three GDP paths

- All scenarios assume declining economic growth
GDP projections

GDP (in 2013 prices, billions of rubles)
GDP in 2100 varies from 400 to 1600% of 2013 GDP
Divide expenditures to several groups

General government budget expenditures structure (2012)

- Pension benefits: 22%
- Education: 41%
- Health: 11%
- Housing and communal facilities: 11%
- Social policy excl pensions: 10%
- Other expenditures: 5%
Expenditures

- Pension expenditures
  - Derived from the model of pension system

- Healthcare and education expenditures
  - Use expenditures age profile to catch heterogeneity

- Expenditures for social needs
  - Are linked to total population

- Other expenditures are proportional to GDP
Three broad groups of revenues

General government budget revenue structure (2012)

- Oil & Gas revenues: 51%
- Taxes and Contributions for Social Needs: 17%
- Other Revenues: 32%
Revenues

- Contributions to social needs (pension system)
  - Derived from pension system model

- Oil & Gas revenues
  - Depend on price of resources, extraction, exhaustion

- Other revenues proportional to GDP
Results

- Fiscal gap is 890 trln 2013 RUR ($28 trln)
  - Under intermediate scenario
  - Russian GDP in 2012 is 62,4 trln RUR

- Closing the gap requires fiscal adjustment
  - Permanent adjustment equal to 8.4% of GDP (intermediate scenario)
  - Cut expenditures by 22% permanently
  - Raise taxes by 29% permanently
Other scenarios tell the same story

- Current fiscal policy is unsustainable under wide range of macroeconomic assumptions
Fiscal gap is positive regardless of choice of discount rate

Results
Sources of fiscal imbalances

- Aging population requires increase in pension spending
  - Absent pension system fiscal gap decreases from 8.4% to 4.5% PV of GDP

- Oil & Gas revenues decline as a share of GDP
  - Extraction is stagnating
  - Real oil & gas price won’t rise forever
Sources of fiscal imbalances

- It’s not because of oil & gas exhaustion
  - Fiscal gap is 7.9% if no oil & gas exhaustion is assumed

- High economic growth leads to large fiscal imbalances
  - All expenditures will grow with GDP ...
  - ... but revenues from energy sector will not
Even though current fiscal stance in Russia looks healthy....

- Russia has lowest Debt-to-GDP ratio and budget deficit among BRICKS
- Bank of Russia has International Reserves of 500 bln USD
... the long run perspective Russia faces a major fiscal imbalances

- Fiscal gap value in Russia is close to these in advanced economies

<table>
<thead>
<tr>
<th>Country</th>
<th>Fiscal gap (% PV GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>10</td>
</tr>
<tr>
<td>Greece*</td>
<td>10</td>
</tr>
<tr>
<td>Japan*</td>
<td>10</td>
</tr>
<tr>
<td>Belgium</td>
<td>10</td>
</tr>
<tr>
<td>Russia</td>
<td>8</td>
</tr>
<tr>
<td>Finland</td>
<td>6.4</td>
</tr>
<tr>
<td>Germany</td>
<td>5.3</td>
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<tr>
<td>Italy*</td>
<td>4.2</td>
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</tbody>
</table>
Current fiscal policy is unsustainable, so it should be adjusted in the future

- When? Now? 10 years later?

The later adjustment starts, the stronger it should be to close the gap.

![Required adjustment in case of no fiscal policy change (% PV GDP)](image)
Policy implications

- Our results do not imply catastrophe in short run...
  - Russia has sizable fiscal space to deal with possible macro shocks in the sort run

- ... but fiscal policy should be adjusted to prevent catastrophe in the long run