Halving Poverty in Russia by 2024: What will it take?

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We identify the conditions in terms of economic growth and public transfers required to “…reduce poverty in the Russian Federation by one half by 2024” as stated in President Putin’s Decree of May 17th, 2018. The current poverty rate is 13.2 percent, and halving it would mean reducing the current rate to 6.6 percent by 2024. We estimate that average annual growth of 1.5 percent would bring down the poverty rate from 13.2 percent to only 10.7 percent by 2024. And even if Russia were to be able to catch up with the rest of the world, and grow at 3.2 percent annually, the poverty rate would fall to 8.1 percent – still below the stated goal of 6.6 percent. Consequently, to reach the Presidential target of 6.6 percent, we estimate that the annual required growth rate would need to surge to 4.4 percent.

But the poverty rate target of 6.6 percent by 2024 could be achieved even under a scenario of 1.5 percent annual growth. This can be done via additional redistribution, for example, in terms of social assistance and transfers. Indeed, we estimate such additional redistribution to be around 0.27 percent of GDP per year. Of course, acceleration of economic growth would make the task of poverty reduction easier. If Russia were to grow at 3.2 percent (slightly above the global growth rate of 3 percent), under perfect targeting, we estimate such additional redistribution to be around 0.10 percent of GDP.

We caution though that this estimate assumes perfect targeting, and as such, should be viewed as a lower bound. Indeed, if the assumption of perfect targeting is dropped, under current conditions where only around 20 percent of the allocated budget reaches its intended beneficiaries, Russia would need to mobilize 1.35 percent of GDP to be able to redistribute 0.27 percent of GDP to the poor. However, improving targeting from the current 20 percent to even around 60 to 70 percent, which is in line with other countries, would require mobilizing only 0.39 to 0.45 percent of GDP annually. Achieving the goal of halving poverty by 2024 therefore puts a sizeable premium on improving the targeting efficiency of Russia’s social assistance system.

The macro numbers: A national perspective

1. From a baseline of current poverty levels of 13.2 percent in 2017, we envision the following three scenarios:

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1 Perfect targeting assumes that the poor and their income are identified precisely and they receive the exact amount of social transfers needed to bring them to the level of the poverty line. In other words, no targeting errors are assumed. In reality, both errors of inclusion and exclusion are commonly found in poverty-targeted income support programs. The policy maker’s objective is to minimize both errors, and countries such as Poland, Turkey, Azerbaijan, etc. have achieved a high targeting accuracy of 60-80 percent. See, for example: The State of Social Safety Nets, (2018), World Bank, Washington D.C., April 2018.

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Scenario 1 is the “Business as Usual (BAU)” scenario. It envisions all household per capita incomes to grow at a projected rate of Russian GDP growth of an average of 1.5 percent over the period. Specifically, this scenario assumes economic growth of 1.6 percent in 2018, 1.3 percent in 2019 and 1.7 percent in 2020, and then 1.5 percent each year subsequently (representing simple extrapolation). This scenario uses data from Russia’s Households Budget Survey and assumes distributionally neutral growth rates across quantiles of the income distribution.²

Scenario 2 is the “Catch-up with the rest of the world (CATCH-UP)” scenario. It envisions what the poverty rate would be if Russia grew at 3.2 percent annually between 2018 – 2024. Specifically, all household per capita incomes grow at 3.2 percent (the projected growth rate of global GDP of 3 percent, plus an additional 0.2 percentage points). This scenario was chosen to correspond to the target of “economic growth rates exceeding international rates” as stated in the President’s Decree of May 17th, 2018.

Scenario 3 is the “REQUIRED GROWTH RATE” scenario. It envisions what the growth rate would need to be if Russia were to halve the national poverty rate by 2024.

Table 1 summarizes these scenarios and main results, in terms of the required growth / poverty rates. We also estimate the “income deficit”, which intuitively measures the monetary amount of the deprivation, and can be considered as a proxy for the expected budgetary value of transfers to eliminate poverty altogether.³

² Other estimation methods and data sources were used but the results are qualitatively similar. For a discussion of robustness see the Methodological Annex of this note.
³ Income deficit is defined as the size of the population multiplied by the poverty line and the poverty gap. Total income deficit is adjusted to the official number of 0.8 percent of GDP in the baseline case, and is estimated as “after social transfers”; i.e., all transfers are taken into account.
Table 1: POVERTY RATE WILL NOT BE HALVED UNDER BUSINESS AS USUAL

<table>
<thead>
<tr>
<th></th>
<th>Average annualized growth rate in 2018-24, percent</th>
<th>Poverty rate under national definition, percent of total population</th>
<th>Total income deficit, percent of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td>13.2</td>
<td>0.80</td>
</tr>
<tr>
<td>Scenario 1: Business as Usual (BAU)</td>
<td>1.5</td>
<td>10.7</td>
<td>0.63</td>
</tr>
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<td>Scenario 2: CATCH-UP</td>
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<td>8.1</td>
<td>0.46</td>
</tr>
<tr>
<td>Scenario 3: REQUIRED GROWTH RATE</td>
<td>4.4</td>
<td>6.6</td>
<td>0.36</td>
</tr>
</tbody>
</table>


3. As Table 1 shows, under current growth projections, poverty rates will not be halved by 2024.

   • Under the BAU scenario, the poverty rate will fall from 13.2 percent to only 10.7 percent by 2024, short of the 6.6 percent target.

   • Even under the CATCH-UP scenario (of higher than average global growth rates), the poverty rate would fall to 8.1 percent by 2024, still short of the 6.6 percent target.

   • The required GDP growth rate that would halve the poverty rate as per the REQUIRED GROWTH RATE scenario is estimated to be 4.4 percent. If these higher growth rates are unlikely to be achieved, additional redistribution would be needed to bring the poverty rate down to the target level of 6.6 percent.

4. The amount of additional redistribution, through social transfers, that is required to achieve the target poverty rate of 6.6 percent by 2024 is estimated at 0.27 percent of GDP per year. This is under the assumption of annual average growth of 1.5 percent and perfect targeting of public transfers.

   • The expected budgetary value of transfers, as proxied by the income deficit, that would be needed to close the poverty gap declines from 0.8 percent of GDP in 2017 (baseline of Table 1) to 0.63 percent of GDP in the BAU scenario.

   • In the CATCH-UP scenario, such transfers decline even further, and are estimated to be 0.46 percent of GDP.
• In the REQUIRED GROWTH RATE scenario, if the economy grows fast enough to reach the 6.6 percent poverty rate target, transfers are estimated to be even lower – at 0.36 percent of GDP.  

• Hence, transfers needed to reach the target poverty rate under the BAU growth rates are estimated at 0.27 percent of GDP (the difference in income deficits between the REQUIRED GROWTH RATE and BAU scenarios), or about 212 billion rubles annually in 2017 prices. Likewise, transfers needed to reach the target poverty rate under the catch-up scenario are estimated at 0.10 percent of GDP (the difference in income deficits between the REQUIRED GROWTH RATE and CATCH UP scenarios).

The micro numbers: A socio-demographic perspective

5. **The average poverty incidence at the national level obscures important differences across demographic groups.** Currently, families with children, especially those with multiple children (three or more) are at the highest risk of poverty in Russia. The poverty rate among this group is 41 percent, which is three times higher than the national average. Another group at high risk of poverty is single parents, which experiences a poverty rate of 26 percent – or double the national average. Households at higher risk of poverty are also in deeper poverty: families with three or more children, as well as single parents, have higher average income deficits.  

6. **Projections of GDP growth also render different poverty rates across demographic groups.** Simulations show that the number of poor people and the poverty gap decline at a slower rate for those households in the most vulnerable categories. Even under the REQUIRED GROWTH scenario, the risks of poverty and income deficit remain widely different across family groups. While households with adults only see their poverty rate decline by more than half than the initial level (from 7.3 to 3.2 percent), for families with three or more children, poverty rates fall a little more than by one third (from 41.2 to 26.1 percent), and for single parents with children from 26.2 percent to 14.1 percent. Thus, without redistribution toward these vulnerable groups, poverty in Russia would become even *more* heterogeneous.

7. **However, an alternative scenario (“Scenario 4”) to respond to differences in poverty risks among different socio-economic groups could allocate transfers in a way that brings the poverty rate in each socio-demographic group down to the 6.6 percent poverty target.** The resources needed to achieve this are kept constant at 0.27 percent of GDP but now, with a larger share allocated to vulnerable groups experiencing high poverty risk. Figure 1 introduces this alternative scenario where social transfers are targeted by type of family and poverty status to make poverty rates the same across vulnerable groups. Under this scenario, the share of the total poverty gap would be much smaller for the most vulnerable.

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4 Formally speaking, halving the poverty rate is not equivalent to halving the total income deficit. However, in the case of Russia, this relation holds approximately close.

5 For instance, at the baseline, the income deficit of households with 3 or more children is 3,309 rubles/month, and for single parents with children the deficit is 2,934 rubles/month, whereas the national average income deficit of the poor is 2,691 rubles/month.
groups. Although the share becomes larger for other groups, it is in line with their respective population sizes.

**Figure 1: Targeted and larger transfers to the most vulnerable groups equalize poverty risk**

![Figure 1](chart.png)


Namely, with the same amount of transfers needed to bring the national poverty rate to the level of 6.6 percent, a more targeted and larger allocation towards vulnerable groups (particularly families with children) would help avoid some groups having poverty rates well above the policy goal.

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6 In fact, other family groups that represent 41 percent of the population would have a similar share of the national income deficit. On the other hand, single parents and couples with three or more children represent only 9.5 percent of the population and would also accrue around 10 percent of the national income deficit. This is in stark contrast with the baseline distribution of the income deficit where these groups represent 20 and 28 percent of the income deficit, respectively.

7 We compute this by fitting different income growth rates for population groups according to family type so that each group reaches the 6.6 percent poverty rate target. Then, for each family-type population group we compute the poverty gap and the corresponding income deficit. This exercise leads to a larger allocation of transfers to fill the poverty gap towards poorer families (which were farther away from the target). For instance, in scenario 3, families with three or more children got 15 percent of transfers, but in scenario 4, they got 35 percent of transfers. These targeted allocations would make all family groups reach the 6.6 percent poverty rate target by 2024. All simulations assume perfect targeting. Theoretically, other targeting mechanisms are possible. The cheapest way would be giving everyone below the poverty line the exact amount needed to get her/him to the poverty line, starting from the least poor (the closest to the line), which will cost approximately 130 billion rubles. On the other hand, the most equalizing way and the most protective, in terms of avoiding the deepest forms of poverty and destitution, would be starting from the poorest individual, an approach that would cost around 500 billion rubles according to our simulations. Our exercise provides a more practical targeting mechanism based on family categories and means-tests.
Policy implications

8. To achieve the poverty level target by 2024, our estimates show that Russia would need an additional 0.27 percent of GDP redistributed to the poor annually, assuming perfect targeting and GDP growth of 1.5 percent per year. However, targeting is not a salient feature of the social assistance system in Russia. Only five out of hundreds of programs implemented in Russia are means-tested: General poverty-targeted benefits, child allowances, housing subsidies, allowances for pregnant and lactating mothers, and stipends for higher education for students from less affluent families. Child allowances that are provided by regions to poor families according to their own definition of poverty are partially subsidized from the federal budget. The capacity of the social assistance system to reach the poor population is also currently weak, with only about 20 percent of the resources allocated to social assistance accruing to the poor.\(^8\) The results vary by the type of program, but almost uniformly the non-poor get 70 plus percent of the program budget and in the case of the utility subsidy, this percentage jumps even higher – to 85 percent. The same applies to the means-tested programs – although they are supposed to reach the poor, they are only weakly targeted: they cover 41 percent of the poor, and 78 percent of these programs’ budgets accrues to the non-poor. Most beneficiaries below the poverty line therefore receive very little assistance – too small to mitigate their poverty in any meaningful way. For instance, poverty benefits do not exceed 15 percent of the poverty line, and the monthly child allowance is only $2.5 per child.

9. Ceteris paribus, Russia would need 1.35 percent of GDP to be able to redistribute 0.27 percent of GDP to the poor. Improving the targeting efficiency of such redistribution to 60-70 percent would require much less: 0.39 to 0.45 percent of GDP annually. Moreover, most of the resources could be provided through better targeting of existing social assistance programs in Russia. The World Bank’s estimates reveal that in 2015 Russia spent 3.2 percent of GDP on non-contributory social assistance and social services. This was done through 756 federally mandated programs and an average of 130 regionally mandated programs in each of the country’s 80 plus regions. A significant share is spent on merits and rewards (0.9 percent of GDP) and compensation to public sector employees for special conditions of work and employment incentives (0.4 percent of GDP). These two conceptually do not belong to social assistance. Hence, the spending on “true” social assistance in Russia is 1.9 percent of GDP. Programs for family, maternity, and children account for 0.8 percent of GDP, of which 75 percent is spent on the Maternity Capital Program, which cannot be used to finance current consumption. Programs related to disability account for 0.6 percent of GDP. Targeted programs account for 0.4 percent of GDP (12.5 percent of the total spending).

10. As a result, while Russia’s spending on social assistance is sufficient to cover the poverty gap several times over, it reduces the poverty gap by only about 28 percent. This is a rather weak outcome. Countries with similar levels of spending and even countries with a much lower level of spending achieve significantly more in terms of poverty alleviation. There is, therefore, huge room for improvement.

11. For Russia’s system of social assistance to play its role in achieving the poverty reduction target by 2024, the system would need to deliver more resources to the poor. This would require some reallocation across programs. For example, Russia could aspire to target 70 percent of the means-tested programs to the poor instead of the current 22 percent. In other words, of the 0.4 percent of GDP spent on

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\(^8\) This part of the note is based on the forthcoming report by the World Bank Russia Social Protection Team: “Towards a more effective social assistance system in Russia.”
means-tested programs, at least 0.28 percent of GDP should reach the poor instead of the current 0.08 percent. Additional resources could also be provided by introducing means-testing to the programs that are currently not subject to a means test such as programs for persons with disability, elderly, veterans of labor, and so on.

12. **How can better targeting be achieved?** The measures could include: (i) unifying the currently different means-testing targeting methods across programs with a single set of criteria that take into account all sources of income and assets of the household and treating them equally; (ii) merging means-tested benefits into a single benefit that will help increase the accuracy of targeting, realize economies of scale in administration, and increase impact on poverty and inequality; (iii) determining the level of assistance as a difference between the estimated family income and the poverty threshold; (iv) extending the means-testing to the child allowance program and significantly increasing its amount, and/or significantly increasing child allowances to families with three or more children and to children of single parents; (v) improving programs’ implementation efficiency, including by regularly checking beneficiaries’ eligibility (annually) through the use of technology and by introducing case management.

**Conclusions**

13. **Under current circumstances, growth is necessary but not sufficient to reducing poverty rates in Russia.** Simulations show that economic growth alone would not halve poverty rates in Russia. Under the assumption of GDP and consumption growth of around 1.5 percent a year, poverty would decline by 2.5 percentage points from the current level of 13.2 percent to 10.7 percent. Although the role of economic growth is necessary, it would not be sufficient to reach the goal of a 6.6 percent poverty rate by 2024.

14. **Social protection and transfers will also be required to halve the poverty rate.** The amount of additional transfers that would be needed for redistribution - under the assumed annual growth rate of 1.5 percent per year - to reach the poverty rate target of 6.6 percent by 2024, is estimated at around 0.27 percent of GDP per year. Groups of the population at the highest risk of poverty are families with multiple children and single parents with children. Social protection measures in favor of these population groups would be needed to most effectively protect the most vulnerable categories and avoid wide differences in poverty reduction benefits across different socio-demographic groups.

15. **For the social protection system to play its role in the achievement of the poverty reduction, it would need to significantly improve its performance.** This would require *inter alia* a much better targeting accuracy of the existing means-tested programs, including their consolidation into a single program providing much higher benefits; extension of means-testing to some of the currently not means-tested programs; and a significant increase in child allowances to children in families that have three or more children and children of single parents. Efficiency gains from existing programs could partly fund the additional transfers needed to achieve the target poverty rate of 6.6 percent by 2024.
Methodological Annex

Different surveys and projection methodologies were used for running simulations and verifying whether results were robust to changes in data and methods. The range in the projections is driven by differences in the assumptions – mainly the underlying income growth (equal to Russia-specific GDP or world GDP projected growth rates), the method (elasticity-based, distribution neutral, or other) and the survey data used (Households Budget Survey (HBS) or Russia Longitudinal Monitoring Survey (RLMS)) as seen in Table 1. In scenario 1, poverty rate forecasts ranged from 10.6 percent to 11.8 percent. Clearly, all methods indicated that 1.5 percent growth would be insufficient for halving poverty rates. In scenario 2, poverty forecasts ranged between 7.6 percent and 9.9 percent. Still, none reaches the poverty target with GDP growth alone.

Table 1: Simulation results for poverty rates and total income deficit using various projection methods and scenarios of income growth

<table>
<thead>
<tr>
<th>Poverty rate under national definition, percent</th>
<th>SEMI-elasticity</th>
<th>Full elasticity</th>
<th>Distr-neutral (HBS)</th>
<th>Distr-neutral (RLMS-inc)</th>
<th>Distr-neutral (RLMS-exp)</th>
<th>ADEPT Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>13.2</td>
<td>13.2</td>
<td>13.2</td>
<td>13.2</td>
<td>13.2</td>
<td>13.2</td>
</tr>
<tr>
<td>Scenario 1</td>
<td>10.6</td>
<td>11.3</td>
<td>10.7</td>
<td>11.2</td>
<td>10.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>7.6</td>
<td>9.4</td>
<td>8.1</td>
<td>9.5</td>
<td>7.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>6.6</td>
<td>6.6</td>
<td>6.6</td>
<td>6.6</td>
<td>6.6</td>
<td>6.6</td>
</tr>
</tbody>
</table>

| Total income deficit, percent of GDP          |                 |                 |                    |                          |                          |               |
| Baseline                                     | 0.80            | 0.80            | 0.80               | 0.80                     | 0.80                     | 0.80          |
| Scenario 1                                   | 0.63            | 0.70            | 0.63               | 0.75                     | 0.68                     |               |
| Scenario 2                                   | 0.46            | 0.59            | 0.45               | 0.70                     | 0.55                     |               |
| Scenario 3                                   | 0.36            | 0.42            | 0.39               |                          | 0.39                     |               |

| Annualized income growth that is required to achieve 6.6 poverty rate, percent | growth | 3.7 | 5.9 | 4.4 | 6.5 | 4.0 | 4.9 |


Notes:
Total income deficit is a function of the poverty gap defined as the size of the population multiplied by the poverty line and the poverty gap. Total income deficit is adjusted to the official number of 0.8 percent of GDP in the baseline case.

We chose the poverty forecast using HBS data and the neutral distribution method, which renders an 8.1 percent poverty rate by 2024, a middle point in the range of different methods adopted for scenario 2. The wider interval in scenario 2 is due to assumptions related to household income growth at the rate of consumption growth using RLMS data, and also due to a faster poverty decline according to semi-elasticity estimates. Given that growth rates are faster for consumption than income, and that there are more households with expenditures higher than income at the bottom of the distribution, these assumptions render
a quite rapid decline in poverty in the case of the distributional neutral method using RLMS with the expenditures growth rate.\textsuperscript{9}

In scenario 3, all methods were fitted to render a 6.6 percent poverty rate by 2024, so there are no differences here. The implicit growth rates to achieve this goal varied by method and ranged from 3.7 percent to 6.5 percent per year. Again, the neutral distribution method, using HBS data, renders a mid-point result.

**Description of scenarios:**

- **Scenario 1**: Household per capita incomes/expenditures (labor incomes in case of the ADEPT simulations) are growing with the projected rate of Russia’s GDP growth using World Bank projections;
- **Scenario 2**: Household per capita incomes/expenditures (labor incomes in case of the ADEPT simulations) are growing with the projected rate of world GDP growth of +0.2 percentage points using World Bank projections. This scenario corresponds to the target of “economic growth rates exceeding international rates” as stated in President Putin’s Decree of May 17\textsuperscript{th}, 2018;
- **Scenario 3**: Household per capita incomes/expenditures (labor incomes in case of the ADEPT simulations), regardless of household type, are growing at the rate that leads to achieving the national goal reducing the poverty rate by half;
- In all scenarios, the 2017 distribution was simulated using actual data on a disposable income contraction of 1.7 percent.

**Methods used:**

- Full elasticity refers to the coefficient from a regression of the logarithm of official poverty rates on the logarithm of GDP per capita for the period 2005-2016. Quasi-elasticity refers to the coefficient from a regression of the official poverty rates on the logarithm of GDP per capita for the period 2005-2016. Applying this elasticity or quasi-elasticity to the projected growth rates renders a poverty forecast by 2024.
- Distributionally neutral refers to applying the same projected rates of income/consumption growth to each quantile of the household income distribution in the baseline year.
- Adept refers to a micro-simulation tool that applies projected rates of growth to the employment likelihood of selected individuals in a representative survey and then estimates the household income and national poverty rates. See (Olivieri, et al. 2014).

**Surveys used:**

- Official Households Budget Survey for 2015 (HBS-2015). This is the official survey conducted by Rosstat and is used for producing official poverty estimates. The distribution was adjusted to represent the year 2016 by a real disposable income contraction of 5.8 percent. Also, the welfare aggregate was adjusted proportionally to match the official numbers for 2016, which are produced based on corrections of mismatches between macro and micro numbers.

\textsuperscript{9} This may be a consequence of income misreporting at the bottom of the distribution in the former survey.
• Russia Longitudinal Monitoring Survey of HSE (RLMS-HSE-2016) was used as an alternative survey to check for robustness of estimates. The poverty simulations were done using two different welfare aggregates based on total incomes and total expenditures.

Other assumptions:
• Another factor that would contribute to poverty dynamics in Russia in the next six years is a change in the age structure of the population. The share of children and pensioners would grow, and the risk of poverty is higher for children and lower for pensioners compared to the rest of the population so these two effects would move poverty in opposite directions. Because of these countervailing effects, changes in demography are expected to have a small impact. The simulation exercise above does not gauge these impacts. Possible changes in the retirement age, as recently announced, are not considered in this exercise either.