# Child Poverty Insights
## Policy Analysis ▪ UNICEF Policy and Strategy

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## *Child Poverty in High- and Middle-Income Countries: Selected Findings from LIS[1]*

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### What is LIS?

LIS (formerly known as the Luxembourg Income Study) was founded in 1983 to acquire, harmonize and disseminate micro-data from a wide range of countries. LIS' mission is to enable, facilitate, promote, and conduct cross-national comparative research on socio-economic outcomes and the institutional factors that shape those outcomes. Nationally representative survey datasets are held and harmonized in our cross-national data center in Luxembourg (www.lisdatacenter.org, datasets are available to eligible and registered users).

LIS is expanding and changing its focus. Currently our data are predominantly from higher income and OECD countries but over the next year we will be expanding to cover a large range of middle-income countries (MICs). By the end of 2013 we will be covering at least 62% of the world's population – and this means well over a half of all children globally. This represents a huge opportunity to work with UNICEF and others working on child rights, to support their work on poverty and inequality, especially in the so-called BRIC's. Our work will inevitably change as we expand our focus beyond high-income countries. This Child Poverty Insight presents some early analyses based on a selection of high- and middle-income countries to show some of the challenges of looking at child poverty across a widening global perspective. The analysis is based on data from the *Luxembourg Income Study Database (LIS)*, which currently contains data on household incomes from nearly 40 countries.

### How do we measure child poverty?

At the moment, our poverty measures are monetary and income-based. We rely on two main household-level income measures: *market income* which is the sum of gross earnings, income from investments and property, and income from occupational and private pensions; and *disposable income* which is the resulting income when

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[1] Based on Janet Gornick and Markus Jäntti. (2011). *Child Poverty in Comparative Perspective: Assessing the Role of Family Structure and Parental Education and Employment*. LIS Working Paper No. 570. Luxembourg: LIS

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private transfers, public social insurance, and public social assistance are added to market income and when income taxes and mandatory payroll taxes are deducted. Both of these income measures are adjusted to reflect household size using a common "equivalence scale" (i.e., total income divided by the square root of household size).

The bulk of LIS' poverty analysis to date has used *relative poverty lines,* reflecting the early focus on high-income countries and similar to the work done on the EU by UNICEF's Innocenti Research Centre. In our analyses we set relative poverty using a poverty threshold at 50 percent of each country's median household disposable income. However, we have also used a '*real income'* or 'absolute poverty' approach based on an internationally consistent version of the US poverty line that uses purchasing power parity (PPP) exchange rates to convert the US poverty measure to international dollars for each country.

Child poverty is calculated by identifying all children who live in poor households, using both these measures. The child poverty rate is the proportion of all children in a country who live in such poor households, under each measure.

### How do poverty results vary across high- and middle-income countries?

Figure 1 shows the results when we plot child poverty rates using 2004 data for both the relative and real-income standard (based on the US poverty line) across 20 high- and middle-income countries both[2]. For the 14 high-income "old OECD" countries, we see that the relative and absolute rates rank countries very similarly, with the US having the highest relative poverty measure, 21%, as well as one of the highest rates of real income poverty 11% (Australia having 14%). This group of high-income countries range, in national income level, from Luxembourg with a GNI per capita of $105,000 to the UK with $36,000. When we look at the three former transition countries (Czech Republic, Estonia and Poland), all of these are defined as 'high income' but they have significantly lower GNI per capita than the old OECD group: just $15,000 on average, or less than half of the UK level (the poorest of the previous group).



Figure 1: Child poverty in 2004 – 20 Countries
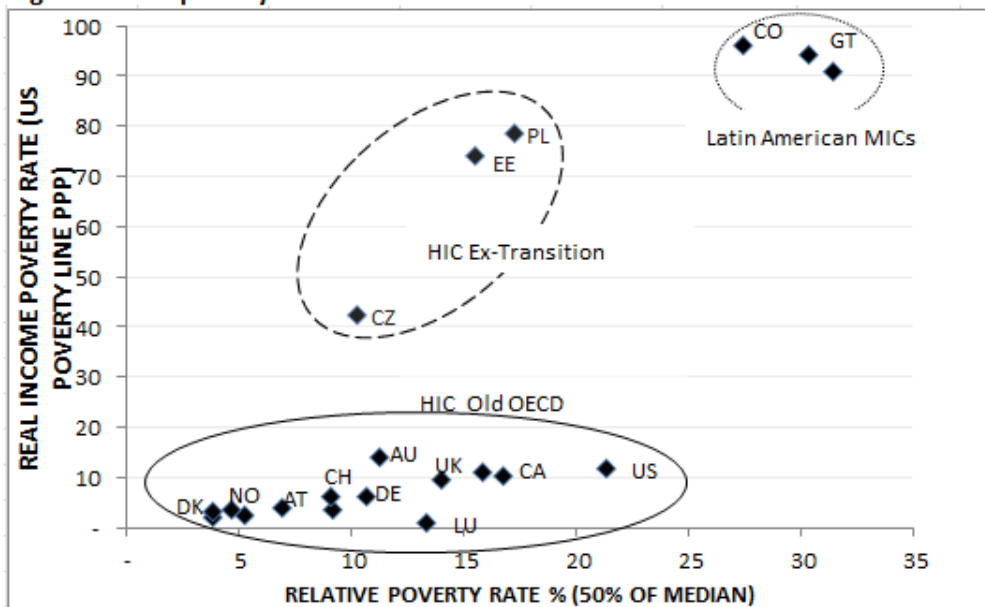
(Source: Gornick and Jäntti. 2011. Table 2)

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[2] Results reported using datasets from LIS's Wave VI, which is centered on the year 2004. We selected 20 diverse countries for comparison. Our study countries (with the abbreviations used in Figure 1) include 14 "old OECD high-income countries": Australia (AU), Austria (AT), Canada (CA), Denmark (DK), Finland (FI), Germany (DE), Ireland (IE), Luxembourg (LU), the Netherlands (NL), Norway (NO), Sweden (SE), Switzerland (CH), the United Kingdom (UK), and the United States (US); 3 high-income countries that are "former transition economies", Czech Republic (CZ), Estonia (EE), and Poland (PL); and three Latin American middle-income countries, Brazil (BR) and Colombia (CO) which are "upper middle income" and Guatemala (GT) which is "lower middle income". We use the World Bank's 2011 country classification, based on per-capita gross national income (GNI).
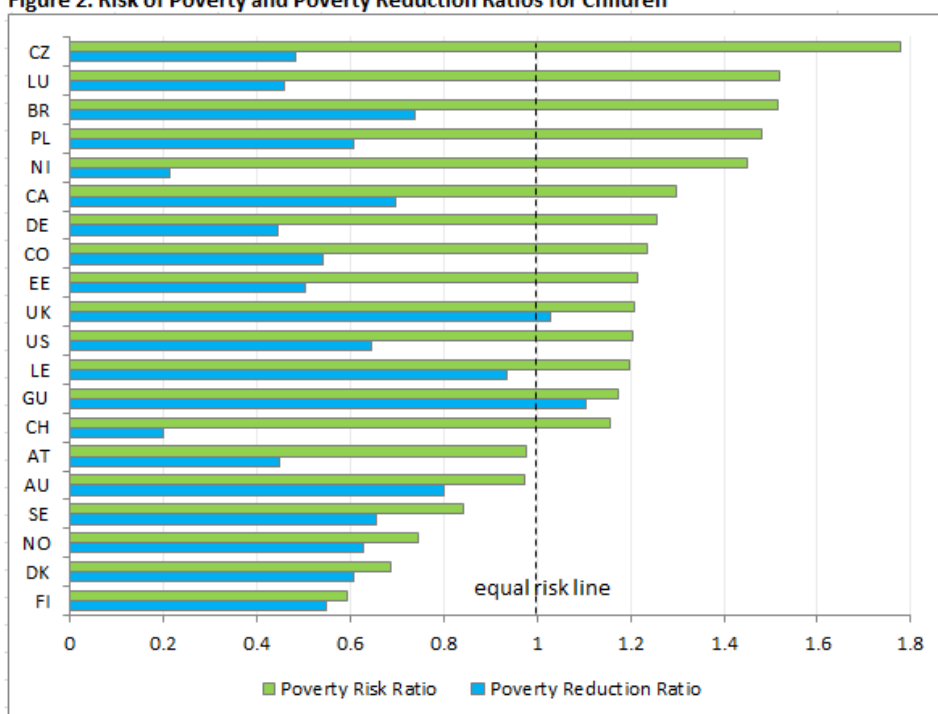
Relative and real income poverty in these three countries also rank consistently, but the rates of real income poverty rise dramatically: from 42% in the Czech Republic, to 74% in Estonia and 79% in Poland. **This reflects the fact that these three countries are substantially poorer.** However, this raises a question about 'absolute' poverty because the US poverty line may represent a living standard that is above a true 'absolute' level of basic needs in these countries. Turning to the three middle-income Latin American countries, considerations of how to resolve absolute and relative standards become even more acute. The three Latin American countries have the highest relative poverty rates: 27 to 31% of children living below 50% of median income; they are very unequal societies. But they also have extremely high levels of 'real-income poverty' when the US poverty line is used: 91 to 96%. However, the value of the US poverty line will be far in excess of any 'basic needs' absolute poverty line in these countries; a poor US household would be in the richest part of the income distributions in these countries that have national income levels of just $6,600 per capita (just 14% of the US).

These findings show how difficult it is to measure child poverty consistently across countries that have large differences both **among** them (Luxembourg has a per-capita GNI that is 37 times greater than Guatemala's) and **within** them; the middle-income countries have higher relative poverty reflecting greater inequality within them. As our work on middle-income countries expands we will use a wider set of poverty measures, including international poverty lines set at per capita levels, national estimates of minimum living standards, and relative measures. For those mainly accustomed to relative poverty measures (especially in high-income countries), the use of absolute measures will provide insights that are both complex and new: for instance, that a relative poverty line may understate poverty levels if the median household is poor or near-poor in absolute terms.

### Are children overrepresented among the poor? Do countries reduce poverty risk for children more extensively than for others?

LIS data also allow us to examine how children's risk of poverty compares to other populations and to assess the extent to which countries vary in their responses to such poverty risks. We compare relative (disposable income) poverty rates of children to the rest of the population to create a ratio: in Finland, for example, we find that children are much less likely to be poor than is the general population (0.59:1), whereas in the Czech Republic they are much more likely to be poor (1.77:1). In Figure 2 we rank the same 20 countries by this child poverty risk ratio (the grey bars) with the highest ratio country at the top. There are 14 countries where **children are more likely to be poor than all persons**, from the Czech Republic down to Switzerland where the risk is 1.2 to 1. There are two countries, Australia and Austria, where the risk is near the 'equal risk line' at 0.98:1. The four countries where the relative risk of poverty children is negative (where they are less likely to be poor) are all Nordic countries: ranging from 0.8:1 in Sweden to 0.6:1 in Finland. Country characteristics, such as its income level or whether it is a member of the 'old OECD', 'ex-transition' or 'Latin American MIC' group, seem to matter less with respect to relative child poverty risk, than with respect to poverty rates per se.



Figure 2: Risk of Poverty and Poverty Reduction Ratios for Children

Each country will alter market-income based poverty risks by fiscal measures that supplement household income through transfers and/or increase household expenditures in the form of taxes. In Figure 2 we report the extent to which child poverty is *reduced* through income taxes and transfers, relative to poverty reduction for all persons, through the 'poverty reduction ratio' (the black bars). Only two countries, the UK and Guatemala, reduce poverty more for children than for other groups and both are countries where the original poverty risk for children is high. The remaining countries provide less fiscal reduction for child poverty relative to others, ranging from just 0.2:1 in Switzerland (where the risk of poverty was 1.2:1) to Ireland (where the ratio is 0.94:1). Again, this points to the fact that, in addressing child poverty, **country income level or status matters less than other policy related influences**.

### What are the high risk groups for child poverty?

Children's poverty risk depends largely on their parents' income; low parental income is associated often with lone parenthood. Figure 3 shows the ratio of the risk of child poverty in lone-parent households to the risk of child poverty in two-parent households. In all 20 countries, lone parenthood increases risk, but with substantial variation across countries and between market and disposable income. Using market income, the children of lone mothers are nearly four times as likely to be poor than their two-parent counterparts overall, and the increased risk runs from 8.5 in the Netherlands to 1.5 times higher in Brazil. Taxes and transfers reduce the risk of child poverty (compared to the general population). Yet even using our disposable income poverty measure, lone parenthood generally increases children's poverty risk by three to five times. Overall, the range is greater; the children of lone parents are more than nine times as likely to be poor in Germany, whereas, by contrast, in Guatemala, the children of lone mothers are slightly less likely to be poor.



Figure 3: Additional Risk of Poverty in Lone Parent Households (compared to couple parent households)
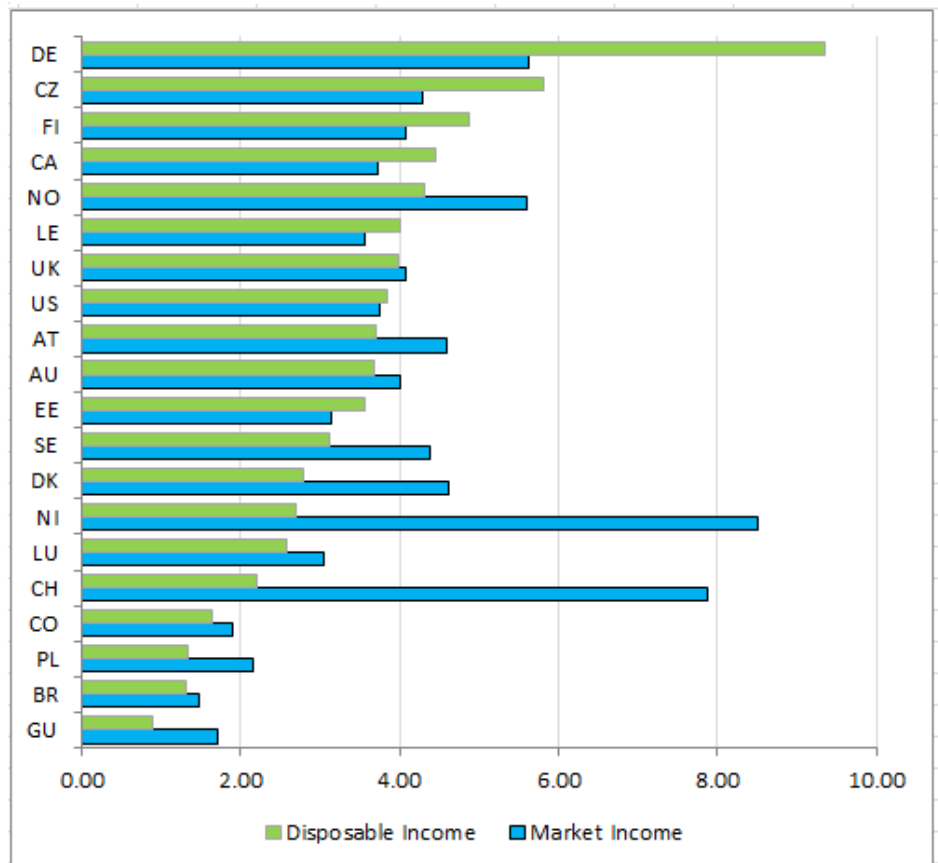
### Adding more middle-income countries to the LIS Database: what does the future hold?

The expansion of LIS to include more middle-income countries means that we will grow from having nine in April 2012 (Brazil, Colombia, Guatemala, Mexico, Peru, Romania, Russia, Uruguay, and South Africa) to sixteen by the end of 2013, with the addition of China, the Dominican Republic, Egypt, India, Panama, Paraguay, and Serbia.

Of course, integrating these new middle-income countries will require some reconsideration of poverty and inequality measurement to better capture various forms of cash and non-cash incomes in countries with larger informal and agricultural economies. We look forward to being able to assist in poverty profiling and analysis with child rights organizations, as well as with other researchers and practitioners.

**Some general resources:**

- Janet Gornick and Markus Jäntti. (2011). *Child Poverty in Comparative Perspective: Assessing the Role of Family Structure and Parental Education and Employment*. LIS Working Paper No. 570. Luxembourg: LIS.
- http://www.lisdatacenter.org/