

**Size matters:
Targeting efficiency and poverty reduction effects of means-tested and universal child
benefits in Russia**

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Abstract

Using the 2000 introduction of means tested child benefits in Russia as a case study; this paper assesses the impact of a policy change from universal to means-tested child allowances in terms of targeting efficiency and poverty reduction. We focus on the core costs of targeting, namely leakage, exclusion errors and program costs, and related these to the benefits in terms of poverty reduction. We use the cross-section and panel dimensions of the Russia Longitudinal Monitoring Survey (RLMS) from 2000 to 2004 to analyse the impact of the reforms and to simulate the effects of various means-tested and universal child benefit schemes. Our analysis contributes to the academic debate in two ways. First, we compare means tested and universal schemes both in terms of targeting efficiency and poverty reduction effects. Second, we analyse the poverty reduction impact of these schemes also in terms of chronic poverty. We find that, since the reforms, more children receive benefits and that there is improved targeting of benefits to children living in low income households. Nevertheless, in 2004 one third to a quarter of the poor children does not receive benefits while about 50% of the benefits leaks to the three highest expenditure quintiles. The poverty reduction impact is modest and improved only marginally since the reforms. The simulations show that universal schemes achieve additional poverty reductions in all indicators because children who were by error excluded under the means tested scheme now receive a benefit.

Keywords: (chronic) poverty, child benefits, targeting efficiency, means test, universal, Russian Federation

Introduction

The debate whether universal or means-tested benefits are the preferred policy instrument in reducing (child) poverty is a longstanding one and centres around costs, incentives and the political economy. Under the condition of a constrained budget and assuming (near) perfect targeting, poverty is reduced more effectively and efficiently when benefits are targeted to the poor based on means (see, e.g., Besley, 1990). Higher administrative costs, targeting errors and labour market disincentives reduce the efficiency and effectiveness of means-tested benefits (Atkinson, 1998; Van de Walle, 1998). Proponents of universal benefits argue that the costs related to means testing may outweigh the actual benefit. Using the 2000 introduction of means tested child benefits in Russia as a case study; this paper assesses the impact of a policy change from universal to means-tested child allowances in terms of targeting efficiency and poverty reduction. We focus on the core costs of targeting, namely leakage, exclusion errors and program costs, and related these to the benefits in terms of poverty reduction.

Our focus is on child benefits because, as in many other countries, children in Russia are particularly at risk of living in poverty. In 2003, the poverty incidence among children younger than 16 years old was 27% compared to the national average of 20%. Younger children have an even higher risk of living in poverty (World Bank, 2004). Family allowances are the main instrument in most social protection systems to provide income support to families with children. Child benefits and other family policies always played an important role in Russian (and Soviet) social policy. In 2000, the eligibility requirements for child benefits in Russia changed from universal to means-tested allocation.

We compare means tested and universal schemes both in terms of targeting efficiency and poverty reduction effects for a vulnerable group in the population, namely children. Using the cross-section and panel dimensions of the Russia Longitudinal Monitoring Survey (RLMS) from 2000 to, we investigate changes in targeting efficiency and poverty reduction over time. We measure targeting efficiency using a range of coverage and adequacy indicators; by calculating these indicators for two poverty lines and the quintiles of the expenditure distribution we gain insight in the scope of inclusion and exclusion errors. The poverty reduction impact is measured in three dimensions; poverty incidence, poverty gap and chronic

poverty. Finally, we also simulate various means tested and universal child benefit schemes and analyze differences in poverty reduction and total benefit expenditures.

The remainder of the paper is structured as follows: firstly we review the main arguments of the debate between proponents of universal and targeted cash benefits as most effective and efficient instruments to support poor households and we discuss which aspects of this debate have been empirically investigated and which not. Then, we discuss the data and variables used in our analysis followed by a discussion of the poverty indicators used as well as their trends from 2000-2004. Section five and six respectively analyse the targeting performance and poverty reduction effects of the current child benefit scheme in Russia. Section seven simulates different policy options and compares their targeting performance with the current system. The final section summarizes the main findings.

Universal versus means-tested cash benefits

The debate whether universal or means-tested child benefits are the preferred policy instrument in reducing child poverty, is a longstanding one and centers around costs, incentives and the political economy (see for instance Atkinson, 1998; Barr, 1998; Besley, 1990; Besley and Kanbur, 1990; Coady *et al*, 2004; van de Walle, 1998). Strictly speaking, a policy maker has two choices: she can allocate a benefit to all children of a certain age-group, i.e. provide a universal benefit, or limit the eligibility to children of poor families. Under a given government budget constraint, allocating the benefits to poor children will result in a higher benefit for each eligible child, and hence, will result in a larger effect on poverty reduction. However, targeting comes at a cost.

If benefits are targeted to the poor, the policy maker will have to determine an indicator that identifies the poor children. Governments have imperfect information about the true welfare level of households. It is difficult to find out whether a person or household belongs to the target group or not, and gathering such information is costly. In addition to screening costs, other inefficiencies arise as a result of imperfect targeting: some of the benefits will flow to children outside the target group while some children in the target group will not get a benefit. The former inefficiency is called ‘leakage’ or ‘inclusion error’ while the latter is known as ‘exclusion error’. When screening costs are high and there are errors of in- and exclusion, universal benefits become more attractive as a benefit allocation mechanism. Moreover, as

targeting becomes stricter in order to reduce leakage, screening costs rise further and exclusion errors as well. Therefore, the decision between universal or targeted child benefits is ultimately a cost benefit analysis; when do the costs of targeting outweigh the benefits in terms of poverty reduction?

It makes sense that a targeting regime which aims at poverty relief needs to use poverty indicators as a screening device. There are, however, a number of pitfalls involved in poverty measurement that need to be considered. One issue is that poverty is a multidimensional concept; another is that there are various ways to measure each of these dimensions. Additionally, to determine whether a person is poor or not involves the (subjective) choice of a poverty threshold below which a person cannot fulfil his/her basic needs, has poor health or an unacceptable low standard of living. Firstly, this implies that it is *a priori* not clear who the target group is (one first needs to determine the relevant dimension(s)). Secondly, the target group differs in size and characteristics according to the chosen measurement method and poverty threshold.

The academic literature also identifies other targeting costs such as incentive costs, social costs and political costs (Atkinson, 1998; Barr, 1998; Coady *et al.*, 2004, Moene and Wallerstein, 2001; Gelbach and Pritchett, 1997; Sen, 1995). Incentive costs arise when households adjust their behaviour in order to meet eligibility criteria. These responses can involve a cost (i.e. a household reduces labour supply such that their income falls below the eligibility threshold) but can also be beneficial (i.e. school attendance increases because benefit eligibility requires the children to go to school). Strict targeting might also increase social costs such as stigma and reduce the available budget for transfers if the budget is politically determined (Gelbach and Pritchett; 1997, Moene and Wallerstein, 2001; Atkinson, 1995; Sen, 1995).

In addition, poverty alleviation may not be the only objective of child and other social benefits. Most social protection systems have several functions. They alleviate poverty, smooth income over the life cycle, provide insurance against certain risks and redistribute welfare. A benefit that is said to be 'poorly targeted' based on the poverty objective may be effective in terms of another objective (Atkinson, 1998). In this respect, child benefit programmes can also have wider objectives, like smoothing income over the life cycle, welfare redistribution or increasing fertility rates.

In this paper we analyse the core costs of targeting, namely leakage, exclusion errors and program costs, and relate these to the benefits in terms of poverty reduction. We limit our focus because the data allow for a thorough analysis of these aspects while they do not provide information on the other factors in the debate. Although there are various other targeting methods (see for instance Coady *et al*, 2004), we focus on means-testing and compare the efficiency of this targeting method to one of universal provision in the context of child benefits in Russia.

Our analysis contributes to the debate in a number of ways. Firstly, many studies focus either on targeting efficiency or on poverty reduction (Coady *et al*, 2004; Foster *et al*, 2001; Immervol *et al*, 2000; Edmonds, 2005). The discussion above suggests that there is a trade off between targeting efficiency and poverty reduction for means-tested and universal child benefits which implies that it is relevant to measure the effects of both. Secondly, other contributions only focus on the effects of means-tested benefits or contrast the role of means-tested benefits to other parts of the welfare state such as social insurance programs (Behrendt, 2000; Sainsbury *et al*, 2002; Nelson, 2004; Heady *et al*, 2001). Such analyses are useful in the sense that they provide information about how social protection programmes can complement each other or about the variation in impact of different means-tested schemes. However, they do not provide insights into the differences in impact of means-tested vis-à-vis universal cash benefit programs for a specific group in the population. In this paper we analyse the impact of universal and means-tested child benefits using various targeting efficiency and poverty reduction indicators. We analyse the impact of the reforms in the Russian child benefit program (from universal to means-tested benefits) and simulate the impact of various means-tested and universal child benefit schemes. Another contribution of this paper is that, in addition to the poverty incidence and poverty gaps indicators, we also analyse the poverty reduction impact of these schemes in terms of chronic poverty. The chronic poor, measured in this paper as those households that have average expenditures below the poverty line, are of particular interest because of the potentially high costs that long-term poverty has on the development of children.

Nevertheless, the empirical literature provides some clues with respect to differences in targeting efficiency and poverty reduction impact between means-tested and universal benefits. Matsaganis *et al* (2004) and Edmonds (2005) indeed find that under means-tested

programs leakage of benefits to the non-poor is considerably lower than under a universal programme. Related to that is the result that a higher share of the benefits goes to the poor with means-tested child benefits (Matsaganis *et al*, 2004). However, in a cross-national comparison of 122 anti-poverty interventions Coady *et al* (2004, p. 32, table 3.4) show that in terms of median targeting performance both means-tested benefits and child benefits score highest as compared with other targeting methods but both methods have approximately equal scores. Thus, both means-tested and child benefits distribute more resources to the poor than random assignment or other targeting methods. However because their definition of child benefit programs includes all types of child benefits (universal, (proxy) means-tested, geographical etc.), it is not clear whether means-tested benefits outperform universal benefits in terms of targeting efficiency (p 27–31, table 3.3).¹

The problem of exclusion or under coverage receives attention in studies like Behrendt (2000) and Edmonds (2005), albeit from different perspectives: Behrendt evaluates the poverty reduction impact of means-tested benefits and notes that recipient rates are ‘astonishingly low’ (i.e. exclusion rates are high, p. 31). Edmonds, being more concerned about the targeting efficiency of means-tested child benefits in Slovenia, mentions that the problem of under coverage does not appear ‘to be so large that it could undermine the progressiveness of the means-tested programme’ (p. 195). Additionally, both studies report that leakage of means-tested benefits is mainly to the ‘near poor’ population and thus less of an (efficiency) problem. It is important to realize that the problem of under-coverage represents a missed opportunity in terms of poverty reduction while at the same time it is the result of (increased) targeting efficiency. By comparing means-tested and universal schemes, our study therefore also analyzes the potential poverty reduction that can be achieved by universal schemes.

The empirical literature suggests that the impact of means tested and universal schemes on various poverty measures differs. Forster and Toth (2001) identify a move from universal to means tested benefits in the Visegrad countries² during the mid-nineties and find that the impact on poverty in terms of incidence was reduced after reforms but that benefits were better targeted in terms of intensity and thus had a larger impact on the reduction of the poverty gap. In the study of Matsaganis *et al* (2004), which compares current (mostly means

¹ Coady *et al* (2004) define child benefits as ‘categorical targeting to the young’. The authors evaluated 26 programs that were targeted to the young, of which 8 were means-tested. Only 3 of the means-tested programs scored higher than the median score.

² Czech Republic, Poland and Hungary.

tested) and simulated universal child benefit schemes in Southern European countries, the poverty reduction impact differs not only per poverty indicator but also per country. Unfortunately, it is not clear to what extent the poverty reduction effects can be attributed to the means-tested – universal difference or to other differences in program characteristics such as the type and level of benefits (flat-rate – progressive, smaller or larger) and differences in benefits according to the number of children. Nevertheless, Matsaganis’ study also shows another important point; other targeting criteria and/or benefit variations matter for the impact on poverty reduction and targeting efficiency. For instance, high poverty risk groups can be targeted by including their demographic characteristics as eligibility criteria (Greece for instance provides special benefits to households with 3 or more children). Another point that is addressed by the empirical literature is that the program implementation matters a lot, also for targeting efficiency and poverty reduction (Coady *et al*, 2004; Behrendt, 2000).

A final aspect is that the size of benefits clearly matters; more generous benefits have a larger impact on poverty (Matsaganis *et al*, 2004). On the other hand, higher benefits put a larger strain on the government budget. If the benefit is small, the costs of strict means-testing may outweigh the benefit, both for the beneficiary and the administrator. As for the means test itself, essential for its validation is the underlying objective. Does the means test aim at targeting the poor or is it meant to cut-off the wealthy households and to redirect some of the resources to poorer households? The latter ‘mild’ targeting may offer an alternative that comes close to an optimum as discussed by Besley and Kanbur (1990). In addition, the amount of leakage of benefits to households close to the poverty line may not be considered as a cost under the presumption that the poverty line is not a stringent concept. This ‘mild’ evaluation takes into account that income may not be perfectly observable and that there is no such thing as a single poverty line. This study therefore uses various benefit levels in its simulations, measures the poverty reduction impact using two poverty lines and also analyses targeting efficiency in terms of the expenditure distribution in the population.

Russia - from universal to means-tested child allowances

Child allowances and other family policies always played a prominent role in Russian (and Soviet) social policy. The objective of providing child allowances is to assist families in having and upbringing children (Karelova, 2003). The main law regulating child and family

allowances was passed in 1995.³ Up to 1999, child allowances were officially allocated according the universal principle but as early as 1995 some regional governments decided to means-test child benefits (Denisova *et al*, 2002). In 1999, federal law officially introduced a means test for child allowances. The eligibility rules changed two more times before they were finally set and approved in the amended law (2000). In 2001, child allowances started to be financed from the federal budget.^{4 5}

Families with children below 16 years (or below 18 if they still go to school) and with average per capita income below the Minimum Subsistence Level (MSL) are entitled to a child allowance. The methodology for calculating the MSL is governed by federal law. Regions are free within the boundaries of the law to determine the content of the minimum consumer basket and adjust its composition to regional needs and habits.⁶ The income test for child allowances only takes the income of the parent(s) into account and divides the total family income by the number of family members, i.e. parent(s) and underage children. The application procedure is un-bureaucratic and simple. One of the parents (usually the mother) has to apply for the child allowance at the social protection authorities of her place of residence. The test includes all formal income from employment or self-employment including bonuses, all types of pensions, benefits and allowances and income such as alimony payments over the three months prior to the application. The applicant fills in an application form, stating the total family income (no official documents or further income documentation have to be submitted) and providing the birth certificate for the child. The benefit is 70 ruble per child from 18 months to age 16 (or 18 if still in high school) (International Social Security Association, 2004). The allowance is higher when one of the parents is avoiding alimony payments (105 ruble) or doubled in case of a single parent. For children under 18 months the allowance (called child care leave allowance) is set at 500 ruble a month.⁷

Data and methodology

³ This legislation describes a package of family and maternity benefits; we only focus on the monthly child benefits to families with children below 16 years (or 18 if still in school).

⁴ The allocation of the funds is based on applications from the regions. Transfers are earmarked and cannot be used for other purposes than targeted child allowances. This financing procedure was legally established in 2002.

⁵ Our analysis covers the period 2000-2004 but reforms in child benefits continued to take place. In 2005, “the authority to finance and legislatively regulate this benefit was transferred to the level of the Russian Federation constituent entities” (Ovcharova *et al*, 2005, p. 7).

⁶ As a result, the value of the MSL may differ per region, and sometimes even within region. This may be the case if the region covers several climatic zones, as for example in the Republic of Komi (Gassmann, 2003:10).

⁷ The allowance is only 70 rubles for unemployed workers.

This study uses data from the Russia Longitudinal Monitoring Survey (RLMS) from 2000 until 2004.⁸ The RLMS can be used for (repeated) cross-section as well as panel analyses. For most of our analyses we use the cross-section dimensions which are representative for the Russian population as a whole.⁹ Part of the cross-section are those households that were observed at least in one round and had no missing observations on demographic, expenditure and income variables. We use the panel dimension of the RLMS to analyse the impact of child benefits on chronic poverty. Households are part of the panel if they participated in all 5 rounds and if they have no missing observations for the main variables.¹⁰

The RLMS includes variables on household demographics, expenditures, income, poverty lines, child benefit receipt and some variables on household labour market participation and education. We measure the poverty status of a household using the RLMS poverty lines and household expenditures. The RLMS poverty lines are based on regional age-gender specific food-baskets that are valued at regional prices.¹¹ We prefer to use expenditures instead of income because households have a tendency to underreport income from informal and semi-formal activities (among others Ravallion, 1994; Deaton, 1997; Atkinson et al, 1995A). Household income is therefore systematically below expenditures, which is a common feature of these data. Total expenditures are composed of food and non-food goods and services. Total food consumption is obtained by adding the expenditures on all foodstuffs, both purchased and from home produced consumption. Total non-food consumption is obtained by summing expenditures on tobacco, clothing, fuel, health, services, luxury goods, rent, and utilities.¹²

⁸ The data are publicly available and can be obtained through anonymous FTP server from the RLMS website. Detailed information on the RLMS project is provided on the following website: <http://www.cpc.unc.edu/projects/rlms/home.html>.

⁹ To obtain representative estimates, we use the RLMS post-stratification weights.

¹⁰ Unlike the cross-section component where a household drops out when it moves from the sampled dwelling site, the panel does include households who moved and were interviewed in subsequent rounds.

¹¹ These individual poverty lines are aggregated for each member to the household level and subsequently multiplied by a factor to adjust for economies of scale. The adjustment factor varies between 1 for single person households and 0.7 for households with 6 or more members. Every year the poverty lines are updated using the consumer price index.

¹² Not included are gifts or loans provided to other households, expenditures for tax and insurance, and savings and expenditures on stocks and bonds because these expenses are not made for the benefit of the household or are not used for current consumption. Also excluded are expenditures on durables because the consumption benefits from such goods extend over multiple periods.

We focus on households with children aged 16 years or 18 if still in high school because these are the households that are potentially eligible for child benefits.¹³ The level of benefit differs with the age of the child; children under 1.5 get a higher benefit than older children. Unfortunately, we can only distinguish between the benefits received by these age categories from 2003 on.¹⁴ To maintain consistency over time we therefore decided to use the slightly larger group of households with children below 16 (or 18 if in high school) for our targeting and poverty impact analyses. Table 1 below shows that the total number of households with children in this category is decreasing over time. This is in line with demographic trends reported in other datasets (World Bank, 2005; Federal Service of State Statistics, 2002). It can also be seen that households with children find themselves disproportionately more often in lower expenditure quintiles.

Table 1: Household with children below 16 or 18 if in high school

	2000	2001	2002	2003	2004
# of households with children	1,280	1,269	1,232	1,207	1,136
# of children	1,836	1,795	1,728	1,683	1,580
Households with child (%)	42.5	41.0	40.1	39.1	35.8
Excluding children under 18 months (%)	40.9	39.2	38.2	37.2	34.0
Households with children per expenditure quintile (%)					
I	50.5	40.4	40.2	37.2	41.3
II	44.2	42.1	41.1	41.7	36.7
III	41.0	41.6	41.6	40.3	35.4
IV	38.4	41.9	40.3	40.3	33.5
V	39.4	39.8	37.8	36.6	33.2

Source: Own calculations based on the RLMS.

Prevalence of (chronic) poverty in families with children

This section describes poverty in Russia during 2000-2004. We analyze poverty trends in poverty incidence and poverty gap indicators (Foster *et al*, 1984)¹⁵ as well as a spells-based

¹³ The main characteristics of the households in the cross-section and panel dimensions are summarized in the appendix. Comparing the characteristics of the weighted cross-section and panel samples shows some differences; in the panel urban households are underrepresented while households with children are somewhat overrepresented. Income and expenditures are somewhat lower in the panel. The main trends are similar in both datasets.

¹⁴ From 2003 on the household questionnaire makes a distinction between child benefits received for children below 1.5 years and benefits received for children between 1.5 and 16 years old (or 18 if still in high school).

¹⁵ The Foster-Greer-Thorbecke class of decomposable poverty indices (1984) can be represented as follows:

$$FGT = 1/n * \sum_{c < z}^q \left[\frac{z - c}{z} \right]^\alpha$$

, where n is the total number of individuals, q is the number of poor, z is the poverty line and c represents our expenditures aggregate. If $\alpha = 0$ the equation represents the headcount index which simply displays the

chronic poverty indicator (Hulme and Sheperd, 2003). We have calculated these poverty statistics for the RLMS poverty lines as well as for 150% of the RLMS poverty lines. We do this for two reasons. Firstly, poverty statistics are sensitive to the level of poverty threshold and we want to evaluate in what way changing the threshold level influences our poverty estimates. Secondly, the Russian authorities use a different threshold (Minimum Subsistence Level) to establish whether a family falls below the income threshold and is thus eligible for child benefits. The 150% RLMS cut-off is comparable to the Minimum Subsistence Level and thus better reflects the target group at which the child benefit program is aimed.¹⁶

Table 2: Russia: Poverty indices, 2000 - 2004

	2000	2001	2002	2003	2004
100% RLMS Poverty line					
Poverty Incidence					
All Russia	21.7	14.5	12.3	9.4	10.7
Children (0-16/18)	25.6	14.7	11.9	9.5	11.7
Poverty Gap					
All Russia	7.3	4.9	4.3	3.1	3.4
Children (0-16/18)	8.8	4.9	4.1	2.9	3.7
150% RLMS Poverty line					
Poverty Incidence					
All Russia	39.3	29.8	26.0	21.5	23.3
Children (0-16/18)	43.9	30.3	27.8	21.6	26.7
Poverty Gap					
All Russia	15.1	10.5	9.2	7.1	7.9
Children (0-16/18)	17.7	10.5	9.4	7.0	9.1

Source: Own calculations based on the RLMS.

The expenditure-based estimates in table 2 show that all poverty indicators declined until 2003, and rose again in 2004. In 2004, 11% of the Russians had expenditures below the poverty line, having an average shortfall of expenditures over the total population of 3.4% and poverty severity index of 1.7%. Using the 150% threshold values most poverty indices more than double in value, a sign that the expenditure distribution around the poverty line is rather dense. In other words, many Russian households have expenditures that are not much above

percentage of individuals living below the poverty line. Taking $\alpha = 1$ results in the poverty gap; this index measures the mean proportionate expenditure shortfall over the total population.

¹⁶ We compared the average household poverty lines used in the RLMS with the average Minimum Subsistence Level (MSL) in the Russian Household Budget Survey for the year 2000. The average weighted MSL was 2,983 ruble (4th quarter of 2000), about 150% of the average weighted RLMS threshold (2,007 ruble). The RLMS data were collected in November-December 2000. Note that this is only an approximation because the RLMS poverty lines assume larger economies of scale than the MSL; depending on the household size each RLMS household member receives a weight between 0.7 and 1 while according to the MSL method each member receives a weight of 1. Therefore even when the thresholds would be the same, household with children are more likely to be poor using the MSL method than the RLMS method.

the poverty line; a shift the poverty line thereby has a large impact on poverty indicators.¹⁷ In comparison with the total population, children have a higher than average or average poverty risk, depending on the survey year.¹⁸

Table 3: Russia: Chronic poverty, 2000 – 2004, % of the population in 2004¹⁹

2000 - 2004	100% RLMS Poverty line		150% RLMS Poverty line	
	All Russia	Children (0-16/18)	All Russia	Children (0-16/18)
Always poor	2.0	1.4	6.9	7.6
Usually poor (mean expenditures \leq poverty line)	5.3	6.9	15.2	17.9
Occasionally poor (mean expenditures $>$ poverty line)	29.5	34.0	38.2	39.7
Never poor	63.2	57.7	39.7	34.8

Source: Own calculations based on the RLMS.

For our analysis of chronic poverty, we use an indicator that is based on a combination of the number of poverty spells and the mean value of household expenditures vis-à-vis the poverty line. Households are classified in four categories: always poor, usually poor (mean expenditures under the poverty line), occasionally poor (mean expenditures above the poverty line) and never poor (Hulme and Sheperd, 2003). Chronic poverty studies have shown that the experience of poverty is not homogenous over time; some individuals experience poverty only once, others regularly and some only know a life of poverty. In terms of need, the chronic poor are a group that should receive special attention from policymakers. Children living in chronic poor households are of particular concern because the sustained low level of household resources also increases the risk of living in poverty as an adult due to insufficient investment in health and human capital. In Russia about one third of the panel's households experienced poverty at least once in the period 2000-2004. The 'occasionally poor' comprise

¹⁷ Poverty estimates typically vary per dataset and methodology used. The use of a different welfare indicator and/or poverty line threshold can have large effects on aggregate poverty indices, particularly in a country such as Russia with a highly unequal expenditure distribution but where differences between household expenditures at the lower end of the distribution are relatively small. We therefore checked the consistency of our estimates with other poverty studies (World Bank, 2004; Gassmann, 2003). These studies find higher poverty rates in general as well as an increased poverty risk for children but the trends in poverty indices are very similar to ours. We found that a large part of these differences could be attributed to differences in expenditures (particularly the value of home produced goods as well as level of detail in the questionnaire) and to some extent to a lower threshold in the RLMS.

¹⁸ We also analyzed poverty decompositions by number of children and household type (not shown here). Households consisting of only parents and (a few) children have a below average poverty risk but households with 3 or more children, single parents, extended families and other household with children have a higher than average poverty risk.

¹⁹ Because of the structure of our data, we first classified households according to our chronic poverty groups and then calculated the incidence of individuals or children living in such a group. Although the number of households is constant in our panel, the number of individuals is not. Therefore the % of individuals or children living in either category differs slightly per survey round.

the largest group with 30% while 7.3% can be classified as chronic poor i.e. those households with mean expenditures under the poverty line. Using the higher poverty line, about 22% of Russians lived in chronic poverty and 38% experienced occasional poverty spells. Clearly, children have a higher than average risk to live in either of the poverty groups; they are more likely to live in chronic poor and occasionally poor households.

Targeting efficiency of child allowance

We have seen that, even though quite some local administrations already introduced some form of means testing during the mid-nineties, only in 1999 child benefits became means-tested by federal law. Since mid-2000 there were no further changes in eligibility requirements. Therefore, we use the 2000 survey data as a benchmark year for analyzing changes in the targeting efficiency. We measure targeting efficiency by using a range of indicators on child benefit coverage and adequacy; coverage indicators provide information on the beneficiaries while adequacy indicators give insight into the size benefits and the allocation of total benefits. To analyze whether child benefits indeed target poor children in Russia and to what extent, we relate our coverage and adequacy indicators to the poverty status of the beneficiaries as well as the poverty threshold. For instance, the % of children receiving benefits indicates which part of the children in Russia receives child allowance, but it does not indicate to what extent these beneficiaries belong to the target group (correct targeting) or not (leakage or inclusion error) and which part of the target group is excluded (exclusion error). By calculating the % of poor beneficiaries we can get insight into these targeting aspects (using the same poverty thresholds as in the previous section). Under a means-tested scheme, leakage of benefits to 'near poor' children is typically considered less problematic than leakage of resources to 'rich' children (among others Atkinson, 1998 and Behrendt, 2000). In addition, the poverty analysis in the previous section has shown that the size of the target population is very sensitive to the choice of the poverty line. We therefore complement our analyses of targeting efficiency by decomposing our indicators into expenditure quintiles.

Households in Russia with children under 16 (or 18 if the child is still going to high school) are potentially eligible for child benefits under the current means-tested scheme, but all would be eligible under a universal benefit. Therefore, this group is our benchmark for calculating

Table 4: Targeting efficiency of child benefits: coverage and adequacy, 2000 - 2004

	2000	2001	2002	2003	2004
Benefit Coverage					
# of children, % of which	1,280	1,269	1,232	1,207	1,136
- receives child benefits	32.5	49.8	57.8	60.9	62.9
- is poor and receives child benefits (100% RLMS poverty line)	31.7	60.3	73.6	78.8	67.0
- is poor and receives child benefits (150% RLMS poverty line)	31.3	58.5	68.4	74.3	73.4
Children receiving child benefit per expenditure quintile (%)					
I	34.2	61.2	71.0	74.8	74.3
II	29.0	59.7	62.7	74.3	72.5
III	36.5	49.4	59.9	60.7	60.0
IV	30.5	43.7	53.5	54.8	58.0
V	31.8	34.4	39.5	39.0	45.2
Benefit Adequacy					
Child allowance per child (median)					
Nominal rubles	60	70	73	70	80
Real 1992 rubles	85	84	76	65	66
Total benefit as % of household expenditure for poor household (median)					
- Poor (100% RLMS Poverty line)	6.9	5.9	5.0	4.3	3.9
- Poor (150% RLMS Poverty line)	5.3	4.0	3.6	2.9	2.5
Total benefit as % of household expenditure per expenditure quintile (median)					
I	8.0	5.0	4.3	2.9	2.7
II	3.3	2.7	2.0	1.6	1.6
III	1.8	1.6	1.4	1.1	1.0
IV	1.6	1.3	1.0	0.8	0.7
V	0.8	0.6	0.6	0.4	0.4
Benefit share to the poor as % of total benefits (excluding outliers)					
- Poor (100% RLMS Poverty line)	25.1	18.2	17.1	13.6	14.4
- Poor (150% RLMS Poverty line)	46.5	37.2	33.6	28.6	32.6
Benefit share per quintile as % of total benefits (excluding outliers)					
I	26.9	25.1	26.7	26.1	28.8
II	20.5	26.0	20.8	26.6	22.9
III	18.5	19.8	21.4	20.0	17.8
IV	16.3	16.8	18.4	16.2	16.6
V	17.8	12.3	12.6	11.2	13.9

Source: Own calculations based on the RLMS.

coverage rates, our first indicator of targeting efficiency. Table 4 shows that benefit coverage increased over the whole period; the % of children receiving child benefits doubles from 33% in 2000 to 66% in 2004. From 2001 on, poor children are more likely to receive benefits than their non-poor counterparts. This suggests that there have been two effects. Firstly, there has been a general increase in the number of benefits provided. It is likely that the move from

local to federal funding of (earmarked) benefits has been an important contribution in this respect.²⁰ Secondly, the increase in coverage of poor children as compared to overall coverage rates suggests that the means test indeed helps to target the poor.²¹

Nevertheless, one third to a quarter of the poor children does not receive a benefit. It is not clear whether these children were denied a benefit when their parents filed an application or for what reasons the parents decided not to file an application. The only insight that the RLMS provides is whether the household thinks it is eligible for child benefits.²² In 2004, 32% of the non-poor households with children thought they were not eligible as compared to 23% of the poor households. This suggests that lack of information might be one reason for non-take up but it is not clear whether this is the only reason.

The distributional decomposition confirms that child benefits are progressive; children in lower quintiles have higher coverage rates. There is nevertheless considerable leakage to the 3rd to 5th quintiles. In most years, these quintiles have expenditures well above the 150% RLMS poverty line.

Coverage rates only show one aspect of targeting efficiency (who receives benefits?). The selected adequacy indicators show how much benefit is received in three dimensions; the absolute level of benefits, the level of benefits as compared to total expenditures and the share of total benefits going to the (lowest) expenditure quintiles. A first indicator of benefit adequacy is the benefit level. We only report median benefit levels because there are a number of outliers in the reported child benefits which cannot be fully explained by eventual supplementary benefits, birth grants or maternity benefits (from local authorities or employers). To facilitate comparison between survey years, we denote the values of child allowances in real 1992 ruble as well as in nominal values. The nominal amount of child allowance received in 2004 is 80 ruble. The median value of child allowance has been

²⁰ Denisova *et al* (2000) mention that funding problems greatly reduced provision of child benefits during the mid-nineties.

²¹ Incidence rates look at benefit receipt over the total population while coverage rates focus on benefit receipt among children or households with children. The trends in terms of incidence rates (not shown here) are similar to the coverage rates but they differ in level; they increased from less than 13% in 2000 to 21% in 2004. There was a strong increase in benefit receipt among (consumption) poor households.

²² For more information check for instance the household questionnaire of 2004, question 5 page 24F (<http://www.epc.unc.edu/projects/rlms/data/questionnaires/rmhouse.pdf> , accessed October 2006).

decreasing in real terms since 2000. This is mainly because child benefits are not indexed for inflation.²³

What is the relative contribution of child allowance to the household budget? Compared to average monthly expenditures, child benefits are rather modest. The benefit shares are also decreasing over time. For the lowest income quintile the benefit share over total (reported) income decreases from 8% in 2000 to 2.7% in 2004. This decline can be explained by an increase of household real expenditures (33% for the lowest quintile)²⁴ combined with a decline in the real value of child benefits (22% for the median child benefit).

To what extent do program benefits flow to households in the target group and which part of the benefits is spent on beneficiaries outside the target group? The benefit share per quintile in table 4 shows which % of the program resources is flowing to the target group and which % of the resources leaks away to richer households. Using the higher poverty line, which corresponds better to the income threshold used by Russian authorities, we can see that about half of the benefits flow to poor households in 2000 but this share declines to about a third in 2004. From the decomposition into quintiles we can see that over the observed period about 50% of the benefits are going to the poorest 40% of the population. Possible explanations for this could be that the means-test is not stringently applied in Russia, or alternatively, benefit receipt is rather sticky (maybe there is no regular re-evaluation of households' means).²⁵

In addition to the descriptive indicators of targeting efficiency we also want to test if there is statistical evidence for the changes in the targeting efficiency of child benefits.²⁶ We estimate a binary model with child benefit receipt as a dependent variable and a number of explanatory

²³ We also checked whether there is a difference in the median benefit per child for poor and non-poor children (we checked for both poverty lines). The median benefit per child of a poor household was about 10 ruble higher in 2000/2001 and 7 ruble in 2002. In 2003 and 2004 there was no difference anymore.

²⁴ See table Table 9 in the appendix.

²⁵ We analyzed patterns of benefit receipt in our household panel and found that the large majority of households continue to receive benefits in subsequent years. Of those households receiving child allowance in 2000, 53% still received child allowances in 2004. Of those who did not receive benefits anymore, 26% still had children in the eligible age category but did not receive benefits while 21% of those households did not have any children in the eligible age category anymore. Over time, stability of benefit receipt has further increased. Those households who lost benefit receipt but still had eligible children, had higher expenditures on average. Unfortunately we do not know if these households did not re-apply or whether their application was denied.

²⁶ We use a binary choice model to find out which household characteristics increase the probability of child benefit receipt. Such a model can be written as $\Pr[Y = 1 | x] = \lambda(\beta' x)$, where Y is the dependent variable, λ the standard normal cumulative distribution function, x a vector of explanatory variables and β a vector of parameters to be estimated (Greene, 1997). The dependent variable takes on $Y=1$ when the household receives a child benefit and $Y=0$ when it does not receive one.

variables such as the number of eligible children and other demographic characteristics, the logarithm of nominal income minus child benefits²⁷, a dummy for the poverty status of the household, a dummy taking the value of 1 if at least one household member is unemployed, a dummy for female headed household, dummies indicating a semi urban and rural dwelling place and dummies for the primary sampling units. We only include households that have children in the eligible age category i.e. under age 16 or 18 if the child is still in high school.

Table 5: Probit regressions on cross-sections (Child benefit receipt, yes=1/no=0), 2000-2004

	2000	2001	2002	2003	2004
# of households	1,261	1,259	1,223	1,195	1,132
Model 1					
Log income before child benefits	-0.017	-0.081	-0.06	-0.1	-0.091
	-0.015	(0.018)**	(0.017)**	(0.020)**	(0.022)**
Number of children in eligible category	0.1	0.175	0.21	0.151	0.101
	(0.019)**	(0.024)**	(0.026)**	(0.025)**	(0.032)**
Model 2					
Expenditures under poverty line	-0.016	0.101	0.165	0.172	0.046
	-0.03	(0.042)**	(0.045)**	(0.045)**	-0.048
Number of children in eligible category	0.099	0.169	0.212	0.147	0.103
	(0.018)**	(0.023)**	(0.026)**	(0.024)**	(0.030)**
Model 3					
Log income before child benefits	-0.027	-0.052	-0.036	-0.071	-0.059
	-0.018	(0.020)**	-0.019	(0.023)**	(0.022)**
Number of children in eligible category	0.101	0.176	0.214	0.145	0.081
	(0.021)**	(0.025)**	(0.029)**	(0.027)**	(0.033)**
At least one unemployed person	0.072	0.059	-0.017	0.05	0.023
	-0.045	-0.048	-0.05	-0.053	-0.052
Head of household is female	0.064	0.165	0.146	0.046	0.016
	-0.058	(0.057)**	(0.055)**	-0.058	-0.059
Household living in semi-urban area	0.16	-0.08	0.023	-0.241	-0.08
	-0.089	-0.086	-0.095	-0.097*	-0.103
Household living in rural area	0.115	0.163	0.056	0.121	0.059
	-0.067	(0.069)*	-0.071	-0.075	-0.075
Dummies indicating primary sampling unit (38-1=37 dummies)	Not reported	Not reported	Not reported	Not reported	Not reported
F-test on joint significance of primary sampling units, critical value (p-value)	32.81**	13.12**	2.59	8.35*	7.24*
	(0.0000)	(0.0003)	(0.1078)	(0.0154)	(0.0268)

Model is estimated with households that have children in eligible age category.

Robust standard errors in parentheses

**significant at a 1% level, * significant at a 5% level

Included in all estimations but not reported: variables on demographic composition of household

Source: Own calculations based on the RLMS.

Our estimation strategy is rather straightforward; for each cross-section we use Probit regressions to estimate a number of models. In our first model the main explanatory variables

²⁷ We use the income variable as constructed by the RLMS minus the child benefits. The income variable includes all earnings from (self-) employment and social transfers (cash and non-cash). We used income because child benefits in Russia are income-tested. We found no essential differences doing the same analyses using the logarithm of household expenditures minus child benefits.

are the number of children in the eligible age category and household income. The second model replaces household income with a dummy variable on the poverty status of the household. The third model includes in addition to the number of children in the eligible age category, household income and a number of control variables that potentially can be correlated with the dependent variable.²⁸ As we repeat the estimation for each year, changes in sign, magnitude and significance of the estimated parameters can be interpreted as indicators for policy change. The results are reported in table 5 and display the estimation results in marginal effects indicating the change in the probability for a small change in each independent, continuous variable and, the discrete change in the probability for dummy variables.

As expected, the number of eligible children in the household is positively correlated with benefit receipt for all models and every survey year; households with more children are more likely to receive child. Additionally, the likelihood of receiving child benefits with an additional child increases from 10% in 2000 to 21% in 2002 and then drops to a value of around 10% in 2004. The estimated marginal effects for household income are very small and insignificant in 2000 but increase in magnitude and become significant at a 1% level from 2001 on. The negative sign of the coefficient confirm the progressiveness of child benefits; as income increases the probability of child benefit receipt falls.

In our second model, the coefficient for poverty status also becomes significant at a 1% level in 2001 suggesting that poor households are more likely to receive child allowance. This effect, however, disappears in 2004.

In the third model, the estimates for the unemployment and most of estimates for rural/semi-urban dummies are insignificant. The dummy indicating female head of the household is significant in 2001 and 2002 and points to an increased probability of receiving child benefits. There is also an interesting pattern in the explanatory power of the primary sampling dummies; the joint explanatory power of these location dummies is very high in 2000 (see the results of the F-test in table 5) but decreasing thereafter being insignificant at in 2002 and significant on a 5% level in 2003 and 2004. We believe that these dummies control for

²⁸ We use the following control variables: the labour status of household members, the dwelling place (urban, semi-urban or rural) as well as dummies indicating the primary sampling units (indicating the location of the household on a raion level).

regional differences in the implementation and financing of child benefits for two reasons. Firstly, these dummies control for the fact that some regions are faster/slower in the implementation of the reforms. Secondly, only in the course of 2001, child allowances are fully financed from the federal budget via a compensation fund. The decrease of explanatory power in the coefficients of the primary sampling units might indeed reflect the harmonization of the child benefit program in the Russian Federation.

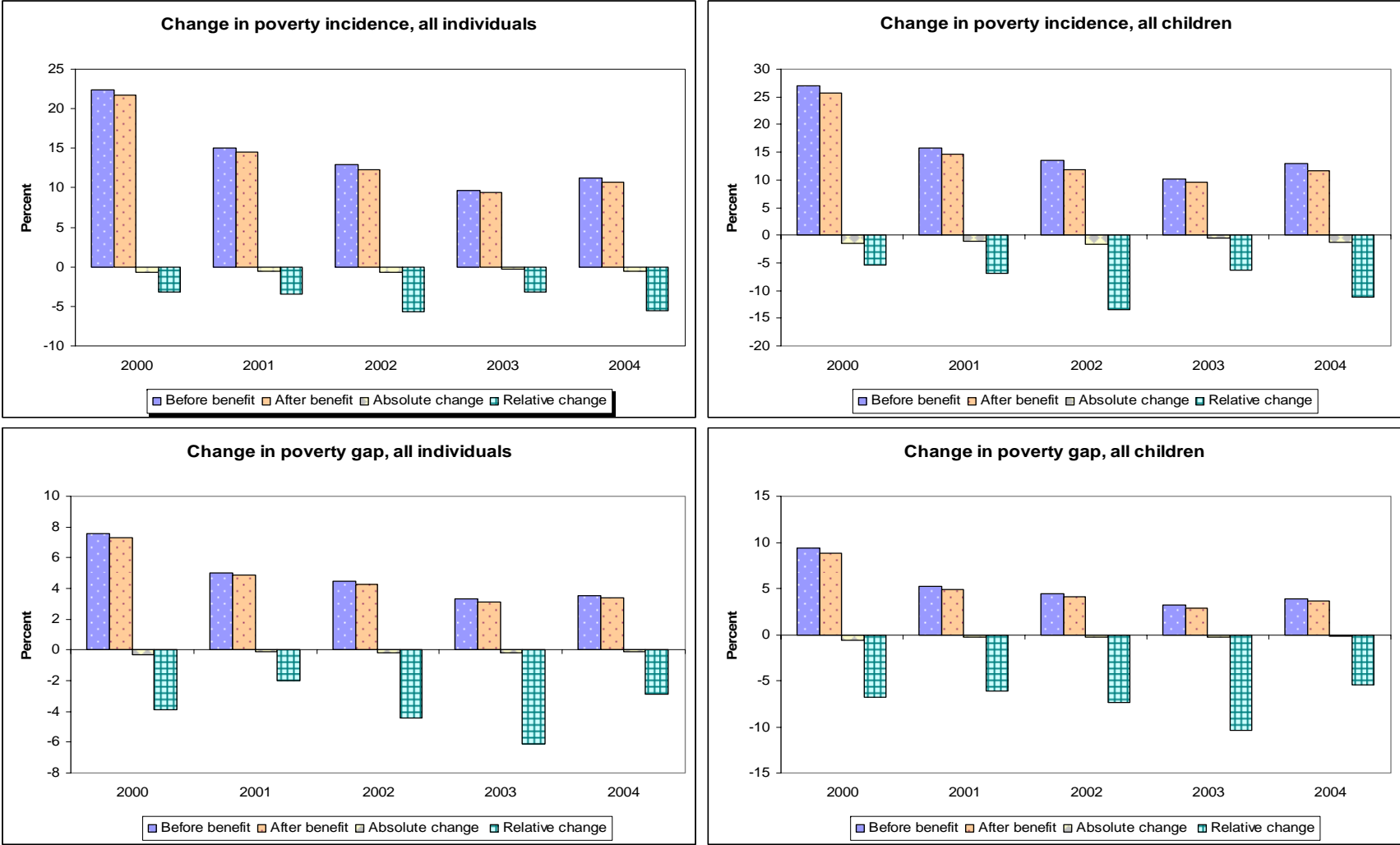
Impact of child allowances on (chronic) poverty

This section evaluates the impact of child benefits in terms of poverty from 2000 to 2004. So far we have seen that the size of child allowances is rather modest and that its real value is decreasing over time. Does this mean that the poverty reduction effect of the benefits also decreased? We analyze the impact of child benefits on poverty by comparing expenditures before and after child benefits. This is a static analysis; it does not take into account any behavioural changes of households in the absence of child benefits nor any responses to changes in the benefit level or eligibility criteria. We investigate the poverty reduction impact of the benefit on the incidence of poverty, the poverty gap and the incidence of chronic poverty, both in terms of the total population as well as children.²⁹

Figure 1 shows the pre and post benefit poverty rates as well as the absolute and relative poverty reduction effects; the reduction in poverty rates is rather small. Overall poverty reduction rates are between 0.3 and 0.7 percentage points (3.2 to 5.7%) while the reduction of child poverty for recipient households varies between 0.6 and 1.6 percentage points (5.5 to 11.1%). The impact of child allowances on the mean proportionate poverty gap among children is declining in an absolute sense; in 2000 child benefits still reduced the mean poverty gap with 0.6 percentage points compared to 0.2 percentage points in 2004. In a relative sense the poverty gap reduction varies between 5.4 and 10.3%. Changing the poverty line does not have a different effect; the percentage point poverty reductions using the 150% RLMS poverty line are of similar magnitude (not shown here).

²⁹ For the poverty gap indices we excluded households for which the reported amount of child benefits could be classified as an extreme outlier. Outliers were identified using the 'iqr' syntax in stata 9.0. 'iqr' indicates outliers as severe when they "comprise about .0002% of the normal population. In samples, they lie far out enough to have a substantial effect on means, standard deviations, and other classical statistics." (Stata 9.0 Viewer).

Figure 1: Poverty reduction impact of child benefits (100% RLMS poverty lines), 2000-2004



Source: Own calculations based on the RLMS.

Did the introduction of mean-testing influence the poverty reduction impact of these indicators? When we compare the poverty reduction effects in figure 1 using the year 2000 as a benchmark, we see that the reduction in the number of poor children is lowest in 2000 and higher in all other years (and this holds for both poverty lines). The trend in terms of poverty gap is less clear but 2000 is one of the lower years in terms of poverty gap reduction. Using the higher poverty line, the poverty gap reduction in 2000 is clearly the lowest. It is however not clear to what extent this improvement is due to the introduction of a means test or because of the large increase of overall benefit coverage. Moreover, what would be the poverty reduction impact of a universal scheme?

Even though the overall poverty reduction impact is modest for all indicators, child benefits in Russia have the largest poverty reduction impact on chronic poor children (a relative reduction of 19.3%). Without child benefits, 9.9% of the children would live in chronic poverty, but child benefits reduce chronic poverty with 1.6 percentage points to 8.3% (the reduction is similar using the higher poverty line). The % of children experiencing occasional poverty declines with 0.8 percentage points for the lower poverty line but rises with 0.3 percentage points for the higher poverty line.

Simulation alternative child benefit programs

The previous section showed that there was (some) improvement in terms of poverty reduction over time. Taking the means-testing capacities of public authorities as a given; what would be the poverty reduction effect when introducing a universal scheme? And, what impact would a change in the level of benefits have? We investigate the poverty impact of a range of alternative child benefit programs and contrast it to the current situation. We simulate 4 alternative child benefit programs: budget neutral universal benefit (42 ruble), universal benefit (70 and 140 ruble) and an means-tested benefit (140 ruble). We use the 2004 cross-section as our benchmark year because it is the most recent year. For simplicity we analyze the impact of benefits on children between 18 months old and 16 years (18 if still in high school).^{30 31} Another simplification is that under the simulated means-tested schemes the same households receive a benefit as those under the current mean-tested scheme. We thereby

³⁰ Children under 18 months receive considerably higher benefits.

assume that there are no changes in the way civil servants determine benefit eligibility. We also estimate the total benefit costs of each policy option. To obtain estimates on the costs of child benefits for each option we use the 2004 population data as provided in the UNICEF TransMONEE data (2005).³² We retrieved the 2004 GDP and social expense figures from the statistical appendix of the IMF country report on Russia (2005).

Table 6: Simulation: Poverty reduction per program type, all children³³

	100% RLMS poverty line		150% RLMS poverty line	
# of children			1,487	
# of households			1,079	
	Incidence	Poverty gap	Incidence	Poverty gap
Means tested benefits of 70 ruble per child (current situation)³⁴				
Before allowance	12.3	3.9	27.4	9.4
After allowance	12.1	3.7	26.8	9.1
<i>Absolute change</i>	-0.2	-0.2	-0.6	-0.3
<i>Relative change</i>	-1.7	-5.4	-2.2	-3.3
Universal benefits of 70 ruble per child				
After allowance	12.0	3.6	26.7	9
<i>Absolute change</i>	-0.3	-0.3	-0.7	-0.4
<i>Relative change</i>	-2.5	-8.3	-2.6	-4.4
Budget Neutral Universal benefits of 42 ruble per child				
After allowance	12.2	3.7	26.8	9.2
<i>Absolute change</i>	-0.1	-0.2	-0.6	-0.2
<i>Relative change</i>	-0.8	-5.4	-2.2	-2.2
Universal benefits of 140 ruble per child				
After allowance	11.3	3.3	26	8.5
<i>Absolute change</i>	-1.0	-0.6	-1.4	-0.9
<i>Relative change</i>	-8.8	-18.2	-5.4	-10.6
Means tested benefits of 140 ruble per child				
After allowance	11.5	3.5	26.5	8.8
<i>Absolute change</i>	-0.8	-0.4	-0.9	-0.6
<i>Relative change</i>	-7.0	-11.4	-3.4	-6.8

Source: Own calculations based on the RLMS.

The impact on child poverty and chronic child poverty under current and simulated policy options is summarized in tables Table 6 and **Error! Reference source not found.** First we analyse the effect of abolishing the means test of the current program. We envisage two

³² In 2004, Russia's population was 144 million of which 20.9% was younger than 18 years (a bit more than 30 million in absolute terms). Children under 18 months and 16/17 year old children who are not in school are thus included. This implies that we overestimate the program cost.

³³ Chronic poverty groups are based on households in 2000-2004 panel, the table reports chronic poverty estimates for the children living in either category in 2004.

³⁴ Note that the differences in poverty reduction reported in the current program and those reported in the section on poverty impact arise. Firstly, because in this section we exclude children aged less than 18 months and the child benefits distributed to these children. Secondly, we replaced the reported benefit amount by 70 ruble per child because we did not want measurement error in the reported benefits to have an influence on the comparison with the other simulated programs.

situations here, one in which we keep the level of child benefits at its current level of 70 ruble per child, and the other one in which we adjust the benefit level such that the impact on total benefit expenditures is neutral. In comparison to the current program, poverty incidence and poverty gap among children would be further reduced with 0.1 percentage point with the 70 ruble universal benefit scheme (irrespective of the poverty line used). For the budget neutral scheme, the poverty reduction effects are equal or less as compared to the current means-tested scheme. The 70 ruble universal scheme also further reduces chronic and occasional poverty while the effects of the budget neutral scheme are less clear cut. Table 8 summarizes the total benefit expenditures per scheme. We estimated current expenditures on child benefits by multiplying the number of children in Russian with the child coverage rate and the legal nominal benefit per child (70 ruble). Expenditures in the current program reported are about 1,300 million ruble, only 0.008% of Russia's nominal GDP in 2004 and 0.08% of subsidies and transfers. Benefit expenditures would rise with approximately 162% for in the 70 ruble universal scheme.³⁵

So far we have seen that the overall poverty reduction impact of the 70 and 42 ruble schemes is modest. We therefore also investigated the impact of doubling of child benefits from 70 to 140 ruble. For the means tested scheme we assume that the households currently receiving a child benefit will also receive the doubled child benefit. This, in fact, may lead to an underestimation in the poverty reduction effect as well as in the estimated program costs as the benefit increase is likely to induce more households to file an application. We do not take these second order effects into account. As expected the poverty reduction effects of both means tested and universal schemes increases as compared to the current scheme. The absolute poverty reduction effect of the universal scheme is doubled (or more) for both poverty indicators and both poverty lines. Again, the universal scheme outperforms the means-tested scheme. The effects are similar for chronic poverty, particularly the chronic poor benefit from an increase in the benefit level. Total benefit expenditures more than triple under the 140 ruble universal scheme as compared to a doubling of the means tested scheme.

³⁵ We assumed 100% take up rates under the universal schemes. Although it is not likely that take up rates would become 100% Take up rates typically depend on a range of cultural and program characteristics. For instance the low level of the benefit, high (opportunity) costs applying, feelings of shame, lack of information or bureaucratic procedures might prevent eligible households to apply for a benefit (Coady et al, 2004A). As such, the estimates are an upper bound.

These simulations illustrate a number of relevant issues. Clearly, total benefit expenditures on benefits are higher under universal programs and, in this respect, less efficient. A point that received far less attention in the universal – means tested debates is that when targeting is not perfect (i.e. there are errors of exclusion), universal schemes outperform means tested schemes in terms of poverty reduction. The additional poverty reduction is achieved because those who were by error excluded under the means tested scheme now do receive a benefit. While keeping the capacity of means testing constant, this paper estimated and compared both effects. The results also show that the difference in poverty reduction effect between means tested and universal benefits increases as the benefit level increases. Whether the additional benefit expenditures are worth the extra poverty reduction, is a decision to be made by society.

Table 7: Simulation: Reduction in chronic poverty, all children, 2004³⁶

Change	100% RLMS poverty line		150% RLMS poverty line	
	Absolute	Relative	Absolute	Relative
# of children			1,319	
# of households			948	
Means tested benefits of 70 ruble per child (current situation)				
Always poor	-0.6	-40.0	-0.1	-1.3
Usually poor	-0.6	-8.5	-1.1	-6.1
Occasionally poor	0.3	0.9	0.6	1.5
Never poor	0.9	1.6	0.6	1.8
Universal benefits of 70 ruble per child				
Always poor	-0.6	-40.0	-0.5	-6.7
Usually poor	-0.8	-11.6	-1.1	-6.1
Occasionally poor	-0.7	-2.1	0.4	1.0
Never poor	2.1	3.7	1.2	3.4
Budget Neutral Universal benefits of 42 ruble per child				
Always poor	0.0	0.0	-0.4	-5.3
Usually poor	-0.9	-13.2	-0.4	-2.2
Occasionally poor	-0.1	-0.3	0.3	0.8
Never poor	1.2	2.1	0.5	1.5
Universal benefits of 140 ruble per child				
Always poor	-0.7	-50.0	-0.8	-11.1
Usually poor	-1.6	-26.2	-2.2	-13.1
Occasionally poor	-2.1	-6.4	0.8	2.0
Never poor	4.5	7.5	2.2	6.1
Means tested benefits of 140 ruble per child				
Always poor	-0.7	-50.0	-0.3	-3.9
Usually poor	-1.1	-16.7	-2.0	-11.8
Occasionally poor	-0.5	-1.5	1.3	3.2
Never poor	2.4	4.2	1.0	2.9

Source: Own calculations based on the RLMS.

³⁶ For the chronic poverty impact we use the 5-year panel. For 2000-2003 we cannot distinguish between child benefits received for children under and over 18 months age. Therefore, the chronic poverty simulations also incorporate children less than 18 months. These children receive the same benefit as the older children.

An important limitation of our simulations is that we can only speculate what the effect of these schemes would be on program's administration costs. Moving from the current scheme to the 70 ruble universal benefit scheme would have two opposing effects; firstly administration costs rise as more households apply under the universal child benefit scheme and secondly, the abolishment of the income test will reduce the workload per application. With current coverage rates (56% of the *households*), local administration offices can expect an increase in applications of 79% (if every household with children in this category would actually apply). It is *a priori* not clear whether the increment in administration costs due to more applications outweighs the decreased costs due to a reduced workload. A doubling of in the benefit level will increase administrative costs in both scenarios compared to current expenditures on administration; even comparing to the current scheme higher benefits induce more households to file an application, even if the scheme is means tested.

Table 8: Monthly expenditures on child benefits by program³⁷

Program	Benefit per child	Total benefits¹	% of current program	% of GDP	% of social expenses
Current means tested benefits	70 ruble	1,300	100	0.008	0.8
Universal benefits	70 ruble	2,100	162	0.013	1.4
Budget neutral universal benefits	42 ruble	1,300	100	0.008	0.8
Universal benefits	140 ruble	4,200	323	0.025	2.7
Means tested benefits	140 ruble	2,600	200	0.016	1.7

¹ In million ruble and rounded to 100.

Source: Own calculations based on the RLMS.

Conclusion

Using the 2000 introduction of means tested child benefits in Russia as a case study; this paper assessed the impact of a policy change from universal to means-tested child allowances in terms of targeting efficiency and poverty reduction. We focused on the core costs of targeting, namely leakage, exclusion errors and program costs, and related these to the benefits in terms of poverty reduction. Our analysis has been comprehensive; using both the cross-section and panel dimensions of the Russia Longitudinal Monitoring Survey (RLMS) from 2000 to 2004, we investigated changes in targeting efficiency and poverty reduction over time. We measured targeting efficiency using coverage and adequacy indicators; by calculating these indicators for two poverty lines and the quintiles of the expenditure

³⁷ GDP in 2004: 16,751 billion ruble; Federal Government expenditures on social policy: 154 billion ruble (IMF, 2005; p. 3 and p. 19).

distribution we gained insight in the scope of inclusion and exclusion errors. The poverty reduction impact was measured in three dimensions; poverty incidence, poverty gap and chronic poverty. Finally, we also simulated various means tested and universal child benefit schemes and analyzed differences in poverty reduction and total benefit expenditures.

The poverty analysis showed that since 2000 all poverty indicators declined until 2003, and rose again in 2004. Depending on the survey year, children have a higher than average or average poverty risk in terms of poverty incidence and poverty gap. From a more dynamic perspective, we found that children are more likely to live in chronic poor and occasionally poor households. The analysis of targeting efficiency showed an improvement in overall coverage rates (more children receive child benefits) and evidence of improved targeting to children living in low income households (poor children or children in lower expenditure deciles are more likely to receive benefits). Nevertheless, in 2004 one third to a quarter of the poor children does not receive benefits while about 50% of the benefits leak to the three highest expenditure quintiles.

The poverty reduction of child benefits has been very modest over the whole period. However, we found some evidence that the poverty reduction effect of child benefit increased somewhat as compared to the benchmark year (2000). It is not clear to what extent this improvement was the results of the introduction of a means test or because of the large increase of overall benefit coverage. The simulations of universal and means tested schemes for 2004 showed that when targeting is not perfect (i.e. there are errors of exclusion), universal schemes achieve additional reductions in poverty because those who were by error excluded under the means tested scheme now receive a benefit. Doubling benefits makes the poverty reduction impact more substantial. At the same time, differences in poverty reduction effect between means tested and universal benefits increase as the benefit level increases. We also estimated the total benefit expenditures for the simulated programs.

One qualification of this study is that we did not investigate the effect of incentives, social and political targeting costs because of data limitations. We measured the program impact in terms of poverty but child benefit programs can also have other objectives. In his state of the nation's address in 2006, president Putin explicitly mentioned the problem of low fertility rates in Russia and he proposed benefit increases over the whole range of family programs

(maternity leave, birth grants and child benefits).³⁸ Another issue is that in this case study we hold the targeting capacity of the benefit providers constant. Differences in the targeting capacity between countries and/or institutions alter the targeting and poverty reduction results. Moreover, targeting capacities can improve over time. And finally, how administration costs differ under means tested and universal schemes remains an issue for further research.

To what extent is a means test of child benefits in Russia desirable? We show that abolishing means testing would improve the (chronic) poverty reduction performance of child allowances, but doubling the benefit would have an even stronger effect. We find it difficult to argue why a program with benefits as low as current benefit levels, should be means tested. Given the characteristics of the expenditure distribution in a country such as Russia, where inequality is high and the welfare differences between households at the lower end of the distribution are small, many benefits leak to ‘near’ poor households. Leakage is also lower because households with children are disproportionately more present at the lower part of this distribution. Moreover, the road of economic transition in Russia has been rather bumpy and led to a surge in uncertainty, also in terms of living standards. In that respect, even when child benefits are modest, they can assist families with children to smooth consumption by providing a stable source of cash income (Notten and de Crombrugghe, 2006). Universal benefits would also be more appropriate if Russia wants to counteract the decreasing fertility rates.

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³⁸ The full text of the speech is available on Mosnews.com as of 11 May 2006. (<http://www.mosnews.com/column/2006/05/11/PutinAddress.shtml>, accessed in September 2006).

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Appendix

Table 9: Household characteristics in RLMS cross-section

	2000	2001	2002	2003	2004
# of households in cross-section	3,094	3,203	3,206	3,176	3,114
Dwelling place (%)					
Urban	65.9	67.2	68.1	65.1	64.7
Rural/Semi-urban	34.2	32.8	31.9	34.9	35.3
Children (<18) in household (%)					
0	55.0	57.0	57.1	58.5	61.7
1	28.2	27.5	27.9	27.3	25.7
2	14.2	13.2	12.5	11.8	10.5
3 or more	2.6	2.3	2.4	2.4	2.1
Elderly in household (%)					
0	52.6	52.8	51.9	51.7	50.6
1	31.5	32.0	32.4	32.9	34.3
2 or more	16.0	15.2	15.7	15.5	15.1
Household type (%)					
Single person household	20.3	21.5	21.1	22.1	23.9
Couple no children	21.5	20.9	20.6	20.9	21.1
Single caretaker & children aged between 1.5 & 18	4.6	4.4	4.7	4.2	4.2
Parents & children aged between 1.5 & 18	19.5	18.3	17.4	17.6	16.5
Triple generations & children aged between 1.5 & 18	8.6	8.0	8.2	8.4	7.7
Other households & children aged between 1.5 & 18	8.2	8.5	7.9	7.1	5.6
Other households	17.4	18.4	20.1	19.9	20.9
Distribution (mean per capita expenditures per quintile in real 1992 ruble)					
I	643	774	805	910	857
II	1,252	1,509	1,577	1,673	1,632
III	1,836	2,180	2,282	2,417	2,385
IV	2,661	3,220	3,306	3,519	3,483
V	7,072	7,718	7,913	9,469	9,170

Source: Own calculations based on RLMS.

Table 10: Household characteristics in RLMS panel

	2000	2001	2002	2003	2004
# of households in panel	2,458				
Dwelling place (%)					
Urban	61.1				
Rural/Semi-urban	38.9				
Children (<18) in household (%)					
0	51.2	53.6	54.9	55.9	58.9
1	30.0	29.1	29.1	29.1	27.2
2	15.3	14.1	12.8	12.0	11.3
3 or more	3.5	3.2	3.2	3.0	2.6
Elderly in household (%)					
0	55.6	54.9	52.4	51.8	50.6
1	28.0	29.0	30.6	32.0	33.0
2 or more	16.4	16.9	17.0	16.2	16.4
Household type (%)					
Single person household	15.8	16.7	17.8	19.2	20.5
Couple no children	22.7	23.0	22.6	21.9	22.1
Single caretaker & children aged between 1.5 & 18	4.7	4.4	4.8	4.3	4.2
Parents & children aged between 1.5 & 18	22.6	21.6	20.8	20.0	19.2
Triple generations & children aged between 1.5 & 18	8.9	8.5	8.5	8.3	8.2
Other households & children aged between 1.5 & 18	8.4	8.3	7.4	7.4	6.0
Other households	17.0	17.5	18.5	18.9	19.8
Distribution (mean per capita expenditures per quintile in real 1992 ruble)					
I	614	756	730	852	805
II	1,189	1,436	1,468	1,566	1,529
III	1,759	2,041	2,118	2,242	2,224
IV	2,518	2,954	3,017	3,247	3,184
V	6,364	6,411	6,931	8,203	7,090

Source: Own calculations based on RLMS.