

“Is the neighbour's lawn greener?”
A comparative perspective on family support systems
in Lithuania and other NMS

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Abstract

To what extent can a country's effectiveness in reducing child poverty be attributed to the size of family cash transfers or to the design of these transfers? In this paper, we aim at disentangling the importance of each of these two factors, focusing on the family support system in Lithuania and comparing it with the four other new member states. Despite increased susceptibility to poverty in Lithuania, single parent families have less state support than large families. This contrasts with other former communist countries, such as Estonia, Hungary, Slovenia or the Czech Republic, who protect both large and single parent families much better. The question is if their family transfer systems could achieve similar results in Lithuania. We employ the EUROMOD microsimulation tax-benefit model to swap selected countries' family policies and test which family policy parameters may have greater effects on child poverty reduction in Lithuania. We explore the role of both income transfers and tax instruments.

The paper is a part of the GINI project, which studies the economic and educational drivers and the social, cultural and political impacts of increasing inequality with novel contributions on the measurement of income, wealth and education inequality. More information could be found at <http://www.gini-research.org>

The results presented here are primarily based on EUROMOD versions F2.38 and F3.0. EUROMOD is maintained, developed and managed by the Institute for Social and Economic Research (ISER) at the University of Essex in collaboration with national teams from the EU member states. We are indebted to the many people who have contributed to the development of EUROMOD and to the European Commission for providing financial support for it. The results and their interpretation are the authors' responsibility.

Contents

1. Introduction.....	4
2. Child poverty and family support systems: existing evidence	5
2.1. Diversity in child poverty risks	5
2.2. Size and design of transfers and child poverty: evidence for the NMS	5
3. Methodology.....	7
3.1. EUROMOD microsimulation model and input data.....	7
3.2. Size and types of support to families in the selected countries.....	8
3.3. Microsimulation scenarios and assumptions.....	11
3.4. Policy effectiveness measurement	13
4. Simulation results	13
4.1. Poverty impacts of baseline policies	13
4.2. Scenarios 1A & 1B	14
4.3. Scenarios 2A & 2B	16
4.4. Scenario 3.....	17
5. Conclusions and policy suggestions	18
References	21

1. Introduction

Child poverty remains a serious problem across the EU, and especially in the new EU member states (NMS), be it with significant variations in its extent and intensity. Compared to other EU countries, Lithuania has “below- (EU) average performance in all dimensions of child poverty and well-being, and particularly in terms of risk of poverty” (TARKI, 2010). It is the only country with a consistent “bottom third performance” on all child wellbeing (Bradshaw & Richardson, 2009). Poverty is especially concentrated among single parent households and households raising three or more children. Both household types are of particular and continuous national and trans-national policy concern, especially given that about half of the poor children in the EU live in these two types of households (i.e. Commission of the European Communities, 2008).

The Lithuanian family system design is criticised on the poverty effectiveness grounds despite numerous past and recent reforms of state provided income support to families with children (Cornelius, 1995; Kabašinskaitė & Bak, 2006; Salanauskaite & Verbist, 2009; TARKI, 2010). Apparently, the implemented policy reforms are not so poverty reduction effective, especially when compared to the achievements of other new EU member states (NMS), such as Estonia, Hungary, the Czech Republic or Slovenia (TARKI, 2010).

Despite the fact that overall child poverty and its causes have been the subject of many studies, analysis of the poverty impacts by state transfers is limited. Current research focuses on the analysis of national programmes, while evidence providing a comparative perspective is still scarce (Barrientos & DeJong, 2006). Most research on the poverty effectiveness of family support tools has concentrated on Anglo-Saxon countries and ‘old’ EU member states (Kamerman, Neuman, Waldfogel & Brooks-Gunn, 2003; Levy, Lietz & Sutherland, 2007; Matsaganis et al., 2007). Research within the NMS region is still quite rare, Förster & Tóth (2001) being one of the few examples. The region though is highly interesting not only because of the fast changing socio-economic environment and demographic conditions (e.g. particularly low fertility rates, high migration), but also because of recent and still under-reform family policy changes. Actually, (relative) child poverty rates in some of the selected NMS countries are lower than in a number of richer EU member states.

In this paper we investigate to what extent one country’s “success” story in achieving low(-er) child poverty rates, and especially among the most vulnerable household types, can be attributed to the size and the design of the transfers, more specifically *child benefits* and *child-related tax support instruments*. Our focus is on the Lithuanian family support system and we compare its effectiveness in combating child poverty to the systems of Estonia, Hungary, the Czech Republic and Slovenia. These four countries resemble Lithuanian political and socio-economic circumstances in many ways, though there are also important differences. The analysis is anchored in 2008 – the year when a major family benefit reform has been fully implemented in Lithuania (for more details see Salanauskaite & Verbist, 2009).

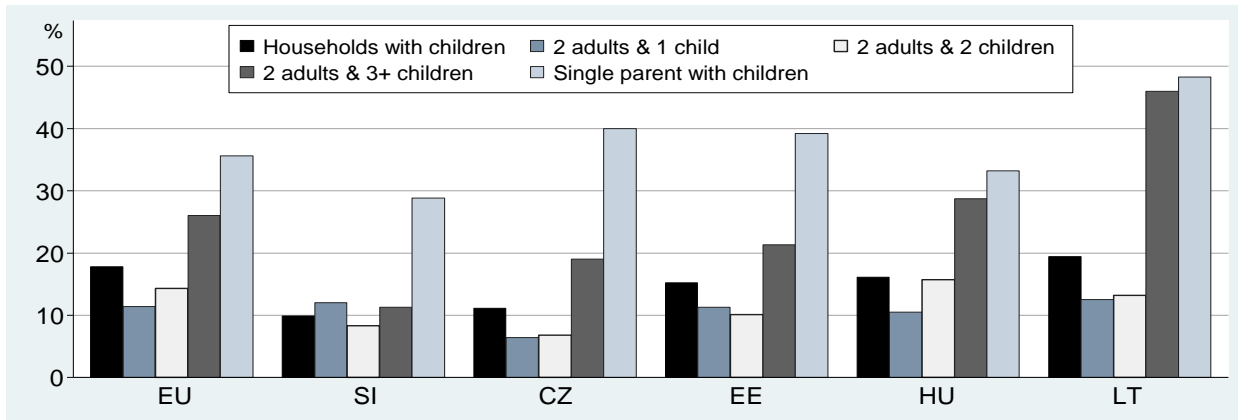
The paper starts with background information on child poverty in the selected NMS countries. We also review evidence on the effectiveness of family benefit/tax mechanisms. Next, we describe the methodology of this article of policy swapping scenarios within a microsimulation framework. We then present and analyse microsimulation analysis results. Finally, we conclude and suggest relevant policy lessons.

2. Child poverty and family support systems: existing evidence

2.1. Diversity in child poverty risks

In 2008 the child poverty rate in Lithuania is above the EU and just below the NMS average. However, the at-risk-of-poverty rates of large households and single parent households are with over 45% extremely high (Figure 2)¹. This is a rare situation in the EU, as often at least one of these household types has better income protection. Furthermore, high-poverty is observed despite the state continuous recognition of large and single parent households as most important poverty reduction targets (e.g. *National report of Lithuania on social protection and social inclusion strategies 2008–2010 (NR – SPSIS)*, 2008).

Figure 1. Poverty among different households with children in the selected countries (2008)



Notes: Countries are ranked by poverty rates for households with children, except of the EU indicator; Children: household members under the age of 18 between ages 18 and 24 if economically inactive and living with a parent. Source: EUROSTAT

In Figure 1, we also highlight households' differences in poverty rates for the selected sample of countries. Slovenia performs extraordinary well for both the most vulnerable household types in the EU – single parent and large households. The Czech Republic stands out with particularly low poverty rates among small families (1 or 2 children). Hungary is the only country that has a higher than the EU average poverty risk among households with two children. The latter indicator is actually the only one, on which Lithuania outperforms the EU average. Somewhat surprisingly, higher than the EU average poverty risk for households with one child is observed in two countries: Lithuania and Slovenia. This is the only worse than the EU average poverty outcome for the latter country.

2.2. Size and design of transfers and child poverty: evidence for the NMS

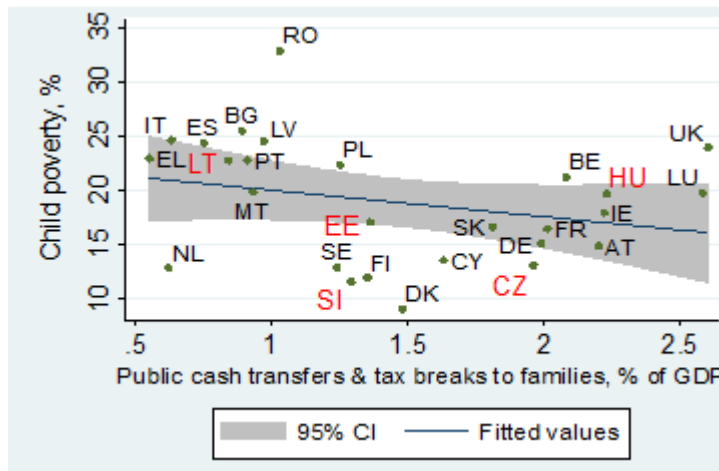
Along with socio-demographic characteristics of the child's family, labour market situation of parents and in-work poverty, government interventions are seen as the major determinant of child poverty (Commission of the European Communities, 2008; TARKI, 2010). Combined action is preferred, as income transfers alone are insufficient and actually not meant to fully eliminate child

¹ Following Förster & Tóth (2001), the perspective of households with children is an important child poverty indicator: it provides with an additional policy perspective, as many institutional regulations take into account the needs of specific family types (i.e. large families) rather than the needs of children per se. In practice, child poverty in a specific household type or poverty rate for this household type are very close estimates.

poverty (Bradbury & Jantti, 2001; Cantillon & Van den Bosch, 2003; Kamerman et al., 2003). The stand alone role of the government transfers is, though, of high importance, especially if well designed to provide support for those in most vulnerable situations. Size and design of transfers share important influences.

Among the diverse types of social transfers, the proportion of social spending dedicated to families with children (apart from the design) is considered to impact child poverty most (e.g. Bradshaw & Finch, 2003). Nevertheless, the importance of the other types of social transfers, such as social assistance, unemployment benefits, is not to be discarded (Corak, Lietz & Sutherland, 2005).

Figure 2. Generosity of family transfers and (child) poverty in the EU (2008)



Notes: Tax breaks primarily refer to tax credits; tax allowances are not included (data not available for Greece, Italy, Estonia, Slovenia, Finland, Luxembourg, Hungary, Denmark and Iceland). Child poverty is calculated on incomes from 2007 (based on the EU-SILC 2008 data). Cash family support indicator refers to 2007 too.

Source: EUROSTAT, OECD Family Database & Social Observatory data

Figure 2 confirms that a higher share of GDP spent on tax breaks and transfers to families with children is associated with the lower child poverty rates. Among the selected countries, Hungary stands out with the largest share of GDP spent on supporting families. Lithuania has the lowest level of expenses. Child poverty levels in both countries, though, are somewhat higher in comparison to other countries with similar spending levels. The best performance is noted in Slovenia: relatively low share of GDP spent on transfers corresponds to very low child poverty risk.

Aside wide-ranging spending levels, diversity in benefits' design is remarkable too. A number of countries rely on universal/ categorical family benefits, but means testing eligibility conditions are prominent too. Support via taxes, such as allowances or credits, is also increasingly recognized and used as an important family policy tool (Adema, del Carmen Huerta, Panzera, Thevenon & Pearson, 2009; Figari, Paulus & Sutherland, 2011).

The poverty impacts of these diverse combinations of benefits and tax instruments are often, though, not well assessed. This is mainly due to complexities of national policy systems and socio-demographic environments, within which such impacts should be identified and evaluated. Especially studies on family policy effectiveness in the NMS countries are still rare. Three studies are worth mentioning in this respect. Förster and Tóth (2001) study the evolution of benefit types

and their effectiveness in Poland, Hungary and the Czech Republic in the mid of 1990's. They find that large and single parent families became particularly income vulnerable during the economic transitions years, with the most dramatic changes observed for the latter household type. Most of the benefits' reforms at that time introduced means-testing conditions, which consequently increased poverty reduction effectiveness of the programmes. Nonetheless, a political will for restoration of universal benefits remained active. The latter observation corresponds to the numerous reforms in economic upturn times (around 2000 onwards) aiming at providing universal coverage with child benefits (e.g. as of 2004 in Lithuania). Levy, Morawski, & Myck (2009) evaluate poverty effectiveness of Polish state support to families by comparing it to systems available in France, the UK and Austria using EUROMOD. They find that single parents in Poland would benefit most if the French system (using both universal and means tested benefits) were adopted, whereas families with both parents would similarly benefit either under the universal Austrian or the mean-tested British systems. TARKI (2010) report provides with the most extensive evaluation of the EU countries' performances in reducing child poverty. It finds low-effectiveness of income support to families with children in Lithuania. The means-tested benefits in the Czech Republic and the universal benefits of Hungary are observed to produce similar child poverty outcomes. Social transfers in Slovenia are seen as often not specifically targeted at children, however, their effectiveness in reducing poverty is noted to be high. As such, both studies do not prioritize poverty effectiveness of either means-tested or universal benefits, but rather highlight their greatly varied impacts under particular national designs and different socio-demographic circumstances.

Apart from Levy et al. (2009), these studies have not used microsimulation modelling which we think is particularly well suited for this kind of topic. Using microsimulation models could help in highlighting the role of family support instruments, be it taxes or benefits, at the time permitting for interactions with the remaining tax-benefit structures to take place. Examples for such studies include Matsaganis et al. (2007) for Southern Europe and Immervoll et al. (2001) for a comparison between the UK and the Netherlands. Matsaganis et al. (2007) stresses the trade-off between the fiscal costs and poverty reduction ability and suggests "combining a universal (low) income base with more targeted policies as a more effective way to reduce poverty at a reasonable cost to the tax payers". Immervoll et al. (2001) find that the effectiveness of universal child benefits in the UK and the Netherlands could be enhanced by adopting parameters available in one or the other country, and without the switch to the means tested benefits.

3. Methodology

3.1. EUROMOD microsimulation model and input data

Following Bradshaw & Finch (2003), five major ways are used for cross-country comparisons of public policies: international databases, microsimulation models, outcome studies, analysis of national accounts and a model family method. Among them, the tax-benefit microsimulation models are the most suitable for tracing distributional impacts of public policies, mainly due to utilization of the micro-level information on households and persons. This method also enables testing hypothetical public policy designs – a usually complex task due to the effects of various counterfactuals (e.g. Matsaganis et al., 2007).

We use the static tax-benefit microsimulation EUROMOD model (versions F3.0 and F2.38) to test poverty effectiveness of the "borrowed" family systems in Lithuania and vice versus. Currently (as

of October, 2011), EUROMOD embeds policy designs of 21 EU countries, among them Lithuania, Estonia, Hungary, the Czech Republic and Slovenia². The model has been initially designed to cover the 15 “old” EU member states, with the NMS being added progressively. Consequently, EUROMOD policy years are not identical for the selected range of countries. Lithuania and the Czech Republic are among the latest (2010) extensions of the EUROMOD framework. The 2005 policy year is the only reference time yet available for Slovenia. Other selected countries have the coverage of 2005-2008 policies.

In Table 6, we describe EUROMOD input data. Due to earlier implementation, Slovenian policies are simulated on a sample of administrative records (Čok, Kump & Majcen, 2008). Other countries use the EU-SILC as a single or major EUROMOD dataset input sources³. In Lithuania, the micro-database for EUROMOD is derived from the EU-SILC (UDB) data with a few imputations on the basis of the National SILC survey⁴ (Ivaskaite-Tamosiune, Lazutka & Salanauskaite, 2010). In the Czech Republic, the National SILC additional variables are merged with the EU-SILC data (Münich & Pavel, 2010). “Pure” EU-SILC is used to form EUROMOD databases for Estonia and Hungary (Hegedűs & Szivós, 2010; Vörk, Paulus & Lüpsik, 2010). As income reference dates are “older” than analysed policies, all countries use adjustment factors to update income levels to a respective policy year. This implies, that, the policy year of 2008 is set on the socio-demographic structure of 2005, but with income levels adequate to 2008.

Table 6. EUROMOD included policies and datasets of the selected countries

	Lithuania	Estonia	Hungary	Czech Rep.	Slovenia
Source database(s)	EU-SILC + imp. Vrbls. Based on N.SILC	EU-SILC *	EU-SILC	EU-SILC merged with N.SILC vrbls.	SURS : sample of administrative records
Income reference year	2005	2005	2006	2005	2004/2002
# of households	4660	5623	8737	7483	4777
# of individuals	12098	15755	22271	17793	13798

* 2 other datasets can be used: Household Budget Survey (2005) and Estonian Social Survey 2006 (National SILC).

Source: EUROMOD country reports

Also the following major assumptions, relevant for the interpretation of the simulation results, are used: June 30 is the reference date for all policy descriptions; no behavioural reactions are taken into account; full take-up of benefits and full compliance with taxes and social contributions is assumed.

Further information on technical details of EUROMOD can be found in Sutherland (2001) or (Lietz & Mantovani, 2007).

3.2. Size and types of support to families in the selected countries

We identify four major types of non-contributory ‘transfers to children’: birth grants, (universal) child benefits, large family allowances and means tested family allowances. Overall, this covers 17

² More info is available at <http://www.iser.essex.ac.uk/research/euromod/developing-euromod/euromodupdate>

³ EU-SILC UDB micro-database is the Community Statistics on Income and Living Conditions (EU-SILC)

⁴ National SILC surveys serve as a basis from which the European wide survey of the EU-SILC (UDB) is derived. Typically, the National SILC data has a more detailed list of country specific income types or additional socio-economic/demographic variables, which are highly useful in EUROMOD country specific policy simulations.

different national benefits in the selected countries. Among them, only one benefit type is not simulated in EUROMOD: an Estonian child benefit supplement for single parents. Benefits are not subject to income taxation. In Hungary, however, the benefit to large families increases the taxable income base. All countries also use either tax credits or tax allowances to support families with children. These measures are simulated in all countries. The principal design features and state expenses of both benefit and tax support measures are reviewed in Table 7.

Table 7. State annual expenses & beneficiaries of ‘transfers to children’, 2008

		LT	EE	HU	SI ^[1]	CZ
Birth grant	Benefit per recipient, EUR	301.1	317.4	270.4	212.0	544.1 ^[2]
Child benefit	Age thresholds	18 (24)	17 (20)	~17 (~20)		
	Size: Δ with child age	↓	No	No		
	Size: Δ with # of children	↑	↑	↓		
	Extra1: for single parents	No	Yes	Yes		
	Extra2: for young children	Yes	Yes	No		
	Extra2: age thresholds	3	3 (8)	No		
	Benefit per recipient, EUR ^[3]	388.1	332.1	1117.6		
Allowance to large families	Age thresholds		17 (20)	17 (25)	18 (26)	
	Eligibility: # of children		>=7	>=3	>=3	
	Benefit per recipient, EUR		277.6	1426.0	334.2	
Means tested allowance	Age thresholds			17(23/25)	18 (26)	18 (26)
	Income threshold			1.25*OAP	Avg. wage	2.4*MLS
	Size1: Δ # of children			No	Yes	Yes
	Size2: Δ other factors			No	↓ income	↑ age
	Benefit per recipient			756.4 ^[4]	1031.9	353.6
Tax support: allowances or credits	Allowance (A)/credit (C)	A	A	C	A	C
	Age thresholds	18	18	17 (25)	18 (26)	18(26)
	Eligibility: # of children	>=1	>=1	>=3	>=1	>=1
	Size: Δ with # of children	Yes	Yes	No	Yes	Yes
	Extra: for single parents	Yes	No	No	No	No
	Means tested	No	No	Yes	No	Yes
	Support per recipient, EUR	48.1	459.0	307.6	738.1	421.1
Country population, mln. people		3.3	1.4	10.1	2.0	10.2
Expenses on benefits, mln. EUR (B)		150.0	94.0	1866.9	282.7	369.5
Per capita benefits, EUR		45.5	69.6	185.8	124.2	36.2
Expenses on tax support, mln. EUR (T)		25.2	79.2	52.9	237.8	594.1
Per capita tax support, EUR		7.6	58.7	5.3	118.9	58.2
Total “transfers to children”: B+T ^[5]		175.2	173.2	1919.8	486.1	963.6
Per capita “transfers to children”, EUR		53.1	128.3	191.1	243.1	94.5
Per capita “transfers to children”, PPS		88.5	175.8	285.2	319.8	152.4

Notes: ^[1] - Here and further on, all EUROMOD related data on Slovenia refers to 2005; ^[1] - No data on expenses in 2008 available; estimation based on [benefit amount in 2008] x [# of beneficiaries in 2005]; ^[3] - In EE case, total expenses exclude (EUROMOD non-simulated) supplement to the single parents (~15% of the child benefit expenses). ^[4] - No administrative data is available; we use EUROMOD simulated expenses instead. ^[5] - Costs refer to direct spending; administrative costs are not included.

Source: EUROMOD Country reports and MISSOC

Birth grants are found in all countries, with quite similar benefit rules. The benefit is proportional to multiple births in all countries, except in Hungary. The benefit is particularly high in the Czech Republic.

Universal child benefits are provided in Lithuania, Estonia and Hungary. The rules are quite different both regarding the eligibility criteria and benefits' size calculation. In Lithuania, the child benefit is provided to all children up to age 18, and up to age 24 – if a child is still in education and belongs to a large family. The benefit is increased for children up to the age three if raised in a large family. As such, these two components of the child benefit could be considered as a quasi large family allowance, which Lithuania does not provide separately. Estonia applies a lower age threshold for children who are above the legal age of majority, but still in education (i.e. under 20). This is applicable to children from all types of families. In Hungary, child benefit is not directly linked to a specific age threshold, but depends on the child's enrolment in a specific educational institution (e.g. compulsory, post-secondary education). Here, the benefit size does not depend on the child's age and has a regressive schedule for numerous children. Estonia provides an extra support to very young children in the form of higher benefit rates to those below age of three compared to those younger than eight. Furthermore, Estonia provides a special benefit to single parent households. The benefit cannot be simulated in EUROMOD, though, as being a 'single parent' means strictly no parenthood information on the second parent or assimilated situations – the data on which is not collected in the EU-SILC. Overall, Hungary offers the most generous child benefit's structure.

Large family allowances are available in three countries: Estonia, Hungary and Slovenia. The Estonian benefit is targeted towards families raising seven or more children. In Hungary, families with three children or more are entitled, but only if the youngest child is between three and seven years old. As all families with three or more children are eligible, Slovenia is the most generous. The dependent child's age is also the highest. In all three countries, the allowance's size is uniform per eligible family. Hungary offers the most generous support.

Hungary, Slovenia and the Czech Republic provide means-tested child allowances. In the Czech Republic, this is the only benefit type available. In Hungary, the benefit is given to families with children up to 18 years and older if in secondary education (23 years) or in tertiary education (25). Slovenia supports children maximum up to 26 years if in education. In the Czech Republic, a child after the age of compulsory schooling is considered to be a dependent child if in registered unemployment or education. The most simple benefit calculation rules are observed in Hungary: any family with per capita incomes lower than 125% of the minimum old-age pension (OAP⁵) is entitled to a uniform benefit amount. Slovenian means-tested threshold is relatively larger than in Hungary – at the average gross wage. The benefit size depends on per capita family income and is gradually withdrawn to zero, when reaching 99% of the average gross-wage. Due to the use of per capita incomes in benefit size's calculations, larger families receive proportionally bigger benefits when other circumstances are the same. The means-tested income threshold in the Czech Republic is family specific. It is set in relation to the state determined minimum living standard (MLS) – the parameter that depends on the age and the number of family members. The benefit's size, however, is not income dependent: it is set per child and increases with age.

Lithuania, Estonia and Slovenia have personal income taxation systems, which use tax allowances – the amounts exempted from taxation. All three countries apply basic allowances and increased allowances for families with children. The rules of family tax allowances are relatively similar, though the support levels differ. Lithuania and Estonia apply the same dependent child's age threshold: up to the age of 18. In Slovenia, dependent children are considered up to the age of 26,

⁵ OAP ~ 15% of the gross average wage in 2008.

if still in education or unemployed. In all countries, the size of the tax allowance does not depend on the family's income level. Lithuanian tax allowances are assigned by family types: the most generous support goes to large families; single parent families receive the second largest allowance; and the lowest support is attributed to families with up to two children. For large and single parent families, the tax allowance increases for each subsequent child, whereas the same amount per child is allocated in the small families. Estonian family tax allowance assigns an identical amount per each child (less the taxable income of the child). Slovenian tax allowance increases with each subsequent child. In Table 7, we present estimated value of these support measures (based on EUROMOD simulations and under assumption that basic allowances would be received instead of family allowances). Slovenian system appears to be the most generous. The tax support amount is actually the second largest state support to families (after the means tested allowance) here. Lithuanian tax allowance is relatively small compared to the state expenses on benefits. In Estonia, expenses on family tax allowance almost reach the level of the state's spending on the family benefits. In terms of population coverage, Lithuania and Slovenia have the most extensive regimes across the selected countries – around 16% of total population is eligible.

Hungary and the Czech Republic have tax credits for families with children (i.e. deductions from tax liabilities). The Czech Republic applies a year higher age threshold for defining children. The major difference, though, is in the means-tested eligibility conditions and the credit's size. In Hungary, only families with three children or more are entitled to receive a lump-sum family tax credit: around 2% of total population. The amount is granted fully if family income is below a certain amount (more than three times the gross average wage). For each monetary unit above this level, a 20% reduction rate in the tax credit is applied. If the tax duty is smaller than the tax credit, nothing is paid. Both small and large families are entitled to the tax credit in the Czech Republic, however stronger means-testing conditions apply. Here, only families with incomes below the six times of the minimum wage are eligible to use the child tax credit. The credit amount is proportional to the number of children and is subject to a maximum yearly amount. If the tax duty is lower than the tax credit, the difference is paid to the taxpayer.

Overall, Hungary has the most extensive support using benefits (see Table 7): about 186 EUR per capita. However, when tax concessions are also taken into account, Slovenia is taking the lead in generosity with 243 EUR per capita. Lithuania has with 53 EUR the lowest spending on transfers to children. Taking into account differences in purchasing power standards (PPS), the per capita "transfer to children" slightly reduces from 1:4.6 (in EUR) to 1:3.6 (in PPS) across the selected countries. Still, this indicates high disparities in the generosity levels of the identified family benefit systems.

3.3. Microsimulation scenarios and assumptions

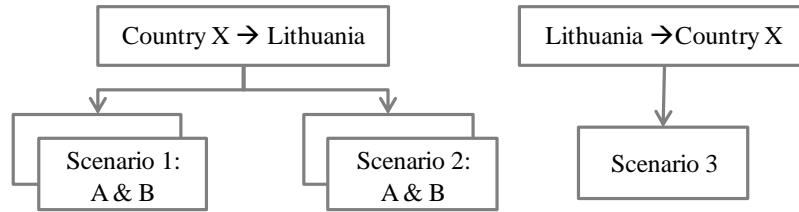
Microsimulation models allow testing for distributional impacts of both existing and "what-if" policies. In this article, we exploit both options.

In order to check how effective original "transfers to children" in reducing child poverty are, we eliminate them within the country's tax-benefit system. This implies that the other tax-benefit rules can still play a role in further increasing or decreasing household income. For example, if no transfers to families were available in the country, the social assistance safety net could prevent certain people from the full monetary impact of losing these benefits. Depending on the tax system, people could also be entitled to lower tax rates and different combinations of other tax allowances,

credits, etc. By comparing poverty outcomes with and without “transfers to children” we evaluate the first-order poverty effects of the original arrangements.

Swapping policies means that family benefits of a ‘donor’ country are integrated into the tax-benefit system of ‘recipient’ country instead of the original family benefit system. This allows testing the effectiveness of a specific ‘donor’ policy given interactions with the remaining tax-benefit structure and socio-demographic features of the ‘recipient’ country. In this article, we analyse three major policy swapping scenarios (see Figure 3), distinguishing between the actual (A) and budget neutral (B) implementation of policies.

Figure 3. Simulation scenarios



Source: own presentation

Three general implementation rules apply to all swapping scenarios. First, we rely on national monetary references, such as the (share of) average gross wage, when converting intermediary monetary parameters, such as income brackets, eligibility thresholds, etc. This ensures policy “adaptation” in national circumstances. Second, the annual consumer price index (CPI) is used to uprate Slovenian benefits of 2005 to account for changes in purchasing power by 2008. This implies that we model Slovenian system of 2005, but with income levels reflecting 2008. Third, only Table 7 identified transfers to children are swapped across the countries. Other policies, such as remaining income taxation rules, remain constant.

In Scenario 1, we implement Lithuanian benefits (as listed in Table 7) in the other selected countries. In the “actual” swap of policies (Scenario 1A), the benefit amounts are kept at the original levels, except of the adjustment for purchasing power standards and currency rates among the analyzed countries. The budget neutral Scenario 1B implies that state expenses are kept at the level observed with the original Lithuanian benefits. This effect is achieved by scaling swapped benefit amounts using the country specific budgetary adjustment factor (F_{jl})⁶:

$$F_{jl} = \frac{\sum_i^n y_{jk}}{\sum_i^n y_{lk}}$$

where: j – is a country, from which policies are borrowed; l –Lithuania; n - number of recipients given Lithuanian population qualities; k – number of transfer types (k); y – total state expenditures. Potential changes in taxes or other transfers (e.g. social assistance) are not accounted for.

In Scenario 2, we replace both Lithuanian benefits and tax allowances to children with the respective “transfers to children” of the other countries (see Table 7). Compared to the previous scenario, this swap shows both the influence of tax support measures and the total distributional

⁶ The factor could only be applied if there are no interactions between benefits. For example, child benefit is included into the income list of means tested allowances in the Czech Republic. In this case, we take the estimated scaling factor as a starting point, with the final factor found during the calibration procedure.

power of the selected benefits and tax measures. Here, the budget neutrality (Scenario 2B) implies that both state expenses and income taxation revenue is unchanged in comparison to original Lithuanian settings. The scaling factors for tax support instruments are estimated using empirical calibration due to non-linearity in income tax calculation.

In **Scenario 3**, we shift Lithuanian transfers and tax instruments for children to the selected country of analysis, while keeping the remaining tax-benefit structure of that country unchanged. We focus on the budget neutral swapping impacts, which we achieve based on analogous assumptions as already described in the Scenarios 1B and 2B. This scenario shows the extent of Lithuanian policies' effectiveness given different socio-economic and demographic settings, as well as interactions with the remaining tax-benefit system.

3.4. Policy effectiveness measurement

We evaluate swapped programmes' effectiveness by their impact on the Foster-Greer-Thorbecke (1984) measures of poverty (i.e. poverty headcount and gap) before and after implementation of a certain scenario. Where relevant, we decompose the selected indicators for population groups of interest (i.e. children: in large and single parent families). The poverty line (60% of the median equivalised income) is recalculated for each scenario. In comparison to the poverty line in original Lithuanian settings (about 216 EUR), it decreases by maximum 2% (Scenario 3, Estonia) or increases by maximum 5% (Scenario 2A, the Czech Republic) for different scenarios. Disposable income is the annual sum of total household income from labour earnings, plus income from investment and savings, plus all types of simulated or observed contributory and non-contributory benefits, minus simulated social contributions, minus simulated final taxes. Income is equivalised with the EU scale, also called the "modified OECD equivalence scale". Standard errors (with a confidence level of 95%) of poverty indicators are estimated in STATA using DASP programme⁷.

4. Simulation results

4.1. Poverty impacts of baseline policies

Table 8 shows that poverty would be higher in all countries and for all groups of interest if not for "transfers to children". The smallest effect is observed in Lithuania – 7% reduction in child poverty rate. The largest role is played by the Hungarian system - around 40% on child poverty, and from 30% to 50% for different household groups.

The Slovenian system is particularly effective for large families, reducing the pre-transfer poverty rate from 45% to 16% (a reduction of more than 60%). Overall, all countries but Lithuania seem to be able to manage poverty risk of this household type precisely with the "transfers to children": around 50% (reduction) in Estonia and Hungary, 36% - in the Czech Republic. The poverty reduction rate of large families in Lithuania is 8% and not significant (when standard errors are taken into account). The same holds for single parent families. Generally, the latter group has lower income protection in comparison to large families in all countries. The largest poverty risk reduction is achieved by Slovenian (36%) and Hungarian systems (32%). The lower effect is played by the Estonian (18%) and the Czech Republic systems (15%). The Estonian single parents would be the most vulnerable group across all countries, if not for the applied transfers.

⁷ More details see in Araar & Duclos (2007).

Table 8. Poverty headcount in pre- and post- transfer systems

Poverty, %:	LT- pre	LT- post	EE- pre	EE- post	HU- pre	HU- post	SI- pre	SI- post	CZ- pre	CZ- post
Total	20.8 (0.78)	20.3 (0.78)	18.5 (0.59)	17.5 (0.59)	17.8 (0.52)	13.3 (0.47)	18.3 (0.57)	15.7 (0.54)	9.8 (0.50)	8.5 (0.47)
Children	28.2 (1.63)	26.2 (1.61)	26.5 (1.22)	20.1 (1.13)	32.6 (1.18)	19.6 (1.02)	23.6 (1.18)	15.0 (0.98)	15.3 (1.07)	10.8 (0.97)
- in large (3+) families	48.0 (6.22)	44.3 (6.27)	40.1 (4.59)	20.2 (3.41)	60.2 (3.48)	30.6 (3.39)	44.9 (5.57)	16.2 (4.17)	31.8 (4.78)	20.5 (4.55)
- in single parent families	49.3 (6.29)	45.1 (6.40)	55.7 (4.48)	45.6 (4.62)	44.5 (3.93)	30.2 (3.54)	39.8 (5.01)	25.6 (4.79)	32.9 (3.50)	27.9 (3.41)

Note: Here and further on: standard errors - in parentheses; shaded cells – significant changes.

Source: own calculations using EUROMOD

Slovenia shows an extraordinary capacity of cutting poverty depth for large families – by 85%, and for single parent families – by 73%. These achievements bring the poverty gap indicators for these two family types to the lowest observable levels among the selected countries, whereas pre-transfer indicators cannot be ranked as “the first best”. The Hungarian transfers to children are important not only in combating child, but also – for population poverty. The poverty gap among large families is also reduced drastically here – by 75%. In the Czech Republic the pre-transfer poverty gap is already particularly small. Its mean-tested benefits dominated system, though, achieves less for large and single parent families compared to the Slovenian system. The Estonian system is able to halve the poverty gap among children in large families. A smaller but significant effect is achieved among the other groups. Results on Lithuania reveal the lowest poverty gap reducing capacities, with small and significant changes observed only for overall child poverty and large families.

Table 9. Poverty gap – pre and post transfer systems

Poverty gap, %:	LT- pre	LT- post	EE- pre	EE- post	HU- pre	HU- post	SI- pre	SI- post	CZ- pre	CZ- post
Total	6.3 (0.41)	5.9 (0.39)	5.3 (0.28)	4.9 (0.26)	6.0 (0.29)	3.2 (0.16)	4.7 (0.22)	3.4 (0.15)	1.7 (0.14)	1.5 (0.13)
Children	8.7 (0.76)	7.5 (0.68)	8.3 (0.57)	6.2 (0.50)	12.0 (0.67)	4.5 (0.30)	6.5 (0.45)	2.5 (0.19)	2.7 (0.28)	1.9 (0.26)
- in large (3+) families	14.8 (2.49)	12.0 (2.19)	10.9 (1.54)	5.2 (0.99)	26.1 (2.17)	6.3 (0.83)	12.3 (2.03)	1.9 (0.55)	6.0 (1.26)	4.3 (1.24)
- in single parent families	13.9 (2.07)	13.1 (2.01)	18.0 (1.89)	14.1 (1.85)	18.2 (2.33)	6.7 (1.14)	11.3 (2.18)	3.1 (0.61)	5.3 (0.73)	3.7 (0.62)

Source: own calculations using EUROMOD

4.2. Scenarios 1A & 1B

Overall, benefit systems with at least one type of a means-tested transfer, are able to achieve better poverty results in Lithuania (see Table 10) – be it under the actual or budget neutral implementations. This is rather intuitive, as means tested benefits should play the largest role in supporting the most income vulnerable. The Estonian system, which resembles the Lithuanian benefits’ design most closely, does not indicate significant poverty headcount changes. The exception in poverty reduction capacity is noted for children living in single parent households:

barely any changes are achieved, especially given greater effects registered in the countries of ‘benefits’ origins. This holds for all systems – be it universal or means tested.

Slovenian policies attain the best poverty headcount outcomes in the Scenario 1A. This is the only country of which benefits’ structure is able to achieve a small (but significant) poverty reduction among the single parent households. To remind, Slovenia provides with a means tested (eligibility) and an income specific (benefit’s generosity) child allowance benefit, plus an allowance to large families. Hungarian system, though offering the most extensive and generous benefits’ package, indicates the third best results (after Slovenia and the Czech Republic). The Czech system does not prioritise the most vulnerable household types (it provides with the means tested benefit, but without differentiating its size based on incomes). This is reflected by the best score in cutting total poverty, the second best score - in child poverty, the third score only - for children in large families, and no significant effects for children in single parent households.

The budget neutral swap of different benefits confirms the importance of the benefit levels. The difference between the estimated poverty rates of scenarios 1A and 1B can be seen as the benefits’ “size effect”. Comparison of Lithuanian baseline and scenario 1B indicates what the benefits’ “design” effect is. The only ‘design’ effect is attributed to the Slovenian system, and particularly to the results concerning large families. For this family type, both the design and the size effects are of equally importance - each achieves around 12 percentage points’ reduction from the original poverty rate.

Table 10. Poverty headcount – Scenarios 1A and 1B

Poverty headcount, %	<i>LT</i>	<i>1A: LT + Country X policies</i>				<i>1B: LT + Country X policies</i>			
	<i>baseline</i>								
	post	EE	HU	SI	CZ	EE	HU	SI	CZ
Total	20.3 (0.78)	20.1 (0.78)	18.5 (0.78)	17.6 (0.78)	17.1 (0.78)	20.3 (0.78)	19.9 (0.78)	18.9 (0.78)	19.4 (0.78)
Children	26.2 (1.61)	25.9 (1.61)	20.4 (1.52)	18.6 (1.49)	18.9 (1.53)	26.8 (1.62)	25.6 (1.60)	23.1 (1.57)	24.7 (1.62)
- in large (3+) families	44.3 (6.27)	41.2 (6.29)	24.9 (5.82)	20.4 (5.60)	27.2 (5.88)	42.6 (6.29)	40.3 (6.27)	32.6 (6.08)	42.9 (6.29)
- in single parent families	45.1 (6.40)	48.1 (6.33)	39.5 (6.29)	38.0 (6.50)	40.2 (6.53)	49.3 (6.29)	45.9 (6.38)	45.0 (6.40)	43.6 (6.44)

Source: own calculations using EUROMOD

Analysis of the poverty gap indicators (see Table 11), follows observations of poverty headcount: all but Estonian benefits achieve significant poverty gap reductions, at least under the actual implementation scenario. The Czech system reveals to be able narrowing poverty gap more than the Hungarian system. Furthermore, significant even though smaller results are noted for the single parent households under the benefits of these three countries. The budget neutral implementation points to two additional observations: 1) Slovenian system is still the leading one, but significant changes in overall/child poverty are noted under the Czech system too; 2) the ‘design’ effect is stronger than the ‘size’ for large families under the Slovenian system.

Table 11. Poverty gap – Scenario 1A and 1B

Poverty gap, %	<i>LT</i> baseline	1A: <i>LT</i> + Country X policies				1B: <i>LT</i> + Country X policies			
	post	EE	HU	SI	CZ	EE	HU	SI	CZ
Total	5.9 (0.39)	5.9 (0.38)	4.9 (0.32)	4.8 (0.31)	4.4 (0.29)	6.0 (0.39)	5.7 (0.37)	5.4 (0.35)	5.4 (0.35)
Children	7.5 (0.68)	7.5 (0.67)	4.9 (0.48)	4.3 (0.43)	4.3 (0.46)	7.7 (0.69)	7.1 (0.65)	6.2 (0.56)	6.7 (0.62)
- in large (3+) families	12.0 (2.19)	11.1 (2.10)	5.9 (1.45)	3.1 (0.99)	5.7 (1.38)	12.1 (2.20)	10.7 (2.16)	7.5 (1.63)	10.6 (2.02)
- in single parent families	13.1 (2.01)	14.7 (2.16)	8.8 (1.50)	9.5 (1.58)	9.0 (1.77)	14.3 (2.10)	12.1 (1.82)	12.0 (1.83)	11.9 (1.92)

Source: own calculations using EUROMOD

4.3. Scenarios 2A & 2B

If in Scenario 1, Slovenia revealed the best results across the selected countries, adding tax concessions changes the distributional portrait (see Table 12). We still do not observe any significant results under the Estonian tax-benefit measures, but rankings of the other countries' results change.

First, the Czech Republic achieves the best poverty scores for total, children and single parent families under the actual implementation Scenario 2A. Adding tax measures implies a more than ten percentage points' drop (from Scenario 1A) in poverty headcount for the latter group. The effect of the Hungarian system is of lower effectiveness, but also notable. Both countries use tax credits rather than tax allowances. Hungarian tax credit is though targeted to large families only, whereas the Czech tax credit applies to all families, but with stronger means testing conditions. Furthermore, the Czech system allows the difference between the tax duty and the tax credit to be paid. The effect of tax allowances is of lower importance as even without the family tax allowance taxpayers would be still eligible to use the basic allowances.

Second, under the budget neutral implementation we observe both Hungary and Slovenia achieving similar poverty reduction results for all children, and particularly for those raised in large families. This implies, that results of the Czech Republic system in Scenario 2A are mainly driven by the "size" effect, and the strong means-tested conditions (on eligibility) imbedded in the system are of lower importance compared to the designs available in the other countries.

Tax measures are actually seen to be the most effective Hungarian measure for large families: leading to a more than five percentage points decrease compared to the effect of benefits only (Scenario 1B). Together, Hungarian tax and benefit measures show the equal importance of both the size and design effects for the latter household group (about 10 percentage points each). The Slovenian system achieves even lower poverty rate among the large families. This success is mainly due to the benefits' performance, and with a higher 'design' than the 'size' effect. Neither country's tax nor benefit measures are able to achieve poverty rate reduction among single parent families given budget neutral implementation.

Table 12. Poverty headcount – Scenario 2A and 2B

Poverty headcount, %	<i>LT</i> <i>baseline</i>	<i>2A: LT + Country X policies</i>				<i>2B: LT + Country X policies</i>			
	<i>post</i>	<i>EE</i>	<i>HU</i>	<i>SI</i>	<i>CZ</i>	<i>EE</i>	<i>HU</i>	<i>SI</i>	<i>CZ</i>
Total	20.3 (0.78)	20.0 (0.78)	18.4 (0.78)	18.5 (0.78)	16.9 (0.78)	20.3 (0.78)	19.6 (0.79)	18.9 (0.79)	19.6 (0.78)
Children	26.2 (1.63)	25.5 (1.60)	19.7 (1.46)	18.6 (1.47)	16.6 (1.50)	26.8 (1.62)	24.4 (1.57)	23.0 (1.56)	25.4 (1.62)
- in large (3+) families	44.3 (6.22)	41.2 (6.29)	24.1 (5.80)	19.8 (5.55)	25.3 (5.85)	42.6 (6.29)	34.4 (6.11)	31.1 (6.07)	45.0 (6.27)
- in single parent families	45.1 (6.29)	47.8 (6.34)	33.2 (5.78)	39.8 (6.46)	29.2 (6.66)	45.2 (6.28)	45.3 (6.39)	45.2 (6.40)	44.7 (6.41)

Source: own calculations using EUROMOD

Analysis of poverty gaps reveals more positive changes across the systems of all countries, except of Estonia. Under the actual implementation, the Czech tax and benefit measures are able to achieve the best closure in the poverty gap. In particular, the single parents' families are benefiting under the system – the largest drop in poverty gap if compared to Hungary and the Czech Republic. The budget neutral implementation removes this effect, but to a lesser extent than in Scenario 1. All three countries reveal some positive changes. Hungary stands out as the only country making a small but significant contribution to single parents' families. It also protects large families quite well. For both groups, the 'size' effect is still larger than the 'design' effect, and is mainly due to the implementation of Hungarian tax measures. Slovenia has the best performance in narrowing poverty gap for large families. This effect is mainly due to the benefits' design. Implementation of the Czech Republic tax credits prove to have a small but significant effect for overall and child poverty, though no significant effects in closing poverty gap among the large and single parent families is noted.

Table 13. Poverty gap – Scenarios 2A and 2B

Poverty gap, %	<i>LT</i> <i>baseline</i>	<i>2A: LT + Country X policies</i>				<i>2B: LT + Country X policies</i>			
	<i>post</i>	<i>EE</i>	<i>HU</i>	<i>SI</i>	<i>CZ</i>	<i>EE</i>	<i>HU</i>	<i>SI</i>	<i>CZ</i>
Total	5.9 (0.39)	5.9 (0.38)	4.8 (0.31)	5.0 (0.32)	3.9 (0.26)	6.0 (0.39)	5.6 (0.36)	5.4 (0.35)	5.4 (0.35)
Children	7.5 (0.68)	7.4 (0.67)	4.3 (0.42)	4.4 (0.45)	2.9 (0.32)	7.9 (0.69)	6.6 (0.59)	6.1 (0.56)	6.6 (0.61)
- in large (3+) families	12.0 (2.19)	10.9 (2.08)	3.8 (0.97)	3.3 (1.09)	3.4 (0.84)	12.4 (2.23)	8.5 (1.82)	7.2 (1.61)	10.5 (1.98)
- in single parent families	13.1 (2.01)	14.8 (2.18)	7.8 (1.56)	10.1 (1.68)	4.8 (1.02)	14.6 (2.11)	11.0 (1.73)	12.1 (1.85)	11.5 (1.82)

Source: own calculations using EUROMOD

4.4. Scenario 3

Table 14 presents the baselines and Lithuanian policy swaps into the four selected countries. Across all countries, implementation of Lithuanian policies worsens poverty situation, though with the varied degrees.

The largest deterioration in poverty rates is observed in the Czech Republic. Here, all selected groups would experience significant and large increase in poverty rates. This is a somewhat

surprising outcome, given that the Czech tax and benefit policies did not lead to any significant poverty changes in Lithuanian settings under the Scenario 2B. Poverty rates in Hungary and Slovenia would also increase, if Lithuanian policies were implemented. In both countries, however, the relative position of the single parent families does not change. This shows that under budget neutral conditions, neither of these countries have a more effective state support package for the latter population group. Estonian policies did not bring any significant changes in Lithuania under any budget neutral scenario. The reverse swap, though, reveals that children would tend to live in higher poverty under Lithuanian policies, despite any significant observations for the vulnerable household types.

Table 14. Poverty headcount – Scenario 3

Poverty, %:	EE		HU		SI		CZ	
	<i>post</i>	<i>LT</i>	<i>post</i>	<i>LT</i>	<i>post</i>	<i>LT</i>	<i>post</i>	<i>LT</i>
Total	17.5 (0.59)	17.9 (0.58)	13.3 (0.47)	13.8 (0.50)	15.7 (0.54)	17.5 (0.55)	8.5 (0.47)	10.6 (0.50)
Children	20.1 (1.13)	21.5 (1.16)	19.6 (1.02)	21.3 (1.06)	15.0 (0.98)	17.8 (1.05)	10.8 (0.97)	15.9 (1.07)
- in large (3+) families	20.2 (3.41)	23.7 (3.67)	30.6 (3.39)	36.8 (3.51)	16.2 (4.17)	23.8 (4.94)	20.5 (4.55)	31.9 (4.74)
- in single parent families	45.6 (4.62)	47.3 (4.60)	30.2 (3.54)	32.2 (3.68)	25.6 (4.79)	26.7 (4.80)	27.9 (3.41)	35.8 (3.55)

Source: own calculations using EUROMOD

The trends in poverty gaps (see Table 15) point to larger and negative changes across all countries. The worsening of poverty gap is particularly notable for large families – all four countries would experience significant increase in poverty gap under the Lithuanian policies. The poverty gap for child poverty would widen too in all countries. The worst performance would be registered in Slovenia. Poverty gap would also widen for single parent households, especially in Hungary and Slovenia. This is also a somewhat surprising effect, as smaller or no effect was detected when swapping Lithuanian policies into the other countries.

Table 15. Poverty gap – Scenario 3

Poverty gap, %	EE		HU		SI		CZ	
	<i>post</i>	<i>LT</i>	<i>post</i>	<i>LT</i>	<i>post</i>	<i>LT</i>	<i>post</i>	<i>LT</i>
Total	4.9 (0.26)	5.1 (0.26)	3.2 (0.16)	3.7 (0.18)	3.4 (0.15)	4.1 (0.18)	4.9 (0.13)	5.1 (0.14)
Children	6.2 (0.50)	6.9 (0.53)	4.5 (0.30)	5.6 (0.38)	2.5 (0.19)	4.0 (0.29)	6.2 (0.26)	6.9 (0.29)
- in large (3+) families	5.2 (0.99)	7.1 (1.27)	6.3 (0.83)	10.0 (1.24)	1.9 (0.55)	5.2 (1.15)	5.2 (1.24)	7.1 (1.29)
- in single parent families	14.1 (1.85)	15.2 (1.87)	6.7 (1.14)	9.4 (1.51)	3.1 (0.61)	6.1 (1.29)	14.1 (0.62)	15.2 (0.78)

Source: own calculations using EUROMOD

5. Conclusions and policy suggestions

Non-contributory transfers to families, be it tax measures or benefits, are recognised as important policy tools in combating child poverty. Existing policy designs, though, leave considerable scope in seeking more efficient and effective poverty reduction policies. Our focus country, Lithuania,

has largely reformed its family transfer system towards favouring the universal benefit programmes. Reducing child poverty, on the other hand, which reaches particular heights for large and single parent families, remained an active and publicly recognised goal. We show that these preferred measures to support families with children (of 2008) are not child poverty effective. To answer what different policy sets could be used, we explore policy designs of the “neighbouring” countries with much better child poverty outcomes – namely, Estonia, Hungary, Slovenia and the Czech Republic.

Swapping policies across countries is a complex task, most suited for analyses using tax-benefit microsimulation models. We employ EUROMOD, the static tax-benefit model, for this task. Though a number of limitations are associated with using such a model, the advantage is its comprehensive structure in handling cross-national analysis on distributional policy impacts. Lithuanian policies have only recently been added to the EUROMOD structure, enabling analysis of family policy “reforms”. Across the selected countries, 17 different non-contributory benefits, plus tax credit or allowances, are identified as non-contributory family income support measures. We refer to them as “transfers to children”. Among them, one benefit (Estonian allowance to single parents) is not simulated due to the underlying micro-data (the EU-SILC UDB) limitations.

Across the selected countries, Lithuania and Estonia have the most similar non-contributory family benefit and tax measures (all universal/categorical), Hungary offers the most varied types of benefits (inclusive of smaller part on means tested benefits), Slovenia relies on a mix of (smaller) categorical and means tested benefits, and the Czech Republic provides with the means-tested measures only. Lithuania, Estonia and Slovenia also use the non-means tested family tax allowances, whereas the tax credits in Hungary and the Czech Republic are both based on the means-tested conditions. Aside these crude classifications of the transfers to children, significant other policy design features exist (e.g. regarding eligibility, benefits’ size, definitions of children, etc.). In terms of generosity, Hungary offers the most extensive benefits’ package, whereas total spending, inclusive of the benefits and tax measures, is highest in Slovenia. The four selected countries are also found to have more effective family transfer systems - with child poverty reduction up to 40% (in Hungary; highest across the countries) due to the existing arrangements. Lithuanian system of transfers to children achieves about 7% in child poverty reduction.

Though means-tested measures are an efficient way of targeting income support to the most vulnerable groups, we observe a number of better outcomes both under the Hungarian (mainly universal/categorical transfers) and Slovenian systems; and especially for the most vulnerable groups. Implementation of Estonian policies in Lithuanian socio-demographic settings, as well as the remaining tax-benefit structure, would not bring lower child poverty rates.

Using actual implementation scenarios (with higher and differently designed transfers), we show that the Slovenian benefits reach the largest poverty reduction effect across all household types, whereas a “reform” of both tax and benefit measures would be the most favourable under the Czech system – mainly due to its family tax credit design. The Czech system, on the other hand, is found to have lower capacities in providing for the most vulnerable households.

“Reforming” under the budget neutral conditions highlights the effectiveness of the policies “design”. Among the benefits, the most poverty reducing “design” effect is observed in Slovenia, especially for the large families. This shows that among the means tested systems, the most effective design is such where both eligibility and benefit’s generosity are family income specific.

Furthermore, the poverty reduction effect for large families is due to the benefit, which is specifically targeted at this household group. Tax measures are most effective under the Hungarian design, again for large families.

No significant reductions in poverty prevalence among single parent families, though, are observed under the budget neutral conditions with any country's tax or benefit measures. This is an unexpected effect, as under the means-tested conditions of Slovenian or the Czech Republic systems we have expected to see more positive outcomes. The only significant effect for this group is recorded under the Hungarian system - in slightly narrowing the poverty gap. Overall, poverty gap analysis confirms the large capacities of the Slovenian system in fighting poverty among the large families, while the Czech system achieves generally favourable child poverty results, but without significant outcomes for the most vulnerable household types.

Implementing Lithuanian "transfers to children" under the budget neutral conditions brings somewhat surprising effects. Child poverty rates would worsen in all countries, inclusive Estonia – even though that was not the case in the reverse scenario. The Czech Republic proves to have the most negative outcomes for all household types, while poverty among the single parent families (except in the Czech Republic) is not changing.

The latter observation suggests that the analysed packages of "transfers to children" do not have an effective poverty design for single parent families, at least given the Lithuanian socio-demographic settings. This could also imply that "transfers to children" alone are not sufficient and not meant to lift this household group out of poverty. Unexpected interactions between the "swapped" transfers to children and the unchanged tax-benefit system or the mismatch between the poverty and means-tested thresholds (especially given that we use a relative poverty concept) might be of importance too. Further research on the relevance of each of these issues should be launched. Furthermore, expanding the scope of the selected countries and proposing the "optimal, though not yet in practice" packages could be of interest too.

The last and other observations, point to a few policy lessons:

1. Aside benefits, tax support measures are of equal and high importance. So is the way they are designed.
2. Though countries choose if to apply means tested or universal benefit systems on a wider ground of considerations, combating child poverty should be considered an important policy priority, especially if particularly high poverty rates for certain household types are observed. We show that child poverty reduction could be achieved using a well designed mix of both universal/categorical and means-tested benefits, plus tax measures.
3. The size of the transfers is of high importance, but a number of policy improvements could be attained by focusing on the design features: benefit's formula, targeting, definitions. This concerns the means-testing conditions too, where not only eligibility (the most common feature), but also the generosity dimension could be income specific. The most effective combinations are still country specific.

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