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**Doing Poorly: The Real Income of American Children  
in a Comparative Perspective**

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**DOING POORLY: THE REAL INCOME**  
**OF AMERICAN CHILDREN IN A**  
**COMPARATIVE PERSPECTIVE**

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## **Abstract**

This paper investigates the real living standards and poverty status of United States children in the 1990s compared to the children in 17 other nations, including Europe, Scandinavia, Canada, and Australia. We find that American low-income children have lower real spendable income than do comparable children in almost every other nation studied. In contrast, high income United States children are far better off than are their counterparts in other nations. We also find persistently high child poverty rates in the United States compared with other nations. Demographic factors and the effectiveness of tax and transfer policies in reducing child poverty are also explored. The paper concludes with a discussion of results and their policy implications.

## **I. Introduction**

Both poverty and inequality have increased in the United States since the late 1970s, particularly among families with children. By the official standard United States child poverty has risen steadily since the 1960s and has continued to rise to in the 1990s. The question is whether these most recent increases in child poverty have been endemic in the rest of the industrial economies or whether they are unique to the United States. Cross-national comparisons of economic well-being are useful for learning how one nation is alike or different from other comparable nations, because countries which face similar economic and demographic issues may use different policy instruments to address these issues and may have very different outcomes. We have visited this topic before (Smeeding and Torrey, 1988; Forster, 1994; Smeeding, 1992; Rainwater and Smeeding, 1994) and found that the United States has much higher child poverty rates than do other high-income countries. In this paper we extend this work and more generally address the real living standards of United States children in a comparative context from the 1970s to the 1990s.

This paper compares the economic well-being of children in the 1980s and 1990s in 18 countries: 14 in Europe (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Norway, Sweden, Switzerland, and the United Kingdom) and four elsewhere (Australia, Canada, Israel and the United States). The analysis is based on the Luxembourg Income Study (LIS) database (Smeeding, Rainwater and O'Higgins, 1990; LIS Users Guide, 1995).

The plan of the paper is straightforward. We begin by identifying the terms and concepts that we use in the paper under the heading measurement issues. In the third section we examine cross-national differences in real living levels. Most people who want to know about child poverty are interested in children's "real incomes" (purchasing parity adjusted spendable income) as well as their relative poverty status. And so we consider the real standard of living of American children at high, middle and low income levels as compared to their counterparts in other countries.

In the fourth section of the paper we examine levels and trends in child poverty over the 1967-1993 time span. We also investigate the role of demographic forces in explaining the differences in poverty (children in two-parent and single-parent families), and the role of market income and income transfers in preventing child poverty. These analyses offer the first glimpse of child poverty in the 1990s as seen from the perspective of the Luxembourg Income Study database. The final section summarizes our results and their policy implications.

## **II. Measurement Issues**

Economic well-being refers to the material resources available to households.<sup>1</sup> The concern with these resources is not with consumption per se but rather with the capabilities they give household members to participate in their societies (Sen, 1992). These capabilities are inputs to social activities and, participation in these activities produces a given level of well-being (Rainwater, 1990; Coleman and Rainwater, 1978).

All advanced industrial societies are highly stratified socially. Some individuals have more resources than others. The opportunities for social participation are vitally affected by the resources that the family disposes particularly in nations like the United States where there is heavy reliance on the market to purchase such social goods as health care, education and child care services (Rainwater, 1974). Money income is the central resource in these societies. But there are still other important kinds of resources such as social capital (Coleman, 1988) and noncash benefits.

In this paper, we are concerned only with disposable money income. Detailed comparable information exists on money income, on taxes paid and on certain kinds of transfers which have a

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<sup>1</sup>We use the terms household and family interchangeably. Our formal unit of aggregation is the household—all persons living together and sharing the same housing facilities—in almost all nations. In Sweden and Canada the “household” refers to a more narrow definition of the “family” unit.

cashlike character, for example housing allowances or fuel assistance or food stamps., for the 18 nations which we will investigate. Unfortunately we cannot take into account the major in-kind benefits which are available in most countries—for example, health care, day care and preschool, general subsidies to housing and the like. To the extent that the level and distribution of these resources is different in different countries our analysis of money income must be treated with some caution. However, they would be unlikely to change the conclusions reached in this paper. In fact, they may even exacerbate them. (See Smeeding, et al, 1993 for an analysis that includes these benefits.)

### **Income and Needs**

Families differ not only in terms of resources but also in terms of their needs. We take the differing needs because of household size and the head's stage in the life course into account by adjusting income for family size using an equivalence scale. The adjustment for household size is designed to account for the different requirements families of different sizes have for participating in society at a given level. Different equivalence scales will yield different distributions of well-being. Several studies in Europe, the United States and Australia point to an equivalence scale which implies rather dramatic economies of scale in the conversion of money incomes to social participation among families with children (Buhmann, et al, 1988, Bradbury, 1989; Rainwater, 1990). Analysis of some of these surveys also suggests that there are important variations in need as a function of the head of the household's age.

Drawing on these studies we have used an equivalence scale which defines need as the product of the cube root of family size multiplied by a factor which sees need as increasing roughly 1 percent a year for head's age up to the mid forties and then decreasing at the same rate. Hence, we define equivalent income in the following way:

$$EI = Y / (S^{.33} \cdot .99^{A-45})$$

That is, equivalent income (*EI*) is defined as an individual's family disposable income (*Y*) divided by the product of the cube root of the family's size (*S*) and .99 compounded by the number of years difference between the head's age (*A*) and 45. The reader should keep in mind that all money income estimates in the paper are based on adjusted or equivalent income calculated according to the above formula.

Having defined equivalent income in this way we determine the median of all individuals in each country. We then examine the distribution of incomes of households with children in relation to the median for all individuals. In this analysis we tabulate the percentage of children who have given characteristics, not the percentage of families with children. In technical terms, our calculations are weighted by the number of children in each family.

### **Real Incomes**

We begin the analysis with an examination of the real incomes of children. Here we define children as persons under age 18. While we use a relative poverty line standard—50 percent of median equivalent disposable income—to calculate poverty rates, we are also concerned with absolute or real levels of child well-being. In order to investigate this issue, we have converted the median incomes of all persons in each country to units of equal purchasing power in the same year using information found in the Penn World table for that year (Summers and Heston, 1991). After converting all incomes to real incomes we analyze our national differences by expressing national amounts as a percent of the United States median for all persons in the year of the survey. This gives us the living standards for middle-income children—the 20 percent of children whose income are around the median (10 percent of them below and 10 percent above). We also present results for

each country's median low-income child (the median of the 20 percent with the lowest income) and median high income child (the median of the 20 percent with the highest income).

### **Poverty Rates and Anti-Poverty Programs**

Turning to poverty rates, we examine results for three groups—(a) all children, (b) children in two parent families and (3) children in families headed by a solo mother or lone parent. This group is defined as a family headed by a single mother who is not currently living as married—there may or may not be other adults in the family—but who has children under 18 living in the household. Our poverty measure is relative: the percent of children living in households with income below half of the national median in line with a well-established theoretical perspective on poverty (Sen, 1992; Townsend, 1979). Such a measure is now commonly calculated by the European Commission (Hagenaars et al., 1994), by the OECD (Förster, 1993) and by other international groups.

The official United States government poverty estimates differ from ours because they are based on gross (pre-tax but post-transfer) money income and on an absolute poverty measure developed in the early 1960s. The United States poverty line at that time was about half of median income, but fell to 40 percent of the median by the mid-1980s.<sup>2</sup> The method of counting income (disposable income including tax benefits from the Earned Income Tax Credit (EITC) or near cash benefits from food stamps) and poverty (relative to the national median) used in this paper are much closer to the recent National Academy of Sciences recommendations for income and poverty measurement (Citro and Michael, 1995) than is the current method used by the United States government..

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<sup>2</sup>The United States measures can be found in U.S. Bureau of the Census (1995). Previous LIS-based research using a 40 percent of median cutoff and different equivalence scales, has resulted in the same results that are shown in Section IV (see Smeeding, 1992; Förster, 1993).

We also examine the impact of public taxes and transfers on child well-being. First, we estimate the percent of children with incomes below half of adjusted median disposable income based on their adjusted market incomes. Market incomes, or pre-government incomes, include all forms of earnings (wages and salaries and self-employment income) plus capital income, occupational pension benefits, and private transfers such as child support. In short, market incomes include everything but government transfers and taxes. Second, we make the same estimate based on their after-tax and transfer incomes (defined as post-government or disposable income). Such a comparison tells the reader how universal benefits, social insurance, and “welfare” programs—the social safety net—help prevent child poverty. It also tells us how the tax system, including negative taxes such as refundable child tax credits and the United States’ EITC, help raise the incomes of some families relative to others.

### **Database**

The database used to carry out this analysis is the *Luxembourg Income Study (LIS)* database which now contains information on child poverty for 25 nations in 65 databases covering the 1967 to 1993 period (LIS User Guide, 1995). Because of the recent addition of the 1990s data to LIS, and the addition of several new nations (e.g., Denmark, Finland) we are now able to analyze both the level and trend in poverty and low incomes for a considerable period. Appendix Table 1 gives the years of data available from LIS, with the nations and years used in this study given in bold. As LIS continues to add datasets an even more complete picture of the comparative well-being of United States children will emerge. For now, these data will give us the first glimpse at child poverty in the 1990s.

### **III. Real Levels of Living**

Although we would argue that economic well-being (at least in developed countries) is most crucially a function of the individual's relative position in the distribution of income, real levels of living are also important in comparing income and well-being. Interest in real income goes beyond the situation of poor children—in comparative studies one also wants to know about the real standard of living of average and well-off children as well.

Comparisons of real gross domestic product and aggregate consumption often show that the United States has the “highest standard of living” among major modern nations. Thus, the question of whether this state of affairs extends to measures of after-tax adjusted disposable income arises. While the purchasing power parities (PPPs) used to make such adjustments are based on differences in consumption patterns among nations, they are designed to be used with macroeconomic concepts: aggregate output (GDP) and aggregate consumption as defined by national and international income accountants. Cross-national differences in types of “consumption” which are tax financed versus household expenditure financed are not taken into account. Because countries differ in the way that they finance such goods as health care and education, and because they differ in the extent to which specific types of consumption are tax subsidized, e.g., owned versus rented housing, the PPPs used here are less than ideal for adjusting disposable income for control over resources across countries. Yet they are the best tool we have to make such comparisons. The “real incomes” measures below should therefore be seen as measures of net spendable income rather than measures of total consumption for children, the largest difference between the two concepts being goods and services such as health care, day care, and education which are provided at different prices in different nations.

Figures 1, 2, and 3 address this issue (also see Table 1, columns 4, 5 and 6, on which Figures 1, 2 and 3, respectively, are based). We present here the results for the most recent LIS data point

in each nation. We compare the real spendable (disposable) incomes of well-off, average and low income children in the United States with comparably situated children in 17 other nations. The average American child in a four person family in 1991 had a family income of \$34,675.<sup>3</sup>

In fact, American children who are in families in the upper 20 percent of the income distribution do very well indeed (Figure 1). They have much higher standards of living as measured by real spendable income than do similarly situated children in all countries, with only Switzerland and Canada being within 20 percent of the United States level. Scandinavia—e.g., Denmark, Sweden—has high income children who live in families with three-quarters the income of the average American child. The only nations whose “rich” children live in households with incomes which are less than 60 percent of that found in the United States are Israeli and Irish children. Given that Israel and Ireland have, by far, the lowest overall real standards of living of the nations observed here, this is to be expected.

Focusing on children in the middle 20 percent (Figure 2) we find that only in Denmark and in Canada are children as well off as are American children, although Swedish and Swiss children are almost as well off. The average child in Belgium, Germany, Norway and Finland is only 90 percent as well off, and 80 percent or less as well off in countries like Austria, Italy, France. On the other hand, in only three countries is the average child less than three-quarters as well-off as in the United States—the United Kingdom at 72 percent, Israel at 52 percent and Ireland at 43 percent.

At the lower end of the distribution we find a very different and surprising picture. Both national (U.S. Bureau of the Census, 1995) and international (see next section) evidence suggests that

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<sup>3</sup>For the statistically inclined, we examine the lowest, middle and highest quintiles of children. We present the income of the average child in each group (that is the 10th, 50th and 90th percentile point) for each country—adjusted in real dollars for the year of the national survey using the Penn World tables—as a ratio to the comparable percentile point in the United States distribution. See notes to Table 1 for a more complete explanation of how the comparisons were made.

the poverty rate of United States children is in the neighborhood of 20 percent. We compare the real spendable incomes of the typical poor American child—the one at the median of the bottom 20 percent—with that of comparable low income children in other countries in Figure 3. We immediately see that in six countries low income children have real standards of living at least 50 percent higher than in the United States—Switzerland, Sweden, Finland, Denmark, Belgium and Norway. And in four other countries (Germany, Luxembourg, Netherlands, and Austria) low income children are at least 30 percent better off than in the United States. Only in Israel and Ireland—the two nations with the lowest GDP per capita of those studied—do low income children have a lower real standard of living than do children in the United States.

In other words, while the United States has a higher real level of income than most of our comparison countries it is the high and middle income children who reap the benefits (and much more the former than the latter). Low income American children suffer in both absolute and relative terms. The average low income child in the other 17 countries is at least one-third better off than is the average low-income American child (see also Table 1).

#### **IV. Evidence on Child Poverty: Level and Trend**

We shift now to measures of relative income within each country to examine both the level and trend in child poverty across the 18 developed nations for which we have data. In order to have really solid evidence on patterns of change in these measures it would be desirable to have multiple observations over several decades for a large number of nations. Unfortunately a database with data for several countries over long periods of time does not yet exist. However, LIS has made efforts to bring in earlier datasets from the later 1960s and 1970s, and also to pursue continual updating of

datasets to the later 1980s and early 1990s to provide a better data base for determining trends as well as levels of poverty in advanced nations.

Table 2 provides multi-year data on child poverty rates, defined as children living in households with incomes below half of the median.<sup>4</sup> We have split the estimates into six periods: before 1971; 1972-1975; 1978-1981; 1982-1985; 1986-1988; and 1989 or later. For 14 nations, we have observations for child poverty at two or more points in time (although in some cases the time lapse is short). For eight of these countries we have observations at three points in time, and four or five points for a few. We must therefore interpret changes in a very tentative way. We have included the nations we have in three groupings: A: United States; B: Western Europe and C: Other Developed Nations.

### **Level of Poverty**

Table 2 and Figure 4 summarize the most recent year for which child poverty estimates are available for each nation. Child poverty rates throughout Western Europe are below 10 percent, with the exception of 12.0 percent in Ireland, also the poorest nation in real terms, of the Western European nations observed here. And in the other Western nations, most recent child poverty rates range from 11.1 percent in Israel to 14.0 percent in Australia.. Clearly the United States rate of 21.5 percent stands out as the largest percentage of children in poverty among the nations observed here (Figure 1).<sup>5</sup>

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<sup>4</sup>While we have not performed sensitivity tests for poverty rates at 40, 50, or 60 percent of median or for different equivalence scales, previous LIS-based research has demonstrated the robustness of our child poverty results for a wide range of poverty measures and equivalence scales (Förster, 1994; Smeeding, 1992).

<sup>5</sup>LIS datasets not used in this comparison include those for Russia, a set of transition countries of Central Europe (Czech Republic, Hungary, Slovak Republic), and the Republic of China/Taiwan. All of these nations have child poverty rates below 15 percent of median income when child poverty is measured in this same way.

## Trend

The 1980s was not a period in which the relative economic well-being of children in any of these countries was greatly improved. In two countries, there are hints of improvement from the 1970s through the 1980s to the 1990s (see Canada and Sweden in Table 2). But overall we have a picture of either stability or deterioration in the children's' economic well-being. In the United States, Israel, and the United Kingdom there is a clear trend toward a worsening situation for children, though the most recent poverty rate for the United States suggests a leveling off of the previous increases. The 1990s results for Israel and the United Kingdom are not yet available. Over an 18 year period, from 1969 to 1986, the child poverty rate increased from 5.3 percent to 9.9 percent in the United Kingdom and in the United States from 13.1 percent to 22.9 percent, before falling to 21.5 percent in 1991. In Israel, too, there was a deterioration during the first half of the 1980s. All of the Scandinavian countries have been able to have kept child poverty below five percent, and many other European nations keep it in the 5 to 6 percent range over the 1980s and into the 1990s.<sup>6</sup>

It needs to be emphasized that levels and trends in child poverty rates do not simply mirror levels and changes in overall income inequality in these nations. While the United States has the highest level of inequality among the nations observed here, Switzerland ranks third in overall inequality but very low in terms of child poverty (Gottschalk and Smeeding, 1995, Figure 3). And while patterns of increasing income inequality in the United States and in the United Kingdom are correlated with their rising child poverty rates over the longer term, the timing of increases in each nation are quite different. Inequality in the United States has continued to increase from the middle 1980s through the 1990s while child poverty has remained constant or has fallen slightly by our

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<sup>6</sup>Note that in both Germany and the Netherlands the data sets used in earlier periods are different from those used in later periods. Thus, the observed trend to higher poverty rates in these nations may be attributed to different datasets, not to true increases in child poverty. Moreover, at he worst, both of these nations have child poverty rates in the six percent range.

measure over this same period. Many nations observed here have sustained large increases in income inequality during the 1980s with no change in poverty, e.g., Sweden and Australia (Gottschalk and Smeeding, 1995, Tables 5 and 6).

At the very least these multiple year observations suggest that the finding from the various LIS datasets are not artifacts of particular years of our samples. We find that the countries that have low poverty rates in our latest samples have low rates in the earlier periods as well. Those with middling rates are in the middle earlier and the higher rate countries are higher in early periods.

### **Differences Between Two-Parent and Solo-Mother Families**

A child's chances of being poor in the United States differs dramatically depending on whether he or she lives in a one or two parent family (Table 3). A child in a two-parent United States family has only about a 11 percent chance of being poor as compared to a 60 percent chance if the child lives with a lone parent who is a mother. In fact, in all countries studied, one's chance of being poor in a one-parent mother family is much higher than in two parent families.

Because so few children in most countries live in solo mother families the difference across countries in the percent of children living in solo mother families has little to do with the difference in total child poverty rates. Only in the cases of Australia, Canada, and the United States would total poverty rates be noticeably lower if the proportion of solo mother families was the average for these 17 countries. In other counties with greater than 10 percent of children in solo mother families (Denmark, Norway, Sweden, United Kingdom), the poverty rates for single parent children are close enough to couples rates to not make a great deal of difference in the overall poverty rate. And demography is clearly not destiny; children in solo mother families in Denmark, Finland (7 percent poverty rate) and Sweden (5 percent poverty rate) do better than children in two parent families in many of the nations studied.

Comparing the poverty rates of children in two parent families and in solo mother families we note a group of countries with very low rates for both types—Sweden, Finland, Belgium, Denmark, and Luxembourg. Another group has child poverty rates in solo mother families between roughly 20 and 40 percent but covers a wide range of rates in two parent families—Germany, Switzerland, and Norway have quite low two parent rates. France has a middling rate and Israel, Italy, and the United Kingdom higher rates for children in two-parent households.

The combination of difference in the poverty rates of children in two parent compared to solo mother families and the smaller differences in the percentage of children who live in solo mother families has an important effect on the family type composition of the poor.<sup>7</sup> In five countries more than half of poor children live in solo mother families—the United States, Australia, Germany, Switzerland, and Norway with Canada coming close at around 40 percent. At the other extreme, fewer than 15 percent of poor children are in solo mother families in the Netherlands, Belgium, Italy, and Israel. Children in solo mother families make up between 15 and 30 percent of the poor in Luxembourg, Ireland, France, the United Kingdom, and Sweden. Thus, the rate of feminization of poverty varies dramatically across these countries based on both the poverty rate for children in single parent units and on the percentage of children living in each type of unit.

In summary, 1 of every 8 American children is a poor child living with a solo mother. Fewer than 1 in 100 children are in the same situation in Sweden, the Netherlands, Luxembourg, Italy, Finland, and Belgium. In the United States 1 of every 10 children is a poor child living in a two parent family and this ratio is not too different in three other countries—Ireland, Israel, and Italy. In contrast, the ratio is about 1 in 50 in Finland, Germany, Norway, Sweden, and Switzerland.

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<sup>7</sup>The figures on the demographic composition of poor children are not shown but are available from the authors.

## **The Role of Market Income and Income Transfers**

What are the roles of market income and transfers in producing the wide range in child poverty? To what extent would children be poor in the absence of transfers? Figures 5 through 7 plot the pre-government (market) income poverty rates of children (that is, poverty rates based on income from earnings and assets and before taxes and transfers—including private transfers) against child poverty rates based on post-government (after tax and transfer or disposable) income. Figure 7 shows the figures for all children, but because the levels of poverty are so different for children living with two parents versus those living with a solo mother, the two patterns are shown separately in figures 5 and 6.<sup>8</sup> Because the all children figure disguises the separate impacts of one and two parent parents on child poverty, we turn to them first.

**Two-Parent Units.** For children in two parent families we find a wide range in pre-government income poverty rates which can be summarized as follows: below 5 percent: Germany, Norway, Switzerland; between 5 percent and 10 percent: Finland, Luxembourg, the Netherlands; between 10 percent and 20 percent: Australia, Belgium, Canada, Denmark, Italy, Sweden, United States; and over 20 percent: France, Ireland, Israel, and the United Kingdom.

There is similarly a wide range in the degree to which market income poverty rates are reduced by transfers. The lines in the figure radiating from the origin indicate the extent of poverty reduction—(none, for no reduction) 25 percent, 50 percent, and 70 percent. In three countries transfers reduce the poverty of children in two-parent families by 10 percent to 33 percent—Australia, Italy, and the US. In nine countries, the reduction ranges from a little below half to not quite two-thirds. Finally, in five countries the reductions are three-quarter or more —Finland, Belgium, France, Sweden, and Denmark.

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<sup>8</sup>The pre- and post-government poverty rates on which Figures 5, 6, and 7 are based are shown in Appendix Table A-2.

The result is that the extremely low market income based poverty rates for children in Norway and Switzerland are reduced to an even lower rates by government programs, and the three countries with 5 to 10 percent market income based poverty rates find their disposable income rates reduced to below 5 percent. For the rest of the countries there is an even greater deal of movement. Belgium has a higher market income poverty rate than the other countries in group C, but its transfers produce a very low disposable income rate of less than 5 percent. The shift for Canada is not as dramatic, but still considerable compared to the United States or Italy or Australia.

There are also differences in the disposable income poverty rates among the countries with the highest market rates (above 20 percent). French children in two-parent families improve their situation a great deal through transfers, and children in the United Kingdom and Ireland improve more than those in Israel.

**Solo-Parent Units.** Next, Figure 6 shows that the antipoverty effect of transfers for children in solo mother families is quite different from that of two-parent families. The pre-government poverty rates in all countries are very high. Only four have rates below 50 percent and two have rates close to 80 percent. Market income poverty rates for children in one-parent families are as follows: between 33 percent and 45 percent: Switzerland, Italy, Finland, Germany; between 55 percent and 62 percent: Luxembourg, Belgium, France, Denmark, Sweden, Norway, Germany, Israel; between 68 percent and 73 percent: Canada, United States, Australia; Ireland; and between 70 percent and 80 percent: Netherlands, United Kingdom.

The antipoverty effect of transfers varies more widely across the countries in this case than for children in two-parent units. While only three countries had reductions in two-parent poverty of 75 percent or more, we find that much reduction for solo mothers' children in six countries.

However, there are also more countries with rates of poverty reduction around 25 percent or less for mother-only than for two-parent families.

The result of this diversity in the proportion of children moved out of poverty by transfers is a very wide range in post-government income poverty rates. The five countries with post-government rates under 10 percent ranged across a fairly narrow range of market income rates—see Finland, Denmark, Belgium, Luxembourg and Sweden. We find greater diversity in market rates for the six countries with disposable income rates ranging from 14 percent (Italy) to 27 percent (Israel). Switzerland and Italy are among the nations with the lowest market based rates, Norway, France, and Israel are in the middle, and the United Kingdom has a high pre-government income based poverty rate for children in solo mother families. Disposable income poverty for children in mother-only families tends to be highest in those countries where the antipoverty reduction is only around 25 percent. The correlation between market income based poverty and disposable income based poverty among children in solo mother families is only 0.40, much less than the 0.73 rate for children living with two parents.

**All Children.** The picture for all children combines the two groups, along with children living in other circumstances (e.g., multi-family households and single-parent units headed by a man). We immediately see that the range of pre-government poverty rates is much less for all children than for the two separate groups. Other than Switzerland and Germany, all nations have pre-government child poverty rates that range from 12 percent to 30 percent, indicating that broadly similar child poverty problems face most advanced national governments. What differs is national governments' abilities to address these problems. The rate of poverty reduction is only about 25 percent in the United States, Australia, Italy, Germany, and Switzerland. It is 75 percent or greater in France, Belgium, Denmark, Sweden, and Finland. Some nations with high child poverty rates based on

market income are able to use taxes and transfers quite effectively to reduce child poverty. These include France, Ireland, and the United Kingdom. Australia, Canada, and Israel have middle-range child poverty rates in terms of market income and reasonable rates of decline from tax and transfer programs. All other nations begin with market income based poverty rates below 20 percent and use tax-transfer policy to reduce those rates to 10 percent or lower.

### **Overall Spending Patterns**

These findings correlate well with overall cash social expenditures on the nonaged as a percent of GDP in 1985 (or 1990/91) as shown in Figure 8. Low transfer societies (Australia, Italy, United States) produce lesser reductions in child poverty in any given year than do high transfer societies (Scandinavia, Northern Europe). Nations that have managed to produce a downward trend in child poverty are either those that spend a lot (e.g., Sweden) or those whose spending has increased through the 1980s (e.g., Canada).<sup>9</sup>

### **Transfer Income Packages**

Insight into how poor families escape poverty will come from examining most particularly the income packages of families who are at highest risk of poverty. Because we define the poverty line as 50 percent of the equivalent median, by definition, half of families have equivalent incomes above twice the poverty line. We consider those individuals with disposable incomes below the median to be at risk of poverty. The income-packaging institutions of each country determine the share of this half of the population who in fact end up with incomes below the poverty line. Based on figures not shown here, transfers to two-parent families amount to more than 25 percent of median income (50 percent of the poverty line) in Sweden and Ireland, and to more than 20 percent in the United

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<sup>9</sup>Because they are not OECD countries, Switzerland and Israel are not shown in Figure 8. OECD information on Ireland and Austria was not available.

Kingdom, Belgium, Finland, and France.<sup>10</sup> At the other extreme, transfers amount to around 10 percent or less in Australia, Luxembourg, Norway, the US, Italy, and Switzerland. As Germany, Norway and Switzerland demonstrate, full employment at adequate wages can produce low child poverty rates due to market incomes thus lessening the percentage of incomes made up by transfers. However, in societies with higher nonemployment and low wages, tax and transfer benefits are needed to reduce child poverty to acceptable levels for two-parent families with children.

As one should expect, average transfers to solo-mother families at risk of poverty comprise a greater share of their disposable income than is the case for two-parent families. In four countries they amount to 40 percent or more of median equivalent income (or 80 percent of the poverty line)—the Netherlands, the United Kingdom, Sweden, and Luxembourg—and are almost that high in Ireland and Belgium. At the low end we find Switzerland, the United States, Italy, Finland, Germany, and Canada with less than 25 percent of disposable incomes for at risk solo parent families coming from transfers.

## **Summary**

The estimates of market and disposable income poverty presented at the end of this section add factual evidence and explanation to the pattern of poverty rates found in the initial tables (2 and 3) in this section of the paper. Despite the wide variation in level and trend of child poverty across the 18 nations studied here, Almost all national governments face substantial numbers of children who would be poor without government tax and transfer policy intervention. Some mix market income and transfers more effectively than do others. And children living with single parents always do less well than children living with both parents. Most societies provide a mix of tax and transfer benefits that, when coupled with market earnings, reduce child poverty to very low levels.

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<sup>10</sup>These figures can be obtained from the authors.

But not all nations do so well. In particular, the overall high rate of both pre- and post-government poverty in the United States is troubling.

## **V. Summary of Results, Policy Implications and Conclusions**

The results of this paper are striking. United States low-income children have a lower real standard of living than do their counterparts in almost every other nation studied. This real income deficit is mirrored in our high relative poverty rates, and in our low and falling social expenditure levels (Figure 8). Because our measure of poverty is much closer to that recently recommended by the National Academy of Sciences than to the “official” United States poverty measures used by the federal government (e.g., U.S. Bureau of Census, 1995) we were able to chart the impacts of two of the most effective anti-poverty devices for children in the United States, food stamps and the EITC. Between 1986 and 1991, we observed a modest decline in relative child poverty in the United States from 22.9 percent to 21.5 percent, because of increases in spending for food stamps and the EITC over this period, and also because of the higher zero bracket amount and personal tax exemptions which emerged from the Tax Reform Act of 1986.<sup>11</sup> These findings emerged despite the overall decline in United States spending for social programs for the nonaged noted in Table 8, and widening overall income inequality in the United States over this same period.

In contrast to our low-income children, our high-income children are better off than their counterparts in every nation studied. The wide variance in child well-being found in the United States mirrors the high level of overall income inequality in our nation. This pattern is not found in other nations. While their inequality is less than in the United States, children living in families at the

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<sup>11</sup>In contrast, the official United States government figures, which do not count these programs, indicate child poverty rates of 20.5 percent in 1986 and 21.8 percent in 1991 (U.S. Bureau of the Census, 1995, Table D-5, page D-17).

bottom of the distribution enjoy living standards which are significantly above those found for similar children in the United States, even in nations where overall income inequality has increased during the 1980s.

### **Policy Implications**

Common children's issues face all of the nations studied. The social, economic, and demographic forces which are propelling high United States child poverty are affecting the parents of children in each nation studied here to a greater or lesser extent. Divorce, out-of-wedlock births, and single-parent families are growing in every nation studied. Similarly, the labor force participation of women—both spouses and single parents—are rising rapidly in every nation studied here (Smeeding, Rainwater and Danziger, 1995). These forces may have important negative effects on children which can produce high market income based poverty rates and which need to be addressed by social policy.

What is uncommon about the United States is its relatively poor response to the problems which these social forces have produced. While social policy in Europe, Scandinavia, and even Canada, has worked hard to keep child poverty low, or to reduce it further (e.g., Blank and Hanratty, 1992; Commission of the European Community, 1993, 1994), the United States is sounding a social policy retreat. While there is widespread agreement that all parents with school-age children should work in the marketplace, and that welfare should be reformed, there is little or no agreement how to help parents find a good job and even less agreement on how to help them keep a job once they have found it. Unlike the other nations shown here, there is much less in the way of public support for both working and nonworking parents in the United States than is found in other nations. Two examples help illustrate this dilemma, child allowances and guaranteed child support for single parents.

Every nation studied here has some form of child or family allowance save the United States. While the U.S. House of Representatives has passed an additional \$500 per child tax credit for “middle income” children, this will provide zero help to the one-third of United States children who live in families with little or no federal income tax liability. For about the same cost as the added \$500 per child credit, Congress could eliminate the federal personal income tax deduction for children and substitute a refundable \$750 per child tax credit for **all** children, regardless of their parents’ income level. Such a change could greatly benefit low income children.

Both divorce and single parenthood are high in the United States, and have been rising at an even more rapid pace in Europe than in the United States. While 23 percent of all United States families with children were headed by a single parent in 1990, as compared to 9 percent in 1960, these rates have grown from about the same 9 percent base in 1960 to 15 percent in Canada and the Netherlands, 13 percent in France and Sweden, and 14 percent in Germany, all by 1990 (McClanahan and Sandefur, 1994, Table 14). Many of these nations also face the same problem that the United States faces with respect to lack of payment of child support by the absent father. The European reaction has been to institute a minimum guaranteed level of child support to single mothers (and fathers) in cases where the absent parent cannot or will not pay child support. This guaranteed income allows a single parent to be able to go out and find a job, keep a job, pay for some portion of subsidized child care and otherwise substitute for the lack of a partner who can share work and child rearing responsibilities. Such programs as these are sometimes restricted to mothers who have legitimate child support orders but are not being paid, and are not terribly generous, e.g., guaranteeing annual support on the level of \$1500 per child. But they do provide a reasonable minimum level of support for the children involved once combined with work and related programs (e.g., child allowances, food stamps, and the EITC). The cost of such a program in the United States

has been estimated to be \$10 to 15 billion, and much less if the program helps single mothers to go to work and to become independent of the welfare system (Kim, Garfinkel and Meyers, 1994). If we want low-income mothers to go to work, we must find ways to reward work and, for single mothers, ways to provide the support that the absent parent cannot, or will not, provide.

These two programs—child allowances and guaranteed child support—are only two examples of how the United States can learn from other nations. But there is no one single magic bullet by which every country handles the problem of child poverty. Moreover, other nations can learn from the United States as well. The EITC is a uniquely American invention which helps make work pay by targeting assistance to low wage families. Other nations such as the United Kingdom and Australia are enacting their own forms of the EITC. And food stamps are another uniquely American program which is effective and worthy of consideration by other nations. The point we are making is a simple one: every nation fights child poverty in its own way, America included. The difference is that every other nation has produced better results in fighting child poverty than has the United States.

## **Conclusion**

All nations begin with the issue of preventing severe poverty and disadvantage for at-risk children. The major difference we note is that other nations are able to produce lower levels of child poverty than in the United States. It follows that child poverty is neither intractable nor intransigent. The United States had an elder poverty problem in 1970 which it markedly reduced through increased social security spending and greater efforts on the part of the aged to save and invest. It now has a child poverty problem which produces an intolerably low real standard of living for a large number of American children. Our high-income children do very well in real terms compared to similar children in other nations. No one wants to take away these advantages for which the parents

of these children work long and hard. What is needed is a reasonable response to the real needs of low-income American children. And as other nations have shown, there is an answer that we can find if we have the national will to face up to the sobering facts presented in this paper.

## References

- Bradbury, B.. 1989. "Family Size Equivalence and Survey Evaluations of Income and Well-Being," *Journal of Social Policy*, v. 11, 3: 383-408.
- Buhmann, B., L. Rainwater, G. Schmaus, and T. Smeeding. 1988. "Equivalence Scales, Well-Being, Inequality and Poverty," *Review of Income and Wealth*, June: 115-142.
- Citro, C. and R.T. Michael (eds.) 1995. *Measuring Poverty: A New Approach*. Washington, DC: National Academy Press.
- Coleman, J. 1988. "Social Capital in the Creation of Human Capital," *American Journal of Sociology*, 94: S95-S120.
- Coleman, J. And L. Rainwater. 1978. *Social Standing in America*. New York: Basic Books.
- Commission of the European Communities. 1994. "The Demographic Situation of the European Union," Report COM(94) 595 final. Brussels, Belgium, December.
- \_\_\_\_\_. 1993. *Social Protection in Europe, 1993*. Directorate General for Employment, Industrial Relations and Social Affairs, Brussels, Belgium
- Förster, M. 1993. "Comparing Poverty in 13 OECD Countries: Traditional and Synthetic Approaches," *Studies in Social Policy #10*, Paris: OECD, October.
- Gottschalk, P. and T. Smeeding. 1995. "Cross-National Comparisons of Levels and Trends in Inequality," LIS Working Paper #127, May 1995.
- Hagenaars, A. K. DeVos and A. Zaidi. 1994. "Patterns of Poverty in Europe." Paper presented to the 23rd General Conference of the IARIW, St. Andrews, Canada, August.
- Hanratty, M. and R. Blank. 1993. "Down and Out in North America: Recent Trends in Poverty Rates in the U.S. and Canada," *Quarterly Journal of Economics*, 10(February): 233-257.
- LIS User Guide. 1995. "User's Guide to The Luxembourg Income Study," LIS Working Paper No. 7, July.
- McLanahan, S. and G. Sandefur. 1994. *Growing Up with a Single Parent*. Cambridge: Howard University Press).
- Organisation for Economic Co-operation and Development (OECD). 1994. "New Orientations for Social Policy," Social Policy Studies No. 12, Paris: OECD.
- Rainwater, L. 1974. *What Money Buys*. New York: Basic Books.

- Rainwater, L. 1990. "Poverty and Equivalence as Social Constructions," LIS Working Paper No. 91.
- Rainwater, L. and T. Smeeding. 1994. "Le Bien-Être Économique des Enfants: Une Perspective Comparatif," *Population*. Vol. 6: 1438-1450.
- Sen, A. 1992. *Inequality Reexamined*. Cambridge: Harvard University Press.
- Smeeding, T. 1992. "U.S. Poverty and Income Security in a Cross-National Perspective: The War on Poverty: What Worked?" *Challenge*, January/February: 16-23.
- Smeeding, T., editor. 1995. . *Poor Children in Rich Countries*. Syracuse, NY: Syracuse University and Russell Sage Foundation, mimeo.
- Smeeding and Torrey. 1988. "Poor Children in Rich Countries," *Science*. Vol. 242: 873-877.
- Smeeding, T., L. Rainwater, and M. O'Higgins, editors. 1990. *Poverty, Inequality and Income Distribution in Comparative Perspective: The Luxembourg Income Study*. London: Harvester Wheatsheaf, and Washington, DC: Urban Institute Press..
- Smeeding, T. et al. 1993. "Noncash Income, Living Standards and Inequality: Evidence from the Luxembourg Income Study," *Review of Income and Wealth*, September: 229-256.
- Smeeding, T., S. Danziger, and L. Rainwater. 1995. "The Western Welfare State in the 1990s: Toward a New Model of Anti-Poverty Policy for Families and Children." LIS Working Paper #126. Luxembourg Income Study, Luxembourg.
- Summers, R. and A. Heston. 1991. "The Renn World Table (Mark 5): An Expanded Set of International Comparisons, 1950-1989," *Quarterly Journal of Economics*, May: 327-368.
- Townsend, P. 1979. *Poverty in the United Kingdom*. Harmondsworth: Penguin Books.
- U.S. Bureau of the Census. 1995. "Income Poverty and the Valuation of Noncash Benefits: 1993," *Current Population Reports*, Series P-60, No. 188. Washington, DC: U.S. Government Printing Office, February.
- Yim, R., I. Garfinkel, and D. Meyer. 1994. "Interaction Effects of a Child Tax Credit, National Health Insurance, and Assured Child Support." Institute for Research on Poverty Discussion Paper #1047-94. Madison: University of Wisconsin.

**TABLE 1. RATIO OF LOW, MIDDLE AND HIGH INCOME CHILDREN'S REAL INCOME TO UNITED STATES MEDIAN INCOME IN 1991**

| Country (Year)       | Ratio to United States Median |                       |                        | Ratio to Comparable United States Children |                       |                        |
|----------------------|-------------------------------|-----------------------|------------------------|--|-----------------------|------------------------|
|                      | Lowest 20 Percent (1)         | Middle 20 Percent (2) | Highest 20 Percent (3) | Lowest 20 Percent (4)                      | Middle 20 Percent (5) | Highest 20 Percent (6) |
| United States (91)   | 31.5                          | 88.2                  | 189.0                  | 100.0                                      | 100.0                 | 100.0                  |
| Australia (90)       | 33.2                          | 77.1                  | 143.8                  | 105.3                                      | 87.4                  | 76.1                   |
| Austria (87)         | 41.3                          | 70.7                  | 115.1                  | 131.0                                      | 80.2                  | 60.9                   |
| Belgium (92)         | 48.1                          | 81.0                  | 136.3                  | 152.5                                      | 91.8                  | 72.1                   |
| Canada (91)          | 39.4                          | 88.3                  | 162.0                  | 125.0                                      | 100.2                 | 85.7                   |
| Denmark (91)         | 49.8                          | 90.7                  | 133.6                  | 157.8                                      | 102.8                 | 70.7                   |
| Finland (91)         | 49.9                          | 78.8                  | 121.1                  | 158.2                                      | 89.4                  | 64.1                   |
| France (84)          | 37.5                          | 67.3                  | 129.3                  | 118.9                                      | 76.3                  | 68.4                   |
| Germany (89)         | 44.0                          | 79.2                  | 149.6                  | 139.6                                      | 89.8                  | 79.2                   |
| Ireland (87)         | 19.3                          | 37.9                  | 78.4                   | 61.1                                       | 43.0                  | 41.5                   |
| Israel (86)          | 22.7                          | 46.1                  | 96.3                   | 72.1                                       | 52.3                  | 51.0                   |
| Italy (91)           | 36.2                          | 66.3                  | 127.7                  | 114.9                                      | 75.2                  | 67.6                   |
| Luxembourg (85)      | 44.4                          | 73.8                  | 144.4                  | 140.6                                      | 83.7                  | 76.4                   |
| The Netherlands (91) | 41.9                          | 73.5                  | 122.9                  | 132.8                                      | 83.3                  | 65.0                   |
| Norway (91)          | 47.8                          | 79.2                  | 126.4                  | 151.7                                      | 89.9                  | 66.9                   |
| Sweden (92)          | 54.3                          | 86.5                  | 133.1                  | 172.0                                      | 98.1                  | 70.5                   |
| Switzerland (82)     | 54.3                          | 85.7                  | 171.6                  | 172.1                                      | 97.2                  | 90.8                   |
| Untied Kingdom (86)  | 33.4                          | 63.8                  | 126.7                  | 105.8                                      | 72.3                  | 67.0                   |

Note: Table to be read as follows:

*Columns 1-3:* Given that in Australia the median real income of all persons is 82.7 percent of the United States median in 1991 and that the Australian child median is 93.0 percent of the overall Australian median and that the 10th percentile point (the middle child in the lower 20 percent) for children's income is 43.2 percent of the median of all Australian children, the average low income Australian child has a real spendable equivalent income equal to  $.827 * .930 * .432$  of the United States overall median equivalent income—this amount is equal to 33.2 percent.

*Columns 4-6:* The ratio of low-income Australian children's equivalent income to that of low-income United States children is equal to  $33.2/31.5$ —this is 105.3 percent.

The Penn World tables used to make these conversions automatically adjust for national changes in consumer prices, thus making all comparisons in terms of United States dollars in the year of the survey in each nation.

Source: Luxembourg Income Study.

**TABLE 2. LEVEL AND TREND IN CHILD POVERTY RATES:<sup>a</sup> 1967-1992**

| Nation           | Year of Survey                 | Period 1<br>< 1971 | Period 2<br>1972-1975 | Period 3<br>1976-1981 | Period 4<br>1982-1985 | Period 5<br>1986-1988 | Period 6<br>1989+ |
|------------------|--------------------------------|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|
| A. United States | 69, 74, 79, 86, 91             | 13.1               | 17.3                  | 18.5                  |                       | 22.9                  | 21.5              |
| B. West Europe:  |                                |                    |                       |                       |                       |                       |                   |
| Austria          | 87                             |                    |                       |                       |                       | 4.8                   |                   |
| Belgium          | 85, 88, 92                     |                    |                       |                       | 3.4                   | 3.1                   | 3.8               |
| Finland          | 87, 91                         |                    |                       |                       |                       | 2.9                   | 2.5               |
| Denmark          | 87, 92                         |                    |                       |                       |                       | 5.3                   | 3.3               |
| France           | 79, 84                         |                    |                       | 6.3                   | 6.5                   |                       |                   |
| Germany (West)   | 73, 78, 83/84, 89 <sup>b</sup> |                    | 4.0                   | 3.2                   | 4.8/6.4               |                       | 6.8               |
| Ireland          | 87                             |                    |                       |                       |                       | 12.0                  |                   |
| Italy            | 86, 91                         |                    |                       |                       |                       | 10.8                  | 9.6               |
| Luxembourg       | 85                             |                    |                       |                       | 4.1                   |                       |                   |
| The Netherlands  | 83, 87/91 <sup>c</sup>         |                    |                       |                       | 2.5                   | 3.6                   | /6.2              |
| Norway           | 79, 86, 91                     |                    |                       | 3.8                   |                       | 3.8                   | 4.6               |
| Sweden           | 67, 75, 81, 87, 92             | 3.5                | 1.9                   | 3.9                   |                       | 3.0                   | 2.7               |
| Switzerland      | 82                             |                    |                       |                       | 3.3                   |                       |                   |
| United Kingdom   | 69, 74, 79, 86                 | 5.3                | 7.0                   | 8.5                   |                       | 9.9                   |                   |
| C. Other:        |                                |                    |                       |                       |                       |                       |                   |
| Australia        | 82, 86, 90                     |                    |                       | 14.0                  | 13.1                  |                       | 14.0              |
| Canada           | 71, 75, 81, 87, 91             | 15.2               | 14.6                  | 13.9                  |                       | 13.6                  | 13.5              |
| Israel           | 79, 86                         |                    |                       | 8.2                   |                       | 11.1                  |                   |

<sup>a</sup>Poverty is defined as percentage of children living in households with adjusted disposable income less than 50 percent of median adjusted disposable income for all persons. Income includes all transfers and tax benefits.

<sup>b</sup>The slash (/) for Germany indicates that the German Survey for 1973-1983 is different from that for 1984 and 1989, hence one cannot derive overall trend estimates from 1973 through 1989 from these figures.

<sup>c</sup>The slash (/) for The Netherlands indicates that the survey for 1983 and 1987 differs from the 1991 survey, hence one cannot derive trend estimates for 1983-1991 from these figures.

Source: Luxembourg Income Study.

**TABLE 3. POVERTY RATES FOR CHILDREN BY FAMILY TYPE<sup>a</sup>**

| <b>Country (Year)</b> | <b>All Children</b> | <b>Children in Two-Parent Family<sup>b</sup></b> | <b>Children in Single Parent/Solo Mother Family<sup>c</sup></b> | <b>Percent of Children in Solo Mother Families<sup>c,d</sup></b> |
|-----------------------|---------------------|--|---|--|
| United States (91)    | 21.5                | 11.1   | 59.5  | 21.2   |
| Australia (90)        | 14.0                | 7.7  | 56.2  | 12.4   |
| Belgium (92)          | 3.8                 | 3.2  | 10.0  | 8.1  |
| Canada (91)           | 13.5                | 7.4  | 50.2  | 13.4   |
| Denmark (91)          | 3.3                 | 2.5  | 7.3   | 14.3   |
| Finland (91)          | 2.5                 | 1.9  | 7.5   | 9.5  |
| France (84)           | 6.5                 | 5.4  | 22.6  | 6.5  |
| Germany (89)          | 6.8                 | 2.9  | 42.7  | 9.9  |
| Ireland (87)          | 12.0                | 10.5   | 40.5  | 5.3  |
| Israel (86)           | 11.1                | 10.3   | 27.5  | 5.1  |
| Italy (91)            | 9.6                 | 9.5  | 13.9  | 4.4  |
| Luxembourg (85)       | 4.1                 | 3.6  | 10.0  | 6.8  |
| The Netherlands (91)  | 6.2                 | 3.1  | 39.5  | 8.4  |
| Norway (91)           | 4.6                 | 1.9  | 18.4  | 15.4   |
| Sweden (92)           | 2.7                 | 2.2  | 5.2   | 14.6   |
| Switzerland (82)      | 3.3                 | 1.0  | 25.6  | 6.9  |
| United Kingdom (86)   | 9.9                 | 8.4  | 18.7  | 13.0   |

<sup>a</sup>Poverty is defined as in Table 2.

<sup>b</sup>Child poverty rates in two-parent families are for those children living in situations where there are only two adults who are married, or are living together as married.

<sup>c</sup>Single parent/solo mother families are children living in those situations where one female adult resides in the household. Other adults (e.g., older children) may also occupy the residence.

<sup>d</sup>Because some children live in other types of situations, e.g., in multiple family unit households or in lone father units, the weighted averages of children in solo mother and two-parent households do not add to the “all children” total.

Source: Luxembourg Income Study database.

**APPENDIX TABLE A-2**

**CHILD POVERTY RATES BEFORE AND AFTER GOVERNMENT PROGRAMS<sup>a</sup>**

| Nation | Pre-Government Child Poverty Rates <sup>b</sup> |                       |              | Post-Government Child Poverty Rates |                       |              |
|--------|---|-----------------------|--------------|-------------------------------------|-----------------------|--------------|
|        | All Children                                    | Two-Parent Households | Solo Mothers | All Children                        | Two-Parent Households | Solo Mothers |
| AS89   | 19.6  | 11.5                  | 73.2         | 14.0                                | 7.7                   | 56.2         |
| BE92   | 16.2  | 13.1                  | 50.7         | 3.8                                 | 3.2                   | 10.0         |
| CN91   | 22.5  | 14.9                  | 68.2         | 13.5                                | 7.4                   | 50.2         |
| DK92   | 16.0  | 10.6                  | 45.0         | 3.3                                 | 2.5                   | 7.3          |
| FI91   | 11.5  | 8.6                   | 36.3         | 2.5                                 | 1.9                   | 7.5          |
| FR84   | 25.4  | 22.8                  | 56.4         | 6.5                                 | 5.4                   | 22.6         |
| GE89   | 9.0   | 5.2                   | 43.9         | 6.8                                 | 2.3                   | 4.2          |
| IR87   | 30.2  | 28.0                  | 72.6         | 12.0                                | 10.5                  | 40.5         |
| IS86   | 23.9  | 21.6                  | 61.3         | 11.1                                | 10.3                  | 27.5         |
| IT91   | 11.5  | 10.6                  | 31.7         | 9.6                                 | 9.5                   | 13.9         |
| LX85   | 11.7  | 8.4                   | 55.7         | 4.1                                 | 3.6                   | 10.0         |
| NL91   | 13.7  | 7.7                   | 79.7         | 6.2                                 | 3.1                   | 39.5         |
| NW91   | 12.9  | 4.4                   | 57.4         | 4.6                                 | 1.9                   | 18.4         |
| SW92   | 19.1  | 12.5                  | 54.9         | 2.7                                 | 2.2                   | 5.2          |
| SZ82   | 5.1   | 1.9                   | 33.7         | 3.3                                 | 1.0                   | 25.6         |
| UK86   | 29.6  | 22.1                  | 76.2         | 9.9                                 | 8.4                   | 18.7         |
| US91   | 25.9  | 13.9                  | 69.9         | 21.5                                | 11.1                  | 59.5         |

<sup>a</sup>Figures 5, 6, and 7 are based on these estimates.

<sup>b</sup>Government programs include income and payroll taxes and all types of government cash and nearcash transfers.

Source: Luxembourg Income Study estimates.

**APPENDIX TABLE A-1. LIS DATABASE LIST, COUNTRY AND YEAR\***  
(bold entries are included in this paper)

| Country              | Historical Databases |             | Wave I      | Wave II     | Wave III <sup>a</sup> |
|----------------------|----------------------|-------------|-------------|-------------|-----------------------|
| Australia            |                      |             | <b>1982</b> | <b>1986</b> | <b>1990</b>           |
| Austria              |                      |             |             | <b>1987</b> | 1991                  |
| Belgium              |                      |             |             | <b>1985</b> | <b>1988/1992</b>      |
| Bulgaria             |                      |             |             |             | 1991*/1993*           |
| Canada               | <b>1971</b>          | <b>1975</b> | <b>1981</b> | <b>1987</b> | <b>1991</b>           |
| Czech Republic       |                      |             |             | 1988        | 1992                  |
| Denmark              |                      |             |             | <b>1987</b> | <b>1992</b>           |
| Finland              |                      |             | 1981*       | <b>1987</b> | <b>1991</b>           |
| France <sup>b</sup>  |                      |             | <b>1979</b> | <b>1984</b> | 1989*/1990*           |
| Germany <sup>c</sup> | <b>1973</b>          | <b>1978</b> | 1981/83     | <b>1984</b> | <b>1989/1992*</b>     |
| Hungary              |                      |             |             | 1987*       | 1991                  |
| Ireland              |                      |             |             | <b>1987</b> |                       |
| Israel               |                      |             | <b>1979</b> | <b>1987</b> | 1992*                 |
| Italy                |                      |             | 1981*       | <b>1986</b> | <b>1991</b>           |
| Luxembourg           |                      |             |             | <b>1985</b> | 1991*                 |
| The Netherlands      |                      |             | 1981*/1983  | <b>1987</b> | <b>1991</b>           |
| Norway               |                      |             | <b>1979</b> | <b>1986</b> | <b>1991</b>           |
| Poland               |                      |             |             | 1986        | 1992                  |
| R.O.C.-Taiwan        |                      |             | 1981        | 1986        | 1991                  |
| Russia               |                      |             |             |             | 1992                  |
| Slovak Republic      |                      |             |             |             | 1992                  |
| Spain                |                      |             | 1980-81*    |             | 1990-91*              |
| Sweden               | <b>1968</b>          | <b>1975</b> | <b>1981</b> | <b>1987</b> | <b>1992</b>           |
| Switzerland          |                      |             | <b>1982</b> |             | 1992*                 |
| United Kingdom       | <b>1969</b>          | <b>1974</b> | <b>1979</b> | <b>1986</b> | 1991*/1993*           |
| United States        | <b>1971</b>          | <b>1975</b> | <b>1979</b> | <b>1986</b> | <b>1991</b>           |

<sup>a</sup>We are also in negotiation with Korea (1993), Mexico (1990), Portugal (1980, 1989), and South Africa (1993). Japan and New Zealand are unable or unwilling to join at this time.

<sup>b</sup>France has an income survey (1979, 1984, 1990\*) and a budget survey (1989\*).

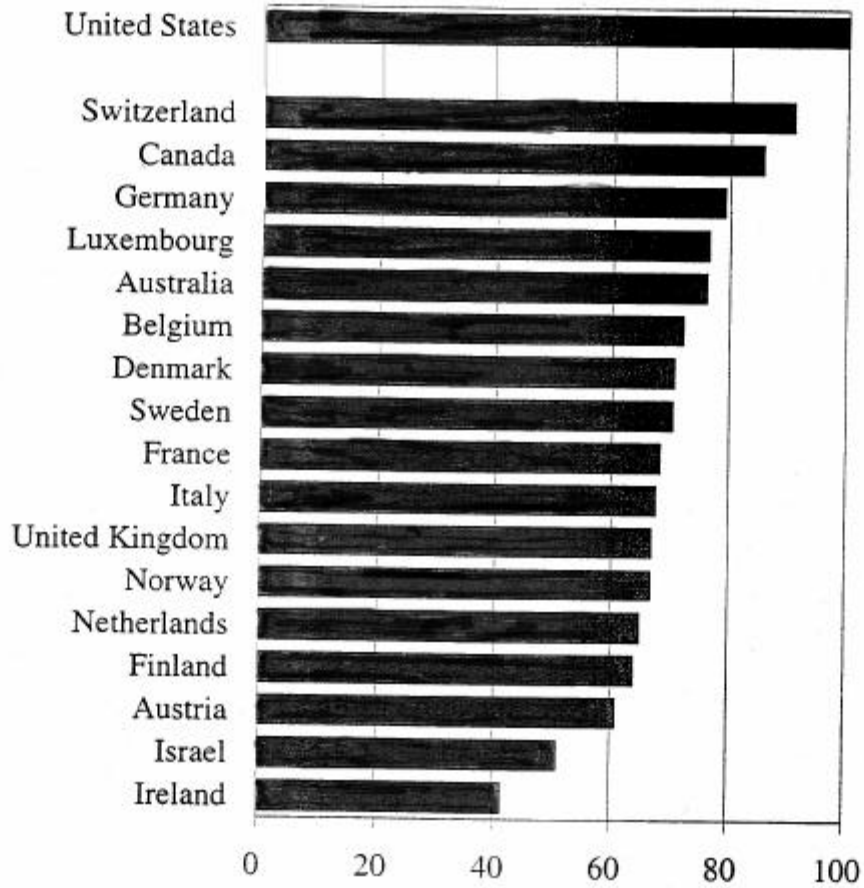
<sup>c</sup>Germany has three different databases: an income and expenditure survey (1973, 1978, 1983); a transfer income survey (1981); and three cross-sections from the socio-economic panel (1984, 1989\*, 1991\*).

\*Will be available in 1995; year given is reference year, not necessarily the year that the data were collected.

Source: Luxembourg Income Study.

FIGURE 1

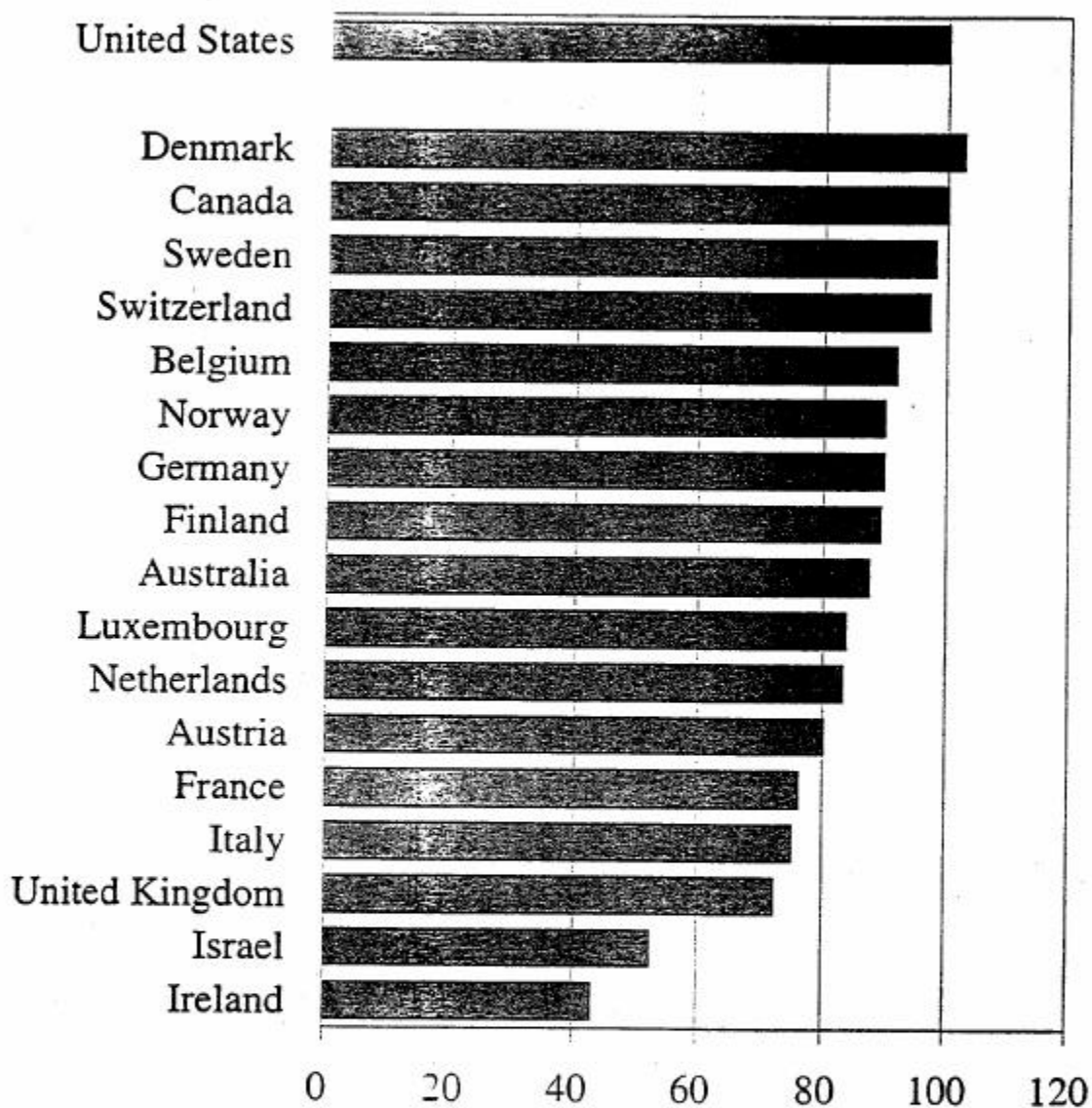
COMPARISONS OF REAL INCOME: CHILDREN IN THE  
HIGH INCOME HOUSEHOLDS



Notes: Based on Table 1, Column 6. See Note to Table 1 for explanation.  
Source: Luxembourg Income Study.

FIGURE 2

COMPARISONS OF REAL INCOME: CHILDREN IN THE MIDDLE-INCOME HOUSEHOLDS

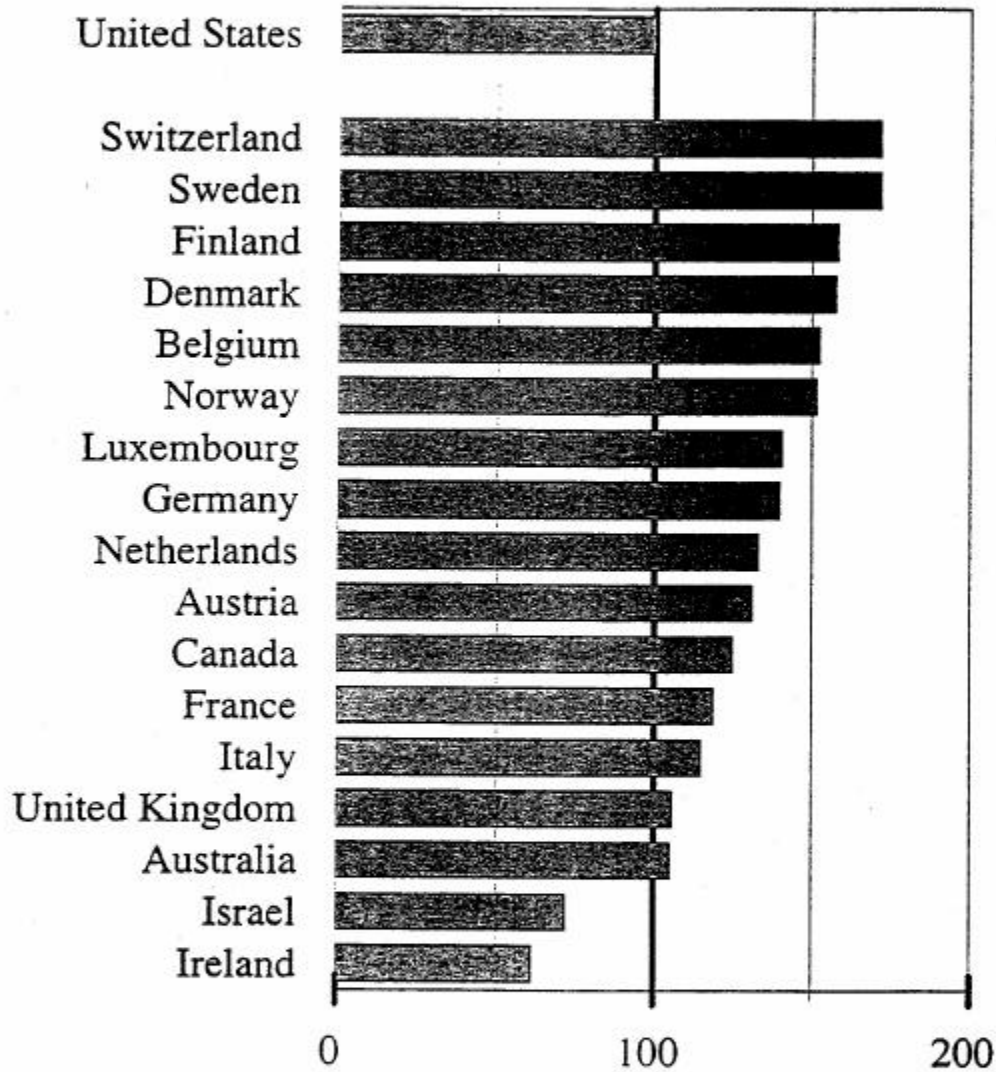


Middle Income U. S. Child = 100

Notes: Based on Table 1, Column 5. See note to Table 1 for explanation.  
Source: Luxembourg Income Study.

FIGURE 3

COMPARISONS OF REAL INCOME: CHILDREN IN THE POOREST HOUSEHOLDS

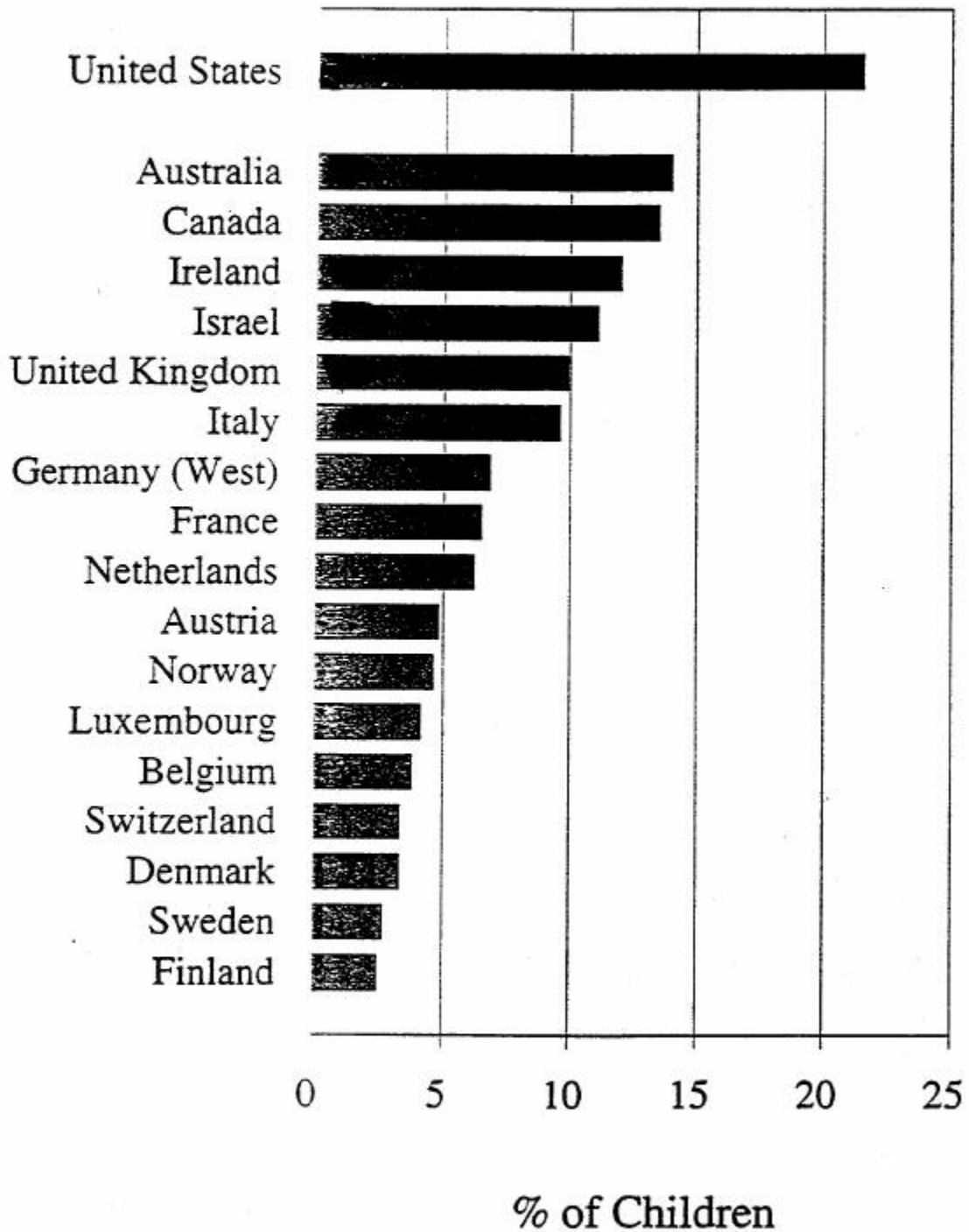


Poor U. S. Child = 100

Notes: Based on Table 1, Column 4. See note to Table 1 for explanation.  
Source: Luxembourg Income Study.

FIGURE 4

CHILD POVERTY RATES IN 18 COUNTRIES<sup>a,b</sup>

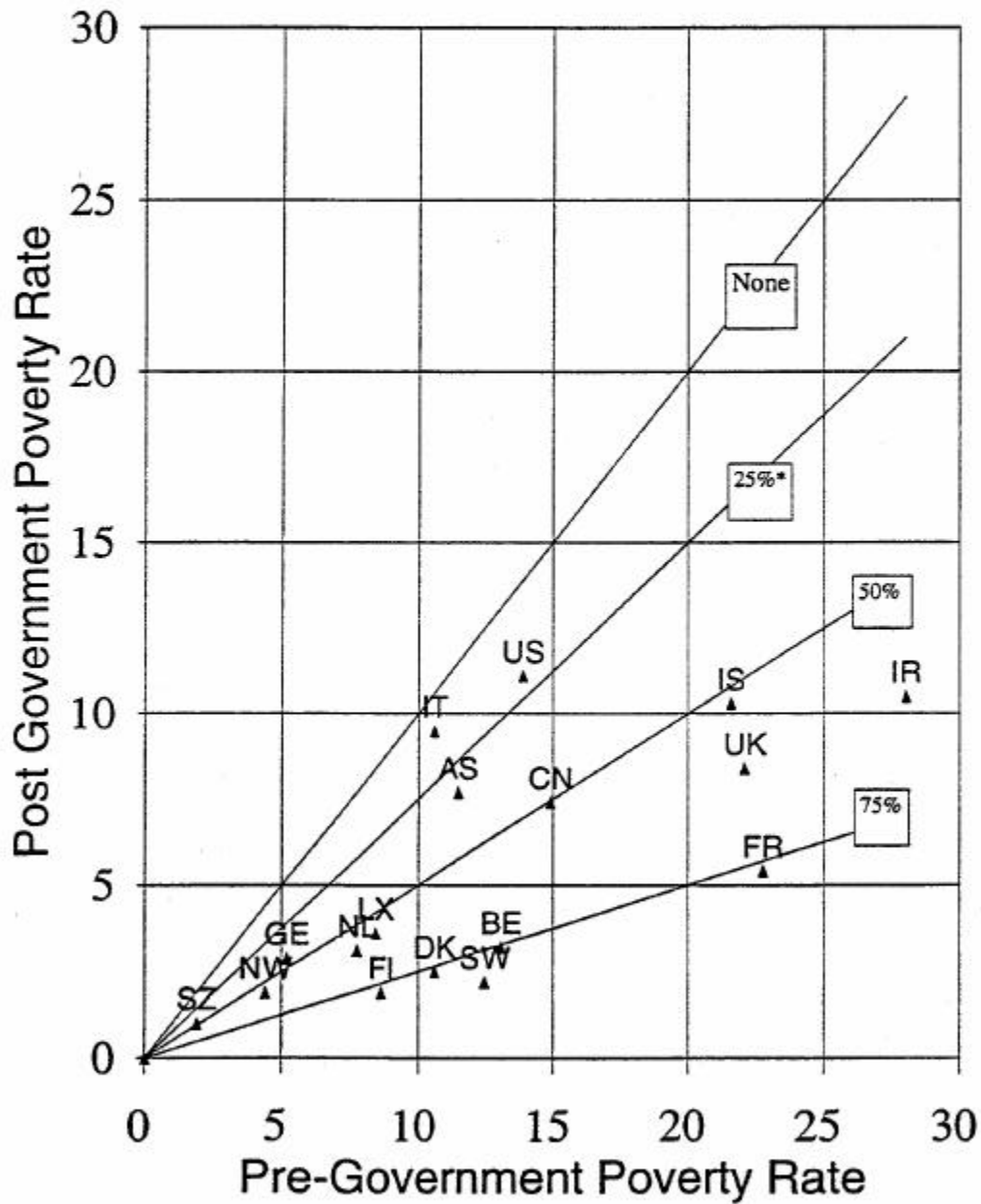


<sup>a</sup>Poverty is defined as percent of children living in families with adjusted disposable incomes less than 50 percent of adjusted median income for all persons. Income includes all transfers and tax benefits.

<sup>b</sup>Year for each estimate is most recent year in Table 1.

FIGURE 5

PRE- AND POST-GOVERNMENT POVERTY RATES:  
CHILDREN IN TWO-PARENT FAMILIES



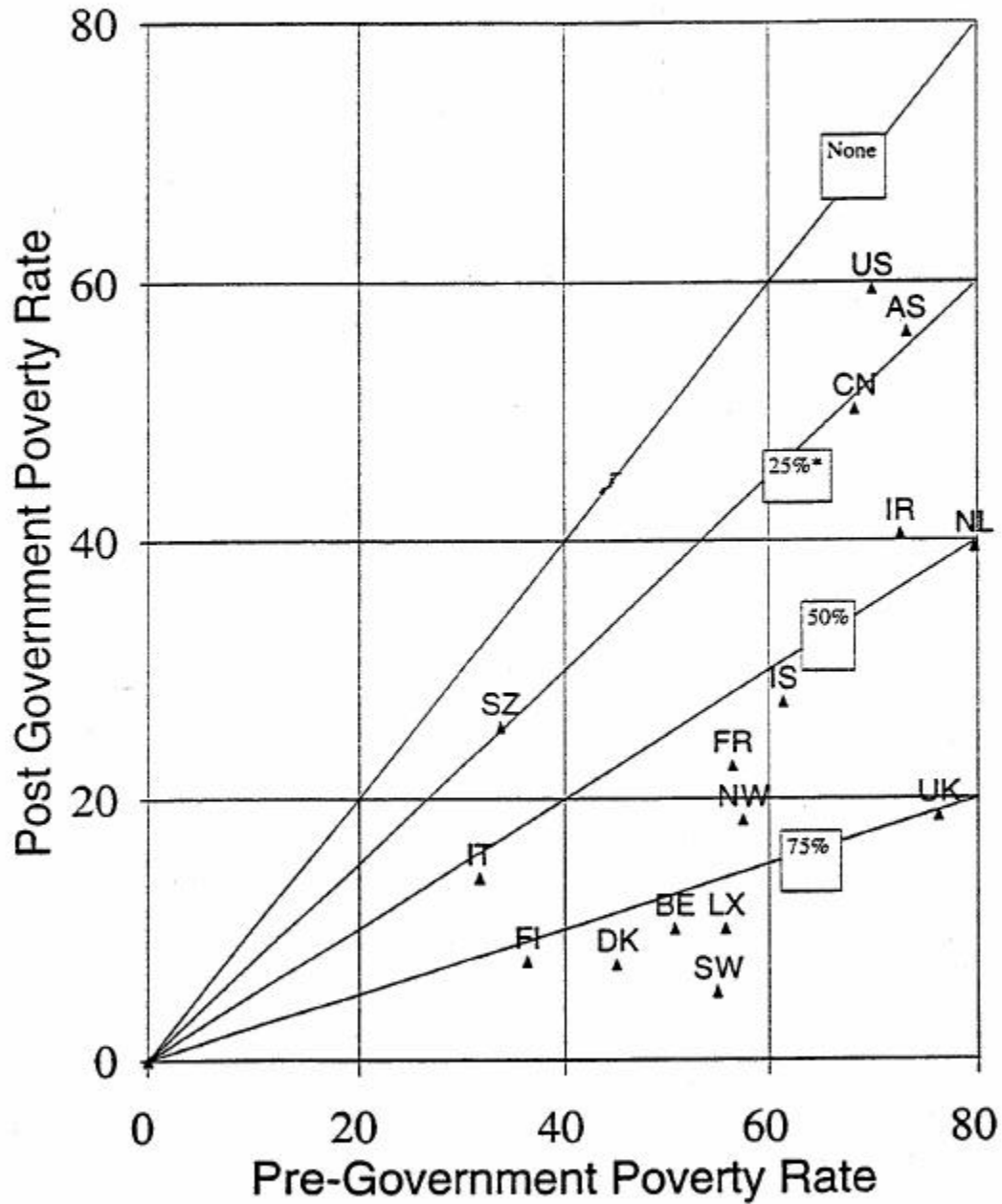
Notes: See Appendix Table A-2 for numerical coordinates of each country point.

\* = percentage reduction from pre-government poverty to post-government poverty.

Source: Luxembourg Income Study.

FIGURE 6

PRE- AND POST-GOVERNMENT POVERTY RATES:  
CHILDREN IN SOLO MOTHER FAMILIES



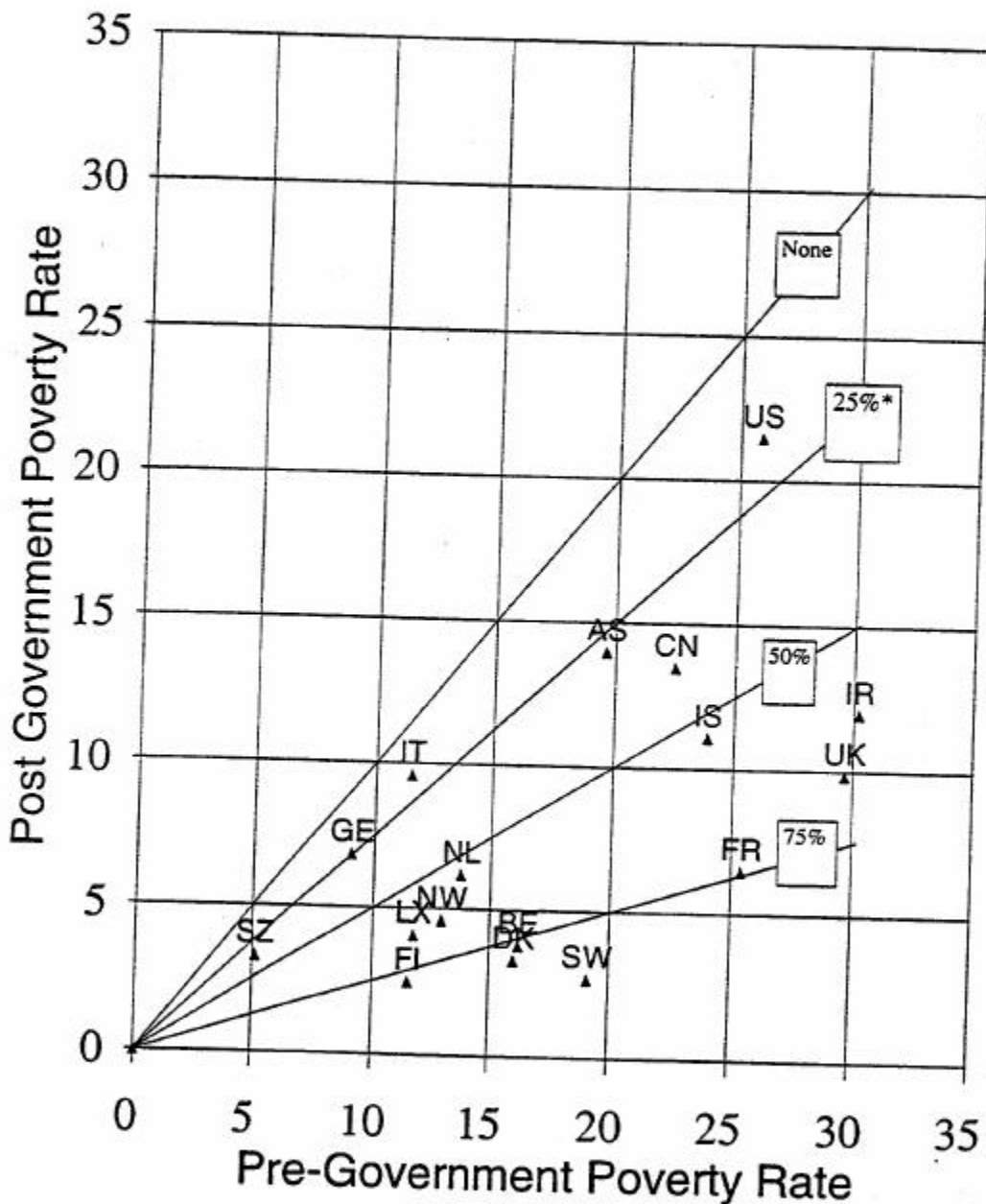
Notes: See Appendix Table A-2 for numerical coordinates of each country point.

\* = percentage reduction from pre-government poverty to post-government poverty.

Source: Luxembourg Income Study.

FIGURE 7

PRE- AND POST-GOVERNMENT POVERTY RATES:  
ALL CHILDREN



Notes: See Appendix Table A-2 for numerical coordinates of each country point.

\* = percentage reduction from pre-government poverty to post-government poverty.

Source: Luxembourg Income Study.

FIGURE 8

SOCIAL PROTECTION AMONG THE NONAGED AS PERCENT OF GDP IN 1980, 1985, AND 1990/91



Note: These include cash benefits for disability and disability services, employment promotion benefits, unemployment compensation, family allowances, welfare benefits, and other miscellaneous items. Excludes all cash benefits to the aged and survivors, health benefits, and education benefits.

Source: OECD (1994), Tables 1b and 1c.