# Factors Affecting International Differences in Childhood Poverty Rates

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## Abstract

The U.S. exhibits higher childhood poverty rates than other developed countries. As the U.S. is also one of the countries where children are most likely to be living with a single mother who is not cohabiting, we use data from the Luxembourg Income Study to explore the contribution of this "distributional" effect to the overall differences in child poverty rates between the U.S. and 15 other developed countries. We also ask whether children living in different household types fare differently in the U.S. than elsewhere. In particular, we explore whether poverty alleviation through taxes and transfers offsets relatively more of the poverty gradient, or the disadvantage of not living with married parents, in the United States. While we find that international differences in children's living arrangements and in the poverty gradients between household types do contribute to the differences in childhood poverty rates between the U.S. and most other nations, the contributions remain small compared to that of the international differences in the overall generosity of redistribution through taxes and transfers. Moreover, results with respect to poverty alleviation for different types of household are mixed. Children in households headed by a single mother without other adults present benefit more from redistribution in some countries than in the U.S. and less in some others, relative to households headed by married couples.

In his PAA presidential address, Preston (1984) brought attention to the fact that poverty rates were higher for children than for the elderly. For the past two decades, childhood poverty rates (under the age of 15) in the United States have oscillated between 20 and 25 percent, but have remained higher than the rates for any other age groups. Crossnationally, childhood poverty is also more common in the U.S. than in other Western countries. Smeeding, Rainwater, and Burtless (2000) found that the U.S. had higher childhood poverty rates in the late 1990s than Australia, Canada, Israel, and 14 Western European countries in the Luxembourg Income Study (LIS) database.

Attempts to explain the unenviable U.S. leadership in childhood poverty have pointed at the lesser extent of labor market regulation, allowing for greater wage dispersion than in some other countries, and at the similarly meager extent of government redistribution through taxes and transfers. In Esping-Andersen's typology of welfare states (1990), the U.S. embodies the "liberal" type most likely to permit wide income inequalities.

The U.S., however, may be at a demographic disadvantage to the extent that a lower proportion of children are living with married parents in the U.S. than in other countries. Garfinkel and McLanahan (1986) have long pointed to the fact that poverty rates were much higher for households headed by a single mother (on the order of 50 percent) than for other households. In her PAA presidential address, McLanahan (2004) continued to emphasize that greater disparities in children's resources are mediated in part by the childhood "exposure" to a household headed by a single mother. Citing Rainwater and Smeeding (2003), she argues that "across all Western industrialized

countries, children in single-mother families have much higher poverty rates than children in two-parent families" (p.619). Everything else constant, a higher proportion of children living in a household headed by a single mother in a given country would thus contribute to increasing the aggregate childhood poverty rate for that country.

One potential objection that is perhaps best dispelled at the outset regards the fact that Northern European countries are known both for low overall child poverty rates and high rates of out-of-wedlock childbearing. Heuveline, Timberlake, and Furstenberg (2003) have shown, however, that (1) out-of-wedlock births correspond much more frequently to unmarried cohabiting parents in Europe than in the U.S., and that (2) divorce is a more common route to living in a household headed by a single mother than is out-of-wedlock birth. When the higher likelihood that an out-of-wedlock birth is actually to a non-cohabiting single mother and that a child born to married parents will experience their divorce or separation during childhood are put together, children in the U.S. do experience a greater risk of living in household headed by a single mother at least once during childhood.

In their analysis of the sources of child poverty in Western nations, Rainwater and Smeeding (2003) concluded that demographic differences between countries are far less important than differences in the extent of income redistribution through taxes for explaining cross-national differentials in child poverty. However, Rainwater and Smeeding did not separate the effects of household structure from those of other factors, such as the age distribution of household heads, which may be less likely to vary across nations.

Another possible objection to blaming the high rate of child poverty in the United States on a lack of redistribution is that the U.S. has more means-tested benefits than other countries. While the overall redistribution scheme is less extensive, it may favor single-mother-headed households with children, relative to households headed by a married couple, more than elsewhere. In other words, redistribution through taxes and transfers in the U.S. may reduce the childhood poverty "gradient" across household structures more than in other countries. If that is the case, it is possible that the greater risk American children have of living with a single parent (a distribution effect) is compensated by greater reduction through taxes and transfers of the economic disadvantages that children of single parents face on the market (a gradient effect). If they largely cancel each other out, these two effects could leave the impression that the U.S. scheme is doing less to correct childhood poverty rates than in other countries, when in fact it is (a) more targeted toward single-parent households, and (b) operating in a unfavorable demographic environment.

In this paper, we explicitly focus upon the distribution of children across a variety of household types, and upon the poverty gradients between these types, to assess whether these factors might play a significant role in explaining the comparatively high childhood poverty rates in the U.S. We also examine whether income redistribution through taxes benefits some types of household more than others. Using data from the Luxembourg Income Study for the U.S. and 15 other Western and post-socialist nations, we estimate the distribution of children across five types of households, estimate the childhood poverty gradient across these household types both before and after taxes and transfers, and decompose the total childhood poverty rate for a country into the

contribution of different factors representing market forces, state characteristics, and living arrangements.

## **Data and Measures**

Data for this research come from the Luxembourg Income Study or LIS (www.lisproject.org), a collection of national micro-level surveys on household income. All of the data sets that are part of LIS were collected within the respective countries, often by government agencies.<sup>1</sup> When they are added to LIS, however, the data are "harmonized" in order to facilitate cross-national comparisons. The Luxembourg Income Study is thus uniquely well-suited for studying the household-level determinants of child poverty across nations.

In this paper, child poverty in the United States will be compared to that in fifteen Western and East European nations: Australia, Belgium, Canada, Estonia, Finland, France, Germany, Italy, the Netherlands, Norway, Poland, Russia, Slovenia, Sweden, and the United Kingdom. Data from most of these nations was collected in approximately 2000.<sup>2</sup>

The definition of child poverty used here is based upon the concepts of equivalized household income and relative poverty. Equivalized household income is

<sup>2</sup> The most recent data available for two nations that are frequently discussed in the international literature on poverty, France and Australia, are from 1994. This does not present any practical problem because we utilize a relative measure of poverty (see below).

<sup>&</sup>lt;sup>1</sup> LIS data on the United States, for example, comes from the Current Population Survey conducted by the Bureau of the Census.

income adjusted for "household characteristics deemed to affect economies of scale and economies of scope as reflected by differences in household size and composition" (Gottschalk and Smeeding 2000, p. 638). Following a very common practice in crossnational poverty research, we utilize a measure where

equivalized household income = disposable income / household size<sup>0.5</sup> This simple correction to household income reflects the intuition that a given level of income does not go as far when divided among many people, but that there are economies of scale in sharing a home.

We define children to be poor if their equivalized household income is less than fifty percent of the median in their home countries. Because this definition of poverty depends upon the national distribution of income, it is called a relative poverty measure. Although discussions of poverty in the United States often utilize an absolute definition of poverty where an individual is poor if his or her household income is below a certain fixed threshold, relative poverty measures are superior for cross-national research. One reason is that they avoid the indeterminacy inherent in making judgments about whether a given level of income that makes one poor in one nation might be adequate in another nation with a different standard of living (Brady 2003).

Our typology of children's living arrangements encompasses several variables that we hypothesize to affect children's chances of being poor in at least some nations: whether there are two or more adults in the household, as opposed to one; whether the household head is male; and whether the household is headed by a married couple. Taking these issues into account results in a five-part typology: households headed by a married couple, those headed by a cohabiting couple, those headed by a single mother

with and without other adults present, and those headed by a single male.<sup>3</sup> In the data for Australia and Poland, there are only four categories because cohabiting couples are not distinguished from married couples.

## Methods

We first estimate the distribution of children across the five types of household described above. We then estimate and compare before and after-tax (and transfer) poverty rates for children residing in each of the five household types. After-tax poverty is based upon net disposable income, which takes into account the income household members earn from the market, the taxes they pay, and the cash and near-cash transfers they receive from the government. Before-tax poverty is based only upon the income the household receives from employment and other market sources such as interest and rents.

We then decompose the difference between the after-tax child poverty rate in the U.S. (P) and in any other country (p) into the contribution of the tax redistribution scheme, the poverty gradient across household types, and the distribution of children across household types. To do so, we follow the decomposition of rates in Das Gupta (1993), which extends the classical two-factor decomposition of a difference between rates in Kitagawa (1955, see also Smith, Morgan, and Koropeckyj-Cox 1996).

Specifically, we first write *P* as:

$$P = \sum D_i * P_i$$

<sup>&</sup>lt;sup>3</sup> While completeness would demand separating single male households with and without other adults present, single male households remain rare enough that there is little value in doing so.

where  $D_i$  is the proportion of children in household type *i* in the U.S. (e.g.,  $D_i$  is the proportion of children in households headed by a married couple),  $P_i$  is the (after-tax) poverty rate of children in household type *i* in the U.S., and  $\Sigma$  represents the sum across the five household types.

We then re-write *P* as:

$$P = \Sigma D_i * B_i * (P_i / B_i)$$

where  $B_i$  is the before-tax poverty rate of children in household type *i* in the U.S. If we define  $A_i$  as the ratio of the after-tax poverty rate to the before-tax poverty rate for children in household type *i* in the U.S., *P* then appears as:

$$P = \sum D_i * B_i * A_i$$

Since we are interested in how children in other household types fare compared to those in households headed by a married couple before and after tax, we then define:

$$E_i = B_i / B_I$$
 and  $G_i = A_i / A_I$ 

 $E_i$  is thus the before-tax poverty rate of children in household type *i* relative to the same rate for two-parent households in the U.S., whereas  $G_i$  is the ratio of the after-tax poverty rate to the before-tax poverty rate for children in household type *i* relative to the same ratio for children in households headed by a married couple in the U.S. *P* thus appears as a function of five factors, two scalars,  $B_i$  and  $A_i$ , and three vectors (*D*), (*E*), and (*G*):

$$P = A_1 * B_1 * \Sigma D_i * E_i * G_i$$

To decompose the difference between *P* and *p*, we first treat *P* as the product of three terms  $A_1$ ,  $B_1$ , and  $C_1$  and *p* as the product of the corresponding three terms  $a_1$ ,  $b_1$ , and  $c_1$ . Das Gupta (1993, p.8) then shows that:

$$p - P = F_{\alpha} + F_{\beta} + F_{\omega}$$

where  $F_{\alpha}$  is contribution of the difference between  $A_{1}$  and  $a_{1}$ , and  $F_{\beta}$  is contribution of the difference between  $B_{1}$  and  $b_{1}$ . The two terms are equal to:

$$F_{\alpha} = (a_{1} - A_{1}) * \{ [(b_{1} c_{1} + B_{1} C_{1})/3] + [(b_{1} C_{1} + B_{1} c_{1})/6] \}$$
  
$$F_{\beta} = (b_{1} - B_{1}) * \{ [(a_{1} c_{1} + A_{1} C_{1})/3] + [(a_{1} C_{1} + A_{1} c_{1})/6] \}$$

As for the residual term, it can also be written as:

$$F_{\omega} = (c_1 - C_1) * \{ [(a_1 b_1 + A_1 B_1)/3] + [(a_1 B_1 + A_1 b_1)/6] \}$$

In addition, since  $C_1 = \sum D_i * E_i * G_i$  and  $c_1 = \sum d_i * e_i * g_i$ , we can use a second decomposition for the first term in  $F_{\omega}$  (Das Gupta 1993, p.21):

$$c_1 - C_1 = f_{\delta} + f_{\varepsilon} + f_{\gamma}$$

with the following equations:

$$f_{\delta} = \{ [(\Sigma d_{i}^{*} e_{i}^{*} g_{i} - \Sigma D_{i}^{*} e_{i}^{*} g_{i}) + (\Sigma d_{i}^{*} E_{i}^{*} G_{i} - \Sigma D_{i}^{*} E_{i}^{*} G_{i})]/3 \}$$

$$+ \{ [(\Sigma d_{i}^{*} e_{i}^{*} G_{i} - \Sigma D_{i}^{*} e_{i}^{*} G_{i}) + (\Sigma d_{i}i^{*} E_{i}^{*} g_{i} - \Sigma D_{i}^{*} E_{i}^{*} g_{i})]/6 \}$$

$$f_{\varepsilon} = \{ [(\Sigma d_{i}^{*} e_{i}^{*} g_{i} - \Sigma d_{i}^{*} E_{i}^{*} g_{i}) + (\Sigma D_{i}^{*} e_{i}^{*} G_{i} - \Sigma D_{i}^{*} E_{i}^{*} G_{i})]/3 \}$$

$$+ \{ [(\Sigma d_{i}^{*} e_{i}^{*} G_{i} - \Sigma d_{i}^{*} E_{i}^{*} G_{i}) + (\Sigma D_{i}^{*} e_{i}^{*} g_{i} - \Sigma D_{i}^{*} E_{i}^{*} g_{i})]/6 \}$$

$$f_{\gamma} = \{ [(\Sigma d_{i}^{*} e_{i}^{*} g_{i} - \Sigma d_{i}^{*} e_{i}^{*} G_{i}) + (\Sigma D_{i}^{*} e_{i}^{*} g_{i} - \Sigma D_{i}^{*} E_{i}^{*} G_{i})]/3 \}$$

$$+ \{ [(\Sigma d_{i}^{*} E_{i}^{*} g_{i} - \Sigma d_{i}^{*} E_{i}^{*} G_{i}) + (\Sigma D_{i}^{*} e_{i}^{*} g_{i} - \Sigma D_{i}^{*} e_{i}^{*} G_{i})]/3 \}$$

Combining the two decompositions, we can thus write:

$$p - P = F_{\alpha} + F_{\beta} + F_{\delta} + F_{\varepsilon} + F_{\gamma}$$

with  $F_{\alpha}$  and  $F_{\beta}$  as defined above, and:

$$F_{\delta} = \{ [(a_1 \ b_1 + A_1 \ B_1)/3] + [(a_1 \ B_1 + A_1 \ b_1)/6] \} * f_{\delta}$$
$$F_{\varepsilon} = \{ [(a_1 \ b_1 + A_1 \ B_1)/3] + [(a_1 \ B_1 + A_1 \ b_1)/6] \} * f_{\varepsilon}$$
$$F_{\gamma} = \{ [(a_1 \ b_1 + A_1 \ B_1)/3] + [(a_1 \ B_1 + A_1 \ b_1)/6] \} * f_{\gamma}$$

The three terms  $F_{\delta}$ ,  $F_{\varepsilon}$ , and  $F_{\gamma}$  can in turn be seen as the contributions of the difference between the distribution (*D*) and (*d*), (*E*) and (*e*), and (*G*) and (*g*), respectively. The first difference thus relates to the distribution of children across household types, the second difference to the distribution across household types of the before-tax poverty rate of children relative to the same rate for children in households headed by married couples, and the third one to the distribution across household types of the ratio of after-tax childhood poverty rate to before-tax childhood poverty rate relative to the same ratio for children in households headed by married couples. This final ratio represents the gradient between the effects of government redistribution on child poverty in households headed by married couples and in other households.

#### Results

Table 1 shows the weighted distribution of children by living arrangement in the United States and the other 15 nations, along with the unweighted sample sizes upon which the weighted numbers are based. In comparative perspective, children in the United States are less likely to live with married parents than in most other nations, but the percentage of children living with married parents (72.3 percent) is nonetheless higher than in Nordic countries (Sweden, 56.0 percent, Norway, 64.3 percent, Finland, 69.4 percent), Estonia (62.7 percent), and the United Kingdom (67.2 percent). With the exception of the United Kingdom, however, the proportion of children living in households headed by a cohabiting couple is much smaller in the U.S. than in those countries. The U.S. thus has the highest proportion of children living in households headed by a single person rather than a couple (married or not) after the U.K. As for the households typically exhibiting the highest poverty rates, those headed by a single woman with no other adults present,

the proportion of children in the U.S. is higher (13.2 percent) than in most other nations (third after the U.K, 19.0 percent, and Sweden, 16.2 percent), but the proportion is also above ten percent in a number of other nations (Canada, Finland, Germany, and Norway). This immediately casts doubt on the hypothesis that living arrangements account for the United States' poor performance in terms of child poverty.

### --- Table 1 About Here ---

Table 2 reports before and after-tax child poverty for all children and for each household type. The international estimates for the overall (all household types) after-tax child poverty rate confirm the frequently-reported finding that children are more likely to be poor in the United States (22.0 percent) than in other Western and post-socialist societies: only Russia has a higher overall child poverty rate (23.4 percent). In addition to comparisons across countries, Table 2 also allows for comparison across household types and between pre- and after-tax child poverty.

--- Table 2 About Here ---

### Poverty rates across household types

Table 2 shows first how children fare across different types of households. In the U.S., not surprisingly, we find children living in households headed by a married couple to experience the lowest actual poverty rate and those living in households headed by a single female with no other adult present to experience the highest actual poverty rate. The same pattern is found consistently in other countries with the exceptions of Belgium (where child poverty is highest in households headed by a single female with other adults present) and Italy (where it is highest among cohabiting couples). These exceptions do

not constitute robust findings, however, given the small sample sizes for those household types in these particular nations.

Between the two consistent ends of the poverty spectrum, the relative poverty of children in other living arrangements varies considerably from country to country. For example, consistent with previous observations that unmarried cohabitation has become virtually indistinguishable from marriage in Sweden (Kiernan 2001; Heuveline and Timberlake 2004), children in households headed by unmarried, cohabiting couples have the same poverty rate as those in households headed by a married couple (2.3 percent). In contrast, the poverty rate of children living in households headed by a cohabiting couple in the United States (29.7 percent) is more than twice the rate for children living in households headed by a married couple (13.9 percent).

## International differences for specific household types

The unenviable position of the United States holds near universally true at the level of specific household types. For each type of household structure, there are never more than two nations with a higher rate of after-tax child poverty than the U.S. This is so, in particular, for the most common childhood living arrangement. The United States' 13.9 percent poverty rate for children living with a married couple comes, again, after Russia's 20.7 percent, but after also Italy's 16.8 percent. Figures in Table 2 also demonstrate that children in households headed by a single female with no other adults present in the U.S. have a higher actual poverty rate than children in any household type in any other country. Their poverty rate reaches a staggering 55.4 percent.

Although the United States' position hardly changes depending on the household type under consideration, the range of child poverty rates is more modest with respect to

households headed by a married couple (from 2.1 percent in Norway to 20.7 percent in Russia) than with respect to households headed by a single female with no other adults present (from 9.0 percent in Finland to 55.4 percent in the U.S.). Another way to document this is by considering the childhood poverty gradient, or the excess poverty of children living in households other than those headed by married couples. This excess poverty reaches 41.5 percent in the U.S. for children in households headed by a single mother with no other adult present (55.4 percent v. 13.9 percent for children in household by married couples) and is again the highest rate of any household type in any country.

## Poverty rates before and after tax

Another familiar finding from Table 2 emerges from the comparison of overall pre- and post-tax and transfer child poverty rates. The difference is relatively modest in the U.S., where government redistribution only reduces the overall child poverty rate from 26.3 percent to 22.0 percent. The difference is more dramatic in most other countries. The United Kingdom, with the highest pre-tax childhood poverty rate of all the countries considered here (34.4 percent), has a substantially lower actual (post-tax) childhood poverty rate (15.3 percent) than the U.S. Similarly, Finland has the lowest actual childhood poverty rate of all the countries considered here (2.8 percent), but hypothetically, without transfers the rate would be 18.6 percent. Those impressive figures bear repeating, but they are hardly new.

A comparison of the pre- and post-tax child poverty rates for specific household types suggests that U.S. taxes and transfers do little to pull children out of poverty regardless of the household in which they live. In absolute terms, the difference between

child poverty before and after redistribution is smaller for households headed by a married couple (from 16.7 percent to 13.9 percent) than for households headed by a single female with no other adults present (from 65.2 percent to 55.4 percent). The latter decline pales, however, in comparison with the poverty reduction achieved through tax for children in similar households in the Nordic countries (from 50.6 percent to 9.0 percent in Finland, from 56.1 percent to 11.6 percent in Norway, from 51.9 percent to 13.5 percent in Sweden) and in the U.K. (from 84.1 percent to 37.3 percent). In relative terms, however, it is difficult to state whether these countries do comparatively more for those households at the highest risk of being poor than for households headed by a married couple, as children in the latter type of household face a minimal poverty risk after taxes and transfers (1.9 percent in Finland, 2.1 percent in Norway, 2.3 percent in Sweden).

The decomposition presented in Table 3 allows us to answer more formally this question, that is, whether differential poverty reduction through taxes and transfers across household types actually contributes to higher child poverty rates in the U.S. It also allows us to pull together the three dimensions that we have discussed with respect to Table 2: differences across countries, across household types, and between child poverty before and after redistribution.

#### Decomposition of the international differences in overall poverty rate

Table 3 presents the results of the decomposition of the difference in child poverty between the United States and each other nation. The first row for each country reports the effect of each factor on the actual difference in rates. The second row reports standardized figures that show the contribution of each factor to the total (100%)

difference in child poverty. Columns (2) to (6) represent the contribution of each of the five factors in the decomposition, and by construction their standardized contributions add up to 100 percent. Columns (7) to (9) represent additional combinations of the five factors in columns (2) to (6).

## --- Table 3 About Here ---

Columns (2), (3), and (7) show the contribution to the overall difference that originates in pre-tax incomes. Specifically, column (2) shows what the contribution of differences in market income would be if all household types fared as those headed by a married couple, column (3) suggests the additional contribution of the gradient of pre-tax incomes across household types, and column (7) shows the combined effect of these two factors. Column (4) shows the contribution of the distribution of children across household types, that is, the potential demographic effect. Columns (5), (6), and (8) show the contribution of taxes and transfers. Just like column (2), column (5) suggests what the contribution would be if all household types benefited in the same way as households headed by a married couple from taxes and transfers. Similarly to column (3) for market inequality, Column (6) accounts for the differential effect of taxes and transfers on different household types and can be interpreted as the contribution of the gradient across households with respect to the poverty reduction through government redistribution. The sum of columns (5) and (6) is shown in column (8) and corresponds to the total effect of redistribution, which is what most previous analyses have considered. Finally, column (9) shows the combined effect of cross-national differences in the household type gradients, that is to say, in the relative incomes available to children in different living arrangements.

In column (8), we find confirmation of the importance of income redistribution in explaining international differences in child poverty rates. The overall contribution of the redistribution scheme accounts for more than half of the total poverty rate difference between the U.S. and all countries except the Netherlands (37.1 percent) and Slovenia (38.5 percent). In many nations, differences in tax and transfer policies actually dwarf all other factors in explaining why children are less likely to be poor than in the United States.

The gradient in government redistribution by household type shown in column (5) rarely plays a large role in compensating differences in child poverty between the U.S. and other nations. Moreover, the change in the child poverty gradient attributable to taxes and transfers is just as likely to be unfavorable as to be favorable to children in the United States. The gradient in government redistribution does reduce the U.S. difference in child poverty rates with France, Germany, and Slovenia by nearly 20 percent, but it actually increases the difference compared to 8 of the 14 countries, most notably the U.K. (27.1 percent) and Poland (31.7 percent).

Before government redistribution, differences between the market incomes available to children, as exemplified by children in married couple households, already contribute a large component to differences in child poverty rates between the United States and certain nations, especially Germany, Italy, the Netherlands, Norway, and Slovenia. However, this is not universally true. In particular, pre-tax and transfer child poverty is *higher* in the other English-speaking nations (the UK, Canada, and Australia) than in the United States, although the differences are subsequently reversed via government redistribution. As with the redistribution gradient, the market income

gradient across household types is important in some cases, but it is rarely a major explanatory factor, and its effect does not always penalize children in the United States. Children in Estonia, Italy, and Poland are better off than their U.S. counterparts because the market income gradients are less steep. On the other hand, children in Germany suffer from the fact that there is a severe gap between market income poverty in married couple households and others. (The same is true of Russia, where overall child poverty is higher than in the United States.)

Finally, while we have seen that the distribution of children by family type varies from nation to nation (Table 1), distributional differences only play a minor role in explaining child poverty differentials between the United States and each other country. While it is true that the U.S. is usually at a disadvantage compared to other Western nations due to its distribution of children across household types, the largest distributional effect, which is between the U.S. and the United Kingdom, favors the former. British children, who have a very low likelihood of living with married parents, would be better off if their distribution of household arrangements were the same as their American counterparts'. Once again, British tax and transfer payments serve to overcome this disadvantage. Compared to other countries (except Estonia where the distributional effect is negative but small), overall differences in childhood poverty are modestly increased by the greater proportion of children in households headed by a single mother with no other adult present in the U.S. This distributional effect contributes more than 20 percent of the overall difference in Australia, Germany, the Netherlands, Poland, and Slovenia.

Although children's living arrangements do not explain much of the child poverty differentials, it is worth noting where they make the most difference. Household gradients

in market income and tax/transfer policy—column (9)—favor children in several postsocialist societies (Poland and Estonia) relative to the United States. In these nations, children who do not live with married parents are less likely to suffer income poverty as a result. By contrast, the penalty to living in any family arrangement other than a married couple home is much greater in Germany than in the United States. Consistent with Esping-Andersen's (1990) classification of Germany as a "conservative" state where policy is designed to promote the traditional family, children in married couples have low market income poverty and are disproportionately favored by the transfer system. The reason that actual child poverty is lower in Germany than in the United States is that a larger proportion of children live in the favored family form in the former nation. (This is true of the Netherlands as well.)

#### Discussion

Our results shed light on a well-known, yet still discomforting statistic: 22.0 percent of children in the U.S. are poor, a higher proportion than children in Australia, in Canada, and in Europe with the sole exception of Russia. In particular, we look at child poverty rates across living arrangements and find that 55.4 percent of children living in households headed by a single female with no other adults present are poor in the U.S.— a higher actual poverty rate than any other group of children in any household type in any other country considered here.

As for the factors contributing to these sobering figures, our results confirm earlier analyses (Rainwater and Smeeding 2003) suggesting that these differentials are mainly explained by *overall* differences between countries in market outcomes and, more than anything else, in the anti-poverty effectiveness of tax and transfer policy. The

additional factors considered here—(1) differences in how household types fare on the market and in government redistribution schemes and (2) differences in children's distribution across household types—do not play a major role, but they are not always negligible either. In Australia, Belgium, Estonia, Italy or Poland, the gradient and distributional effects combine to contribute more than one third of the overall difference in childhood poverty rates from the U.S.

Contrary to the perception that single mothers with children reap most of the benefits from government anti-poverty dollars, we did not find that the U.S. fared better than most countries in reducing the economic disadvantage that these families face on the market. Relative to nations with conservative welfare states, especially (in this analysis) Germany, U.S. children living in single-female-headed homes and in other non-marital households are indeed helped out of poverty by government redistribution. In the broader international context, however, they are not receiving special treatment. Redistribution assists children in non-marital households in post-socialist nations such as Poland and Estonia far more than in the United States. Most of the other child poverty differentials considered here are hardly affected by the redistribution gradient between household types at all. For some, it might be good news to find that, relative to other countries, U.S. tax and transfer policy appears even-handed across household structures. This must be tempered, however, by the observation that this results from the fact that, by international standards, hardly any household type benefits from strong poverty reduction through taxes and transfers.

With respect to the distributional effect, we found that it operated in the expected direction but had a limited impact. It is true that the prevalence of children in households

with a single mother and no other adult contributes to the United States' poor standing, but this is generally a minor factor relative to the impact of redistribution, and high child poverty in the United States is not primarily driven by the prevalence of single motherheaded families.

In decomposing the comparatively high child poverty rates of the U.S. in ways that previous analysts had not, we focused on two possible mitigating factors. We asked whether income redistribution in the U.S. operates in a less favorable demographic environment (because of a high proportion of children in households headed by single mothers) that could offset a potentially greater reduction of the differences in marketbased poverty risks for children in such households in the U.S. than in comparable nations. The results provide little comfort in this respect: the U.S. demographic disadvantage is quantitatively limited, and children in the households most susceptible to poverty are not really faring better, relative to children in households headed by a married couple, than in comparable countries.

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## Tables

Table 1 Distribution of chi	ldren bv countrv a	and house	hold type				
				Househ	old type		
		All	Married Couple	Cohabiting	Single Male Head	Single Female Head, No Other Adults	Single Female Head and Other Adults
US 2000	Unweighted N	345	39 25101	1585	1333	4303	2267
	Weighted N	345	39 25008	1522	1314	4566	2179
	Weighted %	100	.0 72.3	4.4	3.8	13.2	6.3
Australia 1994	Unweighted N	45	48 3915	а	72	450	111
	Weighted N	45	48 3989		77	387	96
	Weighted %	100	.0 87.7		1.7	8.5	2.1
Belgium 1997	Unweighted N	25	37 2265	98	36	126	62
	Weighted N	25	37 2212	98	49	168	62
	Weighted %	100	.0 85.5	3.8	1.9	6.5	2.4
Canada 2000	Unweighted N	175	13 12464	1980	670	1875	524
	Weighted N	175	13 12802	1751	683	1751	543
	Weighted %	100	.0 73.1	10.0	3.9	10.0	3.1
Estonia 2000	Unweighted N	42	30 2701	711	60	446	312
	Weighted N	42	30 2652	694	68	537	283
	Weighted %	100	.0 62.7	16.4	1.6	12.7	6.7
Finland 2000	Unweighted N	73	36 5848	959	125	377	77
	Weighted N	73	36 5126	1152	162	842	96
	Weighted %	100	.0 69.4	15.6	2.2	11.4	1.3
France 1994	Unweighted N	74	55 5900	859	59	489	158
	Weighted N	74	55 5845	866	7	530	164
	Weighted %	100	.0 78.3	11.6	0.1	7.1	2.2
Germany 2000	Unweighted N	57	4723	385	51	488	97
	Weighted N	57	44 4480	482	63	620	98
	Weighted %	100	.0 78.0	8.4	1.1	10.8	1.7
Italy 2000	Unweighted N	38	33 3517	84	32	106	94
	Weighted N	38	33 3526	77	4	126	69
	Weighted %	100	.0 92.0	2.0	0.1	3.3	1.8

Table 1 (cont.)							
				Househ	old type		
						Single Female Head No	Single Female Head and
		A 11	Married	Cohabiting	Single	Other	Other
Notherlands 1000	Lipwoighted N	All 2001	Couple	Couple		Adults	Adults
Nethenalius 1999	Woighted N	2001	2002	229	20	192	30
	Weighted N	3001	2000	200	10	213	34
	weighted %	100.0	82.3	9.1	0.6	0.9	1.1
Norway 2000	Unweighted N	9144	6646	1609	196	551	142
	Weighted N	9144	5880	1682	256	1180	146
	Weighted %	100.0	64.3	18.4	2.8	12.9	1.6
Poland 1999	Unweighted N	28406	25081	а	513	1609	1203
	Weighted N	28406	25082		511	1619	1193
	Weighted %	100.0	88.3		1.8	5.7	4.2
Russia 2000	Unweighted N	1962	1435	155	72	194	106
	Weighted N	1962	1452	155	69	181	106
	Weighted %	100.0	74.0	7.9	3.5	9.2	5.4
Slovenia 1999	Unweighted N	2364	1945	225	40	40	114
	Weighted N	2364	1894	258	45	57	99
	Weighted %	100.0	80.1	10.9	1.9	2.4	4.2
Sweden 2000	Unweighted N	7250	4578	1798	125	615	134
	Weighted N	7250	4060	1675	225	1175	123
	Weighted %	100.0	56.0	23.1	3.1	16.2	1.7
UK 1999	Unweighted N	14955	9783	1339	382	3108	343
	Weighted N	14955	10050	1346	314	2841	404
	Weighted %	100.0	67.2	9.0	2.1	19.0	2.7
Note: All data are d	rawn from the Lu	xembourg li	ncome Study	/			
a = Married and col	nabiting couples	are grouped	together in t	he data for A	Australia and	l Poland	

Table 2						
Actual (after tax/trai	nsfer) and ma	rket (pre-tax/t	ransfer) child	poverty rates	s by househol	d type
			Househ	old type		
		Married	Cohabiting	Single Male	Single Female Head, No	Single Female Head and
	All	Couple	Couple	Head	Other Adults	Other Adults
Actual child poverty	rates (%)					
US 2000	22.0	13.9	29.7	25.6	55.4	36.9
Australia 1994	16.0	12.1	а	25.8	51.6	27.2
Belgium 1997	7.7	7.0	10.9	19.0	9.3	12.2
Canada 2000	14.9	10.4	14.4	13.3	48.3	16.8
Estonia 2000	13.6	10.2	15.5	10.9	27.3	15.2
Finland 2000	2.8	1.9	3.0	2.1	9.0	0.0
France 1994	7.9	5.2	11.7	13.3	27.3	19.0
Germany 2000	9.0	4.1	12.0	10.0	42.1	11.3
Italy 2000	17.4	16.8	24.7	19.9	24.5	23.9
Netherlands 1999	9.8	6.6	15.9	11.0	38.4	16.0
Norway 2000	3.4	2.1	1.6	5.4	11.6	8.6
Poland 1999	12.7	12.2	а	10.5	20.1	15.1
Russia 2000	23.4	20.7	30.6	16.6	41.0	24.9
Slovenia 1999	6.9	5.6	7.4	16.8	28.8	14.4
Sweden 2000	4.2	2.3	2.3	4.2	13.5	7.1
UK 1999	15.3	9.2	15.0	21.4	37.3	9.8
Market child povert	y rates (%)					
US 2000	26.3	16.7	35.1	30.7	65.2	47.0
Australia 1994	28.4	22.3	а	46.8	79.5	62.5
Belgium 1997	18.9	15.9	17.9	23.1	45.2	53.5
Canada 2000	24.0	17.0	26.6	22.6	65.2	47.5
Estonia 2000	21.2	15.1	22.8	47.1	40.6	31.5
Finland 2000	18.6	13.2	18.0	22.0	50.6	30.9
France 1994	17.7	13.7	20.0	17.9	48.4	46.4
Germany 2000	18.0	10.2	22.3	30.4	65.5	42.4
Italy 2000	b	b	b	b	b	b
Netherlands 1999	15.2	10.5	18.5	28.5	58.1	54.9
Norway 2000	14.3	7.1	7.1	22.9	56.1	33.4
Poland 1999	19.4	16.4	а	30.3	42.3	47.5
Russia 2000	23.9	20.5	26.7	25.2	40.1	37.6
Slovenia 1999	12.0	10.6	11.1	22.1	25.9	28.4
Sweden 2000	18.7	11.7	9.9	20.4	51.9	51.9
UK 1999	34.4	19.2	33.4	53.4	84.1	51.3
a = Married and col	nabiting couple	es are groupe	d together in	the data for A	Australia and I	Poland
b = Pre-tax and trar	nsfer income is	s not available	e for Italy			

l Poverty Rates
n Childhood
Differences ir
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Table 3									
Decomposition of	Factors Affectin	g Differential	s in Child Pove	erty between t	he US and Oth	ner Countries			
		Market	Household						Sub-total
		Income Devicitiv	I ype Gradiant in	Dictribution	Dodiotribu	Housenoid Tyne		Sub-total	Due to
		Married	Market	of Children	tion, Married	rype Gradient in	Due to	Redistribu-	Type
	Total	Couple HHs	Income	by Family	Couple HHs	Redistribu-	Market (Fβ +	- tion (Fα +	Gradient (Fε
	Difference	(FB)	Poverty (Fε)	Type (Fð) (4)	(Fα) (5)	tion (Fγ) /6)	Fɛ) (7)	Fγ) (8)	+ Fγ) (α)
Australia 1994	(-)	(2)	(2)		(2)	(2)	( ) )	6	(2)
Unstandardized	5.9	-2	7 1.1	2.2	8.2	-0.7	-4.6	7.5	0.4
Standardized	100.0	-96-	5 19.1	37.0	139.0	-12.2	-77.4	126.8	6.9
Belgium 1997									
Unstandardized	14.3	0	7 1.2	2.2	8.4	1.7	1.9	10.1	2.9
Standardized	100.0	4	7 8.5	15.3	58.6	12.0	13.2	20.6	20.5
Canada 2000									
Unstandardized	7.1	7 <sup>.</sup> 0-	4 0.0	9.0	5.6	-0.2	3.0	5.4	. 0.7
Standardized	100.0	-2.6	9 12.6	8.2	5.67	-2.3	6.7	. 17.3	10.3
Estonia 2000									
Unstandardized	8.4	-	7 2.7	9.0-	3.5	1.2	4.4	1 4.7	3.9
Standardized	100.0	20.1	7 31.8	-7.3	8 41.7	13.8	52.5	55.5	45.6
Finland 2000									
Unstandardized	19.1	2.5	5 0.7		5 14.7	0.0	3.2	2 14.7	. 0.7
Standardized	100.0	12.9	9 3.6	7.5	) 76.7	0.2	16.5	20.6	3.8
France 1994									
Unstandardized	14.0	2.1	7 1.0	2.4	10.5	-2.7	3.7	7.8	-1.7
Standardized	100.0	19.3	3 7.2	17.4	1 74.7	-19.2	26.5	55.5	-12.0

ional Differences in Childhood Poverty Rates	
Interna	

Table 3 (cont.)									
		Market Income	Household Type			Household		Sub-total	Sub-total Due to
		Poverty, Married	Gradient in Market	Distribution of Children	Redistribu- tion, Married	Type Gradient in	Sub-total Due to	Due to Redistribu-	Household Type
	Total	Couple HHs	s Income	by Family	Couple HHs	Redistribu-	Market (Fβ ·	+ tion (Fα +	Gradient (Fε
	Difference (1)	(Fβ) (2)	Poverty (Fε) (3)	Type (Fð) (4)	(Fα) (5)	tion (Fγ) (6)	Fε) (7)	Fγ) (8)	+ Fγ) (9)
Germany 2000 Unstandardized	12.9	9	9.6-	2.7	10.1	-2.6	3.	4 7.5	5 -6.1
Standardized	100.0	53.	6 -27.3	21.2	78.5	-19.9	26.3	3 58.6	5 -47.2
ltaly 2000 Unstandardized	4.6	2.7	3.3	0.6	7.2	3.3	10.	5 10.5	5 6.6
Standardized	100.0	158.	8 72.4	. 13.9	158.8	72.4	231.	2 231.2	2 144.8
Netherlands 1999 Unstandardized	12.2	ف	7 -2.2	3.2	4	0.4	4	4	-1.8
Standardized	100.0	55.	1 -17.8	26.6	34.1	3.0	37.3	3 37.1	1 -14.8
Norway 2000	с С Ц	٢	c	Ċ	Ċ	1	L		
Unstantiation	10.0	42.	6 -12.5	13.2	50.2	8.9	30.0	1 59.	-0.0 -3.6
Poland 1999 Unstandardized	с б	C			6	0.0	~	4	4 20
Standardized	100.0	ς Υ	1 21.0	21.3	20.3	31.7	24.	1 52.0	52.7
Russia 2000									
Unstandardized	-1.5	4	7 5.5	0.0	4.4	0.9	<u> </u>	2 -3.5	5 6.8
Standardized	100.0	325.	9 -405.5	-40.3	306.6	-61.1	-79.(	3 245.9	5 -466.6

14.2	184.5	-54.0	27.1	157.4	-42.3	-12.9	-41.1	100.0	Standardized
0.9	12.3	-3.6	1.8	10.5	-2.8	-0.9	-2.7	6.7	Unstandardized
									UK 1999
-1.7	71.8	25.7	-5.4	77.2	6.1	3.7	22.0	100.0	Standardized
-0.3	12.7	4.6	-1.0	13.7	1.1	0.7	3.9	17.7	Unstandardized
									Sweden 2000
-4.5	19.2	53.1	-19.3	38.5	27.1	14.8	38.3	100.0	Standardized
-0.7	2.9	8.0	-2.9	5.8	4.1	2.2	5.8	15.0	Unstandardized
									Slovenia 1999
(6)	(8)	(2)	(6)	(2)	(4)	(3)	(2)	(1)	
+ Fγ)	Fγ)	Fε)	tion (Fγ)	(Fα)	Type (Fð)	Poverty (Fε)	(Fβ)	Difference	
Gradient (Fε	tion (Fα +	Market (Fβ +	Redistribu-	Couple HHs	by Family	Income	Couple HHs	Total	
Type	Redistribu-	Due to	Gradient in	tion, Married	of Children	Market	Married		
Household	Due to	Sub-total	Type	Redistribu-	Distribution	Gradient in	Poverty,		
Due to	Sub-total		Household			Type	Income		
Sub-total						Household	Market		
									Table 3 (cont.)