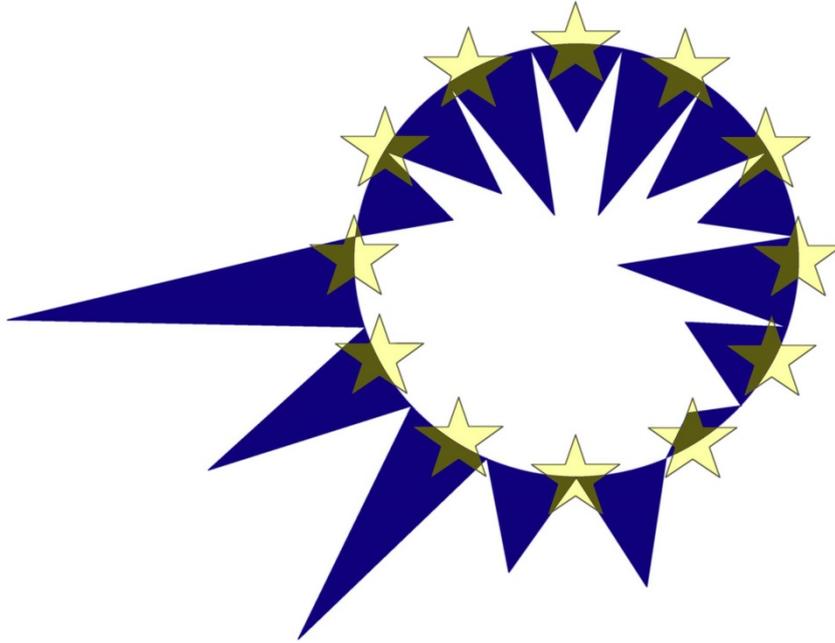


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**Distributional impacts of cash allowances for children:  
a microsimulation analysis for Russia and Europe**

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# Distributional impacts of cash allowances for children: a microsimulation analysis for Russia and Europe<sup>1,2</sup>

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## Abstract

This paper analyses programmes of cash allowances for children and compares their effectiveness in combating child poverty in Russia and four EU countries – Sweden, Germany, Belgium and the United Kingdom. These countries are selected as representatives of alternative family policy models. Using microsimulation models (RUSMOD and EUROMOD), this paper estimates the potential gains if the Russian system were re-designed along the policy parameters of these countries and vice versa. Such an exercise rests on the idea of policy learning and provides policy relevant evidence on how a policy would perform, given different national socio-economic and demographic settings. The results confirm that the poverty impact of the program design is smaller than that of the level of spending. Other conditions being equal, the best outcomes for children are achieved by

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<sup>2</sup> This paper used RUSMOD and EUROMOD version F6.0. RUSMOD has been constructed using the EUROMOD platform (version F5.37). EUROMOD is continually being improved and updated and the results presented here represent the best available at the time of writing. Any remaining errors, results produced, interpretations or views presented are the author’s responsibility. The process of extending and updating EUROMOD is financially supported by the Directorate General for Employment, Social Affairs and Inclusion of the European Commission [Progress grant no. VS/2011/0445]. We make use of micro-data from the EU Statistics on Incomes and Living Conditions (EU-SILC) made available by Eurostat under contract EUSILC/2011/55 and contract EU-SILC/2011/32. The usual disclaimers apply.

applying the mix of universal and means-tested child benefits, such as those employed by the UK and Belgium. At the same time, the Russian design of child allowances does not appear to be less effective in terms of its impact on child poverty when transferred to European countries in place of their current arrangements.

**JEL Classification:** C81, D31, I38

**Keywords:** family policy; child benefits; microsimulation; Russia.

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## 1. Introduction

In the last two decades the level and evolution of child<sup>3</sup> well-being and poverty have become an important concern for social policy all over the world (Bradbury and Jantii 1999; Bradshaw and Finch 2002; Chen and Corak 2005; UNICEF 2005; Bradshaw, Hoelscher et al. 2007; UNICEF 2007; Richardson, Hoelscher et al. 2008; OECD 2009; Bradshaw 2010; UNICEF 2013). In most OECD countries child poverty rates are higher than overall population poverty rates, though there are significant cross-country variations in the extent and intensity of poverty (Rainwater and Smeeding 1995; Bradbury and Jantii 1999; UNICEF 2005; UNICEF 2006; Richardson, Hoelscher et al. 2008). Especially children in lone parent and large families are the subject of policy concern due to their overrepresentation among the poor (Misra, Moller et al. 2007; Van Lacker, Ghysels et al. 2012).

The growth in child poverty has been a result of the combined impact of three factors – socio-demographic trends, labour market conditions and government policies (Chen and Corak 2005; UNICEF 2005). The latter can be a decisive factor in guaranteeing the material well-being of children when the labour market has failed to provide them with the required means. Higher government spending on social programs for families with children is clearly associated with lower absolute and relative child poverty rates. At the same time, the variation in the way the national social protection programs are structured and delivered appears to account for most of the variation in child poverty in Europe (Bradshaw, Ditch et al. 1993; Bradshaw and Finch 2002; UNICEF 2005; OECD 2009; Bradshaw 2010). For example, the analysis by Bradshaw, based on EU-SILC, showed that the league table of child poverty rates in the EU would be very different if child poverty was measured before transfers – just on the basis of market incomes. The Scandinavian countries have much lower post-transfer poverty rates than the Southern and Eastern European countries, because their family policies are much more effective in reducing poverty.

Most research on the poverty effectiveness of state policies for children and families has concentrated on OECD countries and ‘old’ EU member states. Research on family policies and child well-being in Russia is still quite rare, with few examples (IBRD/WB 2002; Ovcharova and Popova 2005; Ovcharova, Popova et al. 2007; UNICEF 2007; UNICEF

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<sup>3</sup> Throughout this paper a child is defined as an individual who is 0 to 18 years of age, unless indicated otherwise.

2011). The country though is highly interesting not only because of the fast changing socio-economic environment and demographic conditions, but also because of the unique combination of the socialist legacies and recent developments in family policy.

Compared to EU countries, Russia performs below average in all dimensions of child well-being and poverty, especially in terms of its economic situation and its health outcomes (UNICEF 2011). Negative child welfare developments in Russia are consequences of the economic crisis of the 1990s, which resulted in large-scale low-paid employment and a reduction in statutory support to families. In a relatively short period of time Russia has moved from a centrally managed universal welfare provision to a residual neo-liberal welfare model (Manning and Tikhonova 2004; Titterton 2006; Cook 2007; Cerami 2009). The gap between children and the rest of the society continued to grow during 2000s, despite a twofold decline in the overall poverty headcount. Children ended up being the poorest group in society. As of 2010 the risk of being poor is 50% higher for children than for the whole population; more than 40% of families with 3+ children are poor; and even a low dependency load does not serve as a reliable shield from poverty (25% of two-child and 20% of one-child families are poor).

The forthcoming demographic crisis became the main motivation behind the major revision of government financial measures concerning families with children in 2007. Although these reforms should be treated as a serious achievement after 15 years of disregard of this area, they have improved the financial situation of a very small group of families with children, while the majority are left without any significant state support (Ovcharova, Popova et al. 2007). The twofold reduction in the poverty headcount between 2000 and 2008 can be mainly attributed to the favourable macroeconomic background. The present Russian social protection system is characterised by poor funding, low level of social assistance, bad targeting performance and insufficient supply and quality of childcare institutions. The decentralization of social protection achieved through a series of major reforms in 2005 has contributed to a further growth of the disparity in the well-being of children living in different regions of Russia.

All in all, it is unlikely that a large-scale reduction of child poverty in Russia could be achieved without a major tax-benefit reform, including a significant increase in spending on family, and child-targeted policies. Economic growth and a reduction in the overall poverty rate would not by themselves ensure improvement of child well-being outcomes and compensate for the deficiencies of the past. A coordinated set of policies has to be designed

and implemented, as part of a national child well-being reform strategy, in order to reduce poverty among families with children.

This paper analyses the Russian situation within a comparative settings. The focus is on programs of cash allowances for children and this study compares their effectiveness in combating child poverty in Russia and four EU countries – Sweden, Germany, Belgium and the United Kingdom (UK). These countries are selected as representatives of alternative family policy models (Gauthier 1996; Gauthier 2000). Using the microsimulation models (RUSMOD and EUROMOD), this paper estimates the potential gains if the Russian system were re-designed along the policy parameters of these countries and vice versa. Such an exercise rests on the idea of policy learning and provides policy relevant evidence on how a policy would perform, given different national socio-economic and demographic settings. The results confirm that the poverty impact of the program design is smaller than that of the level of spending. Other conditions being equal, the best outcomes for children are achieved by applying the mix of universal and means-tested child benefits, such as those employed by the UK and Belgium. At the same time, the Russian design of child allowances does not appear to be less effective in terms of its impact on child poverty when transferred to European countries instead of their current arrangements.

The rest of the paper is structured as follows. Section 2 discusses the theoretical framework of cross-country comparative analysis of policies targeted at families and children. Section 3 explains the methodology of policy swaps using the microsimulation models. Section 4 presents and analyses the results of microsimulation. Section 5 concludes and suggests some policy lessons.

## **2. The theoretical framework**

Any policy intervention or programme seeks to make some positive changes in the well-being of intended beneficiaries. This study focuses on *indicators of material well-being*, in particular the distribution of disposable income and income poverty. The child's family income is a key dimension and is widely known to be correlated to other aspects of well-being (UNICEF 2007; Richardson, Hoelscher et al. 2008; OECD 2009). The existing evidence suggests that there is a causal relationship between growing up in poverty and life chances of children, especially in terms of educational and cognitive outcomes and that the causal relationship is likely to be stronger early in the life course (Duncan, Yeung et al. 1998;

Phipps 1999; Conti and Heckmann 2012). Hence, increasing the income of families of young disadvantaged children is likely to be a key part of any portfolio of policy solutions to improve child well-being outcomes.

Apparently, there is no single road to lower child poverty rates. Outcomes in terms of child poverty rates are strongly associated with the national model of family policy (Adam, Brewer et al. 2002; Chen and Corak 2005; UNICEF 2005; Esping-Andersen 2009; Bradshaw 2010). Models of family policy in Europe are complex, and authors disagree as to where particular states should be located in welfare regime groupings, because of differences in the specific aspects of family policy emphasized in their frameworks (Lewis 1992; Orloff 1993; Lister 1994; Gauthier 1996; Taylor-Gooby 1996; Rostgaard and Friedberg 1998; Hantrais 1999; Hantrais 1999; Sainsbury 1999; Gauthier 2000; Korpi 2000; Lewis 2001; Bambra 2004; Hantrais 2004; Pascall and Lewis 2004; Lewis 2006). In general, various classifications of family policy regimes cross-cut the traditional welfare regime categorisation created by Esping-Andersen (Esping-Andersen 1990), by emphasizing the divisions between different conservative countries.

The aspiration to achieve a set of political goals minimizing the costs of the means applied (or efficiency) provides stimulus to cross-country policy learning (Walker 2005). Policy learning takes various forms – from simply reviewing the policy of another jurisdiction to policy transfer, whereby one jurisdiction borrows an entire policy from another, including its objectives, content, institutions and mode of implementation. Typically, governments stop somewhere in between these extremes, adopting those elements of a policy that fit best with the local environment. International organizations such as OECD, United Nations and European Union (EU) have played a crucial role in popularizing the *best practices approach*, which became one of the most prominent evaluation strategies in public policy by the end of 1990s. For example, the Open Method of Coordination applied for social policy at EU level promotes the cross-national exchange of experience in policy-making and distribution of the examples of the best practice (the most effective and efficient policy interventions) in dealing with poverty and social exclusion. In respect to family policy, there are at least two common trends across the EU: firstly, an increased emphasis on means-tested benefits and support for low-income families; and, secondly, a significant increase in the levels of support for working parents (Gauthier 2000).

This study applies the *best practices* approach in order to identify the tax-benefit reforms that could improve the economic well-being of families with children in Russia based on the

European experience. In particular, the study employs the framework by Gauthier which identifies four distinct models of family policy that have emerged in Europe (Gauthier 1996; Gauthier 2000). The advantage of this framework over other options proposed in the relevant literature is that it emphasizes the causal link between the objectives of family policies, the instruments applied and the actual policy outcomes, which makes it the most robust framework in the context of impact evaluation. Four European countries – Sweden, Germany, Belgium and the UK – were selected as the representatives of alternative family policy models. The objectives and design of family policy in these countries and in Russia are summarized in Table 1. The main policy indicators calculated for European countries and for Russia are shown in Annex, Table A1. By European standards Russia spends little on family related policies (1.8% of GDP in 2010 compared to 2.3% on average for 27 EU countries) and even less on cash benefits for families with children (0.6% of GDP versus the EU average of 1.46%).

Table 1: Comparison of various models of family policy in the selected countries

<i>Country</i>	Sweden	Germany	Belgium	UK	Russian Federation
<i>Family policy regime</i>	pro-egalitarian	pro-traditional	pro-natalist	non-interventionist	non-interventionist with pro-natalist rhetoric
<i>Policy objectives</i>	promote gender equality	preserve traditional family	raise fertility rates	maintain minimum intervention to families	raise fertility rates
<i>Level of support:</i>					
<i>Support for working parents</i>	High	Medium	Medium	low	Low
<i>Cash benefits</i>	Medium	High	High	medium	Low
<i>Child care services</i>	High	Low	High	low	medium
<i>Universalism/selectivity</i>	Universal	mostly universal	universal and means-tested	mostly means-tested	universal and means-tested

Source: Own analysis based on Gauthier's typology (Gauthier 1996).

This study is aimed at assessing the impact of *cash transfers for families with children*. First of all, these policies directly affect the dependent variable – the material well-being of children – and shape outcomes such as poverty and inequality. Secondly, cash transfers can be quantified and measured at the micro-level and hence can be used in cross-country analysis. Thirdly, they arguably demonstrate the highest level of diversity across European welfare states. Non-cash benefits as a percent of GDP are far more equal across nations than are cash benefits (Smeeding and Rainwater 2002).

The ongoing debate has focused on the questions of whether the benefit amounts should vary by number and age of children, and family type (Bradshaw, Ditch et al. 1993; Middleton, Ashworth et al. 1997; Saunders 1999; Bradshaw and Finch 2002; Bradshaw 2006; Folbre 2008; OECD 2009; Bradshaw 2010); whether they should be universal or means/wealth-tested (Skocpol 1991; Gelbach and Pritchett 1995; Korpi and Palme 1998; Moene and Wallerstein 2001; Oorschot van 2002; Pritchett 2005); and whether their funding and delivery should be centralized or decentralized (Castles 1999; Pierson 2001; Ferrera 2005; McEwen and Moreno 2005; Obinger, Leibfried et al. 2005; Dubois and Fattore 2009; Glennerster 2009). This debate provides multiple alternatives for policy reforms in Russia.

The final child poverty outcomes are though highly country specific due to complexities of the overall national policy systems, socio-demographic environments and original income distributions. The poverty impact of these interlinked factors cannot be assessed by other means apart from microsimulation models. Using microsimulation models helps to highlight the role of the existing policy instruments, as well as to test hypothetical policy designs – usually a complex task due to numerous interactions within the tax-benefit system and the effects of various counterfactuals. Three studies are particularly interesting in this respect: all of them are aimed at disentangling the effect of the national policy designs on child poverty outcomes. Levy has evaluated the poverty effectiveness of Spanish state support to families by ‘borrowing’ family policies from Denmark, Germany, France and the UK, introducing them to Spain and comparing their effects with those of the original system (Levy 2003). Later this approach was replicated in Poland with Austria, UK and France serving as models of child targeted policies (Levy, Morawski et al. 2008). Recently, a similar study aimed at estimating the effects of government policies on child poverty reduction has covered five New Member States of the EU (Salanauskaite and Verbist 2011). This paper takes a similar approach in Russia. The main question is whether or not the amount of resources spent on cash family allowances could bring about greater improvements in child well-being outcomes

had they been channeled differently, e.g. using policy designs adopted by the European countries.

### 3. Methods and data

This paper uses EUROMOD – the static tax-benefit model of the EU (Sutherland 2001; Lietz and Mantovani 2007; Sutherland, Figari et al. 2008; Figari and Sutherland 2013) and RUSMOD – the static tax-benefit model for Russia which is fully compatible with EUROMOD (Popova 2013). Table 2 describes EUROMOD input data. For Russia, they are derived from the national household survey RLMS-HSE. Sweden, Germany and Belgium use EU-SILC as a basic input dataset. The UK uses a national household survey – the Family Resources Survey 2008/2009. For all countries the policy systems of 2010 are simulated and used here. Whenever income reference dates are ‘older’ than the analyzed policies, the adjustment factors are used to update income levels to a respective policy year. For example, in the British model the policy rules of 2010 are applied to the population of 2009, but with income levels updated to 2010. For Sweden, Germany and Belgium the policy rules for 2010 are applied to the population of 2008 with the income reference period of the year 2007. In Russia the policy year simulated and the income reference period are the same (2010), so updating was unnecessary.

Table 2: The EUROMOD datasets of the selected countries

<i>Country</i>	Sweden	Germany	Belgium	United Kingdom	Russian Federation
<i>Policy year</i>	2010	2010	2010	2010	2010
<i>Source database(s)</i>	EU-SILC	EU-SILC	EU-SILC	Family Resources Survey	RLMS-HSE
<i>Period of data collection</i>	January-December 2008	April-August 2008	July-December 2008	April 2008 - March 2009	October-December 2010
<i>Income reference period<sup>4</sup></i>	2007	2007	2007	2008-2009	2010

<sup>4</sup> It is important to note that in the Russian and the UK data the income reference period is the previous month, whereas in the other countries annual income is used. At the same time, the income for means-tests is measured

<i>N of households</i>	7,491	13,312	6,300	25,088	6,324
<i>N of individuals</i>	18,663	28,904	15,108	57,276	16,918

Source: EUROMOD country reports, see: <https://www.iser.essex.ac.uk/euromod/resources-for-euromod-users/country-reports>

In each country families with dependent children may be eligible for a number of social transfers that are listed in Annex, Table A2. Only those policies that are targeted at families with children, and are available in EUROMOD are included in the table. Currently, EUROMOD neither includes nor simulates in-kind benefits or public services. Due to the lack of data (e.g. on contribution history, past earnings), some of the cash allowances that appear in the table could not be simulated in some/all countries. Thus, suitable for replicating are *cash allowances and tax credits* that are: (1) formally targeted at families with children; (2) provided on a regular basis (i.e. each week or month); and (3) simulated in all five countries under study. In Annex, Table A2 they are highlighted in grey. Table 3 summarizes each country’s approach regarding cash allowances and tax credits for children, in detail.

Table 3: The design of child cash allowances/tax credits in the selected countries

	<b>Sweden</b>	<b>Germany</b>	<b>Belgium</b>	<b>United Kingdom</b>	<b>Russian Federation</b>
<i>Design</i>	Centralized	Centralized	Centralized	Centralized	Decentralized
<i>Type of allowance</i>	Only universal allowance	Universal allowance + income-tested allowance	Universal allowance + income-tested allowance	Universal allowance + income-tested tax credit	Only income-tested allowance
<i>Benefit unit</i> <sup>5</sup>	Nuclear family	Nuclear family	Nuclear family	Nuclear family	Nuclear family

over the different period (for example, in Russia it is either 3 or 6 months). Due to differences in the income reference periods, the eligibility for means-tested benefits could be both over- and under-estimated during the cross-country policy ‘swaps’.

<sup>5</sup> It is worthy to note that child allowances tend to be targeted on nuclear families, while poverty measurement depends on income of the wider household. This may affect the poverty estimates, as far as multi-generation or other complex households are concerned. This is particularly important for Russia, where the multi-generation households are more widespread than in Western Europe.

	Sweden	Germany	Belgium	United Kingdom	Russian Federation
<i>Child age threshold</i>	16 years (18 if in secondary school)	18 years (25 if in full-time education and does not earn more than a specified amount)	18 years (25 if in full-time education, not married and does not earn more than a specified amount)	16 years (19 if in school)	16 years (18 if in full-time education)
<i>Changes in amounts by:</i>					
<i>the number of children in family</i>	Decreases with each additional child	Increases starting with the 4 <sup>th</sup> child	Increases with each additional child until the 4th one	Decreases with each additional child	Increases starting from the 3d child in several regions
<i>the age of the child</i>	Increases with age	No	Increases with age	Increases for children under 1 year	Increases in several regions
<i>the type of family</i>	No	No	Supplement for lone parents	Supplement for lone parents	Supplements for lone parents

Source: EUROMOD and RUSMOD policy rules

Most child related policies in Sweden are aimed at dependent children under 18. The assessment unit is the nuclear family, including cohabiting parents and their dependent children. The core of the system is the universal monthly *child benefit*. The basic amount is paid to all families with children under 16 years, or 18 years if they are in upper secondary school. From the second child on, a supplement is paid in addition to the basic amount. The supplements get smaller with each additional child, assuming decreasing ‘marginal costs of children’. Children aged 16-20 and studying in upper secondary school receive the basic amount (called a study allowance) only for 10 months during a year. This benefit is not taxable.

In Germany the universal non-taxable *child benefit* is paid to one of the parents of a dependent child up to 18 years (or up to 25 years if the child is still in tertiary education and his/her own income does not exceed a certain amount). No age limit applies if the child is disabled. The amount per child is the same for the first three children and is higher by about

15% for the fourth and subsequent children. Instead of the benefit, parents may opt for the *child tax allowance* if this is more beneficial. The latter is provided on an annual basis to each parent (or double the amount, if claimed by one parent only) and since 2000 includes the childcare element. There is also the *additional child benefit*, which is supposed to help families which are in receipt of the *child benefit*, but whose income after means-tested social assistance and housing benefit is still not sufficient to cover the needs of the dependent children entirely. To be eligible, a child must be 25 or younger, and, in addition, to be unmarried and to live in the same household as her/his parents. The receipt is conditional on the household income falling within the relevant income range.

In Belgium children are considered as dependent if they are younger than 18 years, or 25 years if the child is in full-time education, unmarried and does not earn more than a certain amount. The assessment unit throughout the system is the nuclear family. The *insurance-based child allowance* is provided to parents with a sufficient contribution record. If the parent has not contributed to any social security schemes, she/he might be entitled to the *guaranteed child allowance*, which is means-tested. The amounts paid are basically the same for both allowances. The amount paid per child increases with the rank of the child within the family. There are age-related supplements (implying higher costs of older children) and social supplements (e.g. for children whose parents receive a replacement income, such as pensions, unemployment benefits, etc.). The latter are provided if the family income does not exceed a certain limit. Child allowances are not included in any means-test and are not taxable.

The British package for families includes a universal *child benefit* paid to every child below the age of 16, or 19 if in full-time education. The assessment unit is, again, the nuclear family – a cohabiting couple or a single adult plus any dependent children. The child benefit is topped up by the income-tested, refundable *child tax credit*, which has replaced all the child related supplements paid previously under other social assistance programmes. Although called a tax credit, in fact this is a cash benefit calculated on the basis of the previous tax year's annual income. The maximum for the child tax credit is the sum of the 'family element' (doubled if one child is aged below 1 years old) and the 'child element' paid for each child in the family. Children with disability are entitled to additional payments. The child tax credit is provided to all families with children, regardless of whether they are in employment or not. However it is gradually withdrawn if the taxable income exceeds the established upper limits.

In Russia, for benefit system purposes, dependent children are defined as those aged under 16, or 18 if they are in full-time education. The upper age limit can be raised up to 23 years for children with disabilities studying full-time. Families with children of qualifying age are entitled to the *child allowance* if their income is below the official poverty line. The income assessment unit is the nuclear family. The income test includes net earnings and all types of replacement income, such as unemployment benefit, maternity leave allowance, pensions and child maintenance. The size of the benefit is defined by the regional authorities and thus varies from region to region. In most regions lone-parent families are entitled to higher benefit amounts. In some regions the benefit amounts are increased for children from large families and for families with disabled children or parents.

To summarize, all European countries under study have a unified national design for programmes of child allowances. It is only in Russia that this programme is decentralized. For the purposes of cross-country comparisons, this paper does not take into account the variation in programme rules across Russian regions, assuming that the average amounts apply in all regions<sup>6</sup>. In relation to the discussion on universalism and targeting as modes of welfare allocation, Sweden and Russia represent, respectively, a purely universal and purely selective approach, as far as child allowances are concerned. The other cases use a mix of universal and means-tested programmes. Germany leans towards a universalistic approach, with a small proportion of means-tested benefits. Belgium, with equally important universal and means-tested elements, is in the middle of the said continuum. The UK relies heavily on means-testing, providing a small flat-rate universal benefit for all children.

The simulation scenarios are described below. It is important to stress that static microsimulation models, such as EUROMOD and RUSMOD, can only predict the first-order consequences of policy changes, i.e. the ‘morning after’ changes in economic well-being and poverty of households with children (Bourguignon and Sparado 2006). Evaluation of long-term effects of policy reforms (e.g. changes in labour market participation or in demographic behaviour) requires dynamic microsimulation, which is beyond the scope of this study. Since the main aim of this study is to compare the performance of programme designs, the take up correction is switched off in all the simulations.

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<sup>6</sup> The average amounts per child were computed, by dividing the total costs of the programme for each category of recipients (e.g. two-parent families, lone parent families, large families, etc.) by the total number of recipients in the category. For a detailed account of the impact of a decentralized versus a unified design of the programme of child allowances in Russia see Popova (2013).

Firstly, in order to assess the effectiveness of the selected transfers to children, in terms of reducing child poverty given national circumstances, they are ‘removed’ from the tax-benefit systems (*Reform 1*). The rest of the national policies remain in place and interact with each other<sup>7</sup>. By comparing poverty outcomes with and without selected transfers we can evaluate their redistributive impact.

Secondly, policies can be ‘swapped’ between the countries. This means that child allowances/tax credits of a ‘donor’ country are integrated into the tax-benefit system of a ‘recipient’ country, replacing the existing arrangements. In this way, the effectiveness of a specific ‘donor’ policy is tested, in its interactions with the remaining tax-benefit policies and socio-demographic structure of the ‘recipient’ country. Three policy swapping scenarios are analyzed. The design of policies remains the same in all the scenarios, but the size of entitlements depends on the scenario.

In *Reform 2*, child allowances from Sweden, Germany, Belgium and the UK are transferred to Russia. By implementing both budget-neutral and full-scale reforms, it becomes possible to distinguish between the design effect (the baseline implementation compared to budget-neutral reforms) and the size effect of policies (budget-neutral reforms compared to reforms assuming a budget increase).

The first implementation is fully budget-neutral, i.e. monetary amounts are firstly converted from the national currency of the ‘donor’ country into the Russian national currency (ruble) using PPPs<sup>8</sup> and then adjusted by scaling them down so that the aggregate expenditure on child benefits in Russia remains unchanged (*reform 2.1*). In this way the borrowed policy is fully ‘adapted’ to national circumstances.

In the second implementation the budget allocated to child allowances is increased (*reform 2.2*). This budget increase is financed by another reform which improves the targeting of *housing subsidies*. In other words, the design of housing subsidies is changed, by excluding non-poor households from the number of eligible groups, and redirecting the released funds to child allowances. Thus the budget of child allowances is increased 1.81 times (from 0.12 to

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<sup>7</sup> The results thereafter show the net effects of reforms of child allowances, i.e. the effects after the interactions of child allowances with the rest of the tax-benefit system. It is worthy to note, that in contrast to Russia, in European countries child allowances are typically not included in the means test for other social benefits and are not taxable, hence there are fewer interactions.

<sup>8</sup> *Purchasing power parities (PPPs)* are indicators of price level differences across countries. They indicate how many currency units a particular quantity of goods and services costs in different countries. PPPs can be used as currency conversion rates, to eliminate the effect of price level differences across countries.

0.22% of GDP). This reform is still budget-neutral in respect to the whole system of means-tested allowances.

In the third implementation, the budget for child allowances is increased up to the level of similar programmes in Europe (*reform 2.3*). The average expenditure on child benefits/tax credits for the four EU countries under study amounts to 1.23% of GDP. To achieve that level of spending, the budget for Russian child allowances has to be multiplied by 10.

In *Reform 3*, child allowances from Russia are shifted to Sweden, Germany, Belgium and the UK, while the remaining tax-benefit structure of those countries remains unchanged. The focus is on budget neutral policy swaps, using analogous assumptions as already described above. In other words, the design of the Russian programme of child allowances is applied to the European countries, raising the budget of the programme up to the level characteristic for their original national programmes of child allowances/tax credits. This scenario assesses the distributive effects of Russian policies, given different socio-economic and demographic settings.

The EUROMOD input data and policy parameters are coded in national currency, while the output of the simulation is given in euros. The factors that were used to adjust the monetary amounts in order to run consistent cross-country policy ‘swaps’ are summarized in Table 4.

Table 4: Factors applied to convert monetary amounts during the policy ‘swaps’

<i>Country</i>	Sweden	Germany	Belgium	United Kingdom	Russian Federation
<i>Year</i>	2010	2010	2010	2010	2010
<i>National currency unit</i>	Sek	Euro	Euro	pound sterling	ruble
<i>Nominal exchange rate, EUR=1</i>	9.52	1.00	1.00	0.82	40.30
<i>PPP adjusted exchange rate, EUR=1*</i>	11.77	1.05	1.12	0.87	18.38
<i>to replicate policies in Russia:</i>					
<i>PPP adjustment coefficient</i>	1.561	17.463	16.387	21.216	1.000
<i>Budget neutrality adjustment coefficient, reform 2.1</i>	0.135	0.058	0.087	0.097	1.000

<i>Country</i>	Sweden	Germany	Belgium	United Kingdom	Russian Federation
<i>reform 2.2</i>	0.244	0.106	0.157	0.162	1.815
<i>reform 2.3</i>	1.351	0.575	0.509	0.554	18.150
<i>to borrow policies from Russia:</i>					
<i>PPP adjustment coefficient</i>	0.640	0.057	0.061	0.047	1.000
<i>Budget neutrality adjustment coefficient, reform 3</i>	3.130	7.398	4.467	4.713	1.000

Notes: \*for the EU countries - Eurostat data for 2010, extracted on 05.01.13 (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>); for Russia - the FSSS data for 2008, extracted on 05.01.13 (<http://www.gks.ru/>)

Source: Own calculations based on EUROMOD and RUSMOD

The impact of swapped policies is evaluated by comparing a set of measures of income distribution *before* and *after implementation* of a certain scenario. Income is expressed in monthly terms, and equals the sum of the employment income of all household members, household income from investment and savings, private transfers, all types of observed or simulated contributory and non-contributory social benefits, minus simulated income taxes<sup>9</sup>.

Previous comparative research on the distribution of income has shown that results are sensitive to the equivalence scale used (Coulter, Cowell et al. 1992; Atkinson, Rainwater et al. 1995). In particular, it has been shown that even if the aggregate household poverty rates are not significantly affected, the observed composition of the poor population may be affected by the choice of an equivalence scale (Buhmann, Rainwater et al. 1998). It should be noted that the structure of household consumer expenditure in Russia differs from that in a mature market economy. The share of spending on rent and utilities is substantially lower, while the share of spending on food is higher, resulting in lower economies of scale compared to any advanced European economy. The Russian official statistics on the distribution of income choose to ignore the presence of economies of scale completely, using per capita income alone. In fact, a scientifically derived equivalence scale based on a nationally representative survey of household expenditure for 2003 had an elasticity coefficient of 0.78.

<sup>9</sup> SIC are simulated by the model, but in Russia they are only paid by employers so they are not deducted from gross incomes. Only taxes are.

Until recently, the income distribution measures of the EU were based on the Oxford equivalence scale (this is also called an old OECD equivalence scale) with an elasticity coefficient of 0.73. This scale assigns the weight of 1 to a single person, the weight 0.7 to each additional person aged 14+ and the weight of 0.5 to each child under 14 years. This scale was originally derived as a consensus of scales used by national governments. Meanwhile, for reasons that are not entirely clear, Eurostat decided that their original scale was too generous to children, and modified it (Hagenaars, De Vos et al. 1994). In the modified OECD scale (with an elasticity coefficient of 0.53), which is now used in all Eurostat income statistics, additional adults are given the weight of 0.5 and children under 14 years are given the weight of 0.3.

Table 5 presents some poverty and inequality indicators from EUROMOD for the policy year 2010. Poverty risk rates for the whole population, and for children under 18 years, are shown using the modified OECD scale, the Oxford scale and per capita income. Using the modified OECD scale to define the incidence of child poverty has the effect of eliminating any differences between child and overall poverty rates, making the situation with regards to child poverty look quite unproblematic in all countries except the UK. These distortions in poverty rates are likely to be even higher for families with many children. Given that the main focus of this research is child well-being, this study will use the old OECD scale, which is also closer to the empirical equivalence scale derived for Russia.

The table also compares the indicators of poverty and inequality from EUROMOD with those by Eurostat. Since both use EU-SILC as their input data<sup>10</sup>, the two sets of estimates would be expected to be closely related. However, particularly in Germany and Belgium, the EUROMOD poverty rates and Gini coefficients are substantially lower than those calculated by Eurostat. There are several reasons why the two sets of estimates are not identical: usage of different releases of EU-SILC; difference in definition of household disposable income; over-simulation of means-tested benefits (Avram and Sutherland 2012; Figari, Iacovou et al. 2012).

The set of indicators used to measure the policy impact of cash benefits for children is as follows. The programme characteristics monitored include: the *coverage* (number of households in receipt of the benefits, as % of the population), the *mean size* of the entitlement per beneficiary household, the programme *costs* for the whole population and the percentage

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<sup>10</sup> With the exception of the British model which uses the Family Resource Survey as input data.

of the total amount of benefits received by each income decile. In addition the *vertical efficiency* of the programme is assessed by computing the percentage of the programme's budget spent on the poor (Beckerman 1979).

Table 5: Comparison of EUROMOD output poverty and inequality statistics with Eurostat estimates, 2010

Country:	Source:	Equivalence scale:	Poverty headcount, all population, %	Poverty headcount, population 0-17 years, %	Gini coefficient
Sweden	<i>Eurostat</i>	<i>60% median, modified OECD scale</i>	12.9%	13.1%	0.241
	EUROMOD	60% median, modified OECD scale	12.4%	13.0%	0.234
	<b>EUROMOD</b>	<b>60% median, old OECD scale</b>	<b>10.7%</b>	<b>15.0%</b>	<b>0.237</b>
	EUROMOD	60% median, per capita income	12.5%	24.5%	0.261
Germany	<i>Eurostat</i>	<i>60% median, modified OECD scale</i>	15.6%	17.5%	0.293
	EUROMOD	60% median, modified OECD scale	13.1%	11.9%	0.269
	<b>EUROMOD</b>	<b>60% median, old OECD scale</b>	<b>12.7%</b>	<b>16.9%</b>	<b>0.273</b>
	EUROMOD	60% median, per capita income	13.5%	28.8%	0.294
Belgium	<i>Eurostat</i>	<i>60% median, modified OECD scale</i>	14.6%	18.3%	0.266
	EUROMOD	60% median, modified OECD scale	11.6%	11.9%	0.230
	<b>EUROMOD</b>	<b>60% median, old OECD scale</b>	<b>11.3%</b>	<b>15.8%</b>	<b>0.232</b>
	EUROMOD	60% median, per capita income	13.1%	24.6%	0.253
United Kingdom	<i>Eurostat</i>	<i>60% median, modified OECD scale</i>	17.1%	20.3%	0.330
	EUROMOD	60% median, modified OECD scale	16.3%	19.8%	0.325
	<b>EUROMOD</b>	<b>60% median, old OECD scale</b>	<b>16.9%</b>	<b>25.6%</b>	<b>0.331</b>
	EUROMOD	60% median, per capita income	19.9%	36.9%	0.350
Russian Federation	<i>Eurostat</i>	<i>60% median, modified OECD scale</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
	EUROMOD	60% median, modified OECD scale	16.7%	17.1%	0.408
	<b>EUROMOD</b>	<b>60% median, old OECD scale</b>	<b>16.3%</b>	<b>19.8%</b>	<b>0.409</b>
	EUROMOD	60% median, per capita income	17.6%	25.9%	0.418

Source: the Eurostat data (<http://epp.eurostat.ec.europa.eu>); own calculation using EUROMOD and RUSMOD

Distributive outcomes are measured by aggregate inequality and poverty indices. Inequality is assessed by the two most popular measures – the *Gini coefficient* and the *decile ratio*. As far as poverty is concerned, although in Russian statistical practice poverty is measured in absolute terms (as the share of the population with income below the minimum consumer

basket), for the sake of cross-country comparisons this study uses the relative concept of poverty applied by Eurostat, whereby the poverty line is set at 60% of median equivalised disposable income. The Oxford equivalence scale is applied throughout all the simulations. This poverty threshold based on the baseline simulation of the 2010 Russian tax-benefit system is 221.4 euros per month per equivalised person. The poverty thresholds in the baseline simulation for European countries are as follows: 961.5 euros for Sweden, 828.2 euros for Germany, 791.9 euros for Belgium and 726.8 euros for the UK. Poverty is assessed using two aggregate indices: the *poverty headcount* (the share of population with income below the poverty line) and the *income gap ratio* (the average shortfall in income of the poor from the poverty line). The latter provides important information about the depth of poverty (Ravallion 1992).

The tables presented below display the percentage changes between the *simulated* scenarios and the *baseline* scenarios, for the entire population, for children under 18 years, and for various types of households with children, including couples with 1 child, 2 children, 3+ children and lone-parent families. Statistically significant (average) changes in indicators are highlighted in grey. A paired t-test was applied to assess the statistical significance of the difference of the means of the variables in the baseline and the simulated scenarios (Goedemé, Van den Bosch et al. 2013).

Figure 1 shows the distribution of the population by age and household types, across the five countries. Demographic development in Germany has been characterized by a falling fertility rate since the 1970s, which is reflected in the low proportion of children under 18 years as part of the total population (16.9%) and the higher share of people aged 65+ years. Russia embarked upon this path much later – in the mid-1990s; since then the share of children under 18 years has been decreasing rapidly and dropped to 18.8% in 2010<sup>11</sup>, although the proportion of the elderly still remains low by European standards<sup>12</sup>. The other three countries are currently enjoying relatively high birth rates. Consequently, the proportion of children under 18 in the total population is higher – 21% in Belgium and the UK, and almost 23% in Sweden. Household composition is quite diverse across the five countries under study. Countries with high fertility rates have the higher proportion of households with 3+ children.

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<sup>11</sup> The proportion of children under 18 years old in the total population of Russia according to the 2010 census was 18.3%.

<sup>12</sup> Another explanation for the lower proportion of older people in the total population of Russia is the low life expectancy, especially for men.

The numbers of people living in large families range from 10-11% in Sweden and Belgium to 7% in the UK, to 6% in Germany, and is extremely small in Russia (3.3%). Two countries have been experiencing a growth in lone parenthood: currently in the UK and Russia the proportion of people living in lone parent families reaches 9 and 10%, respectively. In Germany, lone parenthood is still a relatively rare event (5% of the population). In Sweden and Belgium representatives of lone parent families constitute about 7% of the population.

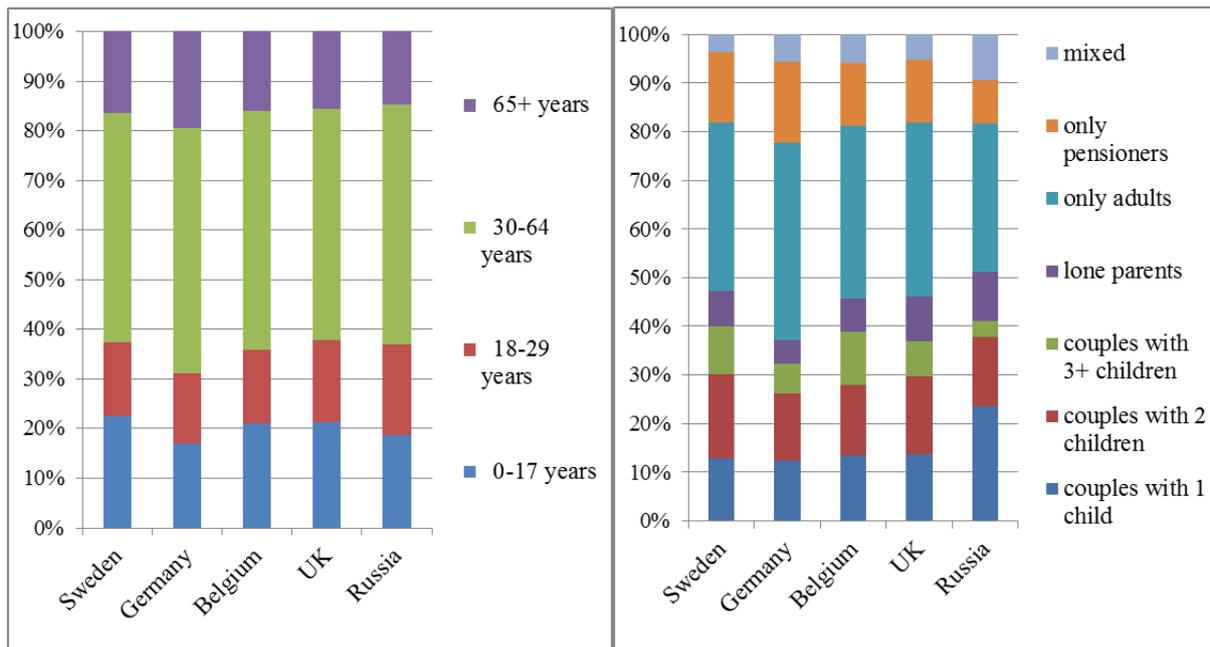


Figure 1: Distribution by age and household type in the selected countries

Source: Own calculation using EUROMOD and RUSMOD

The last two categories are of special interest because they are most susceptible to falling into poverty, due to their vulnerable position in the labour market. In all European countries in our sample, the probability of being poor for lone parent households is 2-3 times as high as the average national figures. Poverty rates for families with 3+ children are also higher than average in Sweden, Germany and Belgium. In the UK, lone parent families and large families have similarly high poverty rates. The Russian situation is different. Lone parents appear to be less vulnerable than those in Europe, because typically they live in three-generation households. Yet their risk of poverty is 1.5 times as high as the national average. The most problematic group in Russia is families with 3+ children, whose poverty rate is 1.7 times higher than the national average.

## **4. The distributional impact of alternative child benefit schemes**

### **4.1 Baseline policies (currently operating national policies)**

A reasonable level of spending and coverage levels of a policy are essential for achieving any significant distributional outcome. Estimates from EUROMOD shown in Table 6 demonstrate that in terms of overall spending on cash transfers for children, the leadership belongs to the UK, where they amount to 1.5% of GDP. Two continental countries – Germany and Belgium – spend similar shares of their GDP on child related cash allowances – 1.3 and 1.2%, respectively. Sweden’s expenditure on cash benefits for children is considerably lower (0.7% of GDP). In terms of coverage, the leader is Belgium, where 31.2% of households are in receipt of child benefits. The other three EU countries provide child allowances for 27-28% of households. Russia is a laggard both in terms of expenditure and of coverage, yet the lag in total spending (0.12% of GDP) is higher than the lag in coverage (19% of households), due to extremely low benefit amounts.

The vertical efficiency of the programmes of child benefits is rather low in continental European countries, ranging from 23.3% in Sweden to approximately 30% in Germany and Belgium. The share of the budget spent on the poor is the highest for the British programme (57.2%). Russia is lagging behind, with only 38.6% of the budget going to beneficiaries who are poor, despite the fact that the Russian programme is the only fully means-tested one.

Figure 2 shows the distribution of the total expenditure on child targeted benefits, by income deciles. The spending is negatively correlated with income in all countries. This negative association is most clear in the UK and Russia. It is worthy of note that, although the Russian child benefit is fully means-tested, recipients can still be found even in the two top deciles of income distribution. The two bottom deciles in the UK appear to receive a larger share of the total amount of benefits than in Russia, despite the presence of the flat-rate universal child allowance in the UK. In Belgium the distribution is almost flat, although the bottom decile gets a considerably higher share of spending compared to the others. In Sweden and Germany the programmes of child benefits achieve a somewhat similar, flat distribution across the deciles.

Table 6: Policy characteristics and distributional impact of child allowances, *baseline* versus *reform 1* (equivalised disposable income, Oxford scale)

<i>Country</i>	<b>Sweden</b>	<b>Germany</b>	<b>Belgium</b>	<b>United Kingdom</b>	<b>Russian Federation</b>
<i>Name of scenario:</i>	<i>Baseline</i>	<i>baseline</i>	<i>baseline</i>	<i>Baseline</i>	<i>Baseline</i>
<b><i>Policy characteristics:</i></b>					
Beneficiaries, % of households	27.9%	27.3%	31.2%	28.4%	18.1%
Mean size of benefit per household, euros	207.1	299.7	301.2	342.5	14.0
Expenditure, % of GDP	0.71%	1.29%	1.20%	1.50%	0.12%
Vertical efficiency, % of the poor among beneficiaries	23.3%	29.8%	29.6%	57.2%	38.6%
<b><i>Policy impact (% change in the indicator due to the programme):</i></b>					
<i>Name of scenario:</i>	<i>reform 1</i>	<i>reform 1</i>	<i>reform 1</i>	<i>reform 1</i>	<i>reform 1</i>
Gini coefficient, %	-4.5%	-5.5%	-9.2%	-8.7%	-0.5%
Poverty headcount, all population	-14.9%	-17.7%	-24.5%	-29.8%	-2.2%
Income gap ratio, all population	-0.1%	-7.1%	-25.6%	-28.3%	-2.2%
Poverty headcount, children under 18 years	-34.8%	-58.1%	-55.4%	-55.8%	-5.3%
Income gap ratio, children under 18 years	-0.3%	-28.8%	-49.6%	-44.7%	-4.8%
Poverty headcount, couples with 1 child	-2.5%	-13.6%	-11.4%	-37.7%	-2.5%
Income gap ratio, couples with 1 child	-3.8%	-10.8%	-15.1%	-15.3%	0.2%
Poverty headcount, couples with 2 children	-28.9%	-65.0%	-33.3%	-51.9%	-1.0%
Income gap ratio, couples with 2 children	3.1%	-13.6%	-29.2%	-33.8%	-3.4%
Poverty headcount, couples with 3+ children	-49.6%	-99.5%	-82.1%	-46.1%	-7.2%
Income gap ratio, couples with 3+ children	-1.0%	-50.4%	-66.7%	-54.2%	-11.1%
Poverty headcount, lone parents	-29.9%	-33.2%	-54.4%	-70.4%	-10.8%
Income gap ratio, lone parents	-1.0%	-20.8%	-51.2%	-43.5%	-3.6%

Note: Statistically significant changes (at the 95% significance level) are highlighted in grey<sup>13\*</sup>

Source: Own calculations using EUROMOD and RUSMOD

<sup>13</sup> Statistical significance of changes between scenarios is estimated using one-sample mean-comparison (for paired data) in Stata.

Apart from programme characteristics, Table 6 also shows to what extent the programmes of child allowances introduced in the five countries reduce inequality and the risk of falling into poverty, for various subgroups of the population. These estimates were obtained by comparing income distribution parameters *before* and *after* adding child benefits to the tax-benefit system in each country (in technical terms – by comparing the outcome of *reform 1* to *baseline* implementation).

If it were not for cash transfers to children, all the European countries included in this study would have considerably higher inequality and poverty levels, for all the groups of interest. On average in the four European countries, the reduction in the Gini coefficient amounts to 6.2%, while the national poverty rate and the poverty depth figures are reduced by 19 and 12%, respectively. The average reduction in the poverty headcount for children under 18 years amounts to 44%, while the income gap is reduced by 25% on average. European schemes are very effective in terms of reducing poverty in vulnerable groups. There is a 60% reduction in the poverty headcount and a 34% reduction in the income gap of families with 3+ children under 18. The poverty headcount of lone parent families is reduced by 38% on average, while their income gap ratio is reduced by 27%.

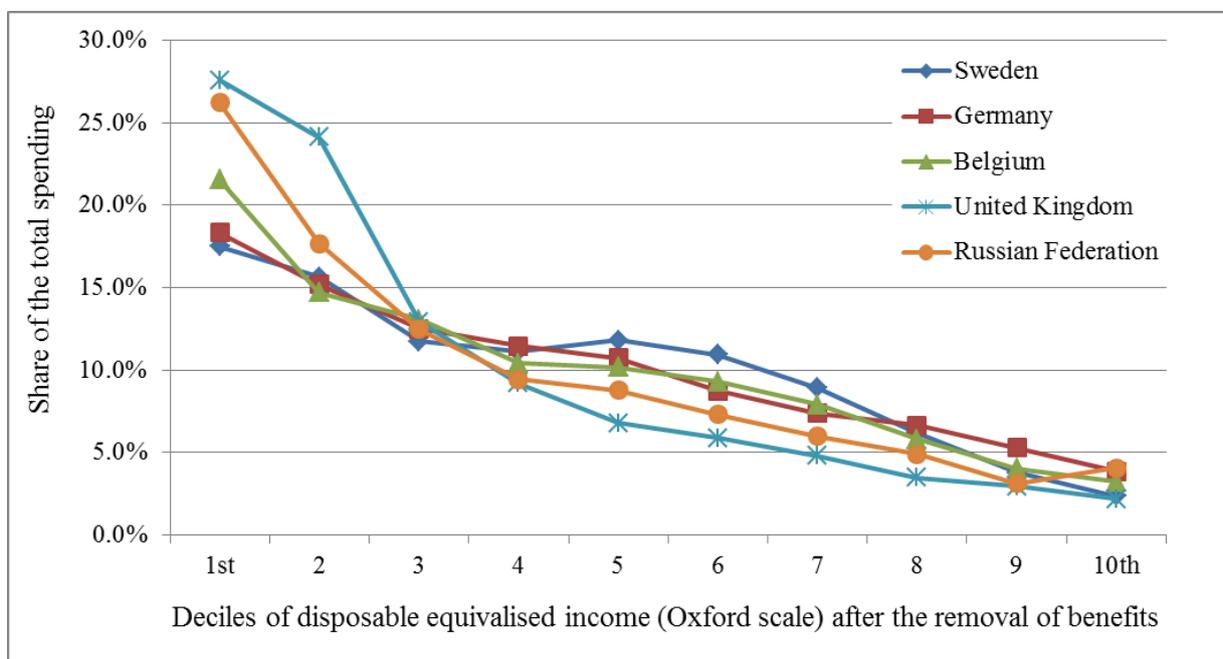


Figure 2: Distribution of the total spending on child allowances, by income deciles, *baseline*

Source: Own calculations using EUROMOD and RUSMOD

It appears that, within national circumstances (composition of the population and original pre-transfer distribution of income), the Belgian programme outperforms the rest (including the most expensive British programme) in terms of reducing the depth of poverty for all groups of interest – children under 18 years, large families and lone parent families. The British scheme is however the most effective one in reducing national poverty figures, and it is also among the most effective schemes in terms of reducing poverty for lone parent families. The German scheme falls behind the Belgian and the British ones, due to its smaller impact on the poverty depth figures. Germany has established effective policies for large families, but lags in terms of the protection of lone parents. The Swedish programme of child benefits plays a smaller role in reducing poverty and has almost no impact on poverty gap measures. As far as Russia is concerned, the programme of cash transfers for children does not appear to have any statistically significant impact on national inequality and poverty measures, as well as measures for children under 18 years. The groups which gain from this programme are large families (whose poverty gap drops by 11.1%) and lone parents (whose poverty headcount drops by 10.8%).

#### **4.2 European policies transferred to Russia**

The fully budget-neutral policy ‘borrowing’ (*reform 2.1*) implies no increase in total costs compared to the baseline Russian settings (Table 7). However, the implementation of this reform implies enlarging the programme coverage. Firstly, the Russian child benefit is means-tested, while all the EU countries under study have established quasi-universal programmes which may or may not be additionally topped up by means-tested payments. In addition, in Germany and Belgium, the age threshold for qualifying as a dependent child is substantially higher than in Russia. These higher age thresholds result in a 1.8-1.9 times increase in the number of beneficiaries under the Swedish and British scenarios and a 2.2 times increase under the German and Belgian scenarios. Given the fixed budget, the average monthly payment per beneficiary-household decreases in proportion to the increased expenditure on the extra beneficiaries. The vertical efficiency of the policy drops from 38.6% for the baseline Russian scheme to 21-22% for the schemes adopted from Sweden, Germany and Belgium, and to 27.8% for the British scheme.

It is not surprising that the total spending on child benefits under the German, Swedish and Belgian schemes is distributed almost evenly across the income deciles, with households

from the bottom decile getting a slightly higher share of total expenditure (Figure 3). The resulting distribution is more progressive under the British system, where about 20% of the total spending accrues to the bottom decile.

Table 7: Policy characteristics and distributional impact of child allowances, *reform 2.1* versus *baseline* (equivalised disposable income, Oxford scale)

<i>Country</i>	<b>Russian Federation</b>	<b>Sweden</b>	<b>Germany</b>	<b>Belgium</b>	<b>United Kingdom</b>
<i>Name of scenario</i>	<i>Baseline</i>	<i>reform 2.1</i>	<i>reform 2.1</i>	<i>reform 2.1</i>	<i>reform 2.1</i>
<b><i>Policy characteristics:</i></b>					
Beneficiaries, % of households	18.1%	33.1%	38.9%	40.5%	34.6%
Mean size of benefit per household, euros	14.0	7.7	6.5	6.3	7.3
Expenditure, % of GDP	0.12%	0.12%	0.12%	0.12%	0.12%
Vertical efficiency, % of the poor among beneficiaries	38.6%	21.8%	21.2%	21.9%	27.8%
<b><i>Policy impact (% change in the indicator due to the programme):</i></b>					
Gini coefficient		0.2%	0.2%	0.2%	0.1%
Poverty headcount, all population		0.7%	1.2%	0.6%	0.3%
Income gap ratio, all population		1.5%	1.2%	1.4%	1.1%
Poverty headcount, children under 18 years		1.7%	2.8%	1.8%	0.8%
Income gap ratio, children under 18 years		3.3%	3.4%	3.5%	3.1%
Poverty headcount, couples with 1 child		-0.5%	0.8%	1.3%	0.0%
Income gap ratio, couples with 1 child		0.6%	-0.6%	-1.1%	-0.8%
Poverty headcount, couples with 2 children		-1.0%	0.0%	0.0%	0.0%
Income gap ratio, couples with 2 children		1.3%	1.0%	0.6%	0.0%
Poverty headcount, couples with 3+ children		2.1%	2.1%	-3.4%	-1.3%
Income gap ratio, couple with 3+ children		8.7%	11.4%	14.9%	11.4%
Poverty headcount, lone parent families		6.3%	7.7%	6.3%	3.1%
Income gap ratio, lone parent families		3.2%	2.7%	3.5%	3.0%

Note: Statistically significant changes (at the 95% significance level) are highlighted in grey

Source: Own calculations using EUROMOD and RUSMOD

As demonstrated by Table 7, given the small budget of child allowances in Russia, any changes in the programme design to incorporate rules of European programmes would not be advisable, because they either would not have any statistically significant impact on inequality and poverty outcomes or would even reduce the programme’s impact (as in case of the income gap of large families).

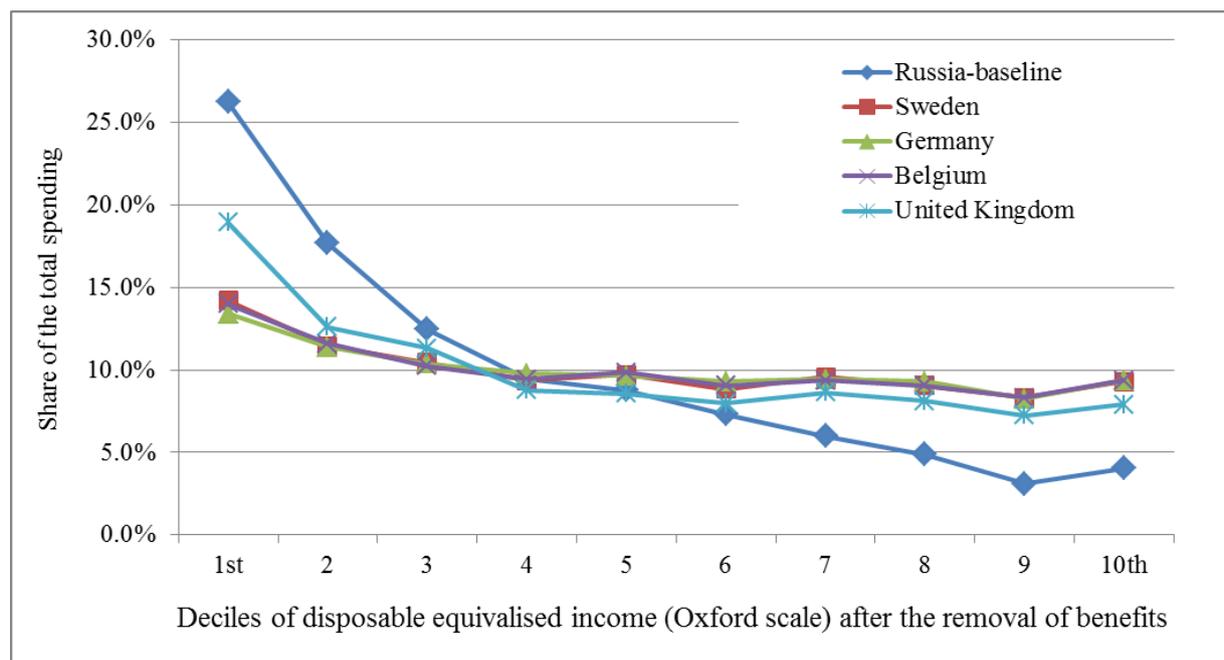


Figure 3: Distribution of the total spending on child allowances, by income decile, *reform 2.1* (equivalised disposable income, Oxford scale)

Source: Own calculations using EUROMOD and RUSMOD

One of the ways to increase the budget of child benefits in Russia without putting an extra burden on the tax system would be to redistribute resources within the existing system of means-tested allowances. By restricting the access of non-poor households to *housing subsidies* and channeling the released funds to *child allowances*, the budget of the latter could become 1.8 times higher. The outcomes of adopting European policies under this budget increase (*reform 2.2*) are presented in Table 8. The only parameter that changes, compared to *reform 2.1*, is the level of spending, hence the average amount paid to beneficiaries of the programme grows by the same proportion. There is no change in the programme design, so the distribution of spending across income groups remains the same as in Figure 3. The

implementation of this reform appears to be less harmful in terms of poverty outcomes than that of the completely budget-neutral policy ‘swap’. However, the adoption of the German and British schemes would still bring about some negative changes – in terms of increasing the depth of poverty for large families.

Table 8: Policy characteristics and distributional impact of child allowances, *reform 2.2*<sup>14</sup> versus *baseline* (equivalised disposable income, Oxford scale)

<i>Country</i>	<b>Russian Federation</b>	<b>Sweden</b>	<b>Germany</b>	<b>Belgium</b>	<b>United Kingdom</b>
<i>Name of scenario</i>	<i>Baseline</i>	<i>reform 2.2</i>	<i>reform 2.2</i>	<i>reform 2.2</i>	<i>reform 2.2</i>
<b><i>Policy characteristics:</i></b>					
Beneficiaries, % of households	18.1%	33.1%	38.9%	40.5%	34.6%
Mean size of benefit per household, euros	14.0	13.9	11.8	11.4	13.3
Expenditure, % of GDP	0.12%	0.22%	0.22%	0.22%	0.22%
Vertical efficiency, % of the poor among beneficiaries	38.6%	22.2%	21.4%	22.2%	29.5%
<b><i>Policy impact (% change in the indicator due to the programme):</i></b>					
Gini coefficient		0.2%	0.3%	0.2%	0.1%
Poverty headcount, all population		0.9%	2.1%	1.6%	1.0%
Income gap ratio, all population		0.3%	0.0%	-0.1%	-1.6%
Poverty headcount, children under 18 years		-1.0%	0.7%	0.0%	-1.3%
Income gap ratio, children under 18 years		1.7%	2.5%	1.8%	-1.0%
Poverty headcount, couples with 1 child		-1.0%	0.0%	0.0%	-0.5%
Income gap ratio, couples with 1 child		-1.2%	-1.7%	-1.6%	-3.8%
Poverty headcount, couples with 2 children		-3.4%	-1.6%	-2.4%	-0.6%
Income gap ratio, couples with 2 children		0.2%	0.0%	0.1%	-3.6%

<sup>14</sup> The results assume reductions in housing subsidies.

Poverty headcount, couples with 3+ children		-3.4%	-3.4%	-3.4%	-8.0%
Income gap ratio, couples with 3+ children		7.6%	13.0%	8.3%	10.5%
Poverty headcount, lone parents		3.8%	6.5%	5.2%	1.0%
Income gap ratio, lone parents		1.7%	1.0%	1.8%	-3.5%

Note: Statistically significant changes (at the 95% significance level) are highlighted in grey

Source: Own calculations using EUROMOD and RUSMOD

Table 9 shows the results of implementation of the four European designs of child allowances in Russia, assuming an actual budget increase (*reform 2.3*). The final budget is fixed at the level of 1.23% of the Russian GDP. This figure was computed as the average spending on child benefits in relation to GDP in the four European countries included in our study. Thus the original budget of child allowances in Russia is multiplied by 10. Compared to the baseline implementation (Table 6) this kind of simulation is suitable for comparing the cost-effectiveness of various programme designs, given that the budget for all schemes is fixed at the same level. Due to the varying age thresholds for children in each system, the resulting increase in the mean benefit amounts, compared to the baseline Russian settings, ranged from 4.5 times under the German and Belgian schemes, to 5.3 times under the British scheme, and to 5.5 times under the Swedish scheme.

Table 9: Policy characteristics and distributional impact of child allowances, *reform 2.3* versus *baseline* (equivalised disposable income, Oxford scale)

<i>Country</i>	<b>Russian Federation</b>	<b>Sweden</b>	<b>Germany</b>	<b>Belgium</b>	<b>United Kingdom</b>
<i>Name of scenario</i>	<i>Baseline</i>	<i>reform 2.3</i>	<i>reform 2.3</i>	<i>reform 2.3</i>	<i>reform 2.3</i>
<b><i>Policy characteristics:</i></b>					
Beneficiaries, % of households	18.1%	33.1%	39.9%	40.5%	34.6%
Mean size of benefit per household, euros	14.0	76.8	63.6	62.4	73.7
Expenditure, % of GDP	0.12%	1.23%	1.23%	1.23%	1.23%
Vertical efficiency, % of the poor among beneficiaries	38.6%	23.9%	23.0%	24.0%	32.6%

<i>Policy impact (% change in the indicator due to the programme):</i>					
Gini coefficient		-2.5%	-2.4%	-2.4%	-3.5%
Poverty headcount, all population		-5.7%	-5.7%	-6.2%	-11.6%
Income gap ratio, all population		-7.7%	-6.7%	-6.3%	-13.9%
Poverty headcount, children under 18 years		-20.7%	-15.9%	-18.3%	-29.2%
Income gap ratio, children under 18 years		-15.0%	-10.5%	-12.5%	-28.6%
Poverty headcount, couples with 1 child		-6.0%	-5.9%	-6.8%	-12.5%
Income gap ratio, couples with 1 child		-11.2%	-12.4%	-7.7%	-23.2%
Poverty headcount, couples with 2 children		-22.7%	-21.1%	-21.9%	-26.1%
Income gap ratio, couples with 2 children		-8.1%	-5.1%	-4.3%	-23.4%
Poverty headcount, couples with 3+ children		-33.7%	-15.2%	-25.2%	-33.7%
Income gap ratio, couple with 3+ children		-22.5%	-16.5%	-28.4%	-37.6%
Poverty headcount, lone parents		-17.3%	-13.8%	-12.9%	-42.2%
Income gap ratio, lone parents		-11.4%	-7.1%	-9.3%	-18.0%

Note: Statistically significant changes (at the 95% significance level) are highlighted in grey

Source: Own calculations using EUROMOD and RUSMOD

By definition all monetary parameters of the programme, including monetary thresholds for income tests, are multiplied by the same factor. Compared to the budget-neutral swap (*reform 2.1*), the percentage of the poor among the programme beneficiaries (i.e. vertical efficiency) has increased from 21-22% to 23-24% under the Swedish, German and Belgian schemes, and from 28 to 33% under the British scheme. Overall, the distribution of spending has not changed considerably (Figure 4).

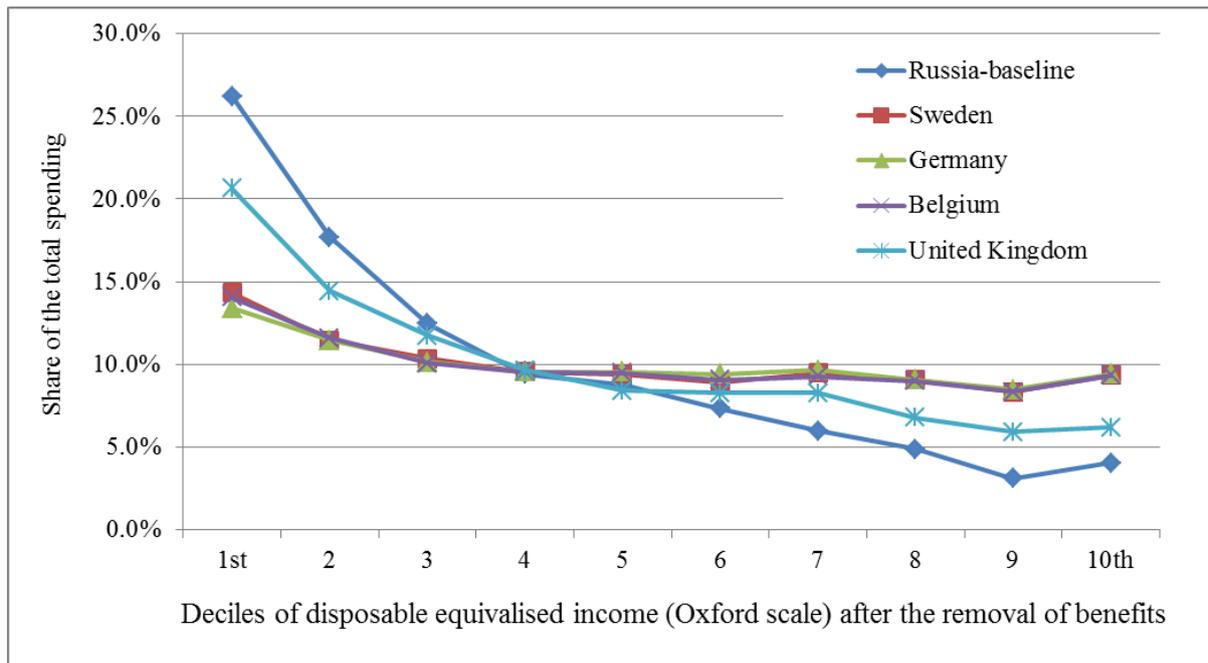


Figure 4: Distribution of the total spending on child allowances, by income decile, *reform 2.3* (equivalised disposable income, Oxford scale)

Source: Own calculations using EUROMOD and RUSMOD

Under the ten-fold budget increase, the programme of child benefits inevitably achieves much better outcomes for Russian children, but there are still four potential designs to choose from. Returning to Table 9, it appears that, despite quite different policy designs, the Swedish, German and Belgium schemes, applied in Russia, achieve quite similar results as far as inequality and poverty outcomes are concerned. There are no statistically significant reductions in the Gini index and in the national poverty rate, but there is a 6-8% reduction in the national poverty gap. Compared to this, the British design is almost 1.5 times more effective in terms of reducing the income gap ratio. In terms of the poverty headcount for children under 18 years, the Swedish and Belgian schemes come close, providing a 20% reduction in the poverty headcount and a 13-15% reduction in the income gap, compared to the *baseline* implementation. But they are outperformed by the British scheme, which provides an almost 30% reduction for both poverty indicators.

As far as families with 3+ children are concerned, the Swedish and British designs reduce poverty incidence by over one third, but again the British system achieves a greater reduction (37.6%) in the poverty gap. For another vulnerable group – lone parents – the British system clearly outperforms the other three on both poverty indicators. Interestingly, for lone parents

the potential reduction in the poverty rate is higher than the reduction in the depth of poverty under any of the European designs, including the British one. In other words, none of the European schemes suggests a good solution for tackling the problems of those lone parents who are at the bottom of income distribution in Russia.

Overall, these policy ‘swaps’ demonstrate that the *design* effect (approximated by the difference between the baseline and the budget-neutral policy swaps) tends to be smaller than the *size* effect (i.e. difference between the full-scale and budget-neutral swaps), but that the design plays a crucial role in improving the poverty outcomes of the most vulnerable groups of families, such as families with 3+ children and lone parent families.

### **4.3 Russian policies transferred to European countries**

The results of the application of the Russian child benefit design to the existing arrangements in Sweden, Germany, Belgium and the UK are given in Table 10. The budget of the Russian scheme is inflated up to the level characteristic for each of these countries (0.7% of GDP in Sweden, 1.3% of GDP in Germany, 1.2% of GDP in Belgium and 1.5% of GDP in the UK) by uprating all monetary parameters using adjustment coefficients (see Table 4).

With the adoption of the Russian scheme, the number of potential beneficiaries is reduced by approximately one third in Sweden and Germany, by 20% in Belgium and by 10% in the UK. Consequently, the mean benefit amounts are increased by those factors.

The vertical efficiency of the programme rises in all the countries, especially in Sweden (by 44%) and in Germany (by 39%). For Belgium an increase in the vertical efficiency amounts to 20%, while in the UK there are only marginal changes. Overall, the Russian design increases the progressivity of spending on child benefits (Figure 5). Even with the generous budget attached to it, the Russian scheme is less beneficial for high income groups for all the European schemes apart from the British one. The winners of the reform are the three bottom deciles in Sweden and Belgium, the two bottom deciles in Germany and the first bottom decile in the UK.

Table 10: Policy characteristics and distributional impact of child allowances, *reform 3* versus *baseline* (equivalised disposable income, Oxford scale)

Country	Sweden		Germany		Belgium		United Kingdom	
	Baseline	reform 3	baseline	reform 3	Baseline	reform 3	baseline	reform 3
<b>Policy characteristics:</b>								
Beneficiaries, % of households	27.9%	21.1%	27.3%	20.2%	31.2%	25.7%	28.4%	25.9%
Mean size of benefit per household, euros	207.1	274.6	299.7	406.4	301.2	365.0	342.5	376.6
Expenditure, % of GDP	0.71%	0.71%	1.29%	1.29%	1.20%	1.20%	1.50%	1.50%
Vertical efficiency, % of the poor among the beneficiaries	23.3%	33.8%	29.8%	41.5%	29.6%	36.1%	57.2%	58.8%
<b>Policy impact (% change in the indicator due to the programme):</b>								
Gini coefficient		-2.3%		-2.5%		-0.6%		-0.3%
Poverty headcount, all population		-8.7%		-10.2%		-4.7%		6.7%
Income gap ratio, all population		-3.5%		4.8%		5.6%		-3.0%
Poverty headcount, children under 18 years		-19.4%		-40.5%		-20.1%		2.4%
Income gap ratio, children under 18 years		-6.3%		0.7%		2.6%		-7.7%
Poverty headcount, couples with 1 child		2.5%		9.8%		13.6%		32.6%
Income gap ratio, couples with 1 child		0.7%		4.6%		9.1%		5.3%
Poverty headcount, couples with 2 children		13.9%		29.6%		24.0%		37.7%
Income gap ratio, couples with 2 children		-3.9%		-0.1%		20.5%		14.5%
Poverty headcount, couples with 3+ children		-19.3%		-88.3%		-28.9%		-15.0%
Income gap ratio, couples with 3+ children		-26.9%		-62.4%		-22.2%		-25.9%
Poverty headcount, lone parent families		-34.9%		-72.6%		-31.1%		-8.6%
Income gap ratio, lone parent families		4.8%		0.6%		0.3%		-17.4%

Note: Statistically significant changes (at the 95% significance level) are highlighted in grey

Source: Own calculations using EUROMOD and RUSMOD

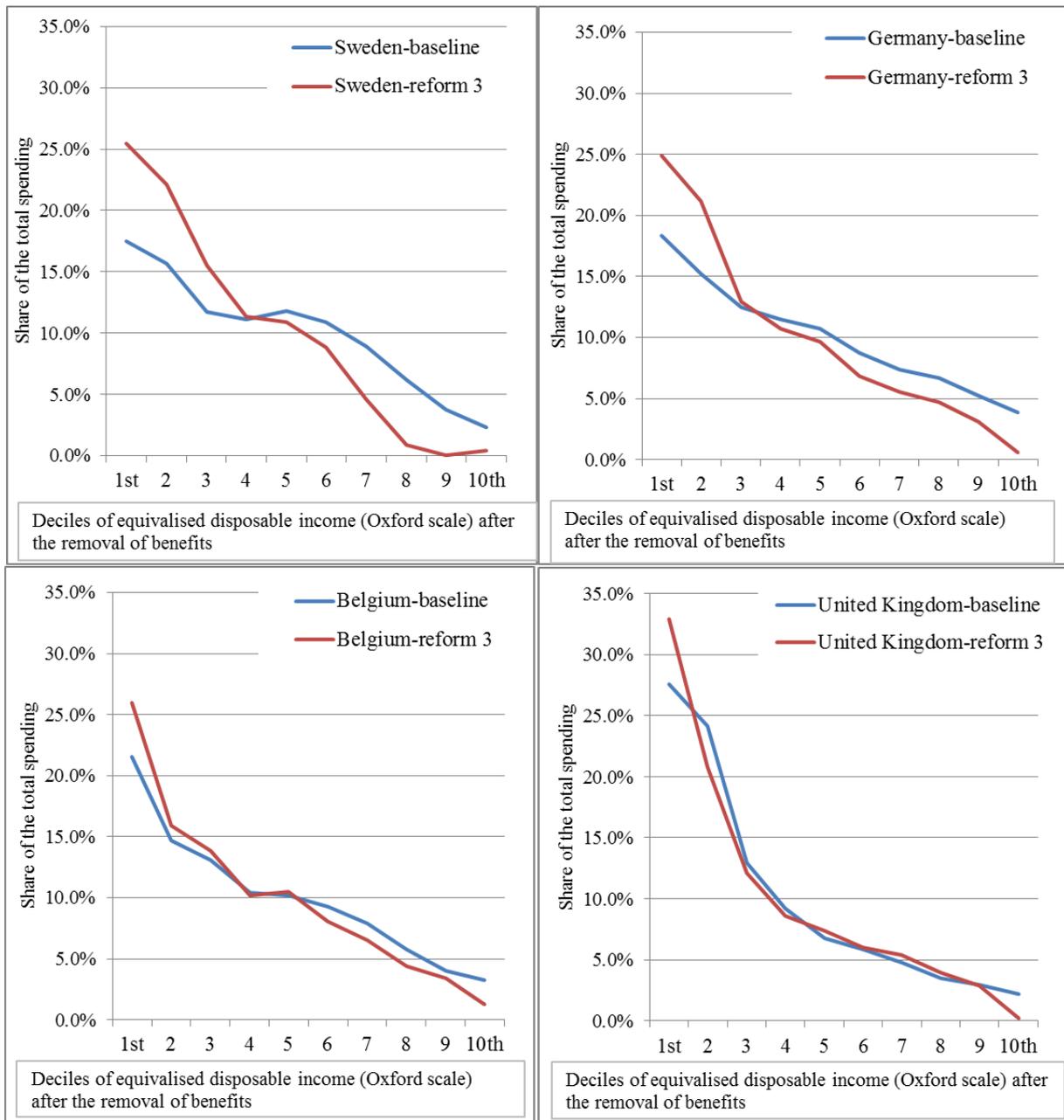


Figure 5: Distribution of the total spending on child allowances, by income decile, *baseline* and *reform 3* (equivalised disposable income, Oxford scale)

Source: Own calculations using EUROMOD and RUSMOD

Turning to the outcome indicators (Table 10), the budget-neutral implementation of Russian policies in Sweden brings about a statistically significant reduction in the poverty headcount for all the groups of interest, including a 8.7% reduction for the whole population, a 19.4% reduction for children under 18 years, a 19.3% reduction for families with 3+ children and a 34.9% reduction for lone parent families. However, it is not equally effective for tackling the

income gap for all these groups, with the exception of families with 3+ children (a 26.9% reduction). At the same time, other groups of families with children – namely couples with 2 children – experience a slight deterioration in their position, but only in terms of poverty headcount measures, while the poverty gap remains the same.

When adopted in Germany, the Russian benefit design is even more effective than in Sweden, but again the major reductions achieved are in terms of poverty rates, rather than the depth of poverty (Table 10). The national poverty headcount drops by 10.2%, with a 4.8% increase in the national poverty gap. The poverty headcount for children under 18 is reduced by more than 40%, with no change in the poverty gap. Lone parent families gain from this scenario, but only in terms of poverty incidence (a 72.6% reduction), with no change in the poverty gap. It appears that the Russian design allows a large number of lone parents, whose incomes are already close to the poverty line, to cross the threshold, but it is not effective in tackling problems of the poorest representatives of this category, who have an initially high poverty depth. However, the Russian design is effective for families with 3+ children, whose poverty indicators improve dramatically: there is an 88.3% reduction in the poverty headcount, combined with a 62.4% reduction in the poverty gap. At the same time, the reform is not beneficial for couples with 1 and 2 children, although they experience an increase in poverty incidence only.

In Belgium the outcomes of the reform are less impressive than in Germany and Sweden. There is no statistically significant reduction in overall poverty incidence and there is a 5.6% increase in the overall poverty gap (Table 10). A 20.1% reduction in the incidence of poverty for children under 18 years is not accompanied by any changes in their poverty gap. The group that definitely gains from adopting the Russian design are families with 3+ children, both in terms of poverty incidence and depth – there is a 28.9 and a 22.2% reduction. There is a positive impact in terms of the poverty headcount of lone parents – it is reduced by 31.1%. But simultaneously this reform worsens the position of couples with 1 and 2 children, both in terms of poverty incidence and, especially, the depth of poverty.

In contrast to all the previous cases, the swapping of the Russian child benefit scheme to the UK has a higher impact on poverty depth measures (Table 10). The main beneficiaries are again families with 3+ children, who experience a 15% reduction in their poverty headcount and a 25.9% reduction in their poverty gap. Lone parents can also expect positive changes, both in terms of poverty incidence (a 8.6% reduction) and poverty depth (a 17.4% reduction). The poverty gap figures for the whole population and for children under 18 years would

decrease to a smaller degree – by 3 and 7.7%, respectively; however, there would be no reduction in the poverty rates, because couples with 1 and 2 children would encounter losses in their benefit entitlements, and their poverty rates would increase substantially.

These simulations have shown that the performance of any benefit scheme is highly dependent on the national context. Yet the main conclusion is that, under comparable budgets, the Russian child benefit scheme may perform even better than the schemes implemented by the four European countries. There is a strong case in Russia for raising child benefit amounts. There is a design-related problem as well: namely, the treatment of couples with 2 children by the Russian tax-benefit system. This group appears to lose out when the Russian benefit scheme is swapped to other countries. In line with Russia's demographic objectives, it would be advisable to provide a more comprehensive support for families with 2 children.

It should be noted, that a number of limitations had to be introduced in this paper in order to facilitate comparative analysis and to maintain meaningful policy 'swaps'. Firstly, the analysis in this paper has focused on cash allowances for families with children, omitting the rest of the child related cash benefits and non-cash policies. The cross-country analysis of policy effects may be biased, because of the varying role played by non-cash income across the different welfare regimes. Secondly, the analysis is concentrated on improving the material well-being outcomes for children from poor families, rather than all children. The reform scenarios that have been found most effective, involve an increase in the targeting accuracy of child benefits, which implies reducing benefits for non-poor households with children and redirecting the released resources to the poor. Thirdly, the correction for non-take up of means-tested benefits has been switched off. Hence, the results do not account for possible changes in the take up of means-tested benefits after increasing the targeting accuracy and raising the child benefit amounts. This is especially relevant when the distributive impact of means-tested and not means-tested systems of child allowances is compared.

As far as more general limitations are concerned, the practical implementation issues in introducing the means-tested programs have been left out of the picture. The evidence from application of means-tested programs in OECD countries demonstrates that although they demand less resources than universal programs, they are characterized by a number of problems (e.g. produce errors of inclusion and exclusion, require high administrative expenditure, decrease incentives to work, etc.). The other consideration that should not be

ignored is a trade-off between the degree of low-income targeting and the size of redistributive budgets. Targeting and budgets are not independent: the budgets tend to decrease while targeting increases, as the average voter is less inclined to support the programs from which they do not have any benefit. Finally, it is important to remind that being purely arithmetical the simulations results obtained from RUSMOD capture only the first-order consequences of various options of the reform of cash child allowances. Possibly, if they were able to take into account the behavioral response, the advantages of a choice in favor of more targeting would be less evident.

## **5. Conclusions and policy suggestions**

This study is the first attempt to apply the microsimulation method to an assessment of the distributional impact of cash transfers for children in Russia, within a European comparative setting. To accomplish this task, this study has applied RUSMOD and EUROMOD – the tax-benefit microsimulation models for Russia and the European Union. Though a number of limitations are associated with using such models, the main advantage is their compatibility and comprehensive structure in handling and measuring the effects of cross-national policy transfers.

This paper argues that Russian policy makers can learn from international experiences, in order to improve the well-being of Russian children. The policy systems differ across Russia and the four European countries selected for the analysis, in terms of the volume of spending and the design of their non-contributory cash transfers to children. The literature points to the level of spending and the design of programmes as the two main determinants of child poverty. This study confirms that for Russia the budget size effect is more important than the design effect. Yet, conversely, at the high level of spending which is characteristic for European welfare states, the design effect can be more important. In other words, the comparative effects of spending level and of design are highly dependent on the national policy context (socio-demographic circumstances, labour market conditions, and ‘pre-social policy’ interventions). For example, the Belgian scheme of child allowances outperforms the German and the British schemes in terms of all poverty depth indicators, despite the lower level of spending in Belgium.

Irrespectively of the programme budget, the best child well-being outcomes cannot be achieved by means of expanding the coverage (as in Germany) and by ‘purely’ universal

transfers (as in Sweden). A policy mix comprising both universal and means-tested benefits (as in the UK and Belgium) appears to be much more effective in terms of child poverty reduction. The means-tested elements are necessary for alleviating the poverty depth of those groups that are detached from the labour market, and concentrated at the bottom of income distribution. From the cost-effectiveness point of view, the British child benefit design should be preferred within the Russian setting. At the same time, none of the European schemes would have a considerable effect on the poverty gap of lone parents in Russia. This means that this group should be targeted with additional measures, such as provision of guaranteed child support, if the non-resident parent avoids payment of support.

The major problem with the Russian child benefit scheme is the negligible benefit amounts, rather than the design itself. The Russian scheme does not appear to be less effective in terms of its impact on child poverty outcomes, when transferred to any of the four European countries in replacement of their current arrangements. The only really major design related problem is a neglect of couples with 2 children; these could benefit from more comprehensive treatment of their needs, especially as the promotion of second parity births has been declared one of the priorities of the national strategy of demographic development.

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Table A1: Family policy related indicators in Europe and Russia, 2010

	Female employment rate, % of women aged 20 to 64 in employment	Part-time female employment, % of total female employment	Social protection expenditure, % of the GDP*	Social benefits for families and children, % of the GDP	Poverty headcount, %**	Child poverty headcount, %**	Gini coefficient	Total fertility rate, number of children per woman
Austria	69.6	43.8	30.4	3.1	12.1	14.3	0.261	1.44
Belgium	61.6	42.3	29.9	2.2	14.6	18.3	0.266	1.86
Bulgaria	61.7	2.6	18.1	2.0	20.7	26.8	0.332	1.49
Cyprus	68.5	12.7	21.6	2.1	15.8	13.6	0.298	1.44
Czech Republic	60.9	9.9	20.1	1.3	9.0	14.3	0.249	1.49
Denmark	73.0	38.4	33.3	4.0	13.3	10.9	0.269	1.87
Estonia	65.7	14.5	18.1	2.3	15.8	17.3	0.313	1.63
European Union (27 countries)	62.1	31.9	29.4	2.3	16.4	20.5	0.305	1.60
Finland	71.5	19.6	30.6	3.3	13.1	11.4	0.254	1.87
France	64.7	30.1	33.8	2.7	13.3	17.9	0.298	2.03
Germany	69.6	45.5	30.7	3.2	15.6	17.5	0.293	1.39
Greece	51.7	10.4	29.1	1.8	20.1	23.0	0.329	1.51
Hungary	55.0	8.0	23.1	2.9	12.3	20.3	0.241	1.25

	Female employment rate, % of women aged 20 to 64 in employment	Part-time female employment, % of total female employment	Social protection expenditure, % of the GDP*	Social benefits for families and children, % of the GDP	Poverty headcount, %**	Child poverty headcount, %**	Gini coefficient	Total fertility rate, number of children per woman
Iceland	77.6	34.9	24.5	3.1	9.8	12.6	0.257	2.20
Ireland	60.5	34.8	29.6	3.7	16.1	19.7	0.332	2.07
Italy	49.5	29.0	29.9	1.3	18.2	24.7	0.312	1.41
Latvia	64.9	11.4	17.8	1.5	21.3	26.6	0.361	1.17
Lithuania	65.1	9.3	19.1	2.2	20.2	23.3	0.369	1.55
Luxembourg	62.0	36.0	22.7	4.0	14.5	21.4	0.279	1.63
Malta	41.6	25.0	19.8	1.2	15.5	20.4	0.284	1.38
Netherlands	70.8	76.5	32.1	1.2	10.3	13.7	0.255	1.79
Norway	76.9	42.9	25.6	3.1	11.2	11.7	0.236	1.95
Poland	57.7	11.5	18.9	0.8	17.6	22.5	0.311	1.38
Portugal	65.6	15.5	27.0	1.5	17.9	22.4	0.337	1.36
Romania	55.9	11.4	17.6	1.7	21.1	31.3	0.333	1.33
Slovakia	57.4	5.4	18.6	1.8	12.0	18.8	0.259	1.40
Slovenia	66.5	14.7	24.8	2.2	12.7	12.6	0.238	1.57
Spain	55.8	23.2	25.7	1.5	20.7	26.2	0.339	1.38

	Female employment rate, % of women aged 20 to 64 in employment	Part-time female employment, % of total female employment	Social protection expenditure, % of the GDP*	Social benefits for families and children, % of the GDP	Poverty headcount, %**	Child poverty headcount, %**	Gini coefficient	Total fertility rate, number of children per woman
Sweden	75.7	40.4	30.4	3.1	12.9	13.1	0.241	1.98
Switzerland	74.6	60.6	26.6	1.2	15.0	17.4	0.296	1.52
United Kingdom	67.9	43.3	28.0	1.9	17.1	20.3	0.330	1.98
Russian Federation	70.0(72.7)***	7.3****	18.8	1.8*****	18.1	19.2	0.421	1.41

Source:

for European countries: EUROSTAT data (<http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database>), date of extraction: 1 Apr 2013.

for Russia: Federal State Statistics Service - FSSS (<http://www.gks.ru/>); relative poverty risks are calculated based on the Russian Longitudinal Monitoring Survey for 2010; social expenditure is estimated based on the FSSS data about the number of recipients and average size of payments, the Social Insurance Fund data, the Pension Fund data, the data on implementation of the Consolidated Budget and regional laws on the budgets' implementation.

Notes:

\*Social protection expenditure includes: social benefits, administration costs, and other miscellaneous expenditure. Social benefits include transfers, in cash or in kind, to households and individuals, to relieve them of the burden of a defined set of risks or needs, including: sickness/health care, disability, old age, survivors, family/children, unemployment, housing, social exclusion.

\*\*Poverty headcount is the share of persons with an equivalised disposable income below 60% of the national median (after social transfers).

\*\*\*% of the population of working age (women aged 15-55 years); in brackets - % of the population of 20-59 years

\*\*\*\*Part-time employment is calculated as employment below 31 hours per week.

\*\*\*\*\*Estimated as the sum of expenses on cash transfers for families with children and institutional childcare. Sources: the FSSS data about the number of recipients and average size of payments, the Social Insurance Fund data, the Pension Fund data, the data on implementation of the Consolidated Budget and regional laws on the budgets' implementation.

Table A2: Overview of child-targeted policies in Sweden, Germany, Belgium, the United Kingdom and the Russian Federation

<i>Country</i>	Sweden	Germany	Belgium	United Kingdom	Russian Federation
<i>Unemployment benefits</i>	Unemployment insurance benefit (bun_s)	Unemployment benefit I (bunct_s)  Unemployment benefit II and Social benefits (bunnc_s)	Unemployment benefit (bun, bun_s)	Income based jobseeker's allowance and income support (bunmt_s)	Unemployment benefit (bun)
<i>Maternity/parental allowances</i>	Parent's allowance at birth (bpl)	Maternity leave benefits (bmact_s)  Parental leave benefit (bplct_s)	Maternity leave (bma)  Parental leave (bfapl)  Birth allowance (bchba_s)	Statutory maternity pay (bmaer)  Maternity allowance (bmana)	Maternity leave allowance (bmapr_s)  Child care allowance up to 1.5 years (bmacc_s)  Birth grant (bchba_s)
<i>Child benefits or tax credits</i>	Child benefit (bch_s)	Child benefit (bch_s)  Additional child benefit (bchot_s)	Child allowance (bch_s)	Child benefit (bch_s)  Child tax credit (bfamt_s)	Child allowance up to 16(18) years (bch_s)
<i>Child related tax allowances</i>		Tax allowance for children (per child)	Withholding income tax allowances (tinwhtc_s)  Income tax credits (tin_s)	Council tax benefit (bmu_s)	Standard tax deduction for children (tintawhc_s)
<i>Social assistance</i>	Social assistance (bsa_s)	General social assistance (bsa00_s)	Income support (bsa_s)	Income based jobseeker's allowance and income support (bunmt_s)	State social assistance (bsa_s)

<i>Country</i>	Sweden	Germany	Belgium	United Kingdom	Russian Federation
<i>Childcare related allowances</i>				Working tax credit (bwkmt_s)	Compensation of charges for pre-school institutions (bcc_s)
<i>Education related allowances</i>	Education benefit (bed)	Education benefit (bed_s)	Scholarships and grants (bed)	Education maintenance allowance (bedes)	Scholarships (bed)
				Student loan (bedsl)	
<i>Housing allowances</i>	Housing allowance (bho_s)	Housing benefit (bho)	Housing related benefits (bho)	Housing benefit (bho_s)	Housing subsidy (bho_s)

Notes: This table shows cash benefits that are available to families with children and are either included or simulated by EUROMOD and RUSMOD. Variable names are shown in brackets. If a policy is fully or partially simulated the name of the relevant variable ends in '\_s'. Policies that are swapped are highlighted in grey.