CSB
WORKING PAPER

centreforsocialpolicy.eu January 2014 No 14 / 01

Universalism under siege? Exploring the association between targeting, child benefits and child poverty across 26 countries

Wim Van Lancker &
Natascha Van Mechelen

University of Antwerp
Herman Deleeck Centre for Social Policy
Sint-Jacobstraat 2
BE – 2000 Antwerp
F +32(0)3 265 57 98

Universalism under siege? Exploring the association between targeting, child benefits and child poverty across 26 countries

Wim Van Lancker & Natascha Van Mechelen

Working Paper No. 14 / 01

January 2014

ABSTRACT

The long-standing wisdom that universally designed benefits outperform targeted benefits in terms of poverty reduction has come under siege. Recent empirical studies tend to find that targeting is not necessarily associated anymore with lower levels of poverty reduction. In this study, we investigate for a broad set of European countries (1) the relationship between child benefits and child poverty reduction; (2) whether a universal or targeted approach is more effective in reducing child poverty; and (3) the causal mechanisms explaining the link between (1) and (2). In doing so, we take into account the general characteristics of the child benefit system, the size of the redistributive budget and the generosity of benefit levels. In contrast to previous studies, we construct an indicator of targeting that captures the design instead of the outcomes of child benefit systems. We find that targeting towards lower incomes is associated with higher levels of child poverty reduction, conditional on the direction of targeting and the characteristics of the benefit system.

Keywords
Child benefits, child poverty, paradox of redistribution, targeting, universalism, comparative social policy

JEL
I32; I38; J13

Wim Van Lancker (corresponding author)
Herman Deleeck Centre for Social Policy
University of Antwerp, Belgium
Wim.VanLancker@uantwerpen.be

1. Introduction

In times of economic hardship and fiscal consolidation, government are in dire need to find cost-efficient ways to combat rising child poverty rates (European Commission, 2013a; TARKI, 2010). Earlier research for developed welfare states has shown that child benefits play an important role in reducing child poverty. In this paper, we aim to reinvigorate our knowledge on the impact of child benefits on child poverty, in particular how child benefit systems should be designed in order to yield the most beneficial results in terms of poverty reduction.

The long-standing wisdom that universally designed benefits outperform targeted benefits in terms of poverty reduction has come under siege in recent years. On the political front, the World Bank, the European Commission, and the OECD all have encouraged a move towards "more and better" targeting to those in need, often accompanied by a call for more conditionality in benefit entitlement (European Commission, 2013b; Hall, 2007; OECD, 2011). The matter has also been at the centre of renewed scholarly attention. While Korpi and Palme's (1998) 'paradox of redistribution' that benefits targeted at the poor achieve less redistribution than universal benefits has long been regarded a settled matter, recent empirical studies for OECD and EU economies tend to find that targeting is not necessarily associated anymore with lower levels of redistribution (Kenworthy, 2011; Marx, Salanauskaite, & Verbist, 2013). Investigations for non-OECD countries yielded mixed results. Ravallion (2009), for instance, found no meaningful relationship between targeting and poverty reduction for a benefit scheme in China. In a report commissioned by the World Bank, on the other hand, Coady et al. (2004) find that targeted programs perform rather good, although conditional on policy specifics. The matter is clearly not settled yet, and should not be approached light-heartedly by academics. Once implemented, the choice between universalism or (more) targeting potentially impacts a large number of people, and support for targeting might also conceal an agenda for reduced social spending in the face of the economic crisis (Bradshaw, 2012). This warrants an increase in the academic effort to further unravel the link between poverty reduction and benefit program design.

Generally, previous studies suffer from two shortcomings. First, the analyses are often limited to the aggregate level which provides no guidance for the design of specific programmes (Moene & Wallerstein, 2001). It could very well be the case that the appropriate balance between targeting and universalism differs for child benefits and pension schemes. Second, the level of targeting is almost always operationalised with an index of concentration, in which redistributive *outcomes* are measured rather than the impact of redistributive *intentions*. In this respect, targeting is interpreted as social transfers being more beneficial for lower incomes, irrespective whether this comes about due to

characteristics of the welfare system (Marx et al., 2013). This distorts the interpretation of the results. To enrich the earlier findings on the impact of child benefits on child poverty, an in-depth exploration of the impact of the policy design, i.e. the balance between universalism and targeting, is a desirable further step in empirical research. Therefore, the aim of this paper is to investigate (1) the relationship between child benefits and child poverty reduction; (2) whether a universal or targeted approach is more effective in terms of child poverty alleviation; and (3) the mechanisms explaining the link between (1) and (2). In doing so, we will take into account the general characteristics of the child benefit system, the size of the redistributive budget and the generosity of benefit levels.

We contribute to the existing literature, first, by focusing on a specific welfare programme instead of the whole tax and transfer system for a large number of countries (EU25 + Norway) using recent data; second, by devoting attention to the drivers of the redistributive outcomes; and third, by applying a methodology in which two research methods are united. We combine information on the institutional characteristics of child benefit systems by means of the so-called family model methodology with an empirical analysis of child poverty reduction by means of survey data. This allows to test the *intentions* of policies in relation to its redistributive *outcomes*. Our results shed light on child poverty reduction, the role of policy design and the impact of social transfers, which does not only contribute to our theoretical understanding of the nature of redistribution, but also feeds into policymaking and the matter of cost-efficiency of social transfers in times of fiscal consolidation.

Our paper is structured as follows. First, we review existing literature on the targeting-universalism debate, the impact of child benefits on child poverty, and the connection between the two. Second, we devote some space to a proper definition of the concepts used throughout this paper, and subsequently present our data and analytical strategy. Our empirical results are found in the fourth section. We end this piece with a discussion of our findings and their relevance for the broader academic and policy debate on the benefits of targeting.

2. Background

2.1. Theoretical arguments

The debate on targeting versus universalism essentially boils down to the question "who should get what type and degree of social protection?" (van Oorschot, 2002, p. 171). The exact meaning of both concepts is not always clear, however, and they are often mixed up with related concepts such as means-testing or selectivity. Here, we distinguish between

universalism as a system characteristic and universalism as benefit entitlement (Bergh, 2005).

As a system characteristic, the opposite of *universalism* is *selectivity*. A benefit system is universal if the whole reference population is covered, while benefits are selective if eligibility is restricted to a specific category of the reference population based on certain conditions (e.g. having a low income). For example, child benefits are universal when all children are entitled, while they are selective when entitlement is limited to a specific group of children (e.g. poor children). Both are mutually exclusive: a benefit system is either universal or selective.

Targeting is concerned with the allocation of resources, i.e. how the budget is meant to be distributed (targeting intentions) or how it is actually distributed over beneficiaries (targeting outcomes). Remember that we are concerned with the targeting intentions, not with the outcomes. In this article, targeting intentions are captured by the variation in statutory benefit levels across income groups. If, say, low income groups are legally entitled to more generous benefits than higher income groups, the child benefit system is targeted towards lower incomes. By the same token, if higher income groups are entitled to higher benefits, the child benefit system is targeted towards higher incomes. This implies that selective benefits are always targeted, but also that targeting not necessarily implies selectivity. Targeting may occur within a universal benefit system as well, previously termed "targeting within universality" (Skocpol, 1991). When all beneficiaries are entitled to equal benefit levels and no targeting occurs, benefit entitlement is *universal*: every one of the reference group is entitled to exactly the same benefit amount. If benefit allocation is not targeted within universal benefit systems and both varieties of universalism are united, we speak of 'strict universality'.

Means-testing, then, is a technique to achieve targeting, a means to an end. Policymakers who want to target low-income households, for instance, might implement a means-test in the form of an income test. In this example, all families fulfilling the criteria of the income test, are eligible for the targeted benefits.

Whether benefits targeted at the poor or universal benefits are better to combat poverty has been a controversial issue for a long time, and theoretical arguments have been proposed favoring both sides (Kahn & Kamerman, 1975; Orloff, 1993; Skocpol, 1991). On the one hand, proponents of targeting benefits to the poor argue that it entails a more efficient use of resources because social spending goes to those who really need it (Besley, 1990). This resonates the criticism that the middle and higher income classes typically benefit more from social spending than the poor (Goodin & Grand, 1987). Consequently, the availability of more resources for those who need it should result in higher benefit levels. On

the other hand, proponents of universalism argue that universal benefits are superior over selective ones, because significant administrative costs, lower rates of take-up, and labor market and savings disincentives reduce their effectiveness in combating poverty (A. B. Atkinson, 1998; Bradshaw, 2012; Notten & Gassmann, 2008). Moreover, targeting is believed to undermine broad-based political legitimacy and public support for the welfare state. Therefore the more benefits are targeted at the poor, the smaller the redistributive budget will be. That is the political economy argument invoked by Korpi and Palme in their seminal 1998 article. They showed that for the period between the mid-1980s and the early 1990s, universalism was associated with a higher degree of redistribution, and that this relationship was driven by the relative size of the redistributive budget.

In sum, two causal mechanisms driving the relationship between benefit design and poverty reduction might be at play: 1) universal benefit systems are superior because they have higher redistributive budgets to allocate (the 'size' hypothesis); or 2) targeted benefits are superior because the available resources are distributed over a smaller group which allows benefits to be more generous; hence more effective in combating poverty (the 'generosity' hypothesis).

2.2. Previous research

Previous research has mainly focused on the redistributive impact of social spending as such. It has been shown extensively that large welfare states, i.e. welfare states with large redistributive budgets, tend to reduce poverty and inequality more effective than smaller welfare states (Korpi & Palme, 1998; Nelson, 2004), and that social spending is also relevant for explaining the variation in child poverty rates across countries (Bradbury & Jäntti, 1999; Chen & Corak, 2008; Gornick & Jäntti, 2010). In particular child benefits have shown to be an important policy lever in combating child poverty (Bäckman & Ferrarini, 2010; Corak, Lietz, & Sutherland, 2005; Immervoll, Sutherland, & De Vos, 2001).

Few studies investigate the design of child benefits in relation to poverty reduction, and these studies are often limited to one or a small set of countries. Notten and Gassmann (2008) use the change from universal to means-tested child benefits in Russia in 2000 as a case-study to compare the impact on poverty between the two strategies and find that universally provided child benefits are more effective in combating poverty. Above all, however, they show that generosity matters most: increasing benefit levels yields the highest impact on poverty. Matsaganis et al. (2006) use microsimulation techniques and find that the introduction of universal child benefit systems in the Southern European countries, which are characterised by selective child benefit systems (infra), would not

necessarily lead to better poverty outcomes. They also find that more generous benefits have a larger impact on poverty, which obviously comes at a higher cost for the exchequer. Salanauskaite and Verbist (Salanauskaite & Verbist, 2013) also make use of microsimulation techniques to test the effectiveness of family transfers in reducing child poverty for five new member states (with the main focus on Lithuania). They too find that size of the transfer budget is of great importance, but that design matters as well. The study shows that strictly universal systems are least effective in reducing poverty, while mixed systems (targeting within universalism) yield better results, albeit dependent on specific design characteristics. Finally, a UNICEF commissioned study on the impact of a new child benefit program in Mongolia finds that a targeted child program resulted in leakage to non-poor households as well as in the exclusion of poor households (Hodges et al., 2007). The authors subsequently advocate a universal child benefit system.

All in all, these studies confirm the importance of size and generosity, in line with the hypotheses formulated, yet remain rather inconclusive when it comes to child benefit design: should child benefits be provided universally or targeted towards lower incomes? In this study, we aim to move forward this debate.

3. Methods

3.1. Data

This paper draws on two data sources. First, data on targeting is provided by the CSB MIPI database, an expert sourced data base on minimum income protection provisions for different target groups in 25 EU countries and three US states (see Van Mechelen, Marchal, Goedemé, Marx, and Cantillon (2011), for detailed information). CSB MIPI contains standard simulations of net disposable income for model family types in various income situations. Here we focus on a couple with two children aged 7 and 14 and the tax-benefit systems in operation in June 2009. We compare four income situations: a double earner family where both partners earn the average wage, a single earner family where one partner earns the average wage while the other is considered to be inactive (not looking for work), a similar family where one partner earns the minimum wage, and a family on social assistance. In order to gauge the value of the child benefit package, we deduct the net income of a hypothetical childless couple from the net income of a couple with children at the same earnings level. The child benefit package includes child cash benefits whether selective or universal, tax benefits or allowances which reduce the direct tax liability in respect of children and any mitigation of local taxes in respect of children. Social assistance top-ups for low wage earning families that vary by the number and/or age of children, and housing benefits or allowances that

take account of the presence of a child are not considered part of "child benefits" [1]. This is to keep consistency of terms between the two databases used in this study. A caveat should be mentioned regarding the age of the children in the model families. In some countries taxes and benefits for children tend to vary substantially by age, and by assuming older children we do not take into account those benefits that are in particular geared towards young children (Bradshaw and Finch, 2002). Standard simulations of childcare costs, for instance, are particularly difficult to link to survey data because tariff systems are often set at the municipal level and support measures for child care costs frequently consist in tax subsidies.

The second data source we rely on is the EU-SILC 2010 (*European Union Statistics on Income and Living Conditions*) survey, with income reference year 2009 which matches the timeframe of the statutory MIPI data. The SILC dataset provides unique and comparable data on income and living conditions of European households and is maintained by Eurostat (although carried out by the statistical offices of the particular countries). Moreover, the dataset allows distinguishing child-related allowances from other components of the income package which makes it extremely suitable for our purpose[2]. More information about the SILC survey can be obtained from the Eurostat website.

Countries included in this study are Austria (AT), Belgium (BE), Bulgaria (BG), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Iceland (IS), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxemburg (LU), Malta (MT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Slovak Republic (SK), Slovenia (SI), Spain (ES), Sweden (SE), and United Kingdom (UK).

---

1 This definition distorts the picture of the child benefit package of social assistance recipients in Denmark and Finland because welfare claimants typically pay taxes in both countries. Given that couples with children receive higher welfare payments than childless couples, they pay higher taxes. The above definition takes into account the negative impact of higher taxes on the child benefit package, while ignoring the positive impact of higher assistance amounts. In order to correct for this, we have assumed the child tax benefit of social assistance recipients in Denmark and Finland to be zero.

2 Child-related allowances as recorded in EU-SILC not only consists of child allowances, child benefits, and child tax credits, but also includes birth, adoption and maternity grants, and for some countries parental benefits as well. To assess their potential impact on our results, we have repeated our analyses excluding families with young children (below 3 years old) from the survey. The interpretation of the results does not change.

3.2. Measurement

3.2.1. Targeting

In contrast to previous studies (e.g. Korpi & Palme, 1998; Marx et al., 2013), we do not rely on a concentration index to gauge the degree of targeting. Instead, we construct a targeting indicator (TI) on the basis of the CSB MIPI dataset which contains statutory information on child benefit levels for different income cases. Our aim is to capture the targeting intentions of a given country, i.e. how the design of the child benefit systems intends to allocate resources across income groups. For most of the countries, we have information on child benefit levels for four *income cases*: couples living on social assistance (SA), couples living on a minimum wage (MW), couples earning average wages (AW) and couples making twice the average wage (2AW)[3]. The four cases are ranked from low to high income levels. Several approaches have been proposed in the literature (Brady & Burroway, 2012); here we use the average of the ratios of child benefits between income groups to calculate the targeting indicator TI. The ratio shows whether a lower ranked income case is entitled to higher benefits compared to the next higher ranked income case. Averaging has the advantage of taking not only the extremities (lowest and highest incomes) into account, but also what happens in between. Formally, the targeting indicator TI is of the form:

$$TI = 1 - \left(1/n \sum_{i=1}^{n} \frac{x_i}{x_{i+1}} \right)$$

With x_i denoting the income case *i*, and *n* being the number of income cases in a given country minus 1. In the expression x_{i+1}/x_i, income case x_{i+1} refers to the income case one rank above x_i. Subsequently, the sum of the ratios is averaged. Following international practice (e.g. the concentration index), the result is subtracted from 1 to reverse the sign, so that TI < 0 denotes targeting towards lower income families, TI > 0 denotes targeting towards higher income families, and TI = 0 denotes an equal child benefit for all income cases (strict universality, *supra*). The four income cases together with the values of the TI are to be found in table A1 in annex. By way of example, the calculation of the TI for Belgium is as follows (amounts are expressed in €PPP per month):

$$\frac{AW}{2AW} = \frac{330.5}{330.5} = 1;\ \frac{MW}{AW} = \frac{340.7}{330.5} = 1.03;\ \frac{SA}{MW} = \frac{396.5}{340.7} = 1.16;$$

So that

[3] Exceptions are GR (no general assistance scheme in place), LU (no data on average wage earners) and DK, DE, FI, NO, and SE (no national minimum wage).

$$TI = 1 - \frac{1 + 1.031 + 1.164}{3} = -0.065$$

Which means that child benefits in Belgium are targeted towards the lower incomes. In particular, the lower income group gets on average 0.065 times higher a child benefit compared to the higher ranked income case.

3.2.2. Child poverty

To define poverty, we make use of the Foster et al. (1984) poverty index FGT(α), which is of the form:

$$P_\alpha = \frac{1}{n}\sum_{i=1}^{n} max\left\{\left(\frac{z-x_i}{z}\right), 0\right\}^\alpha$$

With *z* denoting the poverty threshold, *x* the income of the household in which person *i* lives, *n* the number of individuals, and *α* being a parameter reflecting the poverty measure of interest. When *α=0*, P_0 gives the *poverty headcount ratio*, or the percentage of individuals living in a household with an income below the poverty threshold. Thus, following European practice, a child (under 18 years old) is defined as being poor when living in a household with an equivalised net disposable household income below a poverty line set at 60% of the national median equivalised household income (the European headline at-risk-of-poverty indicator, see Atkinson et al. (2002)). The net disposable household income equals the sum of the income of all members of the household, including social benefits, minus taxes and social insurance contributions. This disposable household income is equivalised using the modified OECD equivalence scale[4] to take into account economies of scale and to render households income comparable across households of different size. The child poverty rate for a given country is thus the headcount of the number of children living in a household below the poverty line (see Decancq et al., (2014), for further reading on poverty measurement). To test the robustness of our results, we complement the poverty rate with the *poverty gap ratio*, with α = 1. P_1 gives the average income shortfall from the poverty line amongst children living in poverty, and should be interpreted as the 'depth' of poverty.

[4] The modified OECD equivalence scale attaches a weight of 1 to the first adult, 0.5 to all other household members aged 14 and over, and a weight of 0.3 to all children under 14 years. The equivalised household income is obtained by dividing total household income by the sum of the individual equivalence weights.

3.2.3. Poverty reduction

To measure the impact of child benefits on child poverty rates, we apply the so-called 'standard approach' (Whiteford, 1997). The standard approach is to compare the poverty rate before and after including child benefits into the equivalised net disposable household income, holding the poverty line constant. The relative difference between the before and after poverty rate is the poverty reducing impact of child benefits. As such, the actual income distribution is compared to a hypothetical counterfactual income distribution in which government intervention in the realm of child benefits is absent. Although often criticised (Bergh, 2005; Jesuit & Mahler, 2010), the standard approach allows to compare countries based on a single metric that is easy to interpret. Formally, our measure of the relative poverty reduction effectiveness (RPRE) of child benefits takes the following form:

$$RPRE = \frac{P_{0_{pre}} - P_{0_{post}}}{P_{0_{pre}}} * 100$$

Where P_{0pre} = poverty risk calculated on equivalised net disposable household income less child benefits, and P_{0post} = poverty risk calculated on equivalised net disposable household income including child benefits. The indicator is expressed in percentage reduction of child poverty. A similar approach is followed for the calculation of the relative poverty gap reduction effectiveness (RGAPRE) of child benefits:

$$RGAPRE = \frac{P_{1_{pre}} - P_{1_{post}}}{P_{1_{pre}}} * 100$$

Where P_{1pre} = poverty gap ratio less child benefits, and P_{1post} = poverty gap ratio including child benefits. Other scholars have also employed an absolute poverty reduction effectiveness measure, defined as the percentage point difference between pre and post poverty rates (e.g. Sainsbury and Morissens, (2002)). Although informative, such absolute measure is sensitive to the pre-transfer poverty rate. As such, it measures not only poverty reduction, but also captures the starting point[5]. Here, our focus is on poverty reduction as such.

[5] This is not a trivial matter, because the choice of indicator determines ranking of countries. Suppose a country A reduces poverty from 80 to 60 per cent, while country B reduces poverty from 10 to 5. According to the absolute measure of poverty reduction, country A would rank first, although it is highly questionable whether that country is actually doing better than country B. The RPRE would rank country B first with a score of 50% and country A at 25%.

3.2.4. Explanatory variables: size and generosity

Finally, two hypotheses regarding the causal mechanisms through which either universal or targeted benefits reduce poverty are considered in this study. The first relates to the size of social expenditure; the second to the generosity of benefits. To measure *size of the redistributive budget*, we calculate for every country the total sum of child-related benefits as measured in EU-SILC. This amount is subsequently related to each country's gross domestic product (GDP). An advantage of relying on survey (SILC) data and not on administrative data (for instance available in the European system of integrated social protection statistics ESSPROS), is that our indicator of size represents the actual amount of spending that is used to calculate RPRE and RGAPRE. However, the correlation with administrative data is strong (r = 0.82) and the results do not substantially differ when relying on administrative instead of survey data.

Second, *generosity of benefit levels* is gauged as the average benefit level for the lowest income groups (SA and MW), expressed as percentage of the poverty line (see Nelson, (2013), for a similar approach). We focus on the lowest income groups, and not on average benefit levels, because it is explicitly hypothesised that targeting will correlate with higher benefit levels for the lowest incomes. We rely on the institutional MIPI data and not on the SILC survey, because it is not straightforwardly possible to operationalise the institutional information, i.e. the four income cases, in the latter (see the discussion on intentions versus outcomes above). However, as a robustness check we have tested an alternative approach in which we have calculated the average child benefit level per child living in a poor family from the EU-SILC. This indicator too correlates strongly with the MIPI indicator of generosity (r = 0.78) and the interpretation of the results does not change. Both measures of size and generosity used in the analyses below are listed in table A1 in annex.

4. Results

4.1. Characteristics of child benefit systems

Table 1 distinguishes between three groups of countries on the basis of benefit entitlement on the one hand, and the system characteristic of child benefit systems on the other: countries with selective child benefit systems, countries with mixed systems (targeted benefits within universal systems) and those with strictly universal systems (universal benefits

within universal systems)[6]. Figure 1 ranks the countries in our sample according to the degree of targeting. To this end, we compare child benefits levels of double earners on twice average wage (2AW), single earners on average wage (AW), single earners on minimum wage (MW) and families on social assistance (SA) (see above).

Only 7 out of the 26 countries under investigation operate selective benefit systems. Countries where eligibility to child benefits is limited to a specific group of beneficiaries are Southern European countries like Italy, Portugal, and Spain, and a number of Eastern European countries such as the Czech Republic, Slovenia, Poland, and Lithuania. Selective benefit systems are targeted by definition, but there is great variety in the degree of targeting across these systems. A crucial factor is the strictness of the means-test involved. In Czech Republic, for instance, one-earner families living on minimum wages tend to receive income related cash benefits whereas one-earner families with an average wage do not. By contrast, in countries like Italy, Portugal, Slovenia Poland and Lithuania even two-earner families with average earnings are entitled to income related benefits.

Table 1. Classification of child benefit systems, 26 European countries, 2009

		System characteristic	
		Selective	*Universal*
Benefit allocation	*Targeted*	IT, PT, ES, CZ, SI, PL, LT	AT, BE, EE, FR, GR, IE, LU, LV, NL, RO, SK, UK
	Universal	/	DK, FI, SE, NO, HU, DE, BG

In most countries, child benefits are provided within a universal framework. The universal systems in Belgium, Greece, France and Germany, however, are exceptions to some extent. In Belgium and Greece working families are entitled to employment-based rather than universal non-income related benefits (while non-working families usually receive income related benefits). In France only families with 2 or more children are entitled to non-income related cash benefits. Germany, finally, complemented its universal cash benefit scheme with an optional model of tax credits and tax allowances in 1996. Families with children are taxed in the most favorable way, which is by making use of the tax credit in most cases. This model is functionally however very similar to strictly universal child benefits. Universal benefits may be targeted by granting

[6] It should be noted that a number of countries have implemented (temporary) austerity measures in their child benefit systems during the crisis. Some of these measures are not taken into account in our classification since we report on the June 2009 situation.

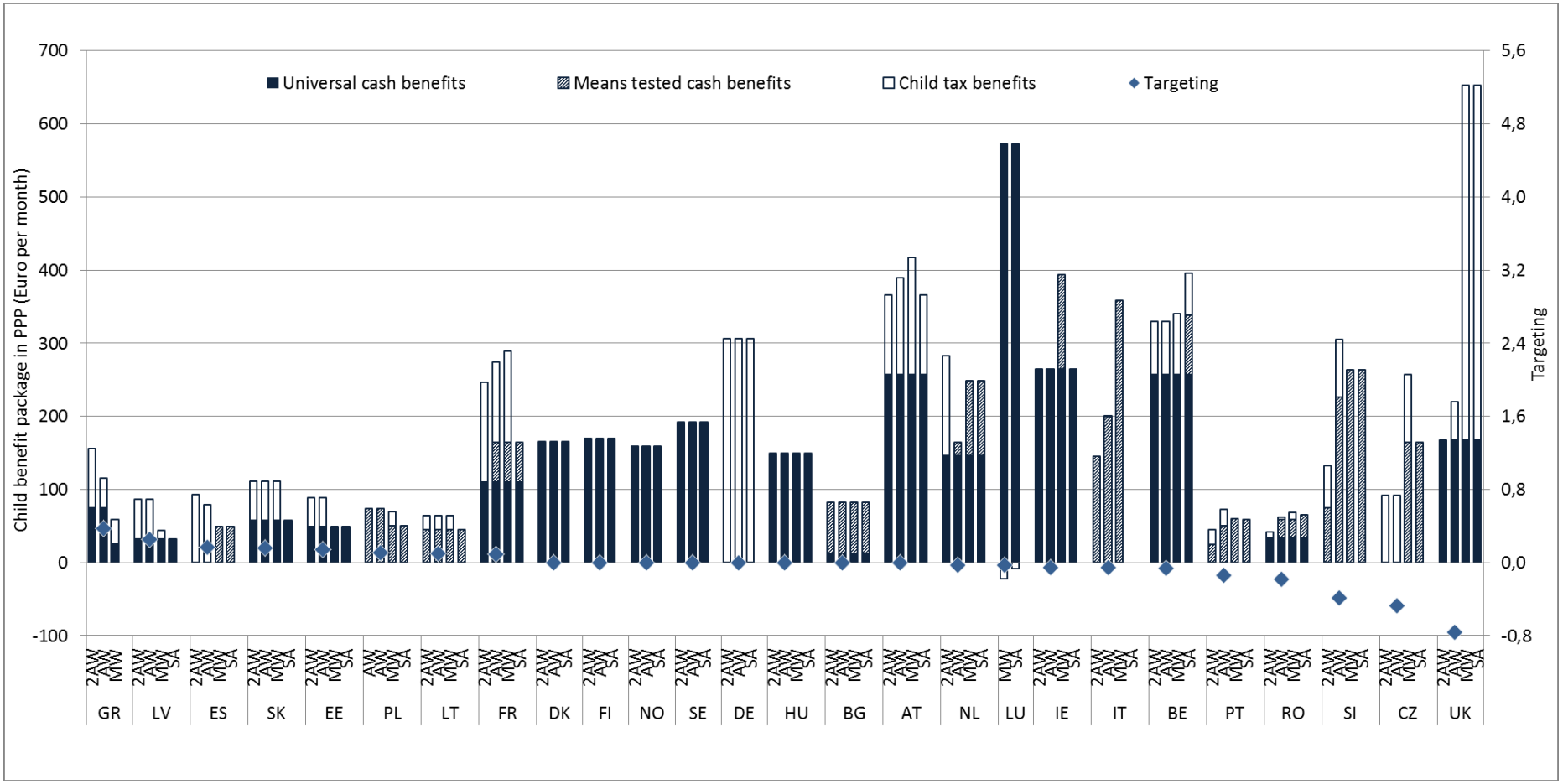
supplements to specific social groups. In Belgium, for example, vulnerable groups like single parents and the long-term unemployed receive more generous child benefits. In France, the Netherlands, Ireland, Bulgaria and Romania child benefits are targeted to low income families through the provision of additional cash benefits on top of universal benefit payments.

In an increasing number of countries tax credits and tax allowances contribute to the degree of targeting. There is evidence that during the past decade child benefits have gradually been reallocated towards the tax system, termed the 'fiscalisation' of child benefits (Bradshaw & Finch, 2002; Ferrarini, Nelson, & Höög, 2013; Immervoll & Pearson, 2009). The income gradient of child tax benefits largely depends on the type and the design of the scheme. An important distinction to make is between wasteable and non-wasteable tax credits. Low income families often fail to benefit from non-wasteable tax credits or tax allowances, simply because they pay no taxes. Refundable or wasteable tax credits, however, are functionally very similar to cash benefits. These tax credits can be strictly universal if the amount of the tax credit is flat rate, which is the case in Austria and Germany, or they can be targeted if amount varies according to income (United Kingdom is a case in point).

There are few countries where child benefits are strictly universal: the Nordic countries, Germany and Hungary.[7] In Bulgaria too, the targeting index is zero. Although a selective benefit system is in place, benefits are flat rate and the means-test only excludes families that are relatively rich (earning more than twice the average wage, not included in the MIPI data).

[7] In Finland housing allowances and social assistance top-ups for low income families increase the selectivity of child benefit packages (Van Mechelen & Bradshaw, 2013). These income elements are however not included in figure 1.

Figure 1. The size and composition of the child benefit package at various income positions (couple + 2 children, aged 7 and 14), 26 countries, 2009



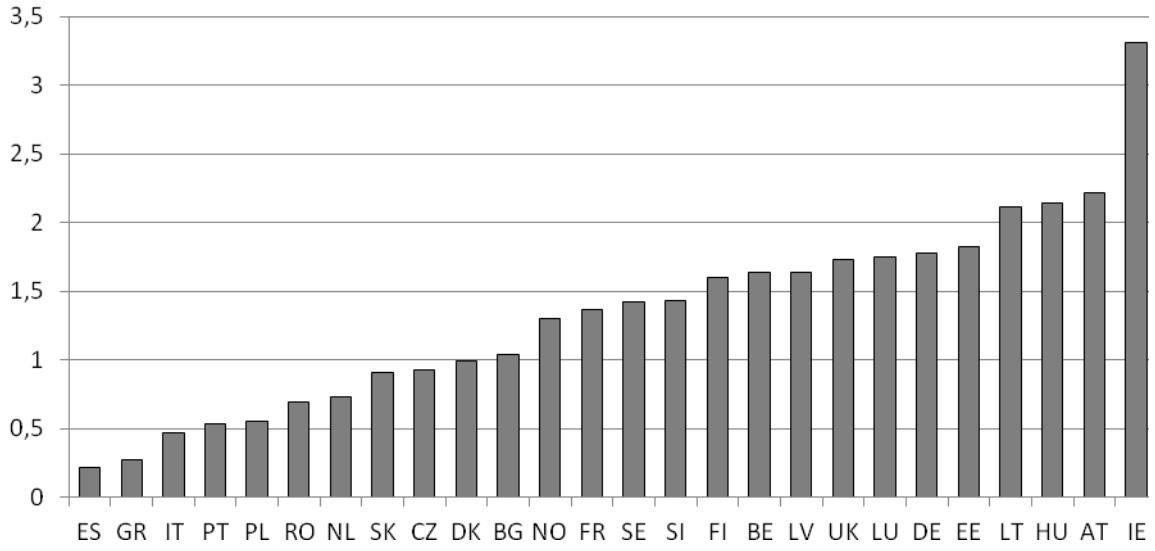
Source: CSB-MIPI (Van Mechelen et al, 2011). *Note*: there is no statutory minimum wage in DE, DK, FI and NO. The minimum wage scenario for Italy is based on Monthly contractual wage for the lowest qualification level in the fur and leather sector. GR lacks a social safety net for able-bodied persons.

As shown in figure 1, the child benefit system in the United Kingdom is most targeted towards lower incomes. Here, universal cash benefits are combined with generous income-related refundable tax credits for children. The top five performers in terms of targeting towards low income families further consist of the Czech Republic, Slovenia, Romania and Portugal. All these countries have selective systems (except Romania). In a substantial number of countries the targeting index is above zero, meaning that their child benefit systems are targeted towards higher income families. This is the case in France, Lithuania, Slovak Republic and most particularly in Spain, Latvia and Greece. These countries illustrate the pitfalls of non-refundable tax benefits: families on low pay profit less from these tax benefits because they pay less taxes.

It is noteworthy that in many of the countries in our sample, child benefits do not systematically increase as one moves down the income distribution, even if benefit systems are relatively well-targeted at low income families. In Italy, for instance, the selective benefit system is contributory and not available to families with insufficient contribution records for social insurance benefits, therefore excluding many social assistance recipients. Consequently, the most generous child benefits are not targeted at the most vulnerable families in general, but to those on low pay in particular. Likewise, the Irish 'Family Income Supplement' is an employment based scheme that gives extra financial support to people on low pay. These measures belong to the set of so-called in-work benefits that are increasingly promoted as a solution for the problem of inactivity traps. Again, work-poor families are put at a disadvantage. In some countries there are anomalies in the variation of child benefits over the income distribution caused by the design of the tax system. In Czech Republic, for example, the degree of targeting built into its system of selective cash child benefits is partly neutralised by the tax benefits for families in the labor market.

Finally, figure 2 shows the size of the redistributive budget for each country in our sample. Again, between-country variation is large. Ireland is the biggest spender, with a total budget for child benefits of 3,3% of GDP. Austria, Hungary, and Lithuania spend around 2% of GDP, while in the majority of countries between 1 and 2% of GDP is spent on child benefits. The Mediterranean countries Spain, Italy, Greece, and Portugal dedicate only 0,5% of GDP or less on child benefits.

Figure 2. Size of the redistributive budget for child benefits (% of GDP), 2009

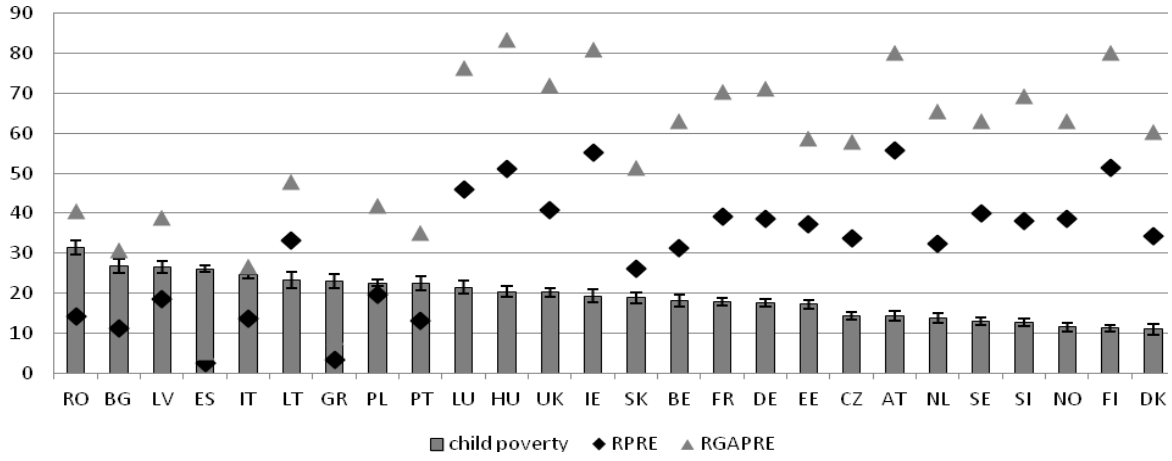


Source: own calculations on EU-SILC 2010. *Note* : income reference year is 2010 for UK; for Ireland, the reference period is the twelve months before the survey was carried out.

4.2. Child poverty, RPRE and RGAPRE of child benefit systems

Figure 3 reports child poverty rates for the countries in our sample as well as our indicators of poverty reduction (RPRE) and poverty gap reduction (RGAPRE). First of all, we observe great diversity in child poverty rates, ranging from over 30% in Romania and around 25% in Bulgaria, Latvia, Spain and Italy, to about 10% in Norway, Finland and Denmark.

Figure 3. Child poverty rates and RPRE, European countries, 2009



Source: own calculations on EU-SILC 2010. *Note* : income reference year is 2010 for UK and the twelve months before the survey was carried out for Ireland..

Second, regarding RPRE, the figure shows that child benefits in some countries only have a negligible impact on child poverty rates (Spain, Greece), while in others child poverty rates are more than halved (Ireland, Austria, Finland, Hungary). A similar pattern can be discerned regarding RGAPRE. It is also clear that, generally speaking, countries with high child poverty rates have lower levels of RPRE (r = -0.66) and RGAPRE (r = -0.64) and vice versa. Where child benefits are not very effective in reducing child poverty, the latter is usual high. This is in line with previous research demonstrating the importance of child benefit systems in reducing child poverty. However, it is also clear that child benefits are not the only important factor at play. Denmark and Norway, for instance, have among the lowest child poverty rates but not the most effective child benefit systems. This relates to contextual factors such as labour market performance but also to the availability of social transfers and services that are not specifically addressed to children but help reduce poverty for all families (Corak et al., 2005). Indeed, countries with a welfare system capable of mitigating poverty for children generally shape beneficial circumstances for all citizens alike (Brady, 2009). In the next section, we relate the design of child benefit systems (TI) to RPRE and RGAPRE for all countries in our sample.

4.3. Targeting and child poverty reduction

Figure 4 and Figure 5 show the relationship between targeting and poverty reduction and targeting and poverty gap reduction respectively. The targeting index takes a value between -1 and 1, whereby a positive value means that higher income families tend to receive higher benefits, a negative value that lower income families tend to receive higher benefits while a value of 0 represents strict universality.

Figure 4. RPRE and TI (r = -0.28)

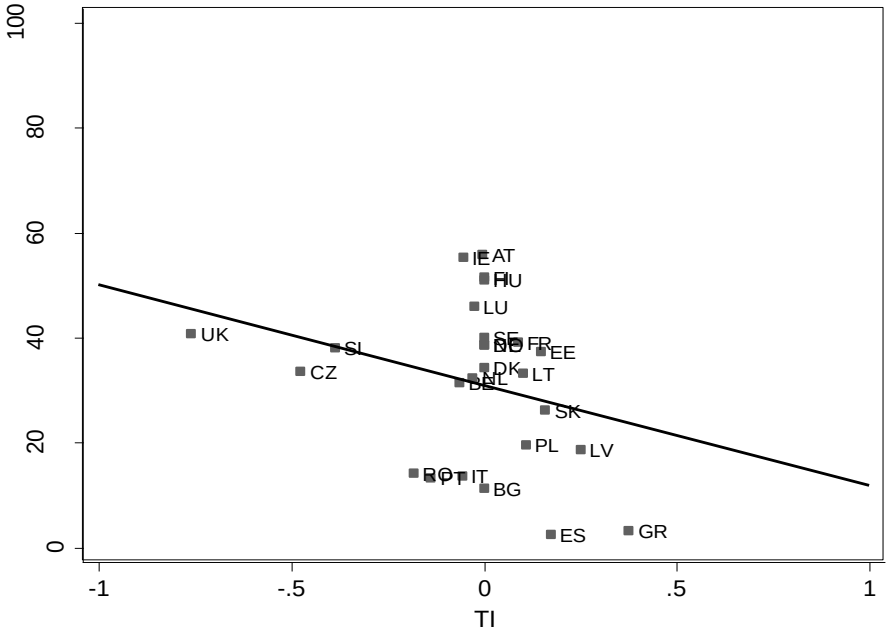
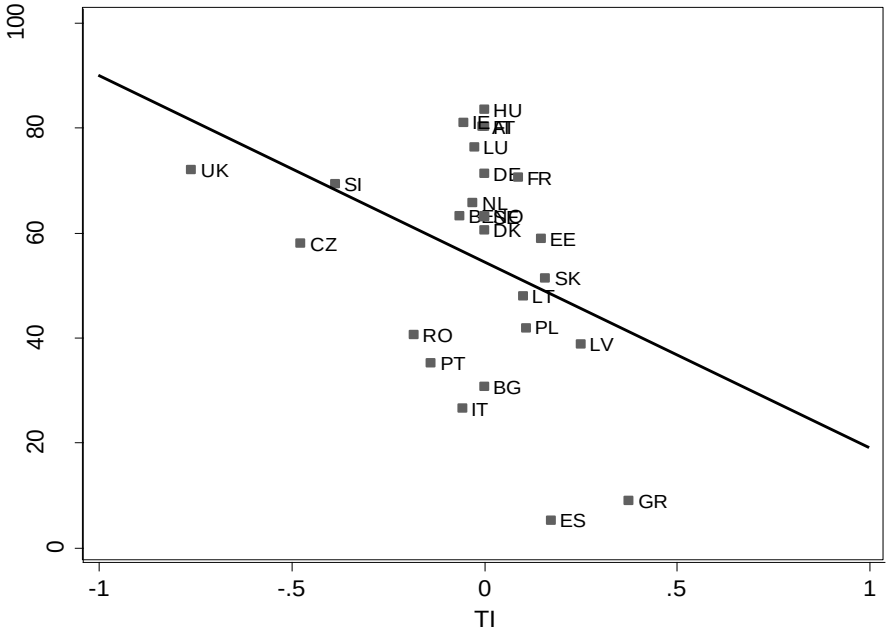


Figure 5. RGAPRE and TI (r = -0.37)



Prima facie, the scatter plots call into the question the assertion that universalism is associated with higher levels of poverty reduction. Although the correlations are rather weak, the sign of the coefficients suggests that the more child benefits are targeted to the lower incomes, the more effective they are in reducing poverty (RPRE) and reducing the poverty gap (RGAPRE). Vice versa, countries allocating more resources to

the higher income groups, such as Greece, Spain, and Latvia, are underachievers in terms of both RPRE and RGAPRE. We also observe, however, that several countries are concentrated around a TI-value of zero and that these countries display great variety in RPRE and RGAPRE. Some of these countries (Austria, Ireland, Finland, Luxemburg) outperform the most targeted country (United Kingdom), while others (Bulgaria, Italy) hardly do better than Spain and Greece. This warrants further qualification, and to gain further insight we now investigate the drivers of poverty reduction.

In the theoretical section (supra), we outlined two hypotheses supporting either universalism or targeting as being most effective in reducing child poverty. First of all, the *size* hypothesis predicts that the size of the redistributive budget relates to poverty reduction, and that universal benefit programs tend to have larger budgets which explains their good performance. Figure 6 shows the relationship between size of the redistributive budget and RPRE, figure 7 the relationship between size and RGAPRE. The strong and positive correlations demonstrate that the redistributive budget is indeed closely related to poverty reduction. The more governments spend on child benefits, the better they are able to reduce child poverty and to mitigate the poverty gap. It could thus be the case that the positive association between targeting and poverty reduction we observed in figure 4, is in fact driven by the total amount of resources spent. Figure 8 plots the relationship between TI and size of the budget. The scatterplot demonstrates that the association between both variables is almost non-existent: although countries targeting towards higher income groups have the lowest budgets and countries targeting lower income groups tend to have higher budgets, the highest budgets are actually found in countries characterised by a universal system with only a limited degree of targeting (targeting within universalism) or strictly universal benefits. This is in line with the size hypothesis.

Figure 6. RPRE and size of the redistributive budget (r = 0.82)

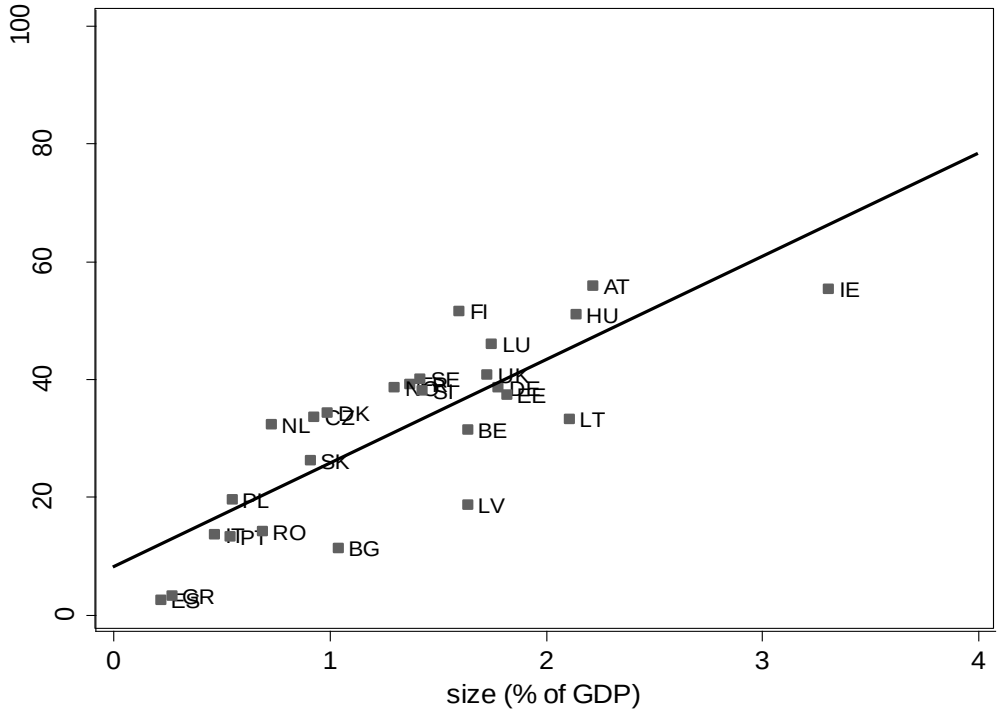


Figure 7. RGAPRE and size of the redistributive budget (r = 0.74)

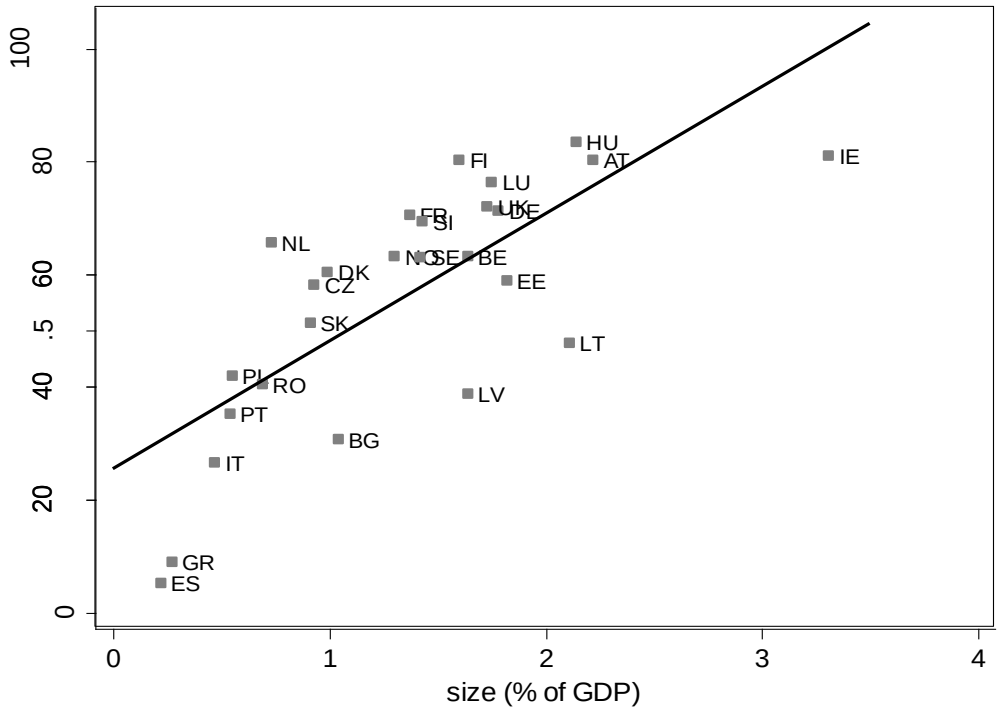
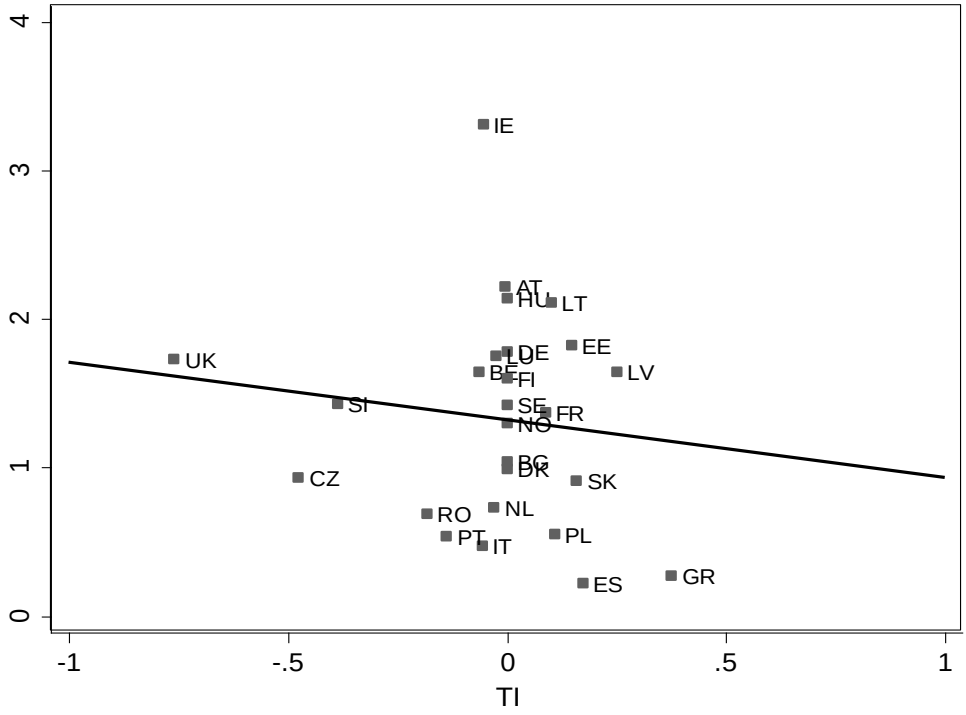


Figure 8. Size of the redistributive budget and TI (r = -0.13)



Second, the main argument invoked by proponents of targeting is that benefit levels will be higher for low incomes because resources are deployed efficiently, i.e. they are allocated to those people who really need it. To assess the validity of this *generosity* hypothesis in the case of child benefits, figures 9 and 10 show the relationship between RPRE and generosity of benefit levels and RGAPRE and generosity, respectively. The correlation is positive and of medium strength, suggesting that the more generous benefits for lower income groups are, the better they succeed in reducing child poverty and closing the poverty gap. Notwithstanding this association, countries reporting similar levels of generosity often display considerable variation in RPRE (Romania and Germany, but also Bulgaria and France are cases in point). Figure 11, then, displays the association between TI and generosity: the correlation is strong and negative, suggesting that the generosity hypothesis holds true in the case of child benefit systems (without outlier UK, the correlation coefficient is still -0.62). Targeting towards lower incomes is associated with higher benefits for the lower income groups. This, in turn, leads to better RPRE and RGAPRE.

Figure 9. RPRE and generosity of benefit levels (r = 0.46)

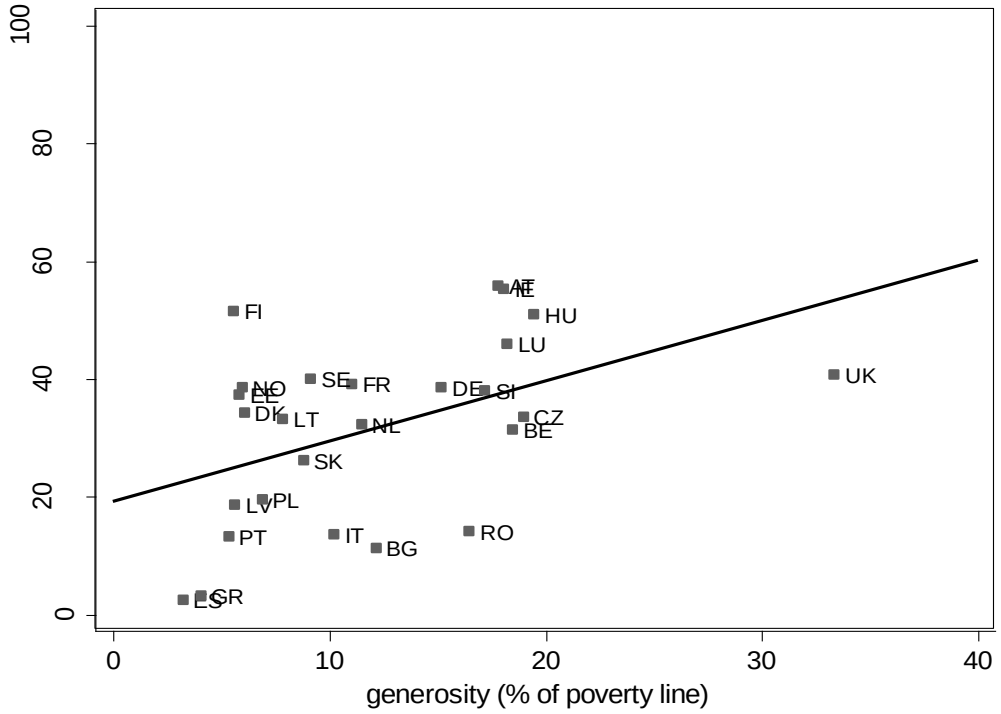


Figure 10. RGAPRE and generosity of benefit levels (r = 0.54)

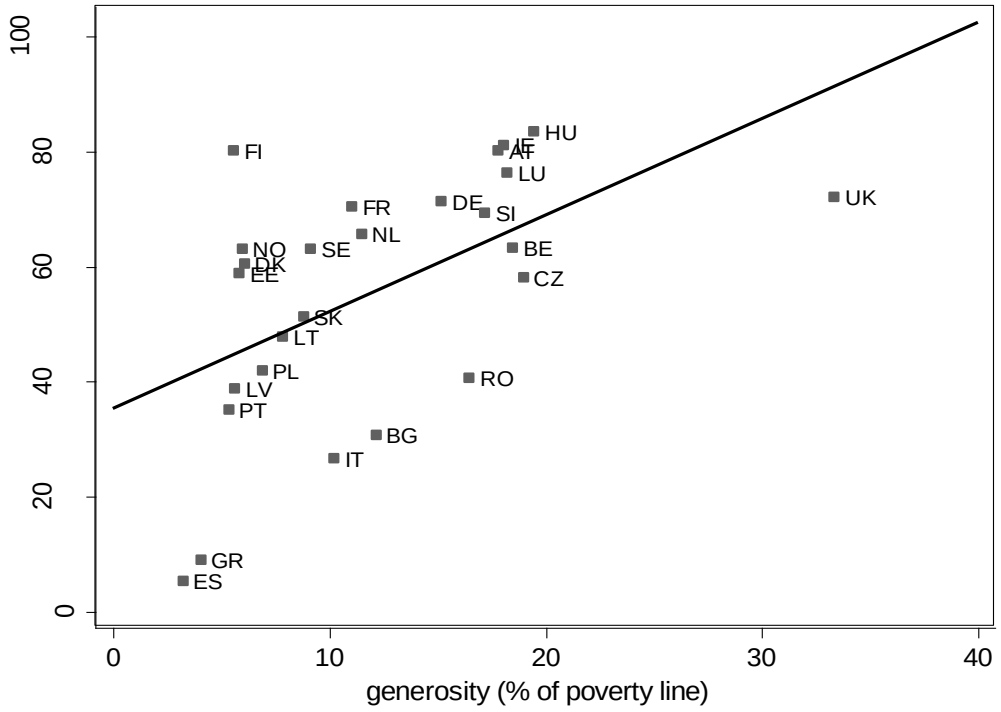
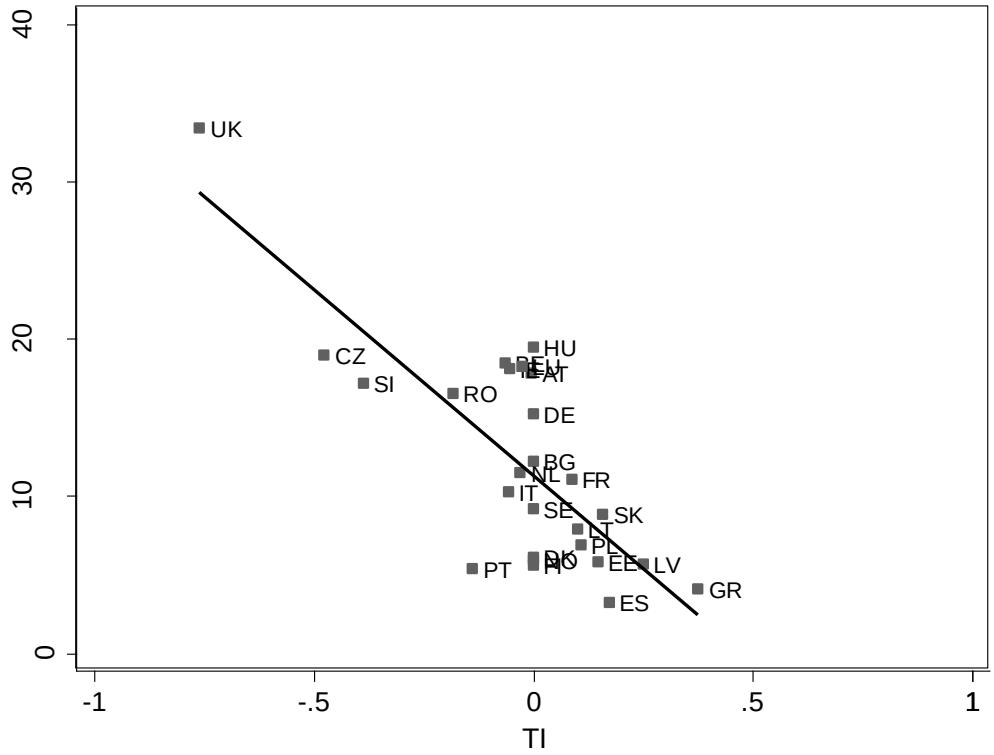


Figure 11. Generosity of benefit levels and TI (r = -0.78)



In sum, we find that size of the budget is positively related to RPRE and RGAPRE, and that universal child benefit systems have the highest redistributive budget. We however find that generosity of benefits for low income families is positively related to RPRE and RGAPRE as well, and that targeted child benefit systems tend to have the highest benefit levels. In fact, our results suggest that both channels through which child poverty reduction ought to be related to the design of child benefit systems (size of the budget and generosity of benefit levels) are simultaneously at play. To make sense of this, we will further disentangle these results in the next section.

4.4. One size fits all?

In the theoretical section, we distinguished between selective and universal child benefit systems. Does the basic architecture of the benefit program impact on the correlation between targeting and poverty reduction? Figure 12 shows the relationship between RPRE and TI for selective child benefit systems; figure 13 between RGAPRE and TI. Figure 14 shows the relationship between RPRE and TI for universal child benefit systems; figure 15 between RGAPRE and TI.

Figure 12. RPRE and TI, selective benefit systems (r = -0.63)

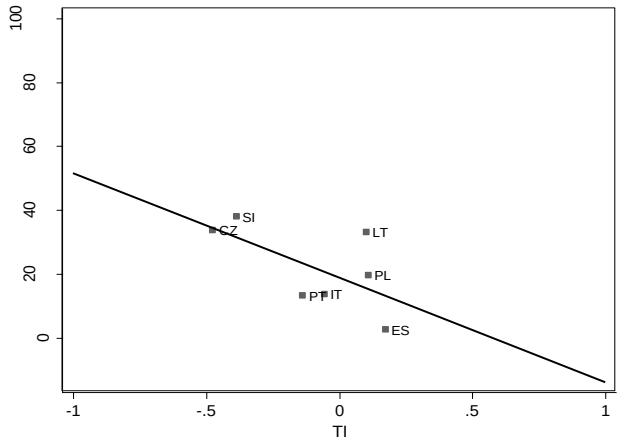


Figure 13. RGAPRE and TI, selective benefit systems (r = -0.72)

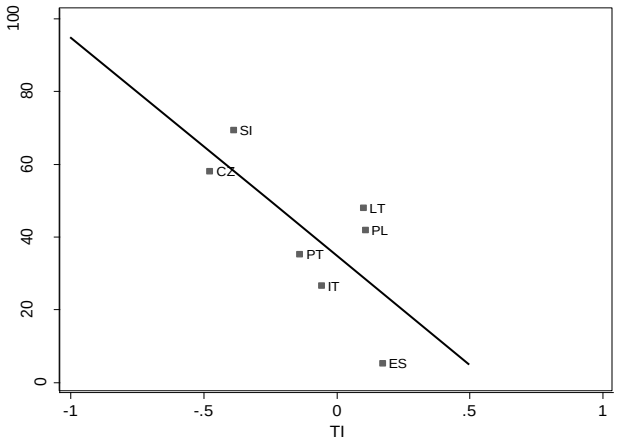


Figure 14. RPRE and TI, universal benefit systems (r = -0.31)

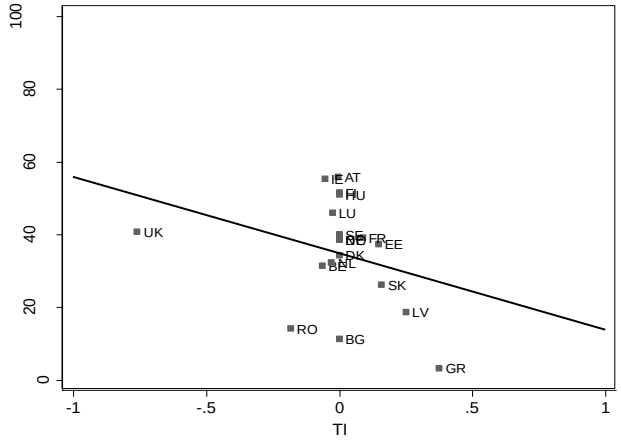
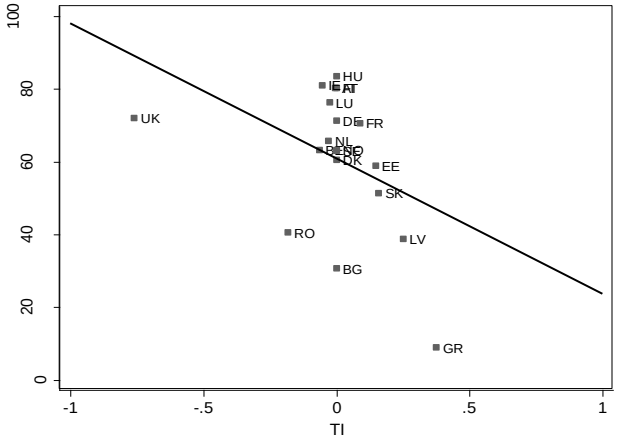


Figure 15. RGAPRE and TI, universal benefit systems (r = -0.42)



Within selective child benefit systems, the relationship between TI and RPRE (r = -0.63) and TI and RGAPRE (r = -0.72) is strong. The more one targets towards lower incomes, the better one is able to reduce poverty. For this set of countries, poverty reduction is associated with both size (r = 0.82) and generosity (r = 0.79). Targeting, however, is strongly associated with generosity (r = -0.90) but much less with size (r = -0.18). Indeed, the most targeted selective countries Czech Republic and Slovenia spend much less (1 and 1,4% of GDP respectively) than Lithuania (2,1% of GDP), that spends about as much as Austria and Hungary but targets its benefits towards higher income groups. As a result, benefits for lower income groups are not very generous in Lithuania (cf. table A1 in annex). This suggests that targeting towards lower incomes might be a cost-efficient way to achieve child poverty reduction within selective systems,

notwithstanding the fact that selective child benefit systems generally achieve less poverty reduction compared with universal ones.

Within universal child benefit systems, we also find an association between TI and RPRE (r = -0.31) and RGAPRE (r = -0.42), but the strength of the relationship is weaker and the variety is greater. Moreover, the correlation is driven by Greece. Without Greece, the alleged relationship between targeting and poverty reduction almost disappears (RPRE: r = -0.12; RGAPRE: r = -0.22). Greece is not only an outlier in statistical terms, but also the odd one out within universal systems. Working families are entitled to contributory child benefits while non-working families can rely on non-contributory but means-tested benefits. The poverty reducing capacity of the Greek system therefore depends strongly on how closely both systems are aligned and on the actual operation of the selective benefit scheme (take-up, administrative complexity et cetera).

For the set of countries with a universal child benefit system, we find that not generosity but size is the strongest determinant of poverty reduction. Formally, RPRE and RGAPRE are strongly associated with size of the budget (r = 0.77 and 0.71 respectively) but in contrast to selective benefit systems the correlation between generosity of benefit levels and poverty reduction is less strong (RPRE: r = 0.35; RGAPRE: r = 0.44). Indeed, countries displaying the most generous benefit levels, such as United Kingdom (figure 1), do not necessarily reduce child poverty to the highest extent. Or, otherwise stated, some countries with lower benefit levels for low income families manage to reduce child poverty more effectively. How can this be? First of all, it could be related to the type of benefit. Figure 1 shows, for instance, that targeting to the lower incomes in United Kingdom is achieved through the tax system, while all income cases are entitled to a relatively low universal cash benefit. Countries with lower benefit levels and lesser degrees of targeting but higher levels of RPRE, such as Ireland and Austria, rely on higher levels of cash benefits. The fiscalisation of child benefits we mentioned above (§4.1) could thus be an important trend in this respect. Further research is however warranted to disentangle the complexity of child tax benefit schemes, and how their peculiarities impact on child poverty reduction. Second, it could also be the case that the issues of administrative complexity and non-take-up, which are often invoked by proponents of universal benefits, are at play. We report here on the *de jure* situation (targeting intentions), but it may be the case that the *de facto* situation (targeting outcomes) is rather different. This issue too should be taken into account in further research endeavours, for instance by combining targeting intentions with outcomes in one analytical framework.

Moreover, the case of Greece demonstrates the importance of the direction of targeting. Not only is Greece a low spender (figure 2), it is also a country with a positive targeting coefficient which means that

higher income groups are entitled to higher child benefits than lower income groups. Indeed, countries with a positive targeting coefficient (Greece, but also Spain, Poland, Latvia, Slovak Republic, Estonia, Lithuania and France, see figure 1) are the actual drivers of the relationship between targeting and poverty reduction. If we only take strict universal countries or countries with benefits targeted towards lower incomes (negative coefficient) into account, the relationship between TI and RPRE disappears altogether (RPRE: r = 0.06; RGAPRE: r = -0.01). It is not that targeting towards lower incomes is good for poverty reduction *per se*; rather it is the case that targeting towards higher incomes is bad for poverty reduction.

The further qualification of our findings we present here does not mean, however, that targeting towards lower incomes should be avoided at all cost. Instead our results point to the fact that targeting may or may not be beneficial for poverty reduction, depending on how it is done. As a matter of fact, the countries with the highest levels of RPRE, Austria and Ireland, are examples of targeting within universalism: benefit levels vary for different income groups. They are characterized by high levels of spending (figure 2) *and* generous benefits levels for low income groups (figure 3).

5. Conclusion

Let us begin the summary of our results with the central question at stake: "should [social policies] be organized for the poor only or should the welfare state include all citizens?" (Korpi & Palme, 1998, p. 661). Alas, there is no straightforward answer to this question. In the case of child benefits and their impact on child poverty, the correct answer is that 'it depends'.

First of all, for a set of 26 countries, we find that targeting towards lower incomes is associated with higher instead of lower levels of poverty (gap) reduction, a finding that is in line with most recent research findings that the paradox of redistribution is not necessarily valid anymore. While investigating the drivers of this relationship, we found that size of the redistributive budget is strongly and consistently associated with higher levels of child poverty reduction, and that universal systems tend to have the highest budgets (confirming the size hypothesis). However, we also find that targeting is associated with more generous benefit levels for low income families, and that generosity is related to higher levels of child poverty reduction as well (confirming the generosity hypothesis).

Second, system characteristics are an important factor to take into account. Within selective systems, targeting is strongly and consistently related to a better performance in terms of child poverty reduction.

However, selective systems generally are underachievers, associated with low redistributive budgets. In such cases, our results suggest that targeting towards lower incomes might be the only feasible way to reduce child poverty. Within universal systems, the relationship between targeting and poverty reduction is weak and less consistent.

Third, the direction of targeting is important. In some countries, child benefits are targeted towards higher income groups, mainly through tax benefits that put the lower income families at a disadvantage. These countries are low spenders and underachievers in terms of poverty reduction. This is an important factor in explaining the relationship between targeting and poverty reduction.

Finally, the best performing countries are actually countries with a system of targeting within universalism. In these countries, two channels of poverty reduction are simultaneously at play: they combine high redistributive budgets with higher benefit levels for low income families. This leads us to conclude that targeting as such might not be the problem; rather it is important how targeting is done.

Acknowledgments

The authors would like to thank Lina Salanauskaite, Gerlinde Verbist, the participants of the 2013 FISS Conference in Sigtuna, Sweden, and the ESPAnet 2013 Conference in Poznan, Poland, for valuable comments and suggestions. Obviously, all remaining errors are the sole responsibility of the authors.

References

Atkinson, A., Cantillon, B., Marlier, E., & Nolan, B. (2002). Social indicators: The EU and social inclusion. Oxford: Oxford University Press.

Atkinson, A. B. (1998). *Poverty in Europe: (Jrjo Jahnsson Lectures)*: Wiley.

Bäckman, O., & Ferrarini, T. (2010). Combating child poverty? A multilevel assessment of family policy institutions and child poverty in 21 old and new welfare states. *Journal of Social Policy, 39*(2), 275-296.

Bergh, A. (2005). On Inter- and Intra-Individual Redistribution of the Welfare State*. *Social Science Quarterly, 86*, 984-995. doi: 10.1111/j.0038-4941.2005.00332.x

Besley, T. (1990). Means testing versus universal provision in poverty alleviation programmes. *Economica, 57*, 119-129.

Bradbury, B., & Jäntti, M. (1999). Child Poverty across Industrialized Nations *Innocenti Occasional Paper, Economic and Social Policy Series*. Florence: UNICEF.

Bradshaw, J. (2012). The case for family benefits. *Children and Youth Services Review, 34*(3), 590-596. doi: http://dx.doi.org/10.1016/j.childyouth.2011.10.009

Bradshaw, J., & Finch, N. (2002). *A Comparison of Child Benefit Packages in 22 Countries* Norwich, UK: Department for Work and Pensions.

Brady, D. (2009). *Rich Democracies, Poor People: How Politics Explain Poverty*. Oxford: Oxford University Press.

Brady, D., & Burroway, R. (2012). Targeting, Universalism, and Single-Mother Poverty: A Multilevel Analysis Across 18 Affluent Democracies. *Demography, 49*(2), 719-746. doi: 10.1007/s13524-012-0094-z

Chen, W.-H., & Corak, M. (2008). Child poverty and changes in child poverty. *Demography, 45*(3), 537-553.

Coady, D., Grosh, M., & Hoddinott, J. (2004). *Targeting of Transfers in Developing Countries: Review of Lessons and Experience*. Washington, D.C.: The World Bank.

Corak, M., Lietz, C., & Sutherland, H. (2005). The impact of tax and transfer systems on children in the European Union *IZA Discussion Paper*. Bonn: Institute for the Study of Labor (IZA).

Decancq, K., Goedemé, T., Van den Bosch, K., & Vanhille, J. (2014). The Evolution of Poverty in the European Union: Concepts, Measurement and Data. In C. Bea & F. Vandenbroucke (Eds.), *Reconciling Work and Poverty Reduction. How Successful are European Welfare States?* Oxford: Oxford University Press.

European Commission. (2013a). *Commission Recommendation of 20.2.2013: Investing in children: breaking the cycle of disadvantage* (C(2013) 778 final). Brussels.

European Commission. (2013b). *Communication from the Commission: Towards Social Investment for Growth and Cohesion – including*

implementing the European Social Fund 2014-2020 (COM(2013) 83 final).
Ferrarini, T., Nelson, K., & Höög, H. (2013). From Universalism to Selectivity: Old Wine in New Bottles for Child Benefits in Europe and Other Countries. In I. Marx & K. Nelson (Eds.), *Minimum Income Protection in Flux*. Houndmills, Basingstoke: Palgrave Macmillan.
Foster, J., Greer, J., & Thorbecke, E. (1984). A class of decomposable poverty measures. *Econometrica,, 52*, 761-766.
Goodin, R. E., & Grand, J. L. (1987). *Not Only the Poor: The Middle Classes and the Welfare State*: Allen & Unwin.
Gornick, J. C., & Jäntti, M. (2010). Child poverty in upper-income countries: Lessons from the Luxembourg Income Study *From child welfare to child well-being* (pp. 339-368): Springer.
Hall, A. (2007). Social policies at the World Bank: paradigms and challenges. *Global social policy, 7*(2), 151-175.
Hodges, A., Dashdorj, K., Jong, K. Y., Dufay, A.-C., Budragchaa, U., & Mungun, T. (2007). Child Benefits and Poverty Reduction: Evidence from Mongolia's Child Money Programme *UNICEF Division of Policy and Planning Working Papers*. New York: UNICEF.
Immervoll, H., & Pearson, M. (2009). A Good Time for Making Work Pay? Taking Stock of In-Work Benefits and Related Measures across the OECD *OECD Social, Employment and Migration Working Papers*: OECD Publishing.
Immervoll, H., Sutherland, H., & De Vos, K. (2001). Reducing child poverty in the European Union: the role of child benefits. In K. Vleminckx & T. M. Smeeding (Eds.), *Child well-being, child poverty and child policy in modern nations: what do we know?* : The Policy Press.
Jesuit, D. K., & Mahler, V. A. (2010). Comparing Government Redistribution Across Countries: The Problem of Second-Order Effects*. *Social Science Quarterly, 91*(5), 1390-1404. doi: 10.1111/j.1540-6237.2010.00737.x
Kahn, A. J., & Kamerman, S. B. (1975). *Not for the poor alone: European social services*. Philadelphia: Temple University Press.
Kenworthy, L. (2011). *Progress for the Poor*. Oxford: Oxford University Press.
Korpi, W., & Palme, J. (1998). The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries. *American Sociological Review, 63*(5), 661-687.
Marx, I., Salanauskaite, L., & Verbist, G. (2013). The Paradox of Redistribution Revisited: And That It May Rest in Peace? *IZA Discussion Papers*: Institute for the Study of Labor (IZA).
Matsaganis, M., O Donoghue, C., Levy, H., Coromaldi, M., Mercader-Prats, M., Rodrigues, C. F., . . . Tsakloglou, P. (2006). Reforming family transfers in southern Europe: is there a role for universal child benefits? *Social Policy and Society, 5*(2), 189.

Moene, K. O., & Wallerstein, M. (2001). Inequality, Social Insurance, and Redistribution. *American Political Science Review, 95*(4), 859-874.
Nelson, K. (2004). Mechanisms of poverty alleviation: anti-poverty effects of non-means-tested and means-tested benefits in five welfare states. *Journal of European Social Policy, 14*(4), 371-390.
Nelson, K. (2013). Social Assistance and EU Poverty Thresholds 1990–2008. Are European Welfare Systems Providing Just and Fair Protection Against Low Income? *European Sociological Review, 29*(2), 386-401.
Notten, G., & Gassmann, F. (2008). Size matters: targeting efficiency and poverty reduction effects of means-tested and universal child benefits in Russia. *Journal of European Social Policy, 18*(3), 260-274.
OECD. (2011). *Divided we Stand. Why Inequality Remains Rising*. Paris: OECD Publications.
Orloff, A. S. (1993). Gender and the Social Rights of Citizenship: The Comparative Analysis of Gender Relations and Welfare States. *American Sociological Review, 58*(3), 303-328. doi: 10.2307/2095903
Ravaillon, M. (2009). How Relevant Is Targeting to the Success of an Antipoverty Program? *The World Bank Research Observer, 24*(2), 205-231.
Sainsbury, D., & Morissens, A. (2002). Poverty in Europe in the mid-1990s: the effectiveness of means-tested benefits. *Journal of European Social Policy, 12*(4), 307-327.
Salanauskaite, L., & Verbist, G. (2013). Is the neighbour's grass greener? Comparing family support in Lithuania and four other New Member States. *Journal of European Social Policy, 23*(3), 315-331.
Skocpol, T. (1991). Targeting within Universalism: Politically Viable Policies to Combat Poverty in the United States. In C. Jencks & P. E. Peterson (Eds.), *The Urban Underclass*. Washington, DC: The Brookings Institution.
TARKI. (2010). Child poverty and child well-being in the European Union. Report prepared for the DG Employment, Social Affairs and Equal Opportunities (Unite E.2) of the European Commission. Budapest.
Van Mechelen, N., & Bradshaw, J. (2013). Child Poverty as a Government Priority: Child Benefit Packages for Working Families, 1992-2009. In I. Marx & K. Nelson (Eds.), *Minimum Income Protection in Flux*. Basingstoke, Houndmills: Palgrave Macmillan.
Van Mechelen, N., Marchal, S., Goedemé, T., Marx, I., & Cantillon, B. (2011). *The CSB-Minimum Income Protection Indicators dataset (CSB-MIPI)*. Antwerp: University of Antwerp.
van Oorschot, W. (2002). Targeting Welfare: on the Functions and Dysfunctions of Means-testing in Social Policy. In P. Townsend & D. Gordon (Eds.), *World Poverty: New Policies to Defeat an Old Enemy*. Bristol: The Policy Press.
Whiteford, P. (1997). Targeting Welfare: A Comment*. *Economic Record, 73*(220), 45-50. doi: 10.1111/j.1475-4932.1997.tb00978.x

Annex

Table A1. Income cases and targeting indicator, 2009

	Income cases				TI	Size	Generosity	RPRE	RGAPRE
	2AW	AW	MW	SA					
AT	366,1223	389,7096	417,8528	366,1223	-0,0042799	2,22	17,8	55,8	80,2
BE	330,4912	330,4912	340,7194	396,5124	-0,0648996	1,64	18,5	31,3	63,1
BG	82,39289	82,39289	82,39289	82,39289	0	1,04	12,2	11,2	30,6
CZ	92,26431	92,26431	257,0961	164,8317	-0,4758820	0,93	19,0	33,6	58,0
DE	307,0327	307,0327		307,0327	0	1,78	15,2	38,6	71,3
DK	165,7718	165,7718		165,7718	0	0,99	6,1	34,3	60,4
EE	88,83762	88,83762	49,69937	49,69937	0,1468532	1,82	5,8	37,3	58,8
ES	92,69347	79,45155	49,70846	49,70846	0,1724041	0,22	3,2	2,5	5,2
FI	169,9143	169,9143		169,9143	0	1,6	5,6	51,4	80,1
FR	247,0817	274,5087	289,6617	164,572	0,0885479	1,37	11,1	39,0	70,4
GR	156,2087	115,5372	58,82637		0,3756056	0,27	4,1	3,2	9,0
HU	150,2664	150,2664	150,2664	150,2664	0	2,14	19,5	51,0	83,4
IE	264,6852	264,6852	393,8389	264,6852	-0,0533389	3,31	18,1	55,2	81,0
IT	145,3258	199,512	358,2278	0	-0,0561265	0,47	10,2	13,6	26,5
LT	64,5287	64,5287	64,5287	45,04017	0,1006711	2,11	7,9	33,1	47,9
LU			550,8052	564,9738	-0,0257235	1,75	18,2	45,9	76,3
LV	86,9145	86,9145	44,42753	32,84017	0,2498837	1,64	5,6	18,6	38,7
NL	283,0567	165,0793	248,7746	248,6168	-0,0298563	0,73	11,5	32,3	65,6
NO	159,6603	159,6603		159,6603	0	1,3	6,0	38,6	63,1
PL	73,75924	73,75924	69,44996	50,9398	0,1083162	0,55	6,9	19,5	41,9
PT	45,6461	73,06582	60,38349	59,57539	-0,1379151	0,54	5,4	13,2	35,2
RO	41,77301	62,74159	69,00344	65,24469	-0,1824322	0,69	16,5	14,2	40,5
SE	192,7998	192,7998		192,7998	0	1,42	9,1	40,0	63,1
SI	133,078	305,4068	264,0435	264,0435	-0,3865031	1,43	17,2	38,1	69,3
SK	111,0422	111,0422	111,0422	58,16237	0,1587380	0,91	8,8	26,2	51,3
UK	167,4659	220,436	653,3214	653,3214	-0,7600241	1,73	33,4	40,7	72,0

Source: CSB MIPI Database and EU-SILC 2010. Note: for the income cases: monthly amounts, expressed in €PPP, for a couple family with two children (7 and 14 years old). There is no statutory minimum wage in DE, DK, FI and NO. The minimum wage scenario for Italy is based on Monthly contractual wage for the lowest qualification level in the fur and leather sector. GR lacks a social safety net for able-bodied persons. Size is expressed in % of GDP, generosity as % of the poverty line