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# LIS Working Paper Series

No. 738

# Universal Child Allowances in 14 Middle Income Countries: Options for Policy and Poverty Reduction

Martin Evans, Alejandra Hidalgo, Mei Wang

May 2018



CROSS-NATIONAL DATA CENTER in Luxembourg

Luxembourg Income Study (LIS), asbl

# Universal Child Allowances in 14 Middle Income Countries: Options for Policy and Poverty Reduction

Martin Evans Alejandra Hidalgo Mei Wang

# Abstract

This paper uses data from 14 Middle Income Countries in the Luxembourg Income Study database to examine the position of children in the income distributions, and to calculate child poverty prevalence, to assess how far children receive transfers from state social protection systems compared to other agegroups. The results show that children are disproportionately concentrated in the lower quintiles and have higher child poverty prevalence than for adults, but receive lower social protection transfers on a per-capita basis across all 14 countries. The analysis then moves to consider how the introduction of a simulated 'universal child allowance' based on a new allocation of 1 percent of GDP across all 14 countries could be designed to achieve both universal and targeted, anti-poverty, outcomes. Different versions of simple static and purely arithmetic micro-simulations are used to examine how a universal approach that allocates transfers to all children aged 0-17 can be adapted to optimise poverty reduction – both for child and general poverty. These simulations examine changes to poverty reduction moving from household to individual level allocation, weighting higher levels of transfers to younger children and of 'taxing back' universal transfers to those with incomes in the highest three quintiles. The findings show that individual allocation and 'taxing back' from higher income quintiles have the largest poverty reduction effect across all 14 countries, while weighting transfers to younger children has different poverty reduction effects between countries - depending on age composition and co-residence. The results are discussed in the light of debates on 'targeting' verses 'universal' approaches to social protection.

# JEL: D31, H53, I32, I38

Keywords: poverty, social policy, children,

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Alejandra Hidalgo and Mei Wang led and undertook the quantitative analysis to produce this paper as interns working under the direction of Martin Evans. Our thanks go to Janet Gornick and staff and students at The Stone Center for Social and Economic Inequality at CUNY, New York for their support in using LIS data for this paper; and to the staff at Columbia University and Kennedy School for organizing the internships. Authorship order for the paper is purely a reflection of the alphabetical order of surnames, and contributions by the authors are equal in their contribution to the paper.

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# 1. Introduction

This paper explores the potential of introducing universal child allowances in the social protection systems of 14 Middle-Income countries: Colombia, China, Dominican Republic, Egypt, Georgia, Guatemala, India, Mexico, Panama, Paraguay, Peru, Russia, Serbia, and Uruguay. What effects on child poverty would such cash benefits have and how could they be optimally designed to remain universal in nature but to have a better poverty reducing effect? We have three analytical questions that we approach sequentially:

- Where do are children in the overall income distributions and what child poverty rates result for children?
- How much percentage of total social protection transfers go to children and poor children?
- What are the options when designing a universal child allowance program to recognize and respond to children's needs across the distribution, as well as to optimize its effect on child poverty reduction?

The paper proceeds as follows. We explore evidence on children's position in the income distribution together with their existing receipt of state transfers and the distributional outcomes of that receipt in all 14 countries. We then consider how much is spent on cash social protection transfers across all the countries and then simulate the effect of a universal transfer that costs one per cent of every country's GDP. Different versions of a universal transfer and then explored to assess how that can be best designed to respond to distributional issues and to income poverty. We keep discussion of nationally specific issues of policy to a minimum, to explore how basic design principles can help optimize poverty reduction outcomes from a universal approach. It is not the scope of this paper to give specific public policies recommendations for any of the countries in the sample, we instead focus on general issues on how a universal child grant can be designed to be progressively pro-poor.

Why focus on children? There are clear normative reasons to do so. Children are the next generation to ensure economic and social success, as future workers, parents and citizens. Reducing child poverty is one of the most urgent and important tasks we face today, and requires concerted and sustained efforts to prioritize children across a wider sector of the population to offer them everything they need to have a fair opportunity to survive and thrive (UNICEF 2016). But empirical reasons are also prominent: children are especially vulnerable to poverty; both from the higher risk of being poor and from the lifetime scarring effects that poverty in childhood can have on being a worker, parent and citizen. Children's higher risk of monetary poverty in developing countries has been shown across all level of poverty lines and to not be

solely the reflection of choice of household equivalence scales when measuring poverty (Newhouse et al Evans 2017). Multi-dimensional poverty shows a similar child penalty across developing countries (Alkire et al 2017).

Why are children poorer than adults? Children are strongly associated with lower family income: "Parents are typically in the younger segments of the population, and thus at a relatively low part of their lifetime earnings trajectory; and the arrival of children frequently reduces second earner income. For both reasons, family income tends to be low precisely at the time when demands on that income are high." (Barr 2004 p 224). There are also reasons to do with selection, with differential fertility and co-residence patterns operating to link children structurally to lower monetary welfare. But such effects at the lower levels of the distribution do not alter the fact that a 'child penalty' can be found on incomes at all levels of income (and does across five of our 14 middle income countries because all quintiles of the distribution have lower income if there are children present, controlling for other factors (Evans & Hassen 2018)). What does this mean for social protection policy? Underlying policy aims of lifetime smoothing and poverty risk reduction can be reconciled through universal child transfers. Such transfers to children inherently conform to both universal and selective principles; they respond to a universally experienced reason for lower income and to a higher likelihood of poverty for those households with lower than average income.

Income based monetary poverty overall has critical significance of proper nutrition for a child's survival and development. It is well established that there are monetary causes to a wide range of child outcomes (Cooper and Stewart 2013). Being raised in poverty increases the chances of having undesirable outcomes in life, such as lower school achievement (years of schooling, high education completion), physical health problems (low birth weight, growth stunting, and exposure to environmental risks such as lead poisoning), lower cognitive ability (verbal ability, intelligence, and achievement test scores), emotional and behavioral conflicts, among others (Brooks-Gunn and Duncan (1997). Furthermore, the evidence has shown that people exposed to persistent poverty during childhood are less likely to escape poverty as adults (Wagmiller and Adelman, 2009). Selective polices that address concurrent child poverty may focus today's poverty but have wider and inter-generational effects that address children as a universal public good.

Universal child allowances are of long standing in industrialised high income countries; many European countries consolidated early the categorical 20<sup>th</sup> century programmes for widows, family poverty assistance and family wage supplements for workers into post war universal family allowances while expanding their welfare states (Daly and Clavero 2004). Atkinson has also highlighted such schemes as a crucial element in a policy package to tackle growing income inequality, raising the prospect of 'children's basic income' as a crucial step towards a more population wide 'participation based basic income' (Atkinson 2015).

When we look at social protection systems we see that transfers to children and families consist of a much wider set of programmes than a universal child allowance. Other transfers include maternity benefits, school scholarships, school fee waivers and uniform and equipment grants. Social assistance programmes can also provide specific benefits relating to children and can help with housing costs for families with children and with food and specific areas of consumption. Transfers associated with health and child healthcare are also part of many social protection systems. Universal child allowance is distinct in that it is a non-contributory benefit paid to all children without means-testing. The ILO report 32 countries in the world having allowances for children, but these tend not to be 'universal' (ILO 2017). However, only 9 of those countries with child allowances in some form are middle income countries with the remainder being EU or OECD high income countries. As middle-income countries experience economic growth, a necessary but not sufficient to reduce poverty and tackle the negative effects of poverty, the policy space for child focuses transfers, and universal cash allowances will grow. However, poverty is a real issue in many fast-growing middle-income countries and the majority (57 per cent) of the poorest children, living on less than \$1.90 per capita per day, live in middle income countries (Newhouse et al 2016). Indeed, thirty percent of the world's extremely poor children live in India, one of the countries studied in this paper. Significant proportions of global extreme poverty and extreme child poverty are thus concentrated in countries that potentially have growing levels of domestic resources to invest more in social protection programs. But the group of middle income countries is large and heterogenous, and for those countries with low levels of 'extreme poverty' and higher national living standards, the issues of poverty and child poverty are still prevalent. Most poverty profiles using National Poverty Lines show higher of poverty for children compared to adults.

The literature on universal child transfers mostly considers OECD and EU high income countries. At the same time, discussion on children's social protection and poverty in developing countries rarely considers universal benefits. Most describe and analyse programmes from one country or region, largely focus on low-income or lower-middle-income countries and thus on the design and evaluation of social assistance programmes and especially of conditional cash transfers (Ellis, Devereux and White (2009), Fiszbein et al (2009); Davis et al (2016) Bastagli et al (2016). Little attention in the literature on social protection in the developing world has gone to universal approach to transfers and published papers discussing child transfers in developing countries have focused on Central Europe and Central Asia (Bradshaw et al 2013, Bradshaw and Hirose 2016). International comparison of child poverty in developing countries is also an area on which little has been written apart from very recent papers that use LIS data (Nell et al 2016), or World Bank data (Newhouse et al 2016, 2017). This paper makes an original contribution to the literature by considering the issues of social protection and child poverty together, and by considering options for universal rather than targeted social assistance transfers (so-called safety nets).

Our argument originates from the UN establishment of the Social Protection Floor Initiative in 2009, led by the ILO. In 2012 the recommendations of the Social Protection Floors were adopted at the International Labour Conference, where it was recognized that children's coverage was clearly essential part to ensure effective access to essential health care and basic income security throughout the life cycle. National 'social protection floors' should comprise a set of social security guarantees, as defined at the national level that included

*"Basic income security for children*, (our emphasis) providing access to nutrition, education, care and any other necessary goods and services" (ILO 2012, para 5b)

'Basic income security' is a term that is necessarily ambiguous in meaning. It brings together different and opposite interpretations: of universal demogrants based on a rights approach verses more targeted approaches that emphasise that 'social protection programs are required to protect the poorest households' (Coady, Grosh, and Hoddinott (2004) p.3). But, as we have suggested earlier, universal child allowances can contribute to poverty reduction as well as addressing the 'child penalty' on incomes across the distribution. The trade-off between universal and targeted benefits is not necessarily all or nothing; there is a constructive ambiguity that can bridge universal and (selective) poverty targeting aims. Recent policy in the United Kingdom implemented programmes that were universal in coverage for children but led to wide reaching means tests across the distribution, to, in part, ensure greater impact on poorer populations and improve work incentives to low paid parents. The term 'selective universalism' (Timmins 2001) was used to summarise that approach. But this turn of phrase obscured the fact that a very large level extension of means-testing occurred across a very wide section of the income distribution - changing the marginal tax rates for large proportions of the population (Brewer 2012). Our interpretation of the potential of a policy of 'selective universalism' is different. We focus on the inherent ambiguity of the term to consider the options of weighting universal transfers to increase their impact on poorer children. This can be done through simple demographic profiles by considering household verses individual level identification and by considering differential benefits according to age. A 'means test' is not necessarily a targeting on monetary characteristics around the margins of the poverty line and can occur thought direct or indirect means. We test an approach that uses differential generosity of benefits based on a broader, simpler, division of the overall distribution, at the 40<sup>th</sup> percentile. The 'bottom 40%' captures the policy of the World Bank's commitment to improving 'shared prosperity' by 2030 (World Bank). We also suggest that universal child allowances are not themselves allocated by a means test remain universal but are taxed back. In this way, there is 'selection' according to income level, but making universal benefits an element of 'taxable income' avoids a separate and distinct means-testing. This approach also satisfies many normative objections to means testing, where, for instance many advocates of a universal basic income do so alongside progressive income taxation. Of course, this means that countries would have to have a progressive income tax in place or planned and this is consistent with our choice of middle income countries, where capacities and development levels are more conducive to that. Alternatives to taxation clawing back entitlement could lie in a 'proxy means test, where targeting efficiency for target groups that are large proportions of the population – in this case the bottom 40 per cent, tend to perform optimally (Klasen and Lange 2015). with no explicit testing of income or assets. Overall, our approach is thus not to be held hostage by the antagonism between universal and selective approaches but to try to illustrate a pragmatic middle ground. More importantly out aim is to be illustrative rather than definitive and to stimulate more precise and applied approaches using our broad-brush approach.

A couple more clarifications before we turn to the meat of our analysis. Our estimates are based on *cash transfers*, which are monetary payments given by formal organizations (governmental or nongovernmental institutions) to a specific group of people, usually in order to achieve a minimum of consumption (Garcia 2012). Cash transfers have the potential to directly raise household income, improve food consumption, increase access to services, such as education and health (UNICEF 2012).

This combination of a cash transfer and income outcome for consideration of poverty and child poverty is long established in the EU and OECD, and present in developing countries, but less so. But such evidence from middle income countries is strong. For example, in Brazil, cash transfers have reduced significantly the likelihood of a child engaging labor activities (de Hoop and Rosati, 2014). In Mexico, children in households receiving cash transfers performed significantly better on 3 different tests to measure a child's cognitive development (Fernald, Gertler, and Neufeld (2009,).

### 1.2 The Luxembourg Income Study Database

Our data is micro-survey data from The Luxembourg Income Study Database (LIS 2018)<sup>1</sup>, which is the largest available income database of harmonized microdata collected from countries in Europe, North America, Latin America, Africa, Asia, and Australasia. Is important to note that the majority of LIS survey data are official household surveys provided by National Statistical Offices or similar government agencies, however, data from Egypt, Russia, China and India come from university or similar economic research institutions and our calculations and estimations are thus not official estimates from those countries. LIS datasets cover a large range of household- and person-level data on labor income, capital income, social security and private transfers, taxes and contributions that allow the computation of income for poverty and inequality profiles that match to Canberra Group (UN2011) recommendations, alongside

<sup>&</sup>lt;sup>1</sup> Luxembourg Income Study (LIS) Database, http://www.lisdatacenter.org (April 2017-May 2018). Luxembourg: LIS.

data on household demography, employment, and expenditures. The classification of harmonized LIS variables for social protection transfers may not follow national level or other classifications – for instance of social assistance or 'family benefits' and does not correspond to the classification used by World Bank (ASPIRE reference). Our computation of income for poverty calculations, benefit incidence profiles and policy simulations uses LIS' definition of gross income and then deducts all direct taxes, social security payments and payments made of informal transfers to other households. We do not try to include benefits in kind or services if they are not a monetarised element of the LIS variable definitions. We measure outcomes in terms of 'net income after taxes and transfers', especially when considering effects on poverty. We use 'per capita' equivalence assumption, and, while this may change the level of pro-child dominance for poverty profiles, we assume that any other equivalence scale would not change children's dominance overall (Newhouse et al 2017) and test our main findings for sensitivity to the choice of equivalence scale.

#### 2. Child Poverty and Children in Income Distributions

In this section we analyse LIS data for the 14 countries to consider the position of children in the overall income distributions and their poverty rates, both compared to adults and by age group.

#### 2.1 Children tend to concentrate in lower income groups

We find that children tend to concentrate in the poorest quantile groups of the income distribution, as shown in Figure 1.

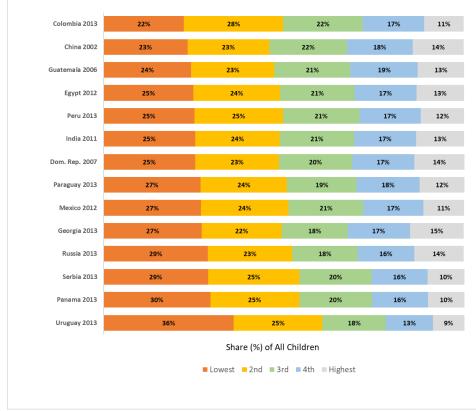


Figure 1 Distribution of Children by Quintile of Household per-capita Income in 14 Middle Income Countries

Source: Authors' calculations from LIS

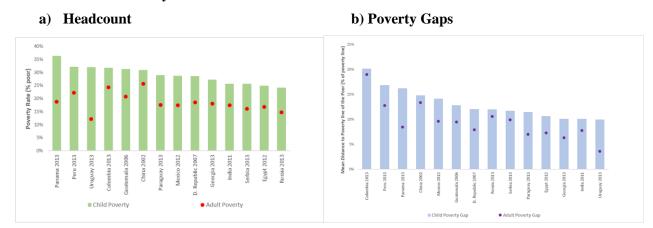
This finding is consistent across the fourteen countries: children are over-represented in the poorest quintile across all 14 countries (equal representation would have 20 per cent of all children in the bottom and all quintiles). Uruguay has highest over-representation, 36 percent, and Colombia the lowest, 23 percent. When we consider the bottom 40 percent of all the national distributions, we see 46 to 61 percent of children. Under representation in the richest quintile, only 9 to 15 percent of all children are living with households that in the top quintile of all countries. The over-representation of children in the poorest quintiles is not explained by our choice of equivalence scale, sensitivity and stochastic dominance tests, available from the authors, confirm this and support the findings of Newhouse et al (2017)

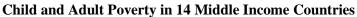
### 2.2 Children have higher poverty rates than adults, and poor children are poorer than poor adults

Figure 2 shows the poverty headcounts (%) for children (0-17) and adults (18 and over) and their poverty gaps (as a percentage of poverty threshold) for each of the fourteen countries. Faced with large economic differences in living standards across these 14 countries we have used a poverty line as the 50% of the

median per capita household disposable income. The results confirm that the overall distribution of children towards the bottom of the income distribution results in higher poverty rates for children. Figure 2 b) additionally shows higher poverty gaps for children, demonstrating that amongst the poor, children are, on average, poorer than adults. Because children live with adults, the interpretation of higher poverty gaps should also recognize that it is poor households with children that are poorer than those with no children – the poverty gap is the same for all individuals, adults and children, who live in poor households.

### Figure 2





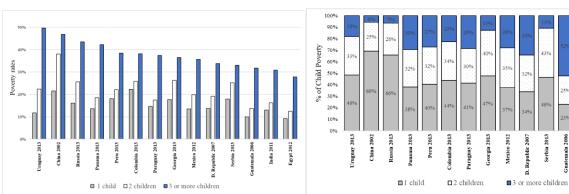
Source: Authors' calculations from LIS

# 2.3 Poorer households have more children

Figure 3 shows that households with more children are poorer overall. With children living in households with 3 or more than children having higher poverty rates across all 14 countries, as shown in Figure 3a. However, there are very different patterns of fertility that drives such differences as large families may be a small proportion of both poor and overall populations. Figure 3b shows the overall share of child poverty attributable to family size, and clearly shows that some countries with high rates of child poverty for families with 3 or more children have very low prevalence – such poor families represent a very small proportion (6 to 7 percentage) of child poverty in China and Russia, but in Guatemala, they represent the majority – 52 percent, and in India, Egypt and Dominican Republic, over a third (34 to 39 percent).

# Figure 3

#### Family Size and Child Poverty in 14 Middle Income Countries



# a) Child Poverty Rates by number of children



Egypt 2012

Guatemala 2006 India 2011

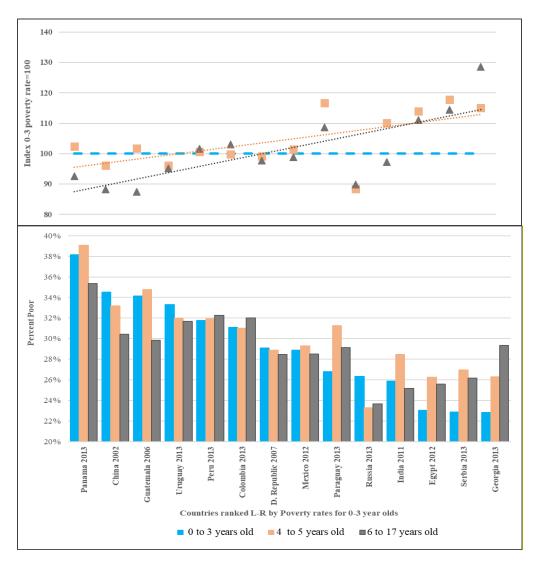
Source: Authors' calculations from LIS

# 2.4 Younger children tend to be poorer

There often a differential risk of poverty for children of different ages. Figure 4 shows how poverty rates differ for young children across the 14 countries. We define age groups for children that link to childcare and education policy and thus, in addition, to patterns of maternal employment that often rise once childcare from pre-school or primary school attendance is in place: we use three age groups: babies and infant children aged 0-3 years, pre-school children aged 4-5, and school aged children aged 6-17 (Kail 2011) <sup>2</sup>.

# Figure 4 Child Poverty by Age of Child

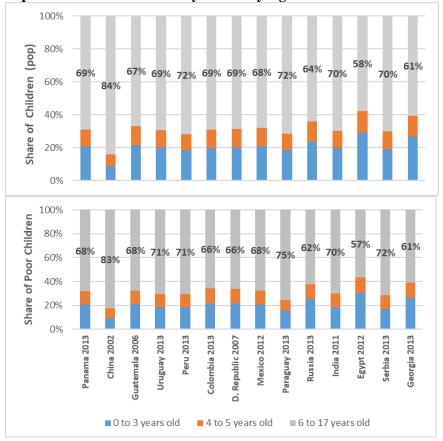
 $<sup>^{2}</sup>$  Is important to note that governments often use child's development-related periods as a guidance to develop public policies regarding children. For instance, in China education is free and mandatory for children older than 5 years old. In Mexico, on the other hand, with the Law of Obligatory Pre-schooling of 2002, pre-school education is now part of obligatory basic education covering children above 3 years old.



Source: Authors calculations from LIS.

The lower graph in Figure 4 shows that children's age-related poverty risk differs across countries. There are a large group of countries where younger children are more likely to be poor compared to 6-17-year-olds of school age, but on the other hand, Georgia, Colombia have higher rates for such older children, and in Peru, Dominican Republic and Mexico, the age-gradient for poverty risk appears very flat. The differences between the babies and infants (0-3-year-olds) and preschoolers (4-5-year-olds) often shows small differences, but in Paraguay, India, Egypt, Serbia and Georgia, there are higher rates of 4-5-year-olds. The uppermost graph in Figure 4 shows the same data normalized to the poverty rate for 0-3-year-olds. This shows the very heterogenous relationships between age and poverty for children appear to align to have higher rates for older children as the poverty rate for 0-3s declines across countries, when a simple linear trend line is imposed across all 14 countries when ranked by poverty prevalence. Fertility, birth spacing and family size will all affect this trend, and we will not pursue a more detailed examination of country level differences due to our small and non-representative sample. However, we can show if differences are due

to underlying population share and disproportionate risk for poverty that is not linked to population share. Figure 5 compares poverty shares by age-group to population share by the same age-groups and suggests there is little or no difference in any of our countries.



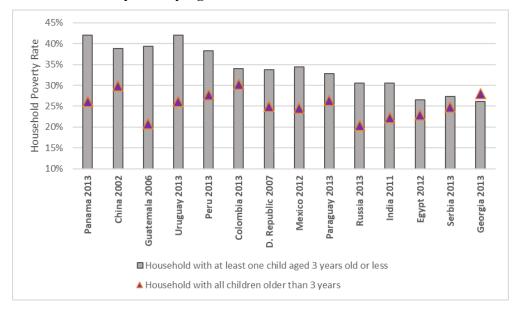
# Figure 5

Population Shares and Poverty Shares by Age of Child

On the other hand, Figure 6, looks at the composition of children in households and shows the large differences in poverty rates for households with children in which there is at least one child aged 0-3 compared to households where all children are older. This gives a clearer result across 13 of 14 countries by showing that the presence of a young child leads to higher poverty risk, but not in Georgia. This suggests that family composition, and thus family size and birth spacing are more important determinants of poverty risk – but this needs testing more rigorously on a larger sample of countries. But for designing universal transfers, this information on differential age-related risk should be an important consideration, and we take forward these findings in our simulations in the final part of this paper.

Source: Authors' calculations from LIS

# Figure 6



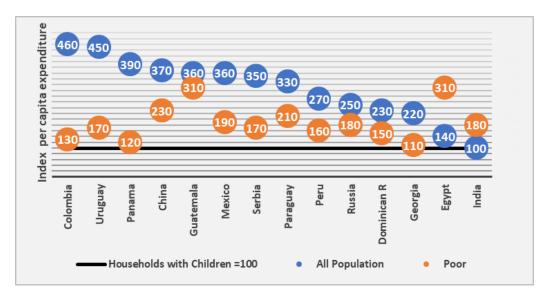
Household Poverty Risk by Age of Child

Source: Authors' calculations from LIS

### 3. Children get less than average from Social Protection Coverage

Before we turn to simulating universal child allowances, it is important to look at how far existing social protection programmes include children. We calculate the per-capita total of social protection transfer spending for each household for each country. We then produce a gross aggregate national spending on social protection from these household level totals and then compare the national per-capita spend between households with and without children. Figure 7 shows our results. We calculate two ratios: the difference between households with and without across the whole population – shown in blue, and then just for the poor population (those 50% of median net per capita income), shown in in orange. Both these figures are shown as an index with per-capital spending on households with children set to 100. Across 13 countries households with children get less, and in India there is parity. Figure 5 ranks countries left to right by the whole population index score (blue results) and this shows the range of national level differences: with children. It is important to note that all forms of social protection, including pensions, are included in our calculations and that we are using household level totals for income from social protection in the first instance, rather than trying to attribute the different programmes to individuals within the household by age.

Figure 7 Spending on Social Protection Transfers



Source: Authors' calculations from LIS Notes: Survey years differ:

When we just consider social protection transfers to the poor, we see a narrowing of difference overall with ratios of per capita spending between households with and without children falling substantially but still showing a consistent relative under-spending on poor households with children. In two countries, India and Egypt, we see the worst per capita spending ratios for the poor compared to the overall population.

We now turn to consider how social protection could be more directed to children and poor children across these countries.

# 4. Simulating Effect of Universal Child Allowances on Child Poverty

Our findings to date show that children have a higher chance of poverty but a lower chance of receiving social protection, both in general and if they are in poor households. In this section we use the same LIS data for these countries to explore how this situation can be addressed. We carry forward the discussion from the introduction that showed both poverty related and 'universal' reasons to provide transfers to children. We simulate the impact of a 'universal child transfer' paid for from a new allocation of a consistent 1 per cent of GDP in each of the 14 countries. However, further to our earlier discussion on the inherent trade-offs between universal and 'selective' approaches for child transfers, in doing so, we explore the *poverty* 

reducing efficiency of five options for a policy on universal child allowances.

#### **Options for Universal Child Allowances.**

Our simulations are all based on a common funding assumption: a new allocation of 1% of GDP available from the benefits of economic growth for the new universal transfer with no other fiscal realignment of funds. This assumption means that we do not explore reform options for current transfers or taxation to fund the transfer, and thus the combined effects of giving additional transfers to children but reducing transfers to others, or of taxing households to pay for the introduction of universal child allowances. This means that there are no 'losers' in our reforms, only gainers. This means that our results should be considered as a preliminary comparative scoping of the potential for such transfers rather than a detailed analysis of options for reform in any country. Our universal assumption for all simulations is that every child receives an allowance with no direct 'means testing' of eligibility for the transfer. Children are defined as aged 0-17 inclusive in line with the Convention on the Rights of Children (UN 1989).

The core of our simulation approach is to change the universal assumptions to reflect demographic differences: focusing on child age and on household verses individually calculated allocations. In addition, we test the effect, in very crude terms, of taxing back universal allowances from those in the higher quintiles on the income distribution. This latter assumption is for demonstration of the principle rather than illustration of viable policy in the immediate future. It follows the suggestion of Atkinson (2015) of making universal child allowances taxable income to improve their redistributional effect in reducing inequality. Of course, our suggestion of taxing back transfers may not reflect the presence of a viable progressive income tax in any of our 14 countries, and thus this option demonstrates the potential of combined tax and transfer approaches that can 'target' social protection without direct means testing as part of the eligibility for the transfer.

We set out a brief overview of out simulation approaches below. Readers who want more detailed outlines of each iteration can see a fuller outline of the details of each simulation in Appendix 1.

- Universal to all households with children: Our first and baseline simulation allocates allowances equally to all households with at least one child. The transfer amount is thus equal to 1% of GDP divided by the number of households with children. The transfer takes no consideration of the number of children in any household. This approach is potentially the easiest to administer.
- Universal to all children: Our second simulation allocates allowances equally to every child. The

transfer amount is thus 1% of GDP divided by the child population. Each household with children will receive an allowance equal to the number of children within it. Figure 1 showed that higher proportions of children live in the lower quantiles of all the 14 countries we consider. This approach is thus likely to improve the progressive impact of child allowances compared to the baseline described above. Households with more than the average number of children will receive more allowances than in the first baseline simulation.

- *Age-weighted Universal to all children*: Figures 4, 5 and 6 previously showed that younger children were more likely to be poor in only some countries, but that households with all children aged over 3 have much lower levels of poverty across all 14 countries. Our third approach to simulating child allowances takes this into account. We reweight the universal allocation to all children in our second simulation to give younger children higher allowances than older children. We test the age-weighting approach by using different definitions of age and using different weights.
  - Age-definitions for higher weights for allowances are applied for the 0-3 and 0-5-yearolds. We chose these ages as being approximately representative of policy for pre-school and primary school age qualification.
  - Allocation Weights we use a baseline approach of doubling the population proportion represented by the age-group. This means that if 0-3s are x% of the population, we allocate 2x% of the overall spend (1% of GDP) to that age group. We repeat that for 0-5-year-olds.<sup>3</sup>
- Universal with Distributional Emphasis: For these simulations we give a higher weight of allowance (+20%) to the bottom 40% of the income distribution in a crude adjustment to reflect the potential impact of 'taxing back' the transfer from higher income households. We repeat previous baseline and demographic approaches using the additional distributional weight. This leads to the following set of simulations:
  - Household level allocation weighted to bottom 40%
  - Individual child level allocation weighted to bottom 40%
  - Age weighted to 0-3s and 0-5s additionally weighted to bottom 40%

For each iteration of the simulations in all 14 countries, we calculate the overall poverty headcount, overall poverty gap, child poverty headcount and child poverty gap.

<sup>&</sup>lt;sup>3</sup> We iterated a range of different weights in addition and these are not reported here apart from the next simulation which applies weights at the extreme margin: where 100% of the allowance is given to these age-groups.

### 5. Findings

Table 1 shows the results from our first simulation, showing the effects of paying a universal allowance to all *households with children* (, funded by an allocation of 1% of contemporary GDP. Poverty headcounts are shown before and after the simulated transfers with poverty impact measured using the 'anchored' poverty line of the pre-transfer distribution (i.e. we do not adjust the median or poverty line for the effect of the transfers but keep a constant comparable ex-ante poverty line).

Table 1

Baseline Household Simulations: Poverty Reduction from Child Allowance paid to Households with Children.

% poor	China	2002	Colomb	bia 2013	Dominica	n R. (2007)	Egypt	2007	Georgi	a 2013	Guatem	ala 2006	India	2011
% poor	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Pre-transfer	26.9	31.0	26.8	31.7	22.6	28.6	20.0	24.9	20.0	27.2	25.9	31.4	20.2	25.7
Post-transfer	24.1	26.7	24.1	27.8	20.1	25.3	16.0	19.7	16.8	22.2	24.0	29.1	17.0	21.3
% reduction	10.4%	13.9%	10.1%	12.3%	11.1%	11.5%	20.0%	20.9%	16.0%	18.4%	7.3%	7.3%	15.8%	17.1%
0/ no or	Mexic	o 2012	Panam	ia 2013	Paragu	ay 2013	Peru	2013	Russia	2013	Serbia	a 2013	Urugua	ay 2013
% poor	Mexic All	o 2012 Child	Panam All	a 2013 Child	Paragu All	ay 2013 Child	Peru All	2013 Child	Russia All	2013 Child	Serbia All	a 2013 Child	Urugua All	ay 2013 Child
% poor Pre-transfer					0	,							0	,
	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child

Source: authors' calculations from LIS

Note: % reduction is the proportional reduction resulting from the simulation as a % age of the original headcount rate

For this and subsequent results, we report differences expressed as a proportional percentage change, not percentage point difference, to enable a simple cross-country comparison from differing starting points in the levels of 'pre-transfer' poverty rates. Differences are expressed in terms of 'poverty reduction', with higher poverty reduction (lower poverty rates) shown in the green in these and future results. The simulated household level allocation of child allowances gives both overall poverty reduction (population of all ages) and child poverty reduction. We report both to demonstrate that children co-reside with adults and that child transfers have an effect on household income that is shared across the household in theory. Of course, in reality, intra-household allocation may not be equal for all household members, but we are unable to observe allocation of resources within households, and we keep to a simple aggregate household level effect when reporting all our results.

Table 1 shows that overall poverty for the whole population declines in every country at between 7 and 20 percent, and that child poverty reduction is equal or greater to this in every country. Results for poverty gap reduction are shown in Appendix A.

The importance of this initial finding from our first and simplest simulation should not be understated: universal child allowances have a progressive impact and poverty reducing effect in all 14 Middle Income

countries from a 1% allocation of GDP to fund them. Many policy makers do not realise the potential of universal transfers to have this poverty reducing effect, and the simplest demonstration can thus potentially have the most enlightening impact. Child poverty reduction is not always greater – see for instance Guatemala – but is usually so across the other countries, but at differing relative impacts.

The remainder of our simulations and findings discuss how to increase the poverty reduction effects but maintain the universal approach, as outlined above.

Does paying allowances to every child increase poverty reduction when compared to paying to households with children? Table 2 shows the results of simulating allocation of the same 1% of GDP to every child (aged 0-17), and compares the poverty reduction to the previous household allocation shown in Table 1. The change in poverty reduction is shown in the green highlighted cells and is reported as proportional change compared to the results in Table 1. Compared to a household level allocation, child allowances that are designed to paid for every individual child increases poverty reduction. This reflects the findings earlier in Figure 1, that showed that children were disproportionately in households at the lower quintiles of the income distributions in all 14 countries. Compared to a household level allowance, individual level grants increase general poverty reduction by an additional 1.2 to 4.8 per cent, but increase child poverty reduction by much higher levels: 2.2 to 7.4 per cent. Across all 14 countries, paying individual level child allowances to all ages is more efficient in poverty reduction than paying allowances to all households with children, and especially so for child poverty reduction.

New Individua	I Leve	el Base	enne: 1	rovert	y Keal	uction	гош	Paying	g Unite	I Allov	vances	s per C	nna	
0( manualty	China	2002	Colom	bia 2013	Dominica	n R. (2007)	Egypt	t 2007	Georg	ia 2013	Guatem	ala 2006	India	2011
% poverty	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Overall %	23.7	25.5	23.2	25.7	19.1	23.5	15.5	18.5	16.2	20.4	23.7	28.4	16.4	19.8
Change in Poverty Reduction compared to household payment	1.7%	4.5%	3.7%	7.6%	5.0%	7.1%	3.1%	6.1%	3.6%	8.1%	1.3%	2.4%	3.5%	7.0%
0(	Mexic	o 2012	Panam	na 2013	Paragu	ay 2013	Peru	2013	Russi	a 2013	Serbia	a 2013	Urugua	ay 2013
% poverty	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Overall %	16.3	20.7	21.1	29.9	20.0	26.3	22.9	28.0	14.1	18.0	15.3	19.5	13.7	24.6
Change in Poverty Reduction compared to household payment	4.7%	8.4%	4.1%	6.3%	1.5%	2.6%	1.7%	3.4%	2.8%	9.1%	1.9%	6.7%	4.9%	7.9%

New Individual Level Baseline: Poverty Reduction from Paying Child Allowances per Child

Source: authors' calculations from LIS

Table 2

Note: % reduction is the proportional reduction resulting from the simulation as a % age of the headcount rates in Table 1

At this point we reset our baseline for future comparison of results to have this individual child specification of allowances as the reference option. From here on, all comparisons of results will refer to the results for individual allowances shown in Table 2. In short, having shown that an individual level approach has better poverty reduction than a household level, we now consider options to see if we can better the poverty reduction impact compared to this individual level specification.

Does paying higher level of allowances to young children compared to older children change the poverty reduction effect of individual level child allowances? Table 3 shows the comparative results for weighted allowances for younger children. We show two sets of results – weighting for those aged 0-3 and then for those aged 0-5. These age groups crudely align to the age groups for policy on pre-school and primary school attendance. To compare these results to the Table 2 baseline, we show positive increases in proportional poverty reduction compared to Table 2 in green, and negative reductions in red. But in Table 3 we only see red cells as these iterations do not give greater poverty reduction, and are all less poverty reducing than our baseline individual simulation. However, differences are sometimes very small, and to show this we compare our proportional reduction to the percentage point reduction, and, where percentage reduction is less than 1 percent, we show these results in a lighter shade.

Weighting of individual child allowances to younger children suggest not overall. Higher levels of allowances to both age groups of children (0-3 and 0-5) was based on doubling the proportion of overall spend relative to the proportion of population of that age (as explained above). We did a range of sensitivity tests on different weights, but no weighting of allowances for a universal benefit of all 0-17-year-olds gave stronger results for poverty reduction compared to those of the baseline shown in Table 2.

% poverty	Age Weight	China	2002	Colomb	oia 2013	Dominica	n R. 2007	Egypt	: 2007	Georg	ia 2013	Guatem	ala 2006	India	2011
% poverty	Age weight	All	Child												
Overall %	0-3	24.1	26.0	23.9	26.9	20.0	24.7	17.0	20.7	17.3	22.0	24.2	29.1	17.3	21.1
	om unweighted Ial allowance	-1.7%	-2.0%	-3.0%	-4.7%	-4.7%	-5.1%	-9.7%	-11.9%	-6.8%	-7.8%	-2.1%	-2.5%	-5.5%	-6.6%
Overall %	0-5	24.3	26.4	24.2	27.5	20.5	25.4	17.5	21.4	17.8	23.0	24.4	29.4	17.7	21.8
	om unweighted al allowance	-2.5%	-3.5%	-4.3%	-7.0%	-7.3%	-8.1%	-12.9%	-15.7%	-9.9%	-12.7%	-3.0%	-3.5%	-7.9%	-10.1%
<i>.</i>		Mexic	o 2012	Panam	ia 2013	Paragu	ay 2013	Peru	2013	Russi	a 2013	Serbia	a 2013	Urugua	ay 2013
% poverty	Age Weight	All	Child												
Overall %	Age Weight 0-3	All 17.8	Child 22.9	All 22.0	Child 31.4	All 20.4	Child 26.8	All 23.4	Child 28.8	All 14.8	Child 19.8	All 15.9	Child 20.9	All 14.7	Child 26.5
Overall % Change fro															
Overall % Change fro	0-3 om unweighted	17.8	22.9	22.0	31.4	20.4	26.8	23.4	28.8	14.8	19.8	15.9	20.9	14.7	26.5

 Table 3

 Poverty Reduction from Age-Weighting Individual Allowances to Younger Children.

Source: authors' calculations from LIS

Notes: % reduction is the proportional reduction resulting from the simulation as a %age of the headcount rates in Table 2 lighter shaded cells show results from differences of less than one percentage point.

Of course, poverty reduction for such younger children will be improved by such an approach but such reductions are countered by reducing the poverty impact for older children, making the overall effect negative. This reflects that fact that young children live with older children but are a minority of all children – the average effect is thus to reduce the impact of allowances for poverty reduction.

However, our weighting assumptions do not test the extreme margin – of weighting older children as zero, or, in other words, only paying allowances to all younger children aged 0-3 or 0-5. Such an approach is still universal, but the universe of children has shrunk to be only to those younger ages. Table 4 shows the results of such an assumption using the far more restrictive, younger, age 'universe' of children, and provides a sensitivity check for our existing set of simulations. Because we maintain the spending assumption as a constant 1 percent of GDP, we are now raising the generosity of allowances as this fixed sum is not paid to a much smaller population. Table 4 shows a range of outcomes and indicates that in some instances in some countries, payment to just young children for the same budget will produce more poverty reduction, and in other countries, less; compared to an allowance to all children of all ages 0-17. However, Table 4 shows that most results represent very small changes in overall poverty rates at the margin of 1 percentage point of poverty headcount. But we see strong effects for China (both positive and negative, depending on age group); and strong negative effects on greater poverty reduction in Egypt, Georgia Mexico and Serbia. The overall conclusion from Tables 3 and 4 is that little gains to poverty reduction age seen from age-weighting individual universal child allowances in these 14 countries.

Table 4
Poverty Reduction from Paying Individual Level Allowances only to 0-3 or 0-5-year-old children

0/	Ann Mainha	China	a 2002	Colomb	oia 2013	Dominica	in R. 2007	Egypt	t 2007	Georg	ia 2013	Guatem	ala 2006	India	2011
% poverty	Age Weight	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
% poverty	0-3	23.9	26.9	23.5	26.5	18.9	23.6	16.2	19.5	17.0	22.4	23.4	28.2	16.6	20.4
	om unweighted Jal allowance	-0.8%	-5.5%	-1.3%	-3.1%	1.0%	-0.4%	-4.5%	-5.4%	-4.9%	-9.8%	1.3%	0.7%	-1.2%	-3.0%
% poverty	0-5	22.9	24.2	23.4	26.1	18.9	23.4	15.9	19.1	16.9	22.1	23.9	28.8	16.2	19.7
	om unweighted Jal allowance	3.4%	5.1%	-0.9%	-1.6%	1.0%	0.4%	-2.6%	-3.2%	-4.3%	-8.3%	-0.8%	-1.4%	1.2%	0.5%
~ .		Mexic	o 2012	Panam	ia 2013	Paragu	ay 2013	Peru	2013	Russia	a 2013	Serbia	a 2013	Urugua	ay 2013
% poverty	Age Weight	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
% poverty	0-3	17.0	22.2	20.8	29.8	20.5	27.1	23.0	28.3	14.1	17.9	15.9	21.6	14.0	25.4
	om unweighted Jal allowance	-4.3%	-7.2%	1.4%	0.3%	-2.5%	-3.0%	-0.4%	-1.1%	0.0%	0.6%	-3.9%	-10.8%	-2.2%	-3.3%
% poverty	0-5	16.6	21.4	20.9	29.8	20.4	27.0	23.0	28.2	14.2	17.9	15.5	20.2	13.9	25.1
•	om unweighted Jal allowance	-1.8%	-3.4%	0.9%	0.3%	-2.0%	-2.7%	-0.4%	-0.7%	-0.7%	0.6%	-1.3%	-3.6%	-1.5%	-2.0%

Source: authors' calculations from LIS

Notes: % reduction is the proportional reduction resulting from the simulation as a %age of the headcount rates in Table 2 lighter shaded cells show results from differences of less than one percentage point.

Would 'taxing back' universal child allowances change their poverty reducing impact? We produce a set of simulations that employed a 'distributional weighting', that gave higher allowances (20% in these examples) to the bottom 40 per cent of households within the same budget constraint of 1% of GDP. It is axiomatic from basic arithmetic that giving higher level of allowances to the bottom 40 percent of the distribution will reduce poverty more. The following simulations thus test the optimal design option for such increased poverty reduction for poverty and child poverty.

For these simulations, we first return to check on the effect on distributional weights on household level

allowance and Table 5 shows the results for household allowances for a simulation that gives 20 percent more allowance to households with children in the bottom 40 percent of the distribution and compares results to Table 1. The net spending (after taxing back) remains at 1 per cent of GDP, and the proceeds of taxing back are put into improved allowances for children in the bottom 40. Such weighting gives greater overall poverty reduction outcomes compared to the unweighted equal individual level allowances from Table 2 but at very small margins. Most results are not greater than one percentage point in poverty rate, apart from Panama. These results mean that there is no basis for changing the individual level allocation principle alongside a distributional weighting and we continue from this point to compare results to an individual level allocation shown in Table 2.

Table 5

Poverty Reduction from Household Level Child Allowances with Higher Weight for Bottom 40%

% poverty	China	a 2002	Colomi	oia 2013	Dominica	an R. 2007	Egyp	t 2007	Georg	ia 2013	Guatem	ala 2006	India	2011
% poverty	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Overall	23.1	25.2	22.7	25.4	18.8	23.6	14.9	18.2	15.4	20.0	23.2	28.2	15.7	19.5
Change in Poverty Reduction compared to individual equal payment	2.5%	1.2%	2.2%	1.2%	1.6%	-0.4%	3.9%	1.6%	4.9%	2.0%	2.1%	0.7%	4.3%	1.5%
	Mexic	co 2012	Panam	na 2013	Paragu	ay 2013	Peru	2013	Russia	a 2013	Serbi	a 2013	Urugua	ay 2013
% poverty	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Overall	15.5	20.4	19.9	28.8	19.7	26.2	22.4	27.7	14.0	18.3	14.9	19.3	13.2	24.5

Source: authors' calculations from LIS

Notes: 1: % reduction is the proportional reduction resulting from the simulation as a % age of the headcount rates in Table 1 lighter shaded c ells show results from differences of less than one percentage point

What effects would 'taxing back' have on individual level child allowances? Table 6 shows results from a 'bottom 40 weighted' *individual allowance* to children and shows that such an approach increases child poverty reduction in all 14 countries, of which 10 are at levels greater than one percentage point, when compared to our earlier revised baseline individual allocation shown in Table 2. The difference arises from spending more per child in bottom 40 compared to those in the higher quintiles. Table 6 shows that all countries improve poverty reduction, but that 4 out of ten show marginal levels of poverty reduction at less than 1 percentage point difference to the baseline (Table 2). But clearly, the majority of out 14 show considerable increases, between 4 to 7 percent additional poverty reduction. Of course, the improvement of poverty reduction in this form compared to household allocation in Table 5 is also apparent.

Poverty Reduc	ction f	rom li	ldivid	ual Le	vel Ch	ild All	owan	ces wit	ih Higi	her Wo	eight f	or Bot	tom 4	0%
% poverty	China	a 2002	Colom	bia 2013	Dominica	n R. 2007	Egypt	t 2007	Georg	ia 2013	Guatem	ala 2006	India	2011
% poverty	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Overall	23.1	24.4	22.4	24.2	18.4	22.4	14.6	17.2	15.6	19.4	23.3	27.9	15.6	18.5
Change in Poverty Reduction compared to individual equal payment	2.5%	4.3%	3.4%	5.8%	3.7%	4.7%	5.8%	7.0%	3.7%	4.9%	1.7%	1.8%	4.9%	6.6%
% poverty	Mexic	o 2012	Panam	ia 2013	Paragu	ay 2013	Peru	2013	Russi	a 2013	Serbia	a 2013	Urugua	ay 2013
% poverty	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
Overall	15.6	19.5	20.2	28.3	19.8	26.1	22.4	27.1	13.6	16.7	15.1	18.7	13.0	23.1
Change in Poverty Reduction compared to individual equal	4.3%	5.8%	4.3%	5.4%	1.0%	0.8%	2.2%	3.2%	3.5%	7.2%	1.3%	4.1%	5.1%	6.1%

 Table 6

 Poverty Reduction from Individual Level Child Allowances with Higher Weight for Bottom 40%

Source: authors' calculations from LIS

Note: lighter shaded cells show results from differences of less than one percentage point

We now turn to our final set of simulations. Does focusing on the younger age groups of children *in addition* to higher allowances to the bottom 40 percent improve poverty reduction from the results in Figure 6? We undertook a full set of simulations that reweighted 'all age' allowances as a version of our previous simulation shown in Table 3. We do not discuss those results here but include them in the full set of national results in Appendix 2, but overall, they replicated the findings from Table 3 and gave less favourable results for increased child poverty reduction compared to allocating allowances *solely* on the younger age-groups of children and weighting to the bottom 40, as in our earlier shown in Table 4.

Table 7 shows the results of these age-specific allowances and 'taxing back' (i.e. differential weighting to improve allowances to children in the bottom 40 per cent of households). We use two different simulations. Table 7i shows the results from simulating transfers only to all 0-3-year-olds, and Table 7ii shows the results from a similar simulation but for the 0-5 age group. Both simulations give 20 per cent more to the children in these age groups in the bottom 40 percent of households. To show how this approach differs from previous simulations we compare to two earlier results:

- first to see if more poverty reduction occurs to our baseline simulation of individual child allowances to all 0-17-year-olds in Table 2; and
- second, to see if more poverty reduction occurs compared to the results from Table 6, where we simulated the effect of a similar universal transfer but giving more to all 0-17s in the bottom 40%.

The results in Table 7 vary much more by country than the earlier simulations. In general, we see more poverty reduction overall for giving bottom 40% weighted allowances solely to 0-5 children than we see for the 0-3 age group, (there is a greater preponderance of green cells in Table 7ii and no darker red cells are seen with differences of greater than 1 percentage point, compared to results in 7i).

# Table 7

# Poverty Reduction from Paying Individual Level Allowances only to 0-3 or 0-5-year-old children with Higher Allowances for those in Bottom 40%

i)0-3-year-olds

		China	a 2002	Colomb	bia 2013	Dominica	in R. 2007	Egypt	2007	Georg	ia 2013	Guatem	ala 2006	India	2011
% poverty 0	Only 0-3	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
		23.6	26.5	22.6	24.6	18.2	22.1	16.2	19.5	16.6	21.7	23.1	27.8	16.6	18.4
Change from 0-17 n individual allo	•	0.4%	-3.9%	2.6%	4.3%	4.7%	6.0%	-4.5%	-5.4%	-2.5%	-6.4%	2.5%	2.1%	-1.2%	7.1%
Change from individu for 0-17 weighted to		-2.2%	-8.6%	-0.9%	-1.7%	1.1%	1.3%	-11.0%	-13.4%	-6.4%	-11.9%	0.9%	0.4%	-6.4%	0.5%
		Mexic	o 2012	Panam	ia 2013	Paragu	ay 2013	Peru	2013	Russia	a 2013	Serbia	a 2013	Urugua	ay 2013
% poverty C	Only 0-3	Mexic All	o 2012 Child	Panam All	a 2013 Child	Paragu All	ay 2013 Child	Peru All	2013 Child	Russia All	a 2013 Child	Serbia All	a 2013 Child	Urugua All	ay 2013 Child
% poverty C	Only 0-3						-								
% poverty C Change from 0-17 n individual allo	non-weighted	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child

#### ii)0-5-year-olds

	China	a 2002	Colomb	bia 2013	Dominica	in R. 2007	Egypt	t 2007	Georg	a 2013	Guatem	ala 2006	India	2011
% poverty Only 0-5	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child
	22.9	24.2	22.6	24.6	18.2	22.5	14.6	17.2	15.9	20.1	23.2	27.8	15.4	18.2
Change from 0-17 non-weighted individual allowance	3.4%	5.1%	2.6%	4.3%	4.7%	4.3%	5.8%	7.0%	1.9%	1.5%	2.1%	2.1%	6.1%	8.1%
Change from individual allowance for 0-17 weighted to bottom 40	0.9%	0.8%	-0.9%	-1.7%	1.1%	-0.4%	0.0%	0.0%	-1.9%	-3.6%	0.4%	0.4%	1.3%	1.6%
	Mexic	o 2012	Panam	ia 2013	Paragu	ay 2013	Peru	2013	Russia	a 2013	Serbi	a 2013	Urugua	ay 2013
% poverty Only 0-5	Mexic All	o 2012 Child	Panam All	na 2013 Child	Paragu: All	ay 2013 Child	Peru All	2013 Child	Russia All	a 2013 Child	Serbia All	a 2013 Child	Urugua All	ay 2013 Child
% poverty Only 0-5													0	
% poverty Only 0-5 Change from 0-17 non-weighted individual allowance	All 15.6	Child	All	Child	All	Child	All	Child	All	Child	All	Child	All	Child

Source: authors' calculations from LIS

Note: lighter shaded cells show results from differences of less than one percentage point

Comparing these final results to our revised baseline in Table 2 – we see compared to the simulation of undifferentiated allowances to individual children aged 0-17 (the upper row of Table 7 results), gives more child poverty reduction in 4 countries for 0-3 allowances (Colombia, Dominican Republic, India and Panama) and in 9 countries for 0-5 allowances (Colombia, Dominican Republic, Egypt, India, Mexico, Panama, Russia and Uruguay). When we compare the age specific allowances to the simulation of bottom 40% all age allowances from Table 6 (the lower row of Table 7 results) we see improved poverty reduction *in only one country*, Dominican Republic. Put simply, giving more to all children in the bottom 40 provides bigger poverty reduction than selecting younger children in the bottom 40 in 13 out of our 14 countries.

These results in general clearly demonstrate the arithmetic outcomes of the effects of allowances on households with children: the gains from different policy design depend on household population size (both children and adults) and thus on the size of population who gain in the transfer effect when children and their position in the income distribution are taken into effect, and the size of the original poor population in similar terms. Restricting transfers to a smaller population within the same budget constraint can improve poverty reduction by higher value transfers; and weighting transfers to be more generous to

the bottom of the distribution can also improve poverty reduction. But the gains depend on how many and where children are and the effect of children's age on the number of co-resident siblings and adults. We can clearly say that designing allowances to reflect individual children rather than households with children gives more poverty impact across all 14 countries, and we can accompany that finding with the rather platitudinal finding that weighting allowances to the bottom of the distribution gives more poverty impact. In these ways, we find strong confirmatory evidence to support Atkinson's proposal of introducing universal child allowances that are taxable (Atkinson 2015) as a major plank of any inequality reduction policy. But actual specific design for each country will not reflect our simplistic assumptions but will focus on the priorities each attaches to the political economy of public expenditure and poverty reduction. The crucial deciding factor for policy is probably the interpretation of the tradeoff between achieving poverty reduction verses universal income smoothing that reflects both children's needs and the universal penalty that children bring to household income.

Are our main findings: that individual allocation and weighting higher allowances (through 'taxing back) to the bottom 40 per cent; sensitive to the per-capita equivalence assumption we used? We repeated the simulations for these two main findings using the OECD equivalence scale (which uses the square root of the number of household members, an assumed elasticity of 0.5 for household size) as an alternative equivalence scale. We followed the approach set out in the literature to allow the poverty line to float with the new distribution created by changing equivalence assumptions (Deaton and Zaidi 2002, Ravallion 2015, Newhouse et al 2017) and results confirmed that the substantial arithmetic difference in allocations from these two policy options are still seen in all countries, apart from China, where the difference between household and individual level effects reduced to be less than one percentage point difference. We did not test the sensitivity of changing the age-weighting of allowances to reflect younger children as results from the main simulation showed that these results are probably best tested at the national level, as there were no substantial differences shown in our original results across the 14 countries. Such sensitivity tests could also test for 'adult equivalence' assumptions by age and we recommend that that such an approach be taken in any national level analysis in the future.

Table 8 shows in more granular detail how the trade-off between targeting to the bottom 40 percent with and without age-weighting can be appreciated if poverty reduction is uppermost as a policy priority in all 14 countries. It should be remembered that these summary 'optimal' results may not differ in significance to other approaches in any case. The results should not be taken as specific examples of how to design implement universal child transfers, per se, but rather seen as exemplifying the potential for such transfers to make a significant contribution to reducing child poverty. The maximum potential effect on child poverty

reduction from our simulations range from 10% in Paraguay to 32% in Mexico – very significant reductions from a non-means tested 'universal' transfer and clear contributions to inequality reduction. Not only does these transfers reduce the risk of poverty, but they also reduce the intensity of child poverty for those who remain poor – reducing poverty gaps (the mean distance between income of the poor and the poverty line) between 25% and 48%

# Table 8

# Summary of Simulations with Optimal Poverty Reduction from Universal Child Allowances in 14 Countries

Country	Ро	licy Approach	Decline in Child Poverty GAP	Decline in Child Poverty Head Count Ratio
Georgia 2013			48%	29%
Uruguay 2013			47%	28%
Egypt 2012	Universal to all 0.17 year o	olds – with weighting to bottom 40%	44%	31%
Serbia 2013		nus – with weighting to bottom 40 /8	36%	27%
Colombia 2013			35%	24%
Peru 2013			27%	16%
Paraguay 2013			21%	10%
Panama 2013			43%	21%
Russia 2013		To skildnen below 2 weens old	40%	28%
China 2002		To children below 3 years old.	38%	23%
D. Republic 2013	Age specific Universal Child Allowances with weighting to		36%	23%
India 2011	bottom 40%		40%	29%
Mexico 2012		To children below 5 years old:	40%	32%
Guatemala 2006			25%	11%

# Discussion

In this paper we have considered the position of children in 14 'Middle Income Countries' and found that they are disproportionately in the bottom quantiles of the income distribution, have consequentially higher poverty rates but receive less social protection than others. To address those issues, but also to consider the fact that there is a lifetime impact of children on income in most households with children across the whole distribution, we consider simulations of how 'universal cash transfers for children' can be designed to address the problem of poverty and lifetime income smoothing across those 14 countries.

Our simulations for the 14 countries are simplistic and are meant solely to consider potential parameters of policy design (age, household size and overall distributional position), rather than exemplify a precise formulation of policy options for each country. We find that, keeping a constant 1% spend of GDP, we can give a universal cash child allowance and improve its poverty reduction effects by giving allowances on a per-capita basis rather than on a household basis and that we can get better poverty reduction if we give higher allowances to the bottom 40. These findings stem from simple arithmetic – the number of kids is greater in low income households and poor households are in the bottom of the income distribution and thus benefit more from higher cash awards. But by giving more to the bottom 40% do we breach the premise of 'universalism'? We think not; as our simulations are designed to capture the effect of 'taxing back' universal allowances through a progressive income tax. This keeps the net (post tax) spend to 1% of GDP but gives more to poor and near poor children. Universalism in our view is ensuring that the whole population of interest receives something of value, not necessarily the same amount. Is this 'means testing?? Selective universalism in the UK was certainly an approach that saw a massive expansion of means testing across the income distribution to claw back the generosity of child transfers to the poor and near poor. This is not our approach, and we more simply make universal transfers taxable income – a very different and more simple form of selective universalism.... This is not means testing in most policy commentator's eyes. Indeed, the most ardent universalists usually insist on progressive taxation as a corollary to universal basic incomes and transfers of this kind.

Many of the 14 countries do not have effective progressive income taxation and high levels of informality dominate their labour markets. For this reason, we make no attempt to model tax, but merely assume a very conservative level of additional benefit that would result from taxing back allowances from the upper 60%. This allows us to demonstrate the impact of the principle and we leave detailed discussion of its implementation to country level simulations and discussions that can get to grips with the complexities of detail and context.

Does a universal child allowance have to go to all children? We considered options to weight an allowance to all 0-17-year-olds to younger children who we saw were more likely to be poor. Our results suggest that this does not improve poverty reduction. On the other hand, solely considering younger children (aged 0-3 or 0-5) gave better poverty reduction in many countries than age weighting benefits to

all children. These results on poverty reduction were sometimes better when also combined with a higher weight to young children in the bottom 40% of the distribution. Again, these results are the outcome of arithmetic based on how many children live with the younger children of interest, and of how many coresident adults also share those households - resulting from differing fertility, household formation and economic activity across the distribution, and these differ by country. These results confounded our expectations that directing more resources to the poorest age group always increased poverty reduction – they did not overall because the older kids and adults who share those households got less. Only when you discussed and illuminated the grey area in social protection policy that crosses the rhetorical divide between universal and selective approaches. Our approach is pragmatic and empirical rather than locked into binary opposites of universal verses selective. Universal child allowances can clearly be both a lifetime smoothing and a poverty reducing transfer. These two approaches can clearly be complimentary if policy makers recognize that and want them to be so. Of course, child allowances should not be the primary transfer for responding to monetary poverty – a comprehensive social assistance safety net is potentially more effective and efficient at doing so. But child allowances can clearly have an anti-poverty impact and designing them to optimally achieve that outcome alongside other 'lifetime smoothing' aims and to have them in place alongside a social assistance safety net, may clearly help to maximize the overall social protection system's efficiency and effectiveness.

#### **Bibliography**

- Adams, R. 1998. "The political Economy of the Food Subsidy System in Bangladesh". *Journal of Development Studies* p.66-88
- Alkire S., Jindra C., Robles G. and Vaz A (2017) *Children's Multidimensional Poverty: Disaggregating the global MPI*, Briefing 46. Oxford: Oxford Poverty and Human Development Initiative, Oxford University
- Atkinson A. B. (2015) Inequality: what is to be done? Boston: Harvard University Press.
- Barr N. (2004) The Economics of The Welfare State 3rd edition, Oxford, Oxford University Press
- Bastagli et al (2016) Cash transfers: what does the evidence say? A rigorous review of impacts and the role of design and implementation features, London: Overseas Development Institute
- Bradshaw, J., Mayhew, E. and Alexander, G. (2013) Minimum social protection in the CEE/CIS countries: the failure of a model in Marx I. & K. Nelson (eds.) *Minimum Income Protection in Flux*. Basingstoke: Palgrave Macmillan
- Bradshaw, J. and Hirose, K. (2016) Child Benefits in Central and Eastern Europe A comparative review, Geneva: International Labour Organisation:
- Brewer M (2012) *Five years of social security reform in the UK*, IFS Working Papers. 02/12. London: Institute of Fiscal Studies

- Brooks-Gunn and Duncan (1997) The Effects of Poverty on Children, The Future of Children Vol. 7 No. 2 pp 55-71.
- Coady, D., Grosh, M., and Hoddinott, J. (2004) *Targeting of Transfers in Developing Countries*. Regional and Sectoral Studies. Washington DC: World Bank
- Cooper K and Stewart K (2013) *Does Money Affect Children's Outcomes? A Systematic Review*, York, Joseph Rowntree Foundation.
- Daly M. and Clavero S. (2004) *Contemporary Family Policy in Ireland and Europe*, Belfast: Queen's University School of Sociology and Social Policy
- Davis B., Handa S., Hypher N., Winder Rossi N., Winters P. and Yablonski J (eds) (2016) From Evidence to Action: The Story of Cash Transfers and Impact Evaluation in Sub Saharan Africa. Oxford: Oxford University Press
- Deaton A. and Zaidi S. (2002) *Guidelines for constructing consumption aggregates for welfare analysis.*" Living Standards Measurement Study Working Paper 1135. Washington D.C.: The World Bank.
- Ellis F., Devereux S. and White P. (2009) Social Protection in Africa. Cheltenham: Edward Elgar
- Evans M and Hassen I (2018) Why is child poverty higher than adult poverty? What are the determinants of such difference in Middle Income Countries? LIS Working Paper, forthcoming
- Fiszbein, A., Schady N., Ferreira F., Grosh M., Keleher N., Olinto P. and Skoufias E. (2009). Conditional Cash Transfers: Reducing Present and Future Poverty. World Bank Policy Research Report. Washington, DC: World Bank
- de Hoop J. and Rosati F. (2014) *Cash Transfers and Child Labor*, Policy Research Working Paper 6826, Washington DC. The World Bank
- International Labour Organisation (ILO) (2012) R202 Social Protection Floors Recommendation, Geneva, ILO
- International Labour Organisation (ILO) (2017) *World Social Protection Report*. Geneva: International Labour Organisation.
- Kail R (2011). Children and Their Development (6th Edition). Englewood Cliffs, N.J: Prentice Hall.
- Klasen S. and Lange S (2015) Accuracy and Poverty Impacts of Proxy Means-Tested Transfers: An Empirical Assessment for Bolivia, discussion paper 164, Göttingen: Courant Research Centre, University of Göttingen.
- Luxembourg Income Study (LIS) Database, http://www.lisdatacenter.org (multiple countries; January 2017 March 2018). Luxembourg: LIS.
- Nell E., Evans M. and Gornick J. (2016) Child Poverty in Middle-Income Countries, LIS Working Paper

Series. 666: Luxembourg: Cross-National Data Center in Luxembourg

Newhouse D., Suàrez Becerra P., and Evans M. (2016) New Estimates of Extreme Poverty for Children,

Policy Research Working Paper 7845, Washington DC: The World Bank.

Newhouse D., Suàrez Becerra P., and Evans M. (2017) New global estimates of child poverty and their sensitivity to alternative equivalence scales, *Economics Letters* 157, pp 125–128

Ravallion M. (2015) "On testing the scale sensitivity of poverty measures." *Economics Letters* 137 (2015): 88-90.

Timmins N (2001) The Five Giants: A biography of The Welfare State, London: Longmans

- UN (1989) United Nation's Convention on The Rights of The Child: General Assembly resolution 44/25 of 20 November 1989.
- UNECE. (2011). Canberra Group handbook on household income statistics. Geneva, UNECE
- UNICEF (2012) Social Protection Strategy Framework, New York: UNICEF.
- UNICEF (2016) A Fair Chance for Every Child, The State of the Worlds' Children 2016, New York,
- Wagmiller R and Adelman R (2009) *Childhood and Intergenerational Poverty: The Long-Term Consequences of Growing Up Poor*, New York: National Center for Children in Poverty, Columbia University

#### ANNEX 1

#### **Detail of micro-simulation exercises**

- 1. In the first set of micro simulations, we consider allocating the transfers universally to all children below 18 years old. Four different exercises were calculated for the first set of micro simulations:
  - 1.1. Universal to households with children below 18 years old: we allocated the additional budget 1% of GDP, equally to every household with children.
  - 1.2. Universal to children below 18 years old: we allocated the 1% of GDP equally to every child.
  - 1.3. Selective Universal to household with children below 18 years old: we allocated the 1% of GDP, weighing universal transfers to bottom 40% of qualifying households. In this option, households with children, whose average income is at the bottom 40% will receive additional transfer that is 20% more than its share of the number of household with children. The remaining children in the upper 60% of distribution will receive the balance of the budget in accordance with their household's share of the number of children.
  - 1.4. Selective Universal to children below 18 years old: in this option we allocated the 1% of GDP, weighing universal transfers to children in bottom 40% of the income distribution. As in the previous option, households with children, whose average income is at the bottom 40% will receive additional transfer that is 20% more than its share of the number of household with children. However, in this option transfers will be allocated by number of children. So, if a house has two children will receive twice as a household with one child in the same income group. The other three income groups will receive the remaining budget in accordance with its share of the number of children.
- 2. We proceed to develop a second set of micro simulations, using age-related development periods of children as the criteria to select the beneficiaries of the transfers. In this set of simulations, we consider allocating the transfers universally to **all preschoolers (children below 5 years old).** Four different options were simulated for this set.
  - 2.1. Universal to households with children below 5 years old: we allocated the additional budget 1% of GDP, equally to every household with children below 5 years old.
  - 2.2. Universal to children below 5 years old: we allocated the 1% of GDP equally to every child below 5 years old.

- 2.3. Selective Universal to household with children below 5 years old: we allocated the 1% of GDP, weighing universal transfers to bottom 40% of households with children below 5 years old. Houses with children below 5 years old, in bottom 40% of the income distribution will receive additional transfer that is 20% more than its share of the number of household with children below 5. The other three income groups will receive the remaining budget in accordance with its share of the number of children below 5.
- 2.4. Selective Universal to children below 5 years old: in this option we allocated the 1% of GDP, weighing universal transfers to children below 5 years in bottom 40% of the income distribution. Households with children below 5 years old, in bottom 40% of the income distribution will receive additional transfer that is 20% more than its share of the number of household with children below 5. As in the simulation 1.4, transfers will be allocated by number of children. Again, the remaining income groups will receive the rest of budget in accordance with its share of the number of children below 5.
- 3. Then, we continued developing a third set of micro simulations, also using age-related development periods of children as the criteria to select the beneficiaries of the transfers. This time we consider allocating the transfers universally to **all toddlers (children below 3 years old)**<sup>4</sup>. Again, four different options were simulated for this set. The four options in this set (option 3.1, option 3.2, option 3.3 and option 3.4) are comparable to the four options of the second set of, but now we consider children below 3 years old instead of children below 5 years old.
  - 3.1. Universal to households with children below 3 years old: we allocated the additional budget 1% of GDP, equally to every household with children below 3 years old.
  - 3.2. **Universal to children below 3 years old**: we allocated the 1% of GDP equally to every child below 3 years old.
  - 3.3. Selective Universal to household with children below 3 years old: we allocated the 1% of GDP, weighing universal transfers to bottom 40% of households with children below 3 years old. Houses with children below 3 years old, in bottom 40% of the income distribution will receive additional transfer that is 20% more than its share of the number of household with children below 3. The other three income groups will receive the remaining budget in accordance with its share of the number of children below 3.
  - 3.4. **Selective Universal to children below 3 years old**: in this option we allocated the 1% of GDP, weighing universal transfers to children below 3 years in bottom 40% of the income

<sup>&</sup>lt;sup>4</sup> Similarly, to the second set of simulations, in the third set children above 3 years old are not considered as beneficiaries of the cash transfer program, but they are considered in Child Poverty measures.

distribution. Households with children below 3 years old, in bottom 40% of the income distribution will receive additional transfer that is 20% more than its share of the number of household with children below 3. As in the simulation 1.4, transfers will be allocated by number of children. Again, the remaining income groups will receive the rest of budget in accordance with its share of the number of children below 3.

- 4. Continuing our research, we decided to create a fourth set of simulation. In this set we included all children in the Cash transfer program, giving higher transfers to children below 5 years old/preschoolers (20% more than amount transferred to other children). Again, four different options were simulated for this set.
  - 4.1. Universal to all households with children all ages, giving more to households with children below 5 years old: we allocated the additional budget 1% of GDP, to every household, giving 20% more to household with children below 5 years old.
  - 4.2. Universal to children all ages, giving more to children below 5 years old: we allocated the 1% of GDP to every child giving 20% more to children below 5 years old.
  - 4.3. Selective Universal to all household with children prioritizing Household with children below 5 years old: Houses with children below 5 years old, in bottom 40% of the income distribution will receive additional transfer that is 30% more than its share of the number of household with children below 5. Households in the top 60% of the income distribution groups will receive the remaining budget in accordance with its share of the number of children below 5.
  - 4.4. Selective Universal to all children, prioritizing children below 5 years old: in this option we allocated the 1% of GDP, weighing universal transfers to children below 5 years in bottom 40% of the income distribution. Households with children below 5 years old, in bottom 40% of the income distribution will receive additional transfer (20% more than its share of the number of household with children below 5). As in the simulation in point 1.4, transfers will be allocated by number of children. Again, the remaining income groups will receive the rest of budget in accordance with its share of the number of children below 5.
- 5. Finally, we develop a fifth set of micro simulations. This set is comparable to the fourth set of simulation but instead of focus on children below 5 years old, this set prioritizes children below 3 years old/toddlers. Again, four different options were simulated for this set. The four options in this

set (option 5.1, option 5.2, option 5.3 and option 5.4) are comparable to the four options of the fourth set of, but now we consider children below 3 years old instead of children below 5 years old.

- 5.1. Universal to all households with children all ages, giving more to households with children below 3 years old: we allocated the additional budget 1% of GDP, to every household, giving 20% more to household with children below 3 years old.
- 5.2. Universal to children all ages, giving more to children below 3 years old: we allocated the 1% of GDP to every child giving 20% more to children below 3 years old.
- 5.3. Selective Universal to all household with children prioritizing Household with children below 3 years old: Houses with children below 3 years old, in bottom 40% of the income distribution will receive additional transfer that is 30% more than its share of the number of household with children below 3. Households in the top 60% of the income distribution groups will receive the remaining budget in accordance with its share of the number of children below 3.
- 5.4. Selective Universal to all children, prioritizing children below 3 years old: in this option we allocated the 1% of GDP, weighing universal transfers to children below 3 years in bottom 40% of the income distribution. Households with children below 3 years old, in bottom 40% of the income distribution will receive additional transfer (20% more than its share of the number of household with children below 3). As in the simulation in point 1.4, transfers will be allocated by number of children. Again, the remaining income groups will receive the rest of budget in accordance with its share of the number of children below 3.

### ANNEX 2

#### **Results of micro-simulation by country**

#### 1. China 2002

Given the result of the simulation, the most effective way to reduce child poverty in China is by giving transfer only to children below 3 years old, allocating the transfer by number of children in the household and prioritizing household with children below 3 years old in the bottom 40% of the income distribution, that is option 3.4 shown in the table below.

			Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP		
<b>Initial Conditions</b>	No Transfer	26.9%	13.7%	31.0%	14.8%		
	1.1 Universal to households with children below 18 years old	24.1%	11.4%	26.7%	11.3%		
First Set of Simulations:	1.2 Universal to children below 18 years old	23.7%	11.1%	25.5%	10.4%		
Without taking into consideration children's age	1.3 Selective Universal to household with children below 18 years old	23.1%	10.6%	25.2%	10.2%		
	1.4 Selective Universal to children below 18 years old	23.1%	10.7%	24.4%	9.6%		
	2.1 Universal to households with children below 5 years old	23.5%	11.6%	26.3%	12.0%		
Second Set of Simulations:	2.2 Universal to children below 5 years old	23.4%	11.7%	26.0%	11.9%		
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	22.9%	11.4%	25.4%	11.7%		
	2.4 Selective Universal to children below 5 years old	22.9%	10.6%	24.2%	9.4%		
	3.1 Universal to households with children below 3 years old	23.9%	12.1%	26.9%	12.8%		
Third Set of Simulations:	3.2 Universal to children below 3 years old	23.9%	12.1%	26.9%	12.8%		
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	23.6%	12.1%	26.5%	12.7%		
	3.4 Selective Universal to children below 3 years old	22.7%	10.5%	23.9%	9.3%		
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	24.2%	11.4%	26.8%	11.3%		
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	24.3%	11.6%	26.4%	11.1%		
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	23.3%	10.9%	25.5%	10.6%		
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	23.4%	10.9%	25.1%	9.9%		
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	24.2%	11.4%	26.9%	11.3%		
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	24.1%	11.4%	26.0%	10.8%		
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	23.3%	11.4%	25.6%	10.4%		
-	5.4 Selective Universal to all children, prioritizing children below 3 years old:	23.4%	10.9%	25.1%	10.0%		

### 2. Colombia 2013

For Colombia option 1.4 is the most effective way of reducing Child poverty rates, giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	26.8%	19.4%	31.7%	20.2%	
	1.1 Universal to households with children below 18 years old	24.1%	16.1%	27.8%	15.5%	
First Set of Simulations:	1.2 Universal to children below 18 years old	23.2%	15.7%	25.7%	14.2%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	22.7%	14.9%	25.4%	13.8%	
	1.4 Selective Universal to children below 18 years old	22.4%	15.0%	24.2%	13.2%	
	2.1 Universal to households with children below 5 years old	23.8%	16.2%	26.8%	15.4%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	23.4%	16.1%	26.1%	15.2%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	22.7%	15.4%	25.2%	14.3%	
	2.4 Selective Universal to children below 5 years old	22.6%	15.1%	24.6%	13.3%	
	3.1 Universal to households with children below 3 years old	23.4%	16.4%	26.3%	15.8%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	23.5%	16.4%	26.5%	15.7%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	22.7%	15.9%	25.2%	15.0%	
	3.4 Selective Universal to children below 3 years old	22.6%	15.1%	24.6%	13.3%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	24.2%	16.1%	27.9%	15.5%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	24.2%	16.9%	27.5%	16.1%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	24.0%	15.8%	27.8%	15.6%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	22.8%	15.3%	25.0%	13.6%	
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	24.2%	16.1%	27.8%	15.5%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	23.9%	16.5%	26.9%	15.4%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	23.7%	15.5%	27.2%	15.0%	
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	22.9%	15.3%	25.2%	13.7%	

#### 3. Dominican Republic 2007

As in China, the most effective way of reducing Child poverty rates in Dominican Republic a is by giving transfer only to children below 3 years old, allocating the transfer by number of children in the household and prioritizing household with children below 3 in the bottom 40% of the income distribution, that is option 3.4 shown in the table below.

			Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP		
Initial Conditions	No Transfer	22.6%	9.6%	28.6%	12.1%		
	1.1 Universal to households with children below 18 years old	20.1%	7.6%	25.3%	9.4%		
First Set of Simulations:	1.2 Universal to children below 18 years old	19.1%	7.2%	23.5%	8.5%		
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	18.8%	6.9%	23.6%	8.5%		
	1.4 Selective Universal to children below 18 years old	18.4%	6.8%	22.4%	7.9%		
	2.1 Universal to households with children below 5 years old	19.4%	7.5%	24.2%	9.1%		
Second Set of Simulations:	2.2 Universal to children below 5 years old	18.9%	7.4%	23.4%	8.8%		
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	18.2%	7.0%	22.5%	8.4%		
	2.4 Selective Universal to children below 5 years old	18.2%	6.7%	22.1%	7.8%		
	3.1 Universal to households with children below 3 years old	19.1%	7.6%	23.9%	9.2%		
Third Set of Simulations:	3.2 Universal to children below 3 years old	18.9%	7.5%	23.6%	9.0%		
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	18.5%	7.2%	23.0%	8.6%		
	3.4 Selective Universal to children below 3 years old	18.2%	6.7%	22.1%	7.7%		
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	20.1%	7.6%	25.3%	9.4%		
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	20.5%	8.0%	25.4%	9.7%		
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	19.7%	7.7%	25.1%	9.8%		
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	18.6%	6.9%	22.7%	8.1%		
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	20.1%	7.6%	25.3%	9.4%		
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	20.0%	7.7%	24.7%	9.2%		
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	19.4%	7.5%	24.5%	9.4%		
-	5.4 Selective Universal to all children, prioritizing children below 3 years old:	18.7%	6.9%	22.8%	8.1%		

# 4. Egypt 2007

In Egypt (as in Colombia) option 1.4 is the most effective way of reducing Child poverty rates, giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	20.0%	8.6%	24.9%	10.6%	
	1.1 Universal to households with children below 18 years old	16.0%	6.3%	19.7%	7.5%	
First Set of Simulations:	1.2 Universal to children below 18 years old	15.5%	5.9%	18.5%	6.7%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	14.9%	5.5%	18.2%	6.5%	
	1.4 Selective Universal to children below 18 years old	14.6%	5.4%	17.2%	6.0%	
	2.1 Universal to households with children below 5 years old	16.0%	6.3%	19.4%	7.3%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	15.9%	6.1%	19.1%	7.1%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	15.1%	5.8%	18.1%	6.6%	
	2.4 Selective Universal to children below 5 years old	14.6%	5.4%	17.2%	6.0%	
	3.1 Universal to households with children below 3 years old	16.2%	6.4%	19.5%	7.5%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	16.2%	6.4%	19.5%	7.4%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	16.2%	6.0%	19.5%	6.9%	
	3.4 Selective Universal to children below 3 years old	16.2%	5.5%	19.5%	6.1%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	16.0%	6.3%	19.6%	7.5%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	17.5%	7.0%	21.4%	8.4%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	16.5%	6.6%	20.9%	8.2%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	14.9%	5.6%	17.7%	6.2%	
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	16.0%	6.3%	19.6%	7.5%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	17.0%	6.6%	20.7%	7.8%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	16.1%	6.4%	20.2%	7.9%	
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	15.0%	5.6%	17.9%	6.3%	

# 5. Georgia 2013

Georgia shows similar results than Egypt and Colombia. In Georgia option **1.4 is the most effective way of reducing Child poverty rates, giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.** 

Set of Simulations	Details of the Cash transfer	Poverty Headcount	Re Poverty GAP	sults Child Poverty Headcount	Child Poverty GAP
Initial Conditions	No Transfer	20.0%	7.2%	27.2%	10.1%
	1.1 Universal to households with children below 18 years old	16.8%	5.3%	22.2%	6.9%
First Set of Simulations:	1.2 Universal to children below 18 years old	16.2%	5.0%	20.4%	6.0%
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	15.4%	4.8%	20.0%	6.1%
	1.4 Selective Universal to children below 18 years old	15.6%	4.6%	19.4%	5.3%
	2.1 Universal to households with children below 5 years old	17.1%	5.5%	22.7%	7.3%
Second Set of Simulations:	2.2 Universal to children below 5 years old	16.9%	5.5%	22.1%	7.1%
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	16.4%	5.2%	21.4%	6.7%
	2.4 Selective Universal to children below 5 years old	15.9%	4.8%	20.1%	5.5%
	3.1 Universal to households with children below 3 years old	17.2%	5.8%	22.9%	7.7%
Third Set of Simulations:	3.2 Universal to children below 3 years old	17.0%	5.7%	22.4%	7.6%
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	16.6%	5.6%	21.7%	7.3%
	3.4 Selective Universal to children below 3 years old	16.6%	4.9%	21.7%	5.7%
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	16.5%	5.3%	21.6%	6.9%
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	17.8%	5.8%	23.0%	7.5%
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	16.0%	5.3%	21.0%	7.1%
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	15.9%	4.8%	20.0%	5.6%
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	16.7%	5.3%	21.9%	6.9%
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	17.3%	5.6%	22.0%	6.9%
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	15.9%	5.2%	20.7%	6.8%
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	15.9%	4.8%	20.0%	5.6%

#### 6. Guatemala 2006

Given the result of the simulation, in Guatemala the most effective way to reduce child poverty is by giving transfers **only to children below 5 years old, allocating the cash by number of children in the household and prioritizing household with children below 5 in the bottom 40%** of the income distribution, which is **option 2.4** shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	25.9%	11.1%	31.4%	12.8%	
	1.1 Universal to households with children below 18 years old	24.0%	9.7%	29.1%	11.1%	
First Set of Simulations:	1.2 Universal to children below 18 years old	23.7%	9.2%	28.4%	10.3%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	23.2%	9.0%	28.2%	10.2%	
	1.4 Selective Universal to children below 18 years old	23.3%	8.8%	27.9%	9.8%	
	2.1 Universal to households with children below 5 years old	23.9%	9.4%	28.8%	10.6%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	23.5%	9.1%	28.2%	10.2%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	23.0%	8.8%	27.7%	9.9%	
	2.4 Selective Universal to children below 5 years old	23.2%	8.7%	27.8%	9.7%	
	3.1 Universal to households with children below 3 years old	23.7%	9.3%	28.6%	10.5%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	23.4%	9.1%	28.2%	10.3%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	23.1%	8.8%	27.8%	9.9%	
	3.4 Selective Universal to children below 3 years old	23.1%	8.8%	27.8%	9.7%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	24.0%	9.6%	29.1%	11.0%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	24.4%	10.0%	29.4%	11.3%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	24.0%	10.0%	29.3%	11.6%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	23.6%	9.0%	28.3%	10.0%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	24.0%	9.6%	29.1%	11.0%	
	5.2 Universal to children all ages, giving more to children below 3 years old	24.2%	9.7%	29.1%	10.9%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	23.9%	9.7%	29.1%	11.3%	
-	5.4 Selective Universal to all children, prioritizing children below 3 years old:	23.6%	9.0%	28.2%	10.0%	

### 7. India 2011

India shows similar results as Guatemala. The most effective way to reduce child poverty in India is by giving transfers only to children below 5 years old, allocating the cash by number of children in the household and prioritizing household with children below 5 in the bottom 40% of the income distribution, which is option 2.4 shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
<b>Initial Conditions</b>	No Transfer	20.2%	8.6%	25.7%	10.1%	
	1.1 Universal to households with children below 18 years old	17.0%	6.8%	21.3%	7.6%	
First Set of Simulations:	1.2 Universal to children below 18 years old	16.4%	6.4%	19.8%	6.7%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	15.7%	6.2%	19.5%	6.8%	
	1.4 Selective Universal to children below 18 years old	15.6%	6.1%	18.5%	6.2%	
	2.1 Universal to households with children below 5 years old	16.5%	6.7%	20.3%	7.3%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	16.2%	6.6%	19.7%	7.1%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	15.6%	6.3%	18.9%	6.7%	
	2.4 Selective Universal to children below 5 years old	15.4%	6.0%	18.2%	6.1%	
	3.1 Universal to households with children below 3 years old	16.7%	6.8%	20.5%	7.5%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	16.6%	6.8%	20.4%	7.4%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	16.0%	6.5%	19.5%	7.1%	
	3.4 Selective Universal to children below 3 years old	16.0%	6.0%	18.4%	6.1%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	16.9%	6.8%	21.2%	7.6%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	17.7%	7.1%	21.8%	7.8%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	17.0%	7.0%	21.7%	8.1%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	15.9%	6.2%	19.0%	6.4%	
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	16.9%	6.8%	21.3%	7.6%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	17.3%	6.9%	21.1%	7.4%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	16.4%	6.8%	20.7%	7.7%	
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	15.9%	6.2%	19.1%	6.4%	

#### 8. Mexico 2012

In Mexico, as in Guatemala and India option 2.4 is the most effective way of reducing Child poverty, in other words, giving transfers only to children below 5 years old, allocating the cash by number of children in the household and prioritizing household with children below 5 in the bottom 40% of the income distribution.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	21.3%	11.2%	28.7%	14.1%	
	1.1 Universal to households with children below 18 years old	17.1%	8.8%	22.6%	10.7%	
First Set of Simulations:	1.2 Universal to children below 18 years old	16.3%	8.2%	20.7%	9.3%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	15.5%	8.0%	20.4%	9.4%	
	1.4 Selective Universal to children below 18 years old	15.6%	7.7%	19.5%	8.5%	
	2.1 Universal to households with children below 5 years old	16.9%	8.7%	22.0%	10.1%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	16.6%	8.6%	21.4%	9.9%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	15.8%	8.2%	20.2%	9.4%	
	2.4 Selective Universal to children below 5 years old	15.6%	7.7%	19.5%	8.5%	
	3.1 Universal to households with children below 3 years old	17.0%	8.8%	22.3%	10.4%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	17.0%	8.8%	22.2%	10.3%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	16.4%	8.4%	21.4%	9.8%	
	3.4 Selective Universal to children below 3 years old	16.4%	7.8%	21.4%	8.6%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	17.1%	8.8%	22.5%	10.6%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	18.4%	9.2%	23.9%	10.9%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	17.2%	9.1%	23.7%	11.5%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	15.9%	7.9%	20.1%	8.9%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	17.1%	8.8%	22.5%	10.6%	
	5.2 Universal to children all ages, giving more to children below 3 years old	17.8%	8.9%	22.9%	10.3%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	16.7%	8.8%	22.4%	10.9%	
-	5.4 Selective Universal to all children, prioritizing children below 3 years old:	15.9%	8.0%	20.1%	8.9%	

### 9. Panama 2013

As in Dominican Republic and China, the most effective way to reduce child poverty in Panama is by giving transfer only to children below 3 years old, allocating the transfer by number of children in the household and prioritizing household with children below 3 in the bottom 40% of the income distribution, that is option 3.4 shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	25.0%	11.2%	36.3%	16.2%	
	1.1 Universal to households with children below 18 years old	22.0%	8.8%	31.9%	12.6%	
First Set of Simulations:	1.2 Universal to children below 18 years old	21.1%	7.9%	29.9%	10.5%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	19.9%	7.7%	28.8%	10.9%	
	1.4 Selective Universal to children below 18 years old	20.2%	7.3%	28.3%	9.5%	
	2.1 Universal to households with children below 5 years old	21.1%	8.4%	30.4%	11.7%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	20.9%	7.9%	29.8%	10.7%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	20.1%	7.7%	28.7%	10.4%	
	2.4 Selective Universal to children below 5 years old	20.1%	7.2%	28.1%	9.3%	
	3.1 Universal to households with children below 3 years old	21.1%	8.4%	30.3%	11.6%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	20.8%	8.1%	29.8%	11.0%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	20.1%	7.8%	28.7%	10.6%	
	3.4 Selective Universal to children below 3 years old	20.1%	7.1%	28.7%	9.2%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	21.9%	8.8%	31.8%	12.5%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	22.4%	9.0%	32.0%	12.5%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	21.3%	9.1%	31.4%	13.5%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	20.6%	7.6%	29.0%	10.0%	
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	21.8%	8.8%	31.6%	12.5%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	22.0%	8.6%	31.4%	11.8%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	20.9%	8.8%	30.8%	12.8%	
-	5.4 Selective Universal to all children, prioritizing children below 3 years old:	20.6%	7.6%	29.0%	10.0%	

### 10. Peru 2013

In Peru option 1.4 is the most effective way of reducing Child poverty rates, giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.

These results are similar to those of Colombia, Georgia and Egypt.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
<b>Initial Conditions</b>	No Transfer	25.4%	14.1%	32.2%	16.8%	
	1.1 Universal to households with children below 18 years old	23.3%	12.3%	29.0%	14.1%	
First Set of Simulations:	1.2 Universal to children below 18 years old	22.9%	11.9%	28.0%	13.0%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	22.4%	11.6%	27.7%	13.1%	
	1.4 Selective Universal to children below 18 years old	22.4%	11.5%	27.1%	12.3%	
	2.1 Universal to households with children below 5 years old	23.1%	12.2%	28.5%	13.7%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	23.0%	12.0%	28.2%	13.3%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	22.5%	11.7%	27.4%	12.9%	
	2.4 Selective Universal to children below 5 years old	22.4%	11.5%	27.2%	12.4%	
	3.1 Universal to households with children below 3 years old	23.0%	12.2%	28.3%	13.6%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	23.1%	12.1%	28.3%	13.4%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	22.5%	11.8%	27.5%	13.0%	
	3.4 Selective Universal to children below 3 years old	22.5%	11.5%	27.5%	12.4%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	23.3%	12.3%	29.1%	14.1%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	23.6%	12.6%	29.2%	14.2%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	23.1%	12.3%	29.1%	14.4%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	22.6%	11.6%	27.5%	12.6%	
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	23.3%	12.3%	29.1%	14.1%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	23.4%	12.3%	28.8%	13.8%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	22.9%	12.1%	28.6%	14.0%	
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	22.6%	11.7%	27.5%	12.7%	

## 11. Paraguay 2013

Paraguay shows similar results than Egypt, Georgia, Colombia and Peru.

In Georgia option 1.4 is the most effective way of reducing Child poverty rates, giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.

		Results Child Cl				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Poverty Headcount	Poverty GAP	
Initial Conditions	No Transfer	21.7%	8.6%	29.0%	11.5%	
	1.1 Universal to households with children below 18 years old	20.3%	7.4%	27.0%	10.1%	
First Set of Simulations:	1.2 Universal to children below 18 years old	20.0%	7.4%	26.3%	9.5%	
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	19.7%	7.2%	26.2%	9.5%	
	1.4 Selective Universal to children below 18 years old	19.8%	7.1%	26.1%	9.1%	
	2.1 Universal to households with children below 5 years old	20.4%	7.5%	27.1%	9.9%	
Second Set of Simulations:	2.2 Universal to children below 5 years old	20.4%	7.4%	27.0%	9.6%	
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	20.1%	7.3%	26.7%	9.4%	
	2.4 Selective Universal to children below 5 years old	19.9%	7.2%	26.1%	9.1%	
	3.1 Universal to households with children below 3 years old	20.6%	7.6%	27.3%	9.9%	
Third Set of Simulations:	3.2 Universal to children below 3 years old	20.5%	7.5%	27.1%	9.8%	
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	20.1%	7.3%	26.5%	9.5%	
	3.4 Selective Universal to children below 3 years old	20.1%	7.2%	26.5%	9.2%	
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	20.3%	7.6%	27.0%	10.1%	
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	20.5%	7.8%	27.0%	10.1%	
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	20.0%	7.6%	26.9%	10.1%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	19.9%	7.2%	26.2%	9.3%	
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	20.3%	7.6%	27.1%	10.1%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	20.4%	7.6%	26.8%	9.9%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	19.8%	7.4%	26.6%	9.9%	
- -	5.4 Selective Universal to all children, prioritizing children below 3 years old:	19.9%	7.3%	26.2%	9.3%	

### 12. Serbia 2013

In Serbia, as in Peru and other countries of the sample, option 1.4 is the most effective way of reducing Child poverty rates, giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.

Set of Simulations	Details of the Cash transfer	Poverty Headcount	Re Poverty GAP	sults Child Poverty Headcount	Child Poverty GAP
Initial Conditions	No Transfer	17.6%	10.2%	25.6%	11.7%
	1.1 Universal to households with children below 18 years old	15.6%	8.9%	20.9%	8.7%
First Set of Simulations:	1.2 Universal to children below 18 years old	15.3%	8.8%	19.5%	8.0%
Without taking into consideration children age	1.3 Selective Universal to household with children below 18 years old	14.9%	8.6%	19.3%	7.9%
	1.4 Selective Universal to children below 18 years old	15.1%	8.6%	18.7%	7.5%
	2.1 Universal to households with children below 5 years old	15.5%	9.1%	20.4%	8.9%
Second Set of Simulations:	2.2 Universal to children below 5 years old	15.5%	9.0%	20.2%	8.6%
Giving transfer only to children below 5 years old.	2.3 Selective Universal to household with children below 5 years old	15.3%	8.9%	19.8%	8.5%
	2.4 Selective Universal to children below 5 years old	15.1%	8.6%	18.8%	7.6%
	3.1 Universal to households with children below 3 years old	15.9%	9.2%	21.5%	9.2%
Third Set of Simulations:	3.2 Universal to children below 3 years old	15.9%	9.2%	21.6%	9.2%
Giving transfer only to children below 3 years old.	3.3 Selective Universal to household with children below 3 years old	15.5%	9.1%	20.4%	8.9%
	3.4 Selective Universal to children below 3 years old	15.5%	8.7%	20.4%	7.8%
	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	15.5%	8.9%	20.6%	8.7%
Fourth Set of Simulations: Giving transfer to all	4.2 Universal to children all ages, giving more to children below 5 years old	16.1%	9.2%	21.6%	9.2%
children, but prioritizing children below 5 years old.	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	15.2%	8.9%	20.6%	8.8%
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	15.2%	8.7%	19.0%	7.7%
	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	15.6%	8.9%	20.8%	8.7%
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.2 Universal to children all ages, giving more to children below 3 years old	15.9%	9.1%	20.9%	8.7%
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	15.2%	8.8%	20.3%	8.6%
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	15.2%	8.7%	19.0%	7.8%

#### 13. Russia 2013

As in Dominican Republic, Panama and China, the most effective way to reduce child poverty in Russia is by giving transfer **only to children below 3 years old, that is allocating the transfer by number of children in each household and prioritizing households with children below 3 in the bottom 40%** of the income distribution, that is **option 3.4** shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	16.5%	10.9%	24.3%	12.0%	
First Set of Simulations: Without taking into consideration children age	1.1 Universal to households with children below 18 years old	14.5%	9.6%	19.8%	8.9%	
	1.2 Universal to children below 18 years old	14.1%	9.3%	18.0%	8.1%	
	1.3 Selective Universal to household with children below 18 years old	14.0%	9.2%	18.3%	8.1%	
	1.4 Selective Universal to children below 18 years old	13.6%	9.1%	16.7%	7.5%	
Second Set of Simulations: Giving transfer only to children below 5 years old.	2.1 Universal to households with children below 5 years old	14.4%	9.5%	18.9%	8.7%	
	2.2 Universal to children below 5 years old	14.2%	9.5%	17.9%	8.4%	
	2.3 Selective Universal to household with children below 5 years old	13.9%	9.3%	17.6%	8.0%	
	2.4 Selective Universal to children below 5 years old	13.5%	9.0%	16.4%	7.3%	
Third Set of Simulations: Giving transfer only to children below 3 years old.	3.1 Universal to households with children below 3 years old	14.4%	9.6%	18.7%	8.8%	
	3.2 Universal to children below 3 years old	14.1%	9.5%	17.9%	8.6%	
	3.3 Selective Universal to household with children below 3 years old	13.9%	9.4%	17.4%	8.3%	
	3.4 Selective Universal to children below 3 years old	13.9%	9.0%	17.4%	7.2%	
Fourth Set of Simulations: Giving transfer to all children, but prioritizing children below 5 years old.	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	14.7%	9.5%	20.0%	8.9%	
	4.2 Universal to children all ages, giving more to children below 5 years old	15.1%	10.0%	20.7%	9.6%	
	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	14.6%	9.6%	20.4%	9.4%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	13.8%	9.2%	17.1%	7.7%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	14.6%	9.5%	19.9%	8.9%	
	5.2 Universal to children all ages, giving more to children below 3 years old	14.8%	9.8%	19.8%	9.1%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	14.6%	9.5%	20.2%	9.1%	
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	13.8%	9.2%	17.1%	7.8%	

# 14. Uruguay 2013

In Uruguay, as in most of the counties in the sample, option 1.4 is the most effective way of reducing Child poverty rates, that is giving transfer to all children below 18 years old, prioritizing households with children in the bottom 40% of the income distribution, as shown in the table below.

		Results				
Set of Simulations	Details of the Cash transfer	Poverty Headcount	Poverty GAP	Child Poverty Headcount	Child Poverty GAP	
Initial Conditions	No Transfer	17.4%	5.3%	32.0%	10.0%	
First Set of Simulations: Without taking into consideration children age	1.1 Universal to households with children below 18 years old	14.4%	4.0%	26.7%	7.4%	
	1.2 Universal to children below 18 years old	13.7%	3.5%	24.6%	6.0%	
	1.3 Selective Universal to household with children below 18 years old	13.2%	3.6%	24.5%	6.5%	
	1.4 Selective Universal to children below 18 years old	13.0%	3.2%	23.1%	5.3%	
Second Set of Simulations: Giving transfer only to children below 5 years old.	2.1 Universal to households with children below 5 years old	14.2%	3.8%	25.9%	6.9%	
	2.2 Universal to children below 5 years old	13.9%	3.7%	25.1%	6.4%	
	2.3 Selective Universal to household with children below 5 years old	13.5%	3.6%	24.6%	6.3%	
	2.4 Selective Universal to children below 5 years old	13.1%	3.2%	23.3%	5.4%	
Third Set of Simulations: Giving transfer only to children below 3 years old.	3.1 Universal to households with children below 3 years old	14.2%	3.9%	26.0%	6.9%	
	3.2 Universal to children below 3 years old	14.0%	3.8%	25.4%	6.7%	
	3.3 Selective Universal to household with children below 3 years old	13.6%	3.6%	24.7%	6.5%	
	3.4 Selective Universal to children below 3 years old	13.6%	3.2%	24.7%	5.4%	
Fourth Set of Simulations: Giving transfer to all children, but prioritizing children below 5 years old.	4.1 Universal to all households with children all ages, giving more to households with children below 5 years old	14.3%	4.0%	26.5%	7.4%	
	4.2 Universal to children all ages, giving more to children below 5 years old	15.0%	4.1%	27.2%	7.3%	
	4.3 Selective Universal to all Household with children prioritizing Household with children below 5 years old	14.3%	4.2%	26.8%	8.0%	
	4.4 Selective Universal to all children, prioritizing children below 5 years old:	13.5%	3.3%	24.1%	5.7%	
Fifth Set of Simulations: Giving transfer to all children, but prioritizing children below 3 years old.	5.1 Universal to all households with children all ages, giving more to households with children below 3 years old	14.4%	4.0%	26.6%	7.4%	
	5.2 Universal to children all ages, giving more to children below 3 years old	14.7%	3.9%	26.5%	6.8%	
	5.3 Selective Universal to all Household with children prioritizing Household with children below 3 years old	13.9%	4.1%	26.0%	7.6%	
	5.4 Selective Universal to all children, prioritizing children below 3 years old:	13.5%	3.4%	24.1%	5.7%	