DYNAMICS OF STATE SPENDING ON POPULATION REPRODUCTION IN THE URALS REGION IN RUSSIA

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Abstract

Declining fertility and high mortality in the early 2000s led to a demographic crisis in Russia. High levels of household spending on having and raising children is traditionally thought to be one of the reasons for low fertility. Some of these expenditures are compensated by the state, other parts are borne by parents.

The paper presents the results of a time series study of indicators that describe spending on population reproduction compensated by the state. Thus overall, during the analysed period the Urals federal district showed a positive dynamic in government spending on population reproduction. However, over the same period, people's living standards deteriorated considerably. This shows the inadequacy of state measures of material support for the reproduction of the population. Moreover, parents bear costs related to raising and educating children at all stages of parenting, whereas current state policy is largely geared towards paying maternity and child benefits at the initial stages of parenthood. We believe that increasing the share of state compensation of costs related to the reproduction of human capital at all stages of parenting will have a positive impact upon demographic dynamics and reduce adverse consequences if pessimistic demographic scenarios transpire in Russia.

Key words: spending on population reproduction, demographic policy, Russian regions.

JEL Code: J11, J13, J18

Introduction

In the early 2000s, all Russian regions experienced registered low birth rates and high death rates, which signified that the country has faced a demographic crisis. Between 2000 and 2008, the population of Russian regions was shrinking steadily. The indicators characterizing the demographic situation in the Urals are even more disturbing: while, after 2008, the country's resident population started to grow again in comparison to 2000, in the Urals, in

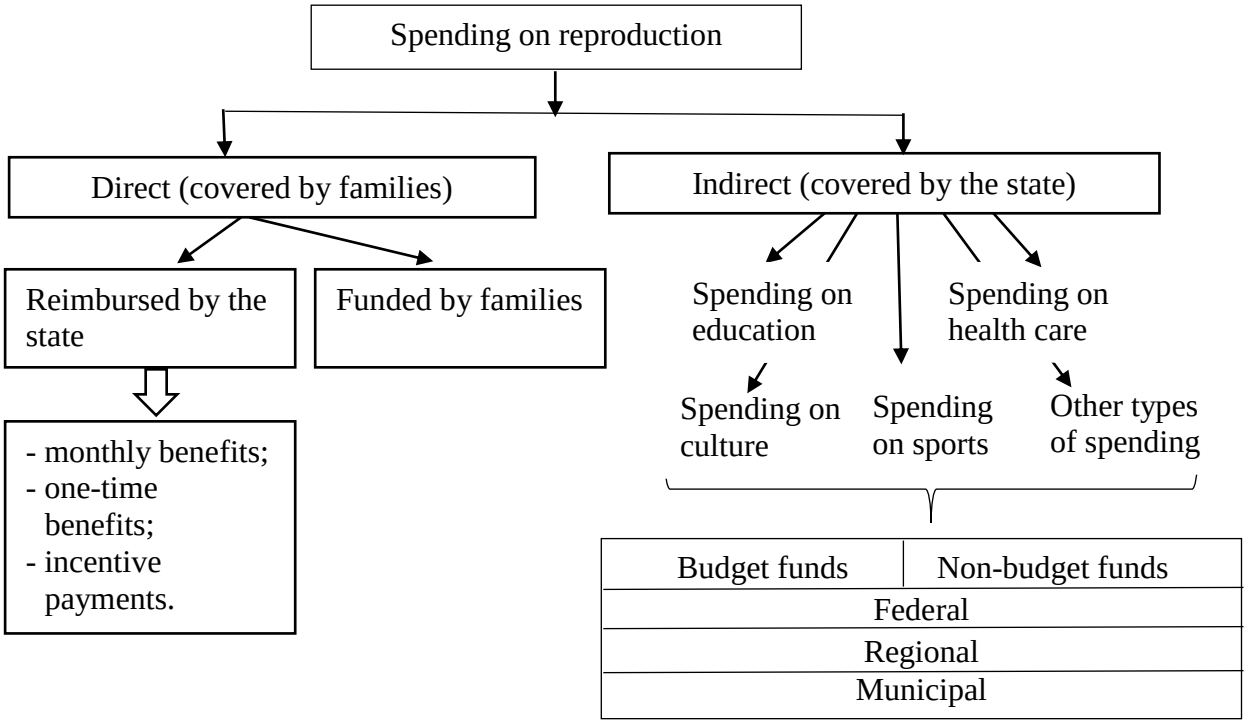
2016, the resident population accounted for only 98.7% of its former size in 2000 (Data from the Single Inter-departmental Information, 2015-2017). Moreover, there is every reason to believe that the pessimistic scenario of the official demographic forecast is quite possible: it was predicted that migration would be unlikely to compensate for the natural population decline, which would lead to a 2% decrease of the region's population in the following twenty years (Data from the Single Inter-departmental Information, 2015-2017).

The high household spendings on the upbringing and development of children are traditionally considered to be one of the main reasons for low birth rates. International demographic studies often consider economic conditions as a key factor affecting birth rates. For example, Becker showed that the growing cost of child rearing may have caused a parental shift toward child quality and away from quantity (Becker, 1981). Cohen and co-authors discovered a certain "price effect" on overall fertility among women of different age and income (Cohen, Dehejia, & Romanov, 2013). Ahn and Mira believe that female unemployment and the opportunity cost of having children have a considerable impact on fertility because women risk losing their income due to penalties imposed on truncated careers, foregone work experience, delayed wage growth, and the increased risk of unemployment (Ahn & Mira, 2002). Other researchers have found the impact of state spendings, such as family allowances, maternity - and parental leave benefits, and childcare subsidies, on birth rates (Kalwij, 2010; Olivetti & Petrongolo, 2017). Moreover, modern studies often focus on specific aspects of childcare: for example, the studies of time costs for housekeeping and parenthood (Neilson & Jeffrey, 2014) and the studies of the impact of its reduction on the further development and adaptation of children due to the mother's early return to work (Boca, Flinn, & Wiswall, 2010).

Similar problems are studied by Russian scholars. For example, Sinitsa proposes to divide childcare expenditures into permanent and variable (Sinitsa, 2016). Permanent expenditures are the minimal financial, temporal and psycho-physiological expenditures of parents and caregivers in children's homes while variable expenditures correspond to any parental expenditures that exceed the minimal level and the state spending on parenting subsidies and the maintenance of the appropriate infrastructure. Child care expenditures are also divided according to the types of child care, the stage in the child's development (pre-natal or post-natal), into material and non-material, and so on. We distinguish between direct and indirect spending on reproduction as well as between the spending that is reimbursed by the state or not. Reimbursable expenses include maternity and child benefits and allowances,

free education for children, health care, and so on. The rest of child care expenses is covered by parents themselves. Thus, we can propose the following classification of child care expenditures (Fig.1).

Fig. 1: Classification of state spending on reproduction



Source: Developed by authors

Direct expenditures associated with reproduction include family spending on child care, upbringing, education and socialization of children. Their amount depends on the child's age (due to changes in the child's needs), as well as on the level and focus of parental investment in the human capital of their children. Indirect expenditures include the costs of education, health care, sports, culture, and so on, which are mostly covered by the state. If the funding is cut off (for example, in case of transition to fee-based preschool education), parents will have to handle this financial burden on their own. This indicator does not take into account such budget items as funding of orphanages, children's homes, boarding schools for orphans, and so on, as well as capital investments into the sphere of education.

Our study concentrates on the dynamics of the indicators which characterize the state's spendings on the reproduction of the population. Such research is particularly important in view of the current demographic situation and the pessimistic population forecasts.

1 Data and Methods

1. For our research we used the data of the Federal State Statistics Service and regional budgets of the Ural Federal District for the period between 2011 and 2016. This period was chosen because it coincided with the second stage in the implementation of the Concept of Demographic Policy of Russia until 2025 (The Concept of the Demographic Policy, 2007). This stage of the Concept is aimed at 'creating comfortable living conditions for families with children'.

2. In our research we focused on the time series showing the dynamics of budget spending on the population reproduction:

- ✓ the amount of maternity and child benefits paid;
- ✓ state expenditures on the provision of high-tech medical assistance related to reproductive technologies: funding for medical assistance with the use of assisted reproductive technologies, activities aimed at prenatal diagnosis of child developmental disorders;
- ✓ spending on children's health;
- ✓ spending on children's education;
- ✓ indirect expenditures on education.

To evaluate the sufficiency of these measures we also calculated the ratio of maternity and child benefits paid to the monthly minimum subsistence for a child.

3. To describe the dynamics of the above-mentioned indicators we analyzed the basic indicators of time series - absolute and relative increase. For quantitative evaluation of the impact that specific factors have on the amount of maternal and child benefits paid we used index analysis.

2 Results

Our findings can be summarized as follows:

1. The following indicators demonstrated the most significant growth in the given period:

1) The amount of maternity and child benefits increased 2.61 times. Index analysis showed that the change in this indicator was caused by the more than twofold increase in the amount of benefits paid for one child and the growth in the number of children by 11%;

2) State spending on high quality medical care involving assisted reproductive technologies and on health services for children more than doubled;

3) Budget spending on education increased 2.13 times in Chelyabinsk region, 2.06 times in Kurgan region, and 1.76 times in Sverdlovsk region. No specific trend could be found in the budget spending data for Tumen region.

2. The dynamics of the regional budget spending on education in Sverdlovsk and Chelyabinsk regions is illustrated in Table 1.

Tab. 1: Budget spending of the areas of the Ural region on education

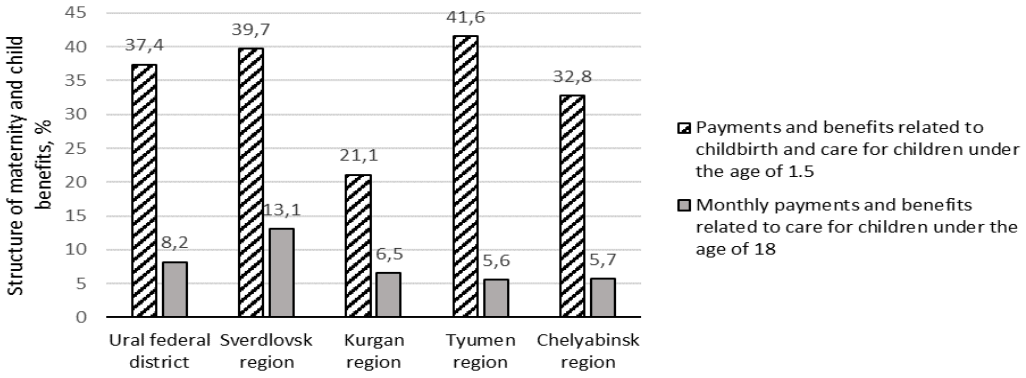
Years	Spending, ths rbs		Growth index	
	Sverdlovsk region	Chelyabinsk region	Sverdlovsk region	Chelyabinsk region
2011	24751.15	12965741	1.00	1.00
2012	25766.57	15782967	1.04	1.22
2013	32070.62	18555163	1.30	1.43
2014	38691.98	27490404	1.56	2.12
2015	40414.80	27160118	1.63	2.09
2016	48187.11	29218739	1.95	2.25

Source: authors' calculations based on the regional budget data

The available data show a twofold increase in the regional budget spending on education in the given period.

3. The changing structure of maternity and child benefits reveals a significant shift in the funding of the population reproduction on the state level: now the focus is made on providing financial support at the initial stage of parenting, that is, until the child reaches the age of 1.5 (see Fig.2).

Fig. 2: The structure of maternity and child benefits in Russia in 2016



Source: Data on Income and Expenditure, 2017

4. To evaluate the sufficiency of the measures for stimulating fertility in Sverdlovsk region we compared the amount of child benefits with the minimum subsistence for one child (Table 2).

Tab. 2: Ratio of the amount of child benefits to the monthly subsistence minimum in Sverdlovsk region

Years	Monthly subsistence minimum for one child, rbs	Monthly child benefit rates for one child, rbs	Ratio of the monthly child benefit rates for one child to the monthly subsistence minimum
2011	6363	1154.55	0.18
2012	6360.5	1243.85	0.20
2013	7257.5	2063.45	0.28
2014	8001.5	2115.14	0.26
2015	9818	2445.29	0.25
2016	10300.5	2535.17	0.25

Source: authors' calculations based on the data of the Federal State Statistics Service

As Table 2 demonstrates, the amount of child benefits paid in the given period is 4-6 times less than the minimum subsistence. Moreover, since 2014, the ratio of monthly benefits for one child to the monthly subsistence minimum has been steadily decreasing.

3 Discussion

Our study has revealed both positive and negative aspects of the current state policy to stimulate fertility rate.

On the one hand, the growth in state spending on population reproduction is a positive sign. Although the effectiveness of these measures is a debatable question, Kalwij found that increased expenditure on family policy programs had a positive effect on fertility rates in Western European countries (Kalwij, 2010). An increase in state spending on reproduction can reduce the opportunity cost of having children and help women to successfully balance their work and family life. The growth in state spending on reproduction shows that the government goes to great lengths to boost fertility rates, which has become one of the key priorities of state policy. It should be noted that in global demographic history, there are cases when a well-planned focused state policy for promoting fertility and parenting did bring positive results and increased fertility rates. For example, in France, child benefits are paid from the second child on until the child reaches the age of 20. Moreover, the amount of benefits increases with the number and age of children while the tax burden is reduced in

relation to the number of children (Koppen, 2006). As we know, in the last decades, the total fertility rate in France has been among the highest in Europe and since 2013, France has been the European leader in terms of fertility rates (Total Fertility Rate, 2018).

On the other hand, we received two negative results:

1) State spending has been focused primarily on the initial stage of parenting (until the child reaches the age of 1.5), which means that the government seeks to reimburse the costs that parents incurred during the maternity and parental leave and thus stimulates parents' employment at later stages. Therefore, parents have to cover most of the direct child care costs, which tend to grow as the child gets older: apart from the costs of food, clothes, hygiene products, and so on, parents also have to pay for programs and services their children need to attend to develop their cognitive, physical, aesthetic abilities and qualities. For instance, in 2015, in Russia, the share of children attending additional (after-school) programs was 57.8% (Data on Percentage of Children, 2015). Mothers who have taken a maternity leave may find it hard to restart their careers after an extended period away from work because they may feel that they have fallen behind in expertise and experience. Moreover, it is hard for them to regain the salary level they had before they had a child, which inevitably leads to a drop in the family's income and living standards. To compensate for these financial losses and to restore the family income to its former level, women have to increase their working time, which can exacerbate the work-family conflict.

2) A low ratio of child benefits paid to the subsistence minimum for one child and the disturbing dynamics of these indicators show that measures of material incentives and support for the reproduction of the population have a limited effect on fertility rates. According to Rosstat, between 2011 and 2016, the share of households that were satisfied with their living standards fell from 3.1% to 2.7% (Data on Incomes, Spending and Consumption, 2017). Thus, the decline in living standards of households with children has become a general trend.

Conclusion

Our findings have revealed a diversity of trends in state spending on population reproduction in the Ural region. The Russian government is paying close attention to the demographic problem, which is reflected in the positive dynamics of the key indicators corresponding to state stimulation of birth rates in the Urals. This trend, however, coincided with a considerable fall in living standards, which shows that the state has failed to provide sufficient material support for the reproduction of the population. Furthermore, parents bear the greatest share of

child raising costs at all stages of the child's development while the current state policy provides most of the funding for maternity and child benefits payable at the initial stage of parenting. In our opinion, an increase in the share of the government reimbursable expenses on the human capital reproduction on all stages of parenting will have a positive influence on the demographic dynamics. Should the pessimistic scenario come true, such policy will enable the country to deal with the negative consequences of the population decline.

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