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Timothy Smeeding

*Syracuse University, Center for Policy Research ; Luxembourg Income Study*

Lee Rainwater

*Harvard University ; Luxembourg Income Study*

Gary Burtles

*The Brookings Institute*

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United States Poverty in a Cross-National Context\*

Timothy Smeeding

Center for Policy Research, and

Luxembourg Income Study

Syracuse University

Lee Rainwater

Luxembourg Income Study

Harvard University

Gary Burtless

The Brookings Institution

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## Introduction

The United States has a long tradition of measuring income poverty and weighing the effectiveness of government policies aimed at poverty reduction. While this analysis has been of value to policymakers, it rests on a foundation that is inherently parochial, for it is based on the experiences of only one nation. The estimation of cross-nationally equivalent measures of poverty provides an opportunity to compare United States poverty rates and the effectiveness of American antipoverty policy with the experiences of other nations. The Luxembourg Income Study (LIS) database contains the information needed to construct comparable poverty measures for about two dozen countries. It provides data that allow a comparison of the level and trend of poverty across several nations. In this paper we use cross-national comparisons made possible by the LIS to examine America's experience in maintaining a low poverty rate. We compare the effectiveness of United States antipoverty policies to that of similar policies elsewhere in the industrialized world.

If lessons can be learned from cross-national comparisons, there is much that can be learned about antipoverty policy by American voters and policymakers. The United States has one of the highest poverty rates of all the countries participating in the LIS, whether poverty is measured using comparable absolute or relative standards for determining who is poor. Although the high rate of relative poverty in the United States is no surprise, given the country's well-known tolerance of wide economic disparities, the lofty rate of absolute poverty is much more troubling. After Luxembourg, the United States has the highest average income in the industrialized world. Our analysis of absolute poverty rates provides poverty estimates for 11

industrialized countries. The United States ranks second highest among the 11 in per capita income, yet it ranks third highest in the percentage of its population with absolute incomes below the American poverty line. The per capita income of the United States is more than 30 percent higher than it is, on average, in the other ten countries of our survey. Yet the absolute poverty rate in the United States is 13.6 percent, while the average rate in the other ten countries is just 8.1 percent—5.5 percentage points lower than the United States rate. Our paper suggests some reasons for this pattern.

The paper is organized as follows. We begin by reviewing international concepts and measures of poverty as they relate to the main measures of income and poverty used in other chapters of this book. Next we present cross-national estimates of both absolute and relative poverty, concentrating on the latter measures. After examining the level and trend in these rates, we explore some of the factors that are correlated with national poverty rates and examine the antipoverty effectiveness of government programs aimed at reducing poverty. We conclude with a discussion of the relationship between policy differences and outcome differences among the several countries, and consider the implications of our analysis for antipoverty policy in the United States.

### Cross-National Comparisons of Poverty: Measurement and Data

Differing national experiences in designing and implementing antipoverty programs provide a rich source of information for evaluating the effectiveness of alternative policies. Policymakers in most of the industrialized countries share common concerns about social problems such as population aging, widening wage disparities, family dissolution, and poverty. The availability of information from a number of countries makes it possible for us to compare

the experience of one country to the experiences of others. This comparison can shed light on our own situation and help us understand the successes and failures of United States policy.

While poverty measurement is an exercise that is particularly popular in the English-speaking countries, most rich nations share the Anglo-Saxon concern over distributional outcomes and the well-being of the low-income population. Few West European nations routinely calculate low income or poverty rates, however. Most recognize that their social programs would ensure a low poverty rate under any reasonable set of measurement standards (Björklund and Freeman 1997).<sup>1</sup> While there is no international consensus on guidelines for measuring poverty, international bodies such as the United Nations Children's Fund (UNICEF), the United Nations Human Development Report (UNHDR), the Organization of Economic Cooperation and Development (OECD), the European Statistical Office (Eurostat), and the Luxembourg Income Study (LIS) itself have published several cross-national studies of the incidence of poverty in recent years. The large majority of these are based on LIS data.<sup>2</sup>

### Measurement

There is considerable informal agreement on the appropriate measurement of poverty in a cross-national context. Most of the available studies share many similarities that help guide our research strategy here.

- For purposes of international comparisons, poverty is almost always a relative concept. A majority of cross-national studies define the poverty threshold as one-half of national median income. In this study, we use both 40 and 50 percent of median income to establish our national poverty lines. We select 40 percent of national median income as our relative poverty threshold because it is closest to the ratio of

the official United States poverty line to median United States household (pre-tax) cash income (42 to 43 percent in 1998 and 1994).<sup>3</sup>

- Only a handful of cross-national studies use an absolute poverty line, but to permit comparisons with other papers in this volume, we begin with one such definition. To estimate absolute poverty rates in different countries, researchers must convert national currencies into units of equal purchasing power or “purchasing power parity” (or PPP) exchange rates for the currencies (Summers and Heston 1991). Construction of an absolute poverty threshold that is consistent across countries is problematic, because national poverty rates are sensitive to the purchasing-power-parity exchange rate that is chosen. Moreover, PPP exchange rates were developed to permit accurate comparison of gross domestic product across countries rather than incomes or consumption of lower income households. This means that, even though PPP’ s are appropriate for comparing national output or output per capita, they are less appropriate for establishing consistent income cutoff points for measuring poverty.<sup>4</sup>
- Poverty measurement is based on the broadest income definition that still preserves comparability across nations. The best current definition is disposable cash and noncash income (that is, money income minus direct income and payroll taxes and including all cash and near cash transfers, such as food stamps and cash housing allowances, and refundable tax credits such as the earned income tax credit (EITC)).<sup>5,6</sup>
- For international comparisons of poverty, the household is the single best unit for income aggregation. It is the only comparable income-sharing unit available for most nations. While the household is the unit used for aggregating income, the person is the unit of analysis. Household income is assumed to be equally shared among

individuals within a household. Poverty rates are calculated as the percentage of all persons who are members of households with incomes below the poverty line.

- A variety of equivalence scales have been used in cross-national comparisons in order to make comparisons of well-being between households with differing compositions. Equivalence scales are used to adjust household income for differences in needs related to household size and other factors, such as the ages of household members (see previous chapter). In the United States poverty literature, a set of equivalence scales is implicit in the official poverty lines. The official poverty threshold for a four-person family is twice as high as is the poverty line for a single person who lives alone. In order to make our cross-national *absolute* poverty estimates consistent with the official United States poverty rate, we use the official American poverty line scales in these analyses. For the cross-national analysis of *relative* poverty rates, however, we use a different scale, which is much more commonly used in international analyses. After adjusting household incomes to reflect differences in household size, we compare the resulting adjusted incomes to either the 40 or 50 percent of median poverty line. The equivalence scale used for this purpose, as in most cross-national studies, is a single parameter scale with a square-root-of-household-size scale factor.<sup>7</sup>

#### Database

The data we use for this analysis are from the Luxembourg Income Study (LIS) database, which now contains almost 100 household income data files for 25 nations covering the period 1967 to 1997 (*LIS Quick Reference Guide* 2000). We can analyze both the level and trend in poverty and low incomes for a considerable period across a wide range of nations. In computing

the trend of relative poverty, we have selected 19 nations for which at least two years of observations are available for the period spanning 1979-1997.<sup>8</sup> The 19 countries are the largest and richest in the world and include all of the G7 nations, Scandinavia, Canada, Australia, and most of Europe.<sup>9</sup> We also include all of Germany, including the eastern states of the former German Democratic Republic (GDR) in many of our analyses.<sup>10</sup>

### Results: Level and Trend in Poverty

We have calculated three sets of poverty rates, one absolute and two relative. In addition to overall poverty rates, we separately estimated poverty among two vulnerable populations, children and the aged.<sup>11</sup> Finally, we tabulated the trends in relative poverty for as many rich nations as the data permit.

#### Absolute Poverty

All poverty measures are in some sense relative and must be chosen to be appropriate for the context in which they are used. The World Bank defines poverty in Africa and Latin America using an income threshold of \$1 or \$2 per person per day, and in Central and Eastern Europe a threshold of \$2 or \$3 per day (Ravallion 1994, 1996). In contrast, the absolute United States poverty line is 6 to 12 times higher than these standards. The World Bank poverty thresholds are obviously too low for use in OECD countries. Scandinavian countries and Eurostat have “minimum income standards” that are as high as 60 percent of median national incomes in Europe. This would translate into a poverty standard that is roughly 25 to 30 percent higher than the official United States poverty line, depending on the average standard of living of a particular European country (European Community 2000; Eurostat 2000).

We begin our analysis by comparing the United States household poverty rate to absolute poverty rates in other nations using the United States poverty line, which is now about 42 percent of United States median household income. For a variety of reasons, the number of countries for which we can estimate absolute poverty rates is smaller than the number for which we can estimate relative poverty rates.

One limitation in estimating cross-national absolute poverty rates is that incomes in each country must be translated into a common currency using PPP-based “exchange rates.” Our estimates of absolute poverty are based on a single set of PPP exchange rates, those developed by the OECD for 1994 or 1995. These are close to the most recent OECD base year (1996) for estimating such exchange rates (OECD 2000). This limits our calculations to those OECD nations for which we have 1994 or 1995 LIS data.<sup>12</sup> We use the OECD estimates of PPP exchange rates to translate household incomes in each country into United States dollars. The measure of household income we use is LIS-adjusted disposable income, which includes cash and some near cash income (including food stamps and the EITC) but subtracts income and payroll taxes. We also use the equivalence scale implicit in the official United States poverty thresholds. Because our definition of income differs from that used by the U.S. Census Bureau, the absolute poverty rate we calculate for the United States in 1994 (13.6 percent) is somewhat below the Bureau’s estimate of the official poverty rate in that year (14.5 percent).

The OECD’s estimates of PPP exchange rates are far from ideal for comparing the well-being of low-income households in different countries. In principle, the PPPs permit us to calculate the amount of money needed in country A to purchase the same bundle of consumption items in country B. If relative prices on different consumption items differ widely between the two countries, however, the PPP exchange rate may only be correct for one particular collection

of items. The exchange rates calculated by the OECD are accurate for overall national aggregate consumption (Castles 1996). Thus, the exchange rates are appropriate for comparing market baskets of all final consumption, including government-provided healthcare, education, and housing. These goods are paid for in different ways in different nations, however. In most countries, health care as well as some rental housing, childcare, and education are subsidized more generously by the government than is the case in the United States. Thus, disposable incomes in countries with publicly financed health and higher education systems reflect the fact that health and education costs have already been subtracted from households' incomes (in the form of tax payments to the government). One implication is that in countries where in-kind benefits are larger than average, real incomes may be understated and therefore absolute poverty rates may be overstated because citizens actually face a lower effective price level than is reflected by OECD's estimates of the PPP exchange rate. The opposite is true for those countries whose citizens must pay larger amounts for health care and education out of their disposable incomes. Since the United States provides lower than average amounts of noncash benefits, United States absolute poverty rates are likely understated.<sup>13</sup> In contrast, Northern European countries provide high levels of tax-financed health care and education benefits and their absolute poverty rates are likely overstated. However, the extent of these differences is unknown at this time.<sup>14</sup>

Another problem for comparing poverty rates across countries arises because of differences in the quality of the household income survey data used to measure poverty. For example, the LIS survey for the United States is the Current Population Survey (or CPS). The CPS captures about 89 percent of the total household incomes that are estimated from other sources (national income accounts data and agency administrative records). Most, but not all, of

the other surveys used by LIS capture approximately the same percentage of total income (Atkinson, Rainwater, and Smeeding 1995). The household surveys of the Scandinavian countries capture between 93 and 94 percent of the incomes reflected in the aggregate statistical sources, while the Australian survey captures just 83 percent of the total. Unfortunately, not all countries have performed the calculations that would allow us to determine the overall quality of their household survey data. We used a rough methodology to compare the quality of survey data for the different LIS countries. Only those countries with LIS household surveys that captured a large percentage of national income are included in our comparisons of absolute poverty rates.<sup>15,16</sup>

Assuming that the household surveys from different countries yield information about disposable incomes with comparable reliability, we should expect that once incomes are converted into a common currency unit, those countries with higher average incomes will have lower absolute poverty rates. This expectation is based, of course, on the presumption that income inequality is approximately the same across all countries. If income inequality differs significantly, countries with higher average incomes but greater income disparities may have higher poverty rates than low-income countries and indeed this is the case.

The results in Table 1 indicate a wide range of absolute poverty rates across the 11 nations, ranging from a low of 0.3 percent in Luxembourg to a high of 17.6 percent in Australia. The unweighted average poverty rate for the 11 countries is 8.6 percent. The United States has the third highest poverty rate (13.6 percent), ranking behind only Australia and the United Kingdom. The table also shows real PPP-adjusted GDP per capita for 1995. Since Australia and the United Kingdom have per capita aggregate incomes that are, respectively, about 23 and 33 percent below that of the United States, the higher absolute poverty rates in those two countries

should hardly be surprising. However, nearly all of the countries in Table 1 have a per capita income level that is below that of the United States, ranging from 67 percent of the United States level (in the United Kingdom) to 84 percent (in Norway). Only tiny Luxembourg has an average aggregate income per capita of 31 percent above that in the United States (OECD 2001). And as expected, Luxembourg has the lowest absolute poverty rate. Most of the other countries have absolute poverty rates substantially below that in the United States, despite their lower real per capita incomes.

Based on this table, it seems clear that amongst these rich nations, the distribution of income is as important as its average absolute income in determining its level of poverty. Poor countries can have lower poverty rates than rich ones if their income distributions are compressed; rich countries can have higher poverty rates than poor ones if their incomes are very unequally distributed.<sup>17</sup>

While acknowledging that the United States has greater inequality than other industrialized nations, many defenders of American economic and political institutions argue that inequality plays a crucial role in creating incentives for people to improve their situations through saving, hard work, and investment in education and training. Without the powerful signals provided by big disparities in pay and incomes, the economy would operate less efficiently and average incomes would grow less rapidly. In the long run, poor people might enjoy higher absolute incomes in a society where wide income disparities are tolerated than in one where law and social convention keep income differentials small. According to this line of argument, wide income disparities may be in the best long-term interest of the poor themselves.<sup>18</sup>

In recent years the Australian, the United Kingdom and especially the United States economies have in fact performed better than other economies where income disparities are

smaller. Employment growth has been faster, joblessness lower, and economic growth higher than in many other OECD countries where public policy and social convention have kept income disparities low. For low-income residents in these three countries, however, the theoretical advantages of greater inequality have failed to produce rapidly growing incomes over the past couple of decades. Their absolute incomes are below the incomes that poor people receive in other rich countries that have less inequality. As a result, the absolute poverty rates in these three countries are substantially higher than they are elsewhere in the OECD. The supposed efficiency advantages of high inequality have not accrued to low-income residents of the United States, at least so far. To the extent such advantages exist, they have been captured by Americans much further up the income scale, producing a conspicuously wide gap between the incomes of the nation's rich and poor.

### Relative Poverty

In order to broaden the range of countries in our analysis and to compare poverty as it is commonly measured in cross-national studies, we now examine relative poverty rates. A range of relative poverty standards is used in cross-national comparisons. One-half of national median adjusted income is the most commonly used poverty threshold for international comparisons. In fact, it is hard to find a study that does *not* use this standard (see note 2). But other standards are also used, if for no other reason than for sensitivity tests. In Europe, the European Statistical Office (Eurostat) has recommended a 60-percent-of-median standard for measuring poverty and social exclusion (Eurostat 2000). In this paper we concentrate mainly on the 40-percent-of-median line because of its proximity to the United States poverty line, though we also provide

poverty estimates using a threshold of 50 percent of national median income (Appendix Table A-1).

Relative poverty rates in 19 nations, using both thresholds, are displayed in Figure 1. All poverty rates are from the early to the middle 1990s. The poverty rate using the lower poverty threshold varies between 1.3 percent in Luxembourg and 10.7 percent in the United States (1997), with an average rate of 4.8 percent across the 19 countries. The fraction of people with incomes below the poverty line is obviously sensitive to where the line is drawn. Even though national poverty rates are sensitive to the level of the threshold, the ranking of the 19 countries is affected only modestly by the change in the relative poverty threshold. However, “deep” or extreme poverty in the United States stands out very clearly even when the poverty threshold is set at 40 percent of median income. At this threshold, almost 11 percent of the United States population is poor, more than are below the *50-percent* threshold in 13 of the other nations shown. More poor people in the United States suffer from extreme relative poverty than is the case in other high-income countries (see Table A-1).

Overall national poverty rates using the 40-percent-of-median-income standard fall into several distinct categories (see Table 2). The United States rate is clearly the highest at 10.7 percent in 1997. Two Anglophone nations—Australia and Canada—plus Italy and Japan have somewhat lower rates, ranging between 6.6 and 8.9 percent. Three other nations—the United Kingdom, Spain, and Israel—have still lower rates. The remaining 11 nations—most of Central Europe and all of Scandinavia—have the lowest poverty rates, below the 4.8 percent overall average rate.

Higher poverty rates are found in countries with a high level of overall inequality (United States, Italy), in geographically large and diverse countries (United States, Canada, Australia),

and in countries with less well-developed national welfare states (Spain, Japan). Low poverty rates are more common in smaller, well-developed, and high-spending welfare states (European Community, Scandinavia) and in countries where unemployment compensation is more generous, where social policies provide more generous support to single mothers and working women (through paid family leave, for example), and where social assistance minimums are high.

Poverty rates computed using before-tax-and-transfer household income do not differ among countries as much as those calculated after taxes and transfers. This finding implies that different levels and mixes of government spending on the poor have sizable effects on national poverty rates (Smeeding 1997). In fact, detailed analysis shows that higher levels of government spending (as in Scandinavia and Northern Europe) and more careful targeting of government transfers on the poor (as in Canada) produce lower poverty rates (Kenworthy 1998; Kim 2000), a finding that we verify below. Earnings and wage disparities are also important in determining poverty rates, especially among families with children (Jäntti and Danziger 2000; Bradbury and Jäntti 1999; Smeeding 1997). Countries with an egalitarian wage structure tend to have lower child poverty rates, in part because the relative poverty rate among working-age adults is lower when wage disparities are small.

Child poverty rates average roughly 0.5 percentage points higher than overall relative poverty rates (Table 2). But child poverty rates are 4.0 to 5.2 percent higher than are overall poverty rates in the two countries with the highest child poverty rates (United States and Italy). Child poverty is also 2.6 points higher than overall poverty in the United Kingdom and 2.9 points higher in Spain. If poverty is measured using a poverty standard equal to 50 percent of median national income, Canada also has a notable gap of 3.9 percentage points between child poverty

and the overall poverty rate (see Table A-1). In contrast, child poverty rates in the low poverty countries of the European Community and Scandinavia are usually less than or equal to overall poverty rates. Using the 40 percent-of-median poverty threshold, child poverty in the United States is 14.7 percent and 14.1 percent in Italy (Table 2). Using the same threshold, child poverty rates in Scandinavia range between 1.3 percent and 2.2 percent, while in the rest of Europe they are below 5 percent everywhere except the United Kingdom (8 percent), Germany (6 percent), and Spain (7 percent).

Child poverty and overall poverty rankings are more similar across countries than are rankings of poverty among the elderly (see the right-hand columns of Table 2). The aged are the group that stands in greatest contrast to the others. Using a poverty threshold of 40 percent of median national income, the elderly on average have a lower poverty rate than other age groups. A poverty rate for older people above 10 percent is found only in the United States, Israel, and Australia. Only one other country, Austria, has an aged poverty rate that exceeds 5 percent. Canada has achieved one of the lowest aged poverty rates, 1.2 percent, far below the rates for Canadian children and working-age adults.

However, the poverty rate of the elderly is particularly sensitive to the income cutoff used to determine poverty. While aged poverty rates are on average below the overall national poverty rate when poverty is measured using the 40-percent-of-median-income standard, they average 3.0 percentage points higher than the overall poverty rate and 1.7 points above the child poverty rate when the higher (50 percent of median) income standard is used. Raising the poverty threshold from 40 percent to 50 percent of national median income increases the unweighted poverty rate of the elderly from 4.5 percent to 11.6 percent in the 19 countries (see Table A-1). This increase is the largest of any age group and suggests that social protection

systems for the elderly often provide income guarantees that are no more than between 40 percent and 50 percent of median national income.

Relative poverty rates can vary across age groups within a nation as much as they do across nations. Comparing poverty among children and the elderly (Table 2), we find large imbalances in several nations. Elderly poverty exceeds child poverty by large amounts in Australia, Israel, and Austria, while the reverse is true in Canada, Spain, Italy, and the United Kingdom. Poverty is high among both the young and the old only in the United States, 14.7 percent and 12.0 percent, respectively. Child and aged poverty rates are approximately equal in the other 11 countries, below 6 percent.

#### Poverty Trends

Evidence on the trend in relative poverty across nations is mixed (see Table 3). The LIS dataset contains different years of data for different nations over different periods. To determine poverty trends, we measure changes in poverty rates from a base year (between 1979 and 1981 in most cases) to a recent year (usually between 1994 and 1997), using the 40-percent-of-median-income poverty threshold. The table presents the actual change in poverty rates from the first to the last year. We also rank nations in Table 3 according to their most recent poverty rate (Table 2) so that we can look for changes in poverty in high- and low-poverty nations.<sup>19</sup>

If we regard a change of 2.0 points or more in either direction as significant, relative poverty rates rose significantly between the 1980s and 1990s in Italy, the United Kingdom, and The Netherlands. Four other countries saw increases of 1.0 to 1.8 points in their relative poverty rates over the period; only one country, Spain, experienced a modest decline of 1.5 percentage points. Overall poverty rates changed by less than 1 percentage point in the other nine nations.

On balance overall, relative poverty rates did not change much between the early 1980s and early to middle 1990s. Even in The Netherlands, poverty rates rose by 2.3 points to peak at just 4.7 percent in 1994. In some nations, such as the United States, our selection of beginning and end dates for measuring the trend makes a difference. For instance, in 1979 the relative United States poverty rate was 10.0 percent, and in 1997 it was 10.7 percent. However, the rate rose sharply in the early 1980s and again in the early 1990s before falling later in the 1990s.

Different poverty trends are evident for the aged and for children. Among the elderly, significant declines in poverty rates are evident in eight of the nations studied here, including the United States. Modest declines can be seen in two other countries (Denmark and Finland). The poverty rate of the elderly increased significantly only in Australia, while it remained essentially unchanged in five other countries.

Among children, significant increases in the poverty rate were observed more frequently. Big increases occurred in Italy (4.6 percentage points), Switzerland (4.1), the United Kingdom (3.7), The Netherlands (3.8) and Germany (3.3). In the United States the child poverty rate rose from 13.2 percent to 14.7 percent, though the latter rate represents a steep decline from 1986, when the child poverty rate was 18.6 percent in the LIS dataset. Child poverty remained largely unchanged in the other 11 countries. Interestingly, child poverty did not fall by a noticeable amount in any of the nations studied here, with the largest decline a 1.0 percentage point drop in Sweden.

It is important to recognize that widening income inequality does not always translate directly into increases in relative poverty rates. In the 1980s and 1990s income inequality rose dramatically in the United Kingdom and somewhat less in Italy and the United States. Relative poverty rose at the same time in all three countries. But overall income inequality also increased

moderately in Norway, Finland, and Israel over this period with no appreciable effect on the overall poverty rates of these nations (Gottschalk and Smeeding 2000; Smeeding 2000).

#### Antipoverty Effectiveness of Social Spending for Working Age Households

There are striking differences across countries in the level and configuration of their social safety nets. It is natural to ask whether differences in social policy lead to systematic differences in poverty, labor market performance, or income inequality. Table 4 summarizes market poverty rates and the effects of the transfer and tax system on poverty rates in seven OECD countries among working age households.<sup>20</sup> The pre-tax-and-transfer poverty rate for household heads aged 25 to 64 is displayed in the first column. Poverty is measured in this column by comparing the household's adjusted market income to a poverty cutoff that is equal to 40 percent of each country's median adjusted disposable income. The "market income" poverty rates range from a low of 14.9 percent in Germany to 25.0 percent in the United Kingdom. The next three columns show the effects of social insurance, direct taxes, and antipoverty transfers on household poverty. In combination, these government interventions reduce relative income poverty rates for prime-age families by 76 percent to 89 percent in the four European countries (see the last column in Table 4). That is, the poverty rate measured after tax payments are subtracted and transfer benefits are included is 76 percent to 89 percent lower than it is when only gross market incomes are included in household incomes. Market poverty rates are reduced by 67 percent and 63 percent, respectively, in Australia and Canada. The tax and transfer system reduces poverty rates for prime-age households by just 37 percent in the United States. Both social insurance and targeted social assistance contributed to this decline in all of the nations studied (with the exception of Australia which has only a targeted social assistance system).

Smeeding and Ross (2001) note there is a positive relationship between the percentage of GDP spent on social spending and poverty reduction. Sweden and The Netherlands reduced market poverty rates by more than 82 percent. Both countries devoted about 14 percent of GDP to social spending in the years observed here (Table A-2). The United Kingdom and Germany eliminated more than three-quarters of pre-tax-and-transfer poverty through their tax and transfer systems, while devoting about 8 to 9 percent of GDP to social spending. Canada and Australia both reduced poverty by about 67 percent through their tax and transfer systems and spent 6.2 and 8.0 percent of GDP, respectively, on social transfers for the nonaged. The United States spent less than 4 percent of GDP on these programs, and it reduced pre-tax-and-transfer poverty by the least proportional amount.

### Summary

Both absolute and relative poverty rankings suggest that United States poverty rates are in the upper end of the range when compared with poverty rates in other LIS member countries. The United States child poverty rates seem particularly troublesome. In most rich countries, the child poverty rate is 8 percent or less; in the United States, it is 14.7 percent. Part, though not all, of the explanation is that the United States devotes a relatively small share of its national income on social transfers for families with a nonaged head.

The trend in overall poverty between the 1980s and middle 1990s was typically flat, except in Italy, the United Kingdom, and The Netherlands. No country in our tabulations experienced a sizable decline in relative poverty over the period examined here. The trend in aged poverty rates was generally down, but child poverty rates often rose, with significant increases in five nations.

## Poverty Correlates and Some Policy Lessons for the United States

Poverty and inequality are higher in the United States than in other countries with similar (and indeed much lower) average incomes (Table 1). American inequality differs noticeably from that in other rich countries primarily because of differences in relative income levels in the lower tail of the American income distribution. An American citizen at the 10<sup>th</sup> percentile of the United States income distribution has an adjusted disposable income that is just 34 to 38 percent of United States median income (Smeeding 2000; Gottschalk and Smeeding 2000). While the 10<sup>th</sup> percentile income level has drawn closer to the median during the 1990s, it is still five to seven points lower than in any other nation.<sup>21</sup> Poverty is also higher in the United States than in other nations. However, owing mainly to the continued strong economy in the 1990s, absolute poverty rates in the United States are falling back to levels last seen in the 1970s (see also Freeman paper).

The relative size of the low-income population in the United States is larger than in other rich countries for two main reasons: low market wages for those with few skills and limited public benefits. The relationship between the prevalence of workers with low wages and poverty is highlighted in Figure 2, which shows cross-national estimates of the incidence of overall poverty and the prevalence of low-paid employment in 14 OECD countries (OECD 1996).<sup>22</sup> The estimates of low-paid employment reflect the percentage of a nation's full-time workers earning less than 65 percent of national median earnings on full-time jobs. These estimates refer to the period 1993-1995 for most nations. The estimates of the overall poverty rate are based on the 40-percent-of-median-income threshold and are taken from the first column of Table 2.

Figure 2 shows a strong association between low pay and national poverty rates. The straight line shows the predictions from the regression line of the overall poverty rates on the incidence of low-paid employment.<sup>23</sup> Countries with values above the line have higher poverty rates than are predicted by the incidence of low relative wages; countries below the line have lower poverty rates. A substantial fraction of the variance in cross-national poverty rates appears to be accounted for by the cross-national variation in the incidence of low pay. Because the United States has the highest proportion of workers in these relatively poorly paid full-time jobs, it also has the highest poverty rate. On the other hand, Canada has a lower poverty rate than its unequal wage distribution would lead one to expect. Other countries have a significantly lower incidence of low-paid employment and also have significantly lower poverty rates than the United States.

The prevalence of low pay workers is, in fact, not the only reliable predictor of poverty rates, however. While low pay is a good predictor of the Dutch and Norwegian poverty rates, other nations with similar overall poverty rates (Canada, the United Kingdom, and Austria) lie further from the prediction line. Other factors, such as the antipoverty efforts of the government, are also important predictors of the poverty rate.

Social spending clearly affects the prevalence of poverty. To measure each country's antipoverty efforts, we collected OECD statistics on the fraction of gross domestic product (GDP) spent on cash and near-cash social transfers for the nonaged (including refundable tax relief, such as the EITC). Measured in this way, social spending is negatively correlated with national child poverty rates. Figure 3 displays the cross-national relationship between social expenditures and child poverty rates.<sup>24</sup> The solid line in Figure 3 shows the predicted line from a linear regression of child poverty rates on social spending. As a result of its low level of

spending on social transfers to the nonaged, the United States has a very high child poverty rate, even higher than predicted by the regression. As in Italy, the United Kingdom, and The Netherlands, the United States has more child poverty than predicted by the cross-national regression equation. Nearly all of the high-spending nations in northern Europe and Scandinavia have child poverty rates of 5 percent or less.

Even though social spending in general has an inverse correlation with poverty rates, different patterns of social spending can produce different effects on national poverty rates. Antipoverty and social insurance programs are in many respects unique to each country. There is no one kind of program or set of programs that is conspicuously successful in all countries that use them. Social insurance, universal benefits (such as child allowances), and social assistance transfer programs targeted on low-income populations are mixed in different ways in different countries (see Table 4). So, too, are minimum wages, worker preparation and training programs, work-related benefits (such as child care and family leave), and other social benefits. The United States differs from most nations that achieve lower poverty rates because of its emphasis on work and self-reliance for working-age adults, regardless of the wages workers must accept. For over a decade, United States unemployment has been well below the OECD average, and for almost three decades American job growth has been much faster than the OECD average. The strong economy coupled with a few specific antipoverty devices (like the expanded EITC) has produced most of the United States poverty reduction in recent years.

As long as the United States relies almost exclusively on the job market to generate incomes for working-age families, changes in the wage distribution that affect the earnings of less skilled workers will inevitably have a big effect on poverty among children and prime-age adults. Reductions in wages at the bottom of the earnings distribution between 1979 and 1993

eroded the living standards of a large and vulnerable population, just as real wage gains among these families since 1995 have reversed some of the previous trend. Improvements in the social safety net for these families were too small to offset the adverse effects of wage developments from 1979 to 1993, although the recent expansion of the EITC has added greatly to the effectiveness of United States anti-poverty policy (see also Scholz and Levine 2000).

### Conclusion

The international comparisons in this paper contain important lessons for understanding the high poverty rate in the United States. Clearly, both the wage distribution and the generosity of social benefits strongly affect poverty. The relationship between low wages and poverty is direct and obvious. Continued tight labor markets in the United States can help reduce poverty as the wages received by less skilled workers are bid up. There are two important limits to this effect, however. Not all of the poor can be expected to “earn” their way out of poverty. Single parents with young children, disabled workers, and the unskilled will all face significant challenges earning a comfortable income, no matter how low the unemployment rate falls.

A second, more uncertain limit on the benefits of low unemployment is the possibility of a recession. In a future recession, declines in employment and hourly wages are likely to be particularly severe for low-income breadwinners, boosting the poverty rate, especially among children. Building a stronger safety net in anticipation of the next recession can significantly improve the fortunes of low-wage breadwinners and their families. For example, many single mothers have become breadwinners as a result of welfare reform. One consequence of reform is that many single mothers who lose their jobs in the next recession will be ineligible for cash public assistance and most will be ineligible for unemployment compensation. To prevent these

mothers from falling into destitution, it may be necessary to create a new cash supplement or public jobs program for unemployed parents, or to significantly strengthen the unemployment compensation system as it applies to low wage workers.

The relationship between antipoverty spending and poverty rates is complicated, so the simple correlations discussed in the previous section are at best suggestive. United States poverty rates among children and the aged are high when compared with those in other industrialized countries. Yet United States economic performance has also been outstanding compared with that in other rich countries. Carefully crafted public policy can certainly reduce American poverty. Implementing the policies that would achieve lower poverty rates would also have costs. A higher unemployment rate and slower economic growth might be two of the indirect effects of a more generous antipoverty policy. Of course, the direct and indirect costs of antipoverty programs are now widely recognized (and frequently overstated) in public debate. The wisdom of expanding programs targeted at children and poor families depends on one's values and subjective views about the economic, political, and moral tradeoffs of poverty alleviation. For many critics of public spending on the poor, it also depends on a calculation of the potential economic efficiency losses associated with a larger government budget. In the strong American economy of the late 1990s and early 2000s, however, it is hard to argue that the United States cannot afford to do more to help the poor, particularly those who are working in the labor market.

A partial solution to the poverty problem that is consistent with American values lies in creating an income package that mixes work and benefits so that unskilled and semi-skilled workers, including single parents, can support their families above the poverty level. Such a package could include more generous earnings supplements under the EITC, refundable child

and day care tax credits, and the public guarantee of assured child support for single parents with an absent partner who cannot or will not provide income to their children. Targeted programs to increase job access and skills for less skilled workers could also help meet the booming labor demand in the United States economy. In the long run, a human capital strategy that focuses on improving the education and marketable job skills of disadvantaged future workers, particularly younger ones, is the approach likely to have the biggest payoff. If the nation is to be successful in reducing poverty, it will need to do a better job of combining work and benefits targeted to low-wage workers in low-income families (e.g., see Ellwood 2000; Danziger, Heflin, and Corcoran 2000).

An expanded SSI program with a higher benefit guarantee for the aged and disabled who also receive Social Security could go a long way toward reducing poverty among these groups to levels that are common in northern Europe. Canada achieved a major reduction in poverty when it implemented a targeted expansion of its social assistance plan in the 1980s (Smeeding and Sullivan 1998).

A prolonged economic expansion and modest improvements in income supplements for low-wage breadwinners (through the expansion of the EITC) have recently pushed the United States poverty rate in the right direction. Given the political disposition of the American public, a near 0 percent poverty rate is not a plausible goal. A gradual reduction in the overall poverty rate to 8 percent using the 40 percent standard or the absolute United States poverty line, is certainly feasible, however. Although this rate would represent a considerable achievement by the standards of the United States, it is worth remembering that an 8 percent poverty rate is higher than the rate in all but one of the 18 other countries we have considered here.

## Endnotes

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1. Poverty measurement began as an Anglo-American social indicator. In fact, “official” measures of poverty (or measures of “low income” status) exist in very few nations. Only the United States (U.S. Bureau of the Census 1999) and the United Kingdom (Department of Social Security 1996) have “official” poverty series. Statistics Canada publishes the number of households with incomes below a “low income cutoff” on an irregular basis, as does Australia. In Northern Europe and Scandinavia the debate centers instead on the level of income at which minimum benefits for social programs should be set. In other words, their concept of insufficient “low income” directly leads to programmatic responses.
  2. See for UNICEF (2000), Bradbury and Jäntti (1999); for the United Nations (1998, 1999); for Förster (1993, 2000); for Eurostat (1998), Hagenaars, deVos, and Zaidi (1994); and, for LIS, Jäntti and Danziger (2000), Smeeding (1997), Kim (2000), Kenworthy (1998), and Smeeding, O’ Higgins, and Rainwater (1990).

3. In 1998 the ratio of the United States (four-person) poverty line to median *family* income was 35 percent while the ratio to median *household* income was 42 percent. Median household income (\$38,855) is far below median family income (\$47,469) because single persons living alone (or with others to whom they are not directly related) are both numerous and have lower incomes than do families (U.S. Bureau of the Census 1999a). Families include all units with two or more persons related by blood, marriage, or adoption; single persons (unrelated individuals) are excluded. In contrast, households include all persons sharing common living arrangements, whether related or not, including single persons living alone. Different adjustments for family or household size might also make a difference in making such comparisons.
  
4. The Penn World Tables Mark V purchasing power parities (PPPs) were judged to be accurate and consistent for the early 1990s for all nations except Italy (Summers and Heston 1991). However, they have not been updated, and now the OECD and World Bank have developed their own sets of PPPs. We do not present comparisons of real poverty rates over time due to the intertemporal inconsistency of PPPs dating back to the mid-1980s and earlier. For additional comments on PPP's and microdata-based comparisons of well-being, see Gottschalk and Smeeding (2000), Rainwater and Smeeding (1999), Smeeding and Rainwater (2001), Smeeding et al. (2000), Castles (1996), and Bradbury and Jäntti (1999, Appendix).

5. See Atkinson, Rainwater, and Smeeding (1995) for more on this income definition and its robustness across nations. Note that the use of this “LIS” disposable income concept is not unique to LIS alone. Eurostat and OECD have independently made comparisons of income poverty and inequality across nations using identical or very similar measures of net disposable income.
6. This income definition differs from the broadest income definition used in the previous chapter. The internationally comparable measure of income does not subtract work-related expenses or medical care spending, and it does not include noncash benefits provided in the form of public housing. The EITC and similar refundable tax credits and noncash benefits such as food stamps and cash housing allowances are included in this income measure, however.
7. Formally, adjusted disposable income (ADPI) is equal to *unadjusted* household income (DPI) divided by household size ( $S$ ) raised to an exponential value ( $e$ ),  $ADPI = DPI/S^e$ . We assume the value of  $e$  is 0.5. To determine whether a household is poor under the relative poverty measure, we compare its ADPI to 40 or 50 percent of the national median ADPI. National median ADPI is calculated by converting all incomes into ADPI and then taking the median of this “adjusted” income distribution. To determine whether a household is poor under the absolute poverty measure, we first convert the official United States poverty thresholds for different household sizes into appropriate national currency units using PPP exchange rates, and then we compare each household’s DPI to the appropriate threshold.

8. We excluded Taiwan and the emerging nations of Central and Eastern Europe. We also exclude Ireland because we currently have only one 1980s dataset for the nation. We could not include New Zealand or Portugal because they are not members of LIS. We include Japan based on an exhaustive set of data runs completed under LIS supervision in 1996.
9. As LIS continues to add datasets, an even more complete picture of comparative national poverty incidence will emerge. Recent studies of poverty using the LIS database include: Bradbury and Jäntti (1999), Jäntti and Danziger (2000), Kenworthy (1998), Smeeding (1997), Kim (2000), UNICEF (2000), and many others that can be found among the LIS Working Papers on the LIS website ([www.lis.ceps.lu](http://www.lis.ceps.lu)).
10. For the first time, we present LIS data on the Unified Germany for 1994. However, trend data for Germany are still restricted to West Germany. The LIS West German poverty rates tend to be 0.9 to 1.2 percentage points below those for all of Germany.
11. Children are all persons under age 18; elderly are all persons age 65 or over. We do not include racial or ethnic breakdown as only five LIS nations have such variables. The poverty status of immigrants (foreign born citizens) can be studied in only four LIS countries.

12. The base year is important because PPPs are reconfigured with a different “base” market basket only every four to five years. Between base years, price indices are used to adjust base baskets for comparisons. These price indices may differ from the consumer price index (CPI) used to adjust poverty lines within and across countries. As the previous chapter suggests, choice of CPI may affect the results. Hence, we stick with 1995 base year PPPs adjusting back to 1994 PPPs using the implicit OECD price index.
13. Smeeding et al. (1993) find that countries that spend more on cash social expenditures also spend more on noncash subsidies. The largest differences between the United States and other nations are in the realm of healthcare costs. United States citizens spend roughly 15 percent of disposable incomes on health care compared to 5 percent in France, 2 percent in Canada, and 1 percent in the United Kingdom (LIS 2000a).
14. While the arguments tend to suggest that United States absolute poverty rates may be understated compared to those in other nations, some counter-arguments can also be made. More than 85 percent of Americans are covered by health insurance. They do not pay for most of the health care they consume out of the disposable income measured on the CPS, though they do pay more for healthcare out-of-pocket on average (see note 12). In other words, the average insured American does not pay the full “price” of medical services reflected in OECD’s PPP estimates for the United States. For a large majority of low-income Americans, insurance is provided for free through the Medicaid program or at reduced cost under Medicare. For others, it is subsidized by an employer’s contribution to a company-sponsored health plan. While low-income people in most, if

not all, LIS nations pay lower net prices for medical care than do residents of the United States, the United States probably has the highest final consumption prices for medical care of all OECD countries. The OECD's PPP estimates should therefore show the United States has a high cost of living (at least for medical care). Second, Americans pay more for higher education (though not for K-12 schooling) than citizens in other OECD countries. Many Americans pay for college out of their disposable incomes. But Americans with low income can obtain a decent college education about as cheaply as most Europeans, so the difference in higher education costs may not be very relevant for comparing poverty market baskets across countries. Third, more than one-quarter of low-income Americans receive housing subsidies, either directly—through vouchers—or indirectly—through below-market rents on publicly subsidized apartments. European subsidies for housing vary by country, but are generally larger. Fourth, some consumption items that are more important to poor families than to the non-poor are dramatically cheaper in the United States than they are in other OECD countries. Food is one such item. Because food consumption likely has a greater weight in the consumption of the poor than it does in aggregate consumption, the OECD's PPP exchange rates are biased against the United States. In summary, while we could develop better PPP exchange rates for purposes of comparing low-income families across OECD countries, it is not obvious that a superior set of PPPs would reveal a systematically higher absolute poverty rate in the United States and systematically lower rates in Europe. Hence, our comparisons in Table 1 are about as good as any that could be done at this time.

15. We compared grossed-up LIS market incomes to OECD final domestic consumption aggregates. The one nation which differed most from the rest was Italy, which captured only about 47 percent of OECD gross final consumption in its LIS survey, compared to 86 percent for the United States. Most other nations were close to the United States level; a few were above it.
16. Underreporting of income has a large impact in comparing absolute poverty rates across countries. The smaller the percentage of aggregate income that is reported in the household survey, the higher the measured poverty rate. Underreporting may also affect relative poverty comparisons if income at either the bottom or the top of the income distribution is differentially underreported. Unfortunately, we cannot currently assess the relative importance of income underreporting in different parts of the income distribution.
17. See also Rainwater and Smeeding (2000) and Smeeding and Rainwater (2001). In order to see where the countries with higher ratios of survey reported income to OECD aggregate income than in the United States would be, we increased the poverty line from 43 percent of the United States 1994 median (the official poverty line) to 50 percent of the United States median in each of these nations. Poverty rates in Finland, Norway, and Sweden each rose by 2.7 to 3.8 percentage points, but still remained below the average rate of 8.6 percent calculated at the bottom of Table 1 in each country. See Bradbury and Jäntti (1999) for a similar result.

18. A lucid presentation and analysis of this viewpoint can be found in Okun (1975). See also Welch (1999).
19. While a similar type of comparison for poverty and inequality trends has been used by Smeeding (1997) and Gottschalk and Smeeding (2000), others have used different poverty measures and different methods of assessing trends, e.g., Jäntti and Danziger (2000). The results of all of these studies and methods were based on trends in poverty rates measured at 50 percent of the median income, but they are also consistent with the 40-percent-of-median-based results in Table 3.
20. Not all countries are included here. The ones that are included have been selected because of their 1990s data and because they provide a broad picture of what is found in other similar countries. A similar analysis of changes in domestic poverty is found in Scholz and Levine (2001) (see also Smeeding and Ross 2001).
21. In 1986, the 10<sup>th</sup> percentile point was 35 percent of the median; in 1991, 34 percent; in 1994, 36 percent, and in 1997, 38 percent—the same level as in 1979. See Atkinson, Rainwater, and Smeeding (1995); Gottschalk and Smeeding (1997), and Smeeding (2000) for more on this point. These adjusted income distributions are all measured using the same units, income definition, and equivalence scale as are used in this paper.
22. The OECD reports on the prevalence of low wages for the early 1990s for 12 nations. We added low-wage workers from Luxembourg and Norway based on LIS-based

tabulations of wages. Estimates were not possible for the other nations (Italy, Switzerland, Denmark, Israel, Spain) because neither LIS nor OECD had the requisite data. Table A-2 contains the raw data for both low wages and social spending.

23. A similar picture with an even stronger (0.57) correlation emerges for child poverty rates (not shown). Overall poverty rates are highly correlated with low wages because childless adults and the elderly are also more likely to be poor in low-wage countries.
24. A similar diagram for overall poverty rates and overall social spending (including elderly benefits) shows much the same result .

## References

- Atkinson, Anthony B., Lee Rainwater, and Timothy M. Smeeding. 1995. "Income Distribution in OECD Countries: Evidence from the Luxembourg Income Study (LIS)," *Social Policy Studies* 18. Paris: Organization for Economic Cooperation and Development, October.
- Björklund, Anders, and Richard Freeman. 1997. "Generating Equality and Eliminating Poverty—The Swedish Way." In Richard B. Freeman, Robert Topel and Birgitta Swedenborg, (eds.), *The Welfare State in Transition: Reforming the Swedish Model*. Chicago: University of Chicago Press,
- Bradbury, Bruce, and Markus Jäntti. 1999. "Child Poverty across Industrialized Nations," *Economic and Social Policy Series 71, Innocenti Occasional Papers*. Florence: UNICEF International Child Development Centre. September. <http://www.unicef-icdc.org/pdf/eps71.pdf>, accessed 5/2/00.
- Burtless, Gary, and Timothy M. Smeeding. 2000. "The Level, Trend, and Composition of American Poverty: National and International Perspective," conference paper. Madison, WI: Institute for Research on Poverty, May.
- Castles, Ian. 1996. "Review of the OECD-Eurostat PPP Program," *STD/PPP(97)5, Economic Studies Branch*. Paris France: Organization for Economic Cooperation and Development.
- Danziger, Sheldon, C. Heflin, and M. Corcoran. 2000. "Does It Pay to Move from Welfare to Work?," *Poverty Research and Training Center*. Ann Arbor, MI: University of Michigan, April. <http://www.ssw.umich.edu/poverty/pubs.html>.
- Ellwood, David T. 2000. "Anti-Poverty Policy for Families in the Next Century: From Welfare to Work—and Worries," *Journal of Economic Perspectives*, 14(1) (Winter): 187-198.

- European Community. 2000. *The Social Situation in the European Union, 2000*. Brussels: Directorate General for Employment and Social Affairs, Unit E.1, April.
- Eurostat. 1998. "Recommendations of the Task Force on Statistics on Social Exclusion and Poverty." Luxembourg: European Statistical Office. <http://europa.eu.int/eurostat.html> 5/2/00.
- Eurostat. 2000. "Report of the Working Group: Statistics on Income, Social Exclusion and Poverty." Luxembourg: European Statistical Office. <http://europa.eu.int/eurostat.html> 5/2/00.
- Förster, Michael. 2000. "Trends and Driving Factors in Income Distribution and Poverty in the OECD Area," Social Policies Studies Division Paper #42. Paris: Organization for Economic Cooperation and Development, September.
- Förster, Michael. 1993. "Comparing Poverty in 13 OECD Countries: Traditional and Synthetic Approaches," Studies in Social Policy. Paris: Organization for Economic Cooperation and Development. <http://www.oecd.org/> 5/2/00.
- Freeman, Richard B. 2001. "The Rising Tide Lifts...?" This volume.
- Gottschalk Peter and Timothy M. Smeeding. 2000. "Empirical Evidence on Income Inequality in Industrialized Countries." In A.B. Atkinson and F. Bourgignon (eds), *Handbook of Income Distribution*. New York: Elsevier-North Holland Publishers, pp. 261-308.
- Gottschalk, Peter and Timothy M. Smeeding. 1997. "Cross-National Comparisons of Earnings and Income Inequality," *Journal of Economic Literature*, 35(2) (June): 633-687.
- Hagenaars, Aldi, Klaas de Vos, and Asghar Zaidi. 1994. "Patterns of Poverty in Europe," Final report to the European Statistical Office. Luxembourg: Eurostat.
- Jäntti, Marcus and Sheldon Danziger. 2000. "Income Poverty in Advanced Countries." In Anthony B. Atkinson and François Bourguignon (eds.), *Handbook of Income Distribution*. New York: Elsevier-North Holland Publishers.

- Kenworthy, Lane. 1998. "Do Social Welfare Policies Reduce Poverty? A Cross-National Assessment," LIS Working Paper 188, Luxembourg Income Study, Center for Policy Research, The Maxwell School. Syracuse, NY: Syracuse University, September.  
<http://www.lissy.ceps.lu/wpapersd.htm>.
- Kim, Hwanjoon. 2000. "Anti-Poverty Effectiveness of Taxes and Income Transfers in Welfare States," LIS Working Paper No. 228, Luxembourg Income Study, Center for Policy Research, The Maxwell School. Syracuse, NY: Syracuse University. March.  
<http://www.lissy.ceps.lu/wpapersf.htm>.
- Luxembourg Income Study. 2000. *LIS Quick Reference Guide*. Syracuse, NY: Center for Policy Research, Luxembourg Income Study, The Maxwell School. Syracuse, NY: Syracuse University. <http://www.lis.ceps.lu/lisquick.htm>.
- Luxembourg Income Study. 2000a. Unpublished tabulations on health care expenses. .  
Syracuse, NY: Center for Policy Research, Luxembourg Income Study, The Maxwell School. Syracuse, NY: Syracuse University, August.
- Okun, Arthur M. 1975. *Equality and Efficiency: The Big Tradeoff*. Washington, DC: Brookings.
- Organization for Economic Cooperation and Development. 2001. "Purchasing Power Parities for OECD Countries, 1970-1999." Created by Organization for Economic Cooperation and Development. <http://www.oecd.org/std/pppoeecd.xls>.
- Organization for Economic Cooperation and Development. 1999. *Social Expenditure Database 1980-1996*. Paris: Organization for Economic Cooperation and Development.
- Organization for Economic Cooperation and Development (OECD). 1996. "Employment Outlook 1996." *OECD Employment Outlook*, 59 and 60 (June and December)

- Rainwater, Lee and Timothy Smeeding. 2000. "Doing Poorly: The Real Income of American Children in Comparative Perspective." In J. Skolwich and E. Currie (eds.), *Crisis in American Institutions*. Berkeley: University of California, pp. 118-125.
- Rainwater, Lee, and Timothy M. Smeeding. 1999. "From 'Relative' to 'Real' Income: Purchase Power Parities and Household Microdata, Problems and Prospects," *Papers and Final Report of the Third Meeting on Household Income Statistics*. Ottawa, Canada: Statistics Canada, pp. 139-163. <http://www.lis.ceps.lu/canberra/ottawareport/ottasession5.PDF>.
- Ravallion, Martin. 1994. *Poverty Comparisons*. Fundamentals of Pure and Applied Economics 56. Chur, Switzerland: Harwood Academic Press.
- Ravallion, Martin. 1996. "Issues in Measuring and Modeling Poverty," *Economic Journal*, 106 (September): 1328-1344.
- Scholz, John Karl, and Kara Levine. 2001. "The Evolution of Income Support Policy." This volume.
- Smeeding, Timothy M. 1997. "Poverty in Developed Countries: The Evidence from the Luxembourg Income Study." In *Poverty and Human Development*. New York: United Nations Development Programme, pp. 195-240.
- Smeeding, Timothy M. 2000. "Changing Income Inequality in OECD Countries: Updated Results from the Luxembourg Income Study (LIS)." In R. Hauser and I. Becker, (eds.), *The Personal Distribution of Income in an International Perspective*. Berlin: Springer-Verlag, pp. 205-24.
- Smeeding, Timothy M., Michael O' Higgins, and Lee Rainwater. 1990. *Poverty, Inequality and the Distribution of Income in a Comparative Context: The Luxembourg Income Study (LIS)*. London/Washington, DC: Harvester Wheatsheaf/Urban Institute Press.
- Smeeding, T.M., P. Saunders, J. Coder, S. Jenkins, J. Fontall, A. Hagenaars, R. Hauser, and M. Wolfson. 1993. "Poverty, Inequality and Family Living Standards Impacts across Seven

- Nations: The Effect of Noncash Subsidies for Health, Education, and Housing,” *Review of Income and Wealth*, 39(3) (September: 229-256.
- Smeeding, Timothy M. and Dennis Sullivan. 1998. “Generations and the Distribution of Economic Well-Being: A Cross-National View,” *American Economic Review, Papers and Proceedings*, 88(2) (May): 254-258.
- Smeeding, T.M. and K. Ross Phillips. 2001. “Social Protection for the Poor in the Developed World.” In N. Lustig (ed.), *Shielding the Poor: Social Protection in the Developing World*. Washington, DC: Brookings Press, pp. 267-304.
- Smeeding, T.M. and L. Rainwater. 2001. “Comparing Living Standards Across Nations: Real Incomes at the Top, the Bottom, and the Middle.” Prepared for the Levy Institute Conference on “The Quality of Life in America and Other Advanced Industrialized Nations,” June 6-7, 2001, Bard College, Annandale-on-Hudson, NY. Mimeo, Center for Policy Research, Syracuse University.
- Smeeding, Timothy M., Michael Ward, Ian Castles, and Haeduck Lee. 2000. “Making Cross-Country Comparisons of Income Distributions.” Paper presented at 26th General Conference of the International Association for Research in Income and Wealth, Cracow, Poland, August 3. <http://www.stat.gov.pl> and <http://www.econ.nyu.edu/dept/iariw>.
- Summers, Robert, and Alan Heston. 1991. “The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950-1988,” *Quarterly Journal of Economics*, 106(2) (May): 327-368.
- U.S. Bureau of the Census. 1999. “Poverty in the United States: 1998,” Current Population Reports P60-207. Washington, DC: U.S. Government Printing Office. September.
- UNICEF Innocenti Research Centre. 2000. “A League Table of Child Poverty in Rich Nations.” Innocenti Report Card 1. Florence: UNICEF. June. <http://www.unicef-icdc.org>.

United Kingdom Department of Social Security. 1993. *Households Below Average Income*.

London, England: Government Statistical Service.

United Nations Development Programme. 1998. *Human Development Report: Consumption for*

*Human Development*. New York: United Nations. <http://www.undp.org/hdro/98.htm>.

United Nations Development Programme. 1999. *Human Development Report 1999:*

*Globalization with a Human Face*. New York: United Nations.

<http://www.undp.org/hdro/99.htm>.

Welch, Finis. 1999. "In Defense of Inequality," *American Economic Review, Papers and*

*Proceedings*, 89(2): 1-17.

**Table 1.**  
**Absolute Poverty Rates for OECD Nations in 1994 and 1995**  
**Using the United States Poverty Line <sup>1</sup>**

Nation	(LIS Data Year)	Poverty Rate (%)	GDP Per Capita in 1995	
			Amount <sup>3</sup>	Index <sup>4</sup>
Australia	(1994)	17.6	\$21,459	77
United Kingdom	(1995)	15.7	18,743	67
United States	(1994)	13.6	27,895	100
France	(1994)	9.9	20,192	72
Canada	(1994)	7.4	22,951	82
Germany <sup>2</sup>	(1994)	7.3	21,357	77
Netherlands	(1994)	7.1	21,222	76
Sweden	(1995)	6.3	19,949	72
Finland	(1995)	4.8	18,861	68
Norway	(1995)	4.3	23,316	84
Luxembourg	(1994)	0.3	36,570	131
Overall Average		8.6	\$22,956	82.4

Notes: <sup>1</sup> Poverty is measured using the official US poverty line and equivalence scales. OECD (1999) purchasing power parities are used to convert the US poverty line.

<sup>2</sup> Includes all of Germany, including the eastern states of the former GDR.

<sup>3</sup> Amount in 1995 US dollars using OECD Purchasing Power Parities.

<sup>4</sup> Index with United States = 100.

Source: Authors' calculations from LIS, OECD (2001) and Smeeding and Rainwater (2001).

**Table 2.**  
**Poverty Rates in Nineteen Rich Countries, by Age Group, in the 1990s**

Country	Year	Poverty rate (% of population) <sup>1</sup>			Rank of country		
		Overall	Children <sup>2</sup>	Aged <sup>3</sup>	Overall	Children <sup>2</sup>	Aged <sup>3</sup>
United States	1997	10.7	14.7	12.0	1	1	2
Italy	1995	8.9	14.1	4.7	2	2	5
Australia	1994	7.0	7.4	12.2	3	5	1
Japan <sup>4</sup>	1992	6.9	na	na	4	na	na
Canada	1994	6.6	8.5	1.2	5	3	14
United Kingdom	1995	5.7	8.3	4.0	6	4	7
Israel	1992	5.2	4.8	11.2	7	8	3
Spain	1990	5.1	7.0	3.9	8	6	9
Netherlands	1994	4.7	4.6	3.1	9	9	12
Sweden	1995	4.6	1.3	0.7	10	18	17
Germany <sup>5</sup>	1994	4.2	6.0	4.0	11	7	7
Switzerland	1992	4.0	4.4	3.1	12	10	12
Denmark	1992	3.6	2.1	3.7	13	15	10
France	1994	3.2	2.6	3.6	14	11	11
Norway	1995	3.0	2.2	0.7	15	13	17
Austria	1992	2.8	2.6	6.8	16	11	4
Finland	1995	2.1	1.5	0.9	17	17	15
Belgium	1992	1.9	1.6	4.2	18	16	6
Luxembourg	1994	1.3	2.2	0.9	19	13	15
Overall Average		4.8	5.3	4.5			

*Notes:*

<sup>1</sup>Poverty is measured at 40% median adjusted disposable personal income (ADPI) for individuals. Incomes are adjusted by  $E=0.5$  where  $ADPI = \text{unadjusted DPI} / \text{household size (S)}^E$ .  $ADPI = \text{DPI}/s^E$ .

<sup>2</sup> Children are under age 18.

<sup>3</sup> Adults aged 65 and over.

<sup>4</sup> Japanese data runs were made for LIS by Professor Tsuneo Ishikawa.

<sup>5</sup> Includes all of Germany, including the eastern states of the former GDR.

*Source:* Authors' tabulations of LIS files, except for Japan.

**Table 3.**  
**Trends in Poverty in Seventeen Rich Countries, by Age Group**

<b>Country</b>	<b>Years</b>	<b>Overall</b>	<b>Children</b>	<b>Aged</b>
United States	1979-1997	0.7	1.5	-4.2
Italy	1986-1995	4.9	4.6	-0.6
Australia	1981-1994	1.8	0.5	6.0
Canada	1981-1994	-0.2	0.0	-5.3
United Kingdom	1979-1995	2.4	3.7	0.5
Israel	1978-1992	0.1	0.6	-2.3
Spain	1980-1990	-1.5	-0.5	-4.4
Netherlands	1983-1994	2.3	3.8	0.5
Sweden	1981-1995	1.7	-1.0	0.7
Germany <sup>1</sup>	1984-1994	1.3	3.3	-0.6
Switzerland	1982-1992	1.5	4.1	-4.3
Denmark	1987-1992	-0.3	-0.2	-1.5
France	1979-1994	-0.8	-0.8	-3.5
Norway	1979-1995	0.5	0.1	-3.3
Finland	1987-1995	-0.4	0.2	-1.6
Belgium	1985-1992	-0.1	-0.3	-0.1
Luxembourg	1985-1994	-0.4	0.7	-2.8

Note: <sup>1</sup> Only West Germany is included here.

Source: Authors' calculations with LIS files based on 40 percent of median poverty thresholds. Numbers show actual change in poverty rates at 40 percent of median (in each year) calculated as the change from the initial year.

**Table 4.**  
**Household Poverty Rates <sup>1</sup> by Income Source (household head aged 25 to 64)**

Country	Year	Market Income	+ Universal Transfers	- Taxes	+ Social Assistance <sup>2</sup>	Total Percentage Change
Australia	1994	19.1	17.9	18.1	6.3	-67.0
Canada	1994	18.4	9.4	9.8	6.9	-62.5
Germany <sup>3</sup>	1994	14.9	5.5	6.3	3.5	-76.5
Netherlands	1991	21.1	6.5	7.7	3.6	-82.9
Sweden	1992	15.8	3.1	4.1	1.8	-88.6
United Kingdom	1995	25.0	14.4	15.1	5.9	-76.4
United States	1994	17.2	11.7	12.9	10.9	-36.6

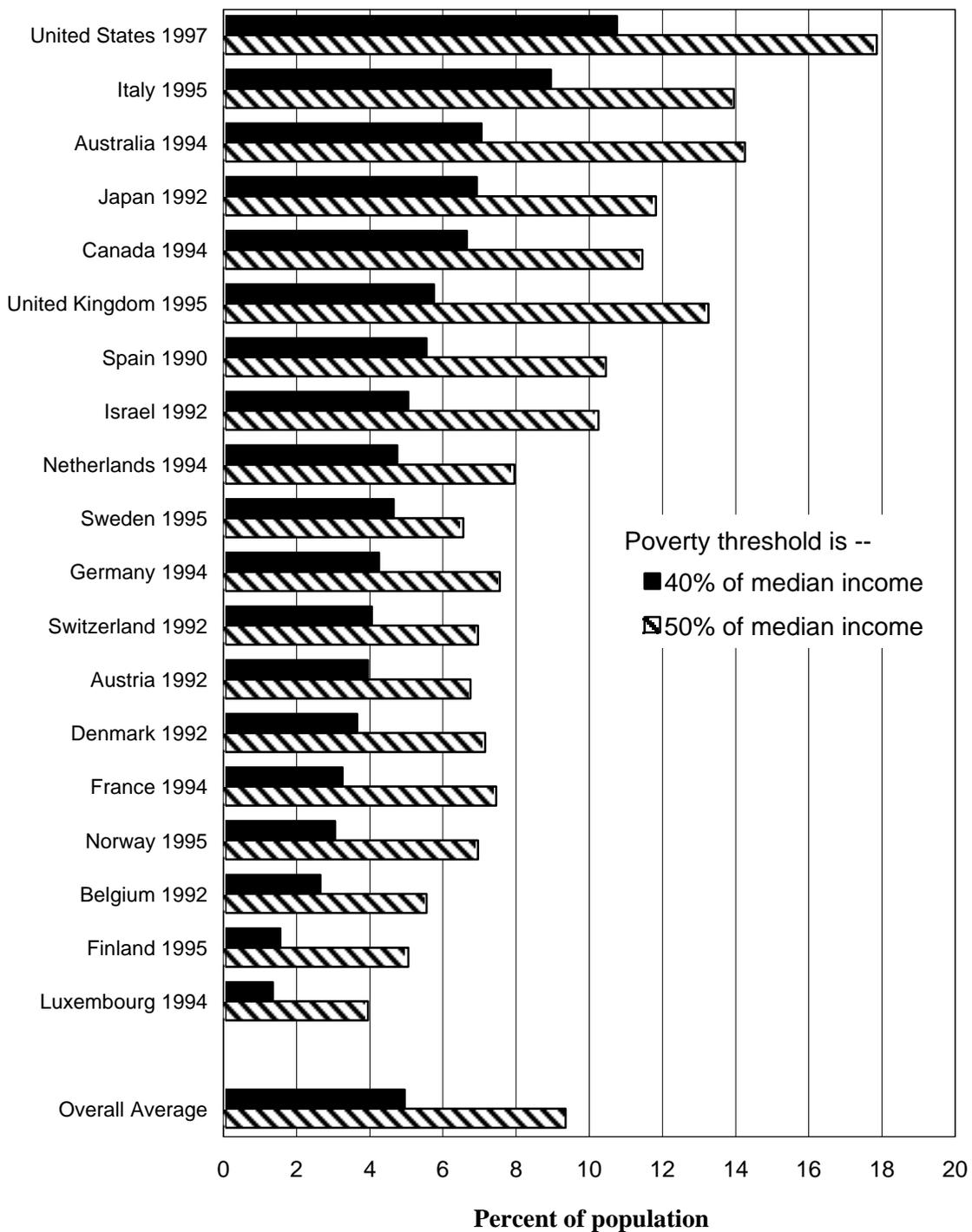
Note: <sup>1</sup> Poverty rates are persons living in households with incomes below 40 percent of median adjusted disposable income.

<sup>2</sup> Refunds from the Earned Income Tax Credit (US) and the Family Tax Credit (UK) are treated as social assistance.

<sup>3</sup> Only West Germany is considered here.

Source: Smeeding and Ross (2001) Table A-2 and authors' calculations.

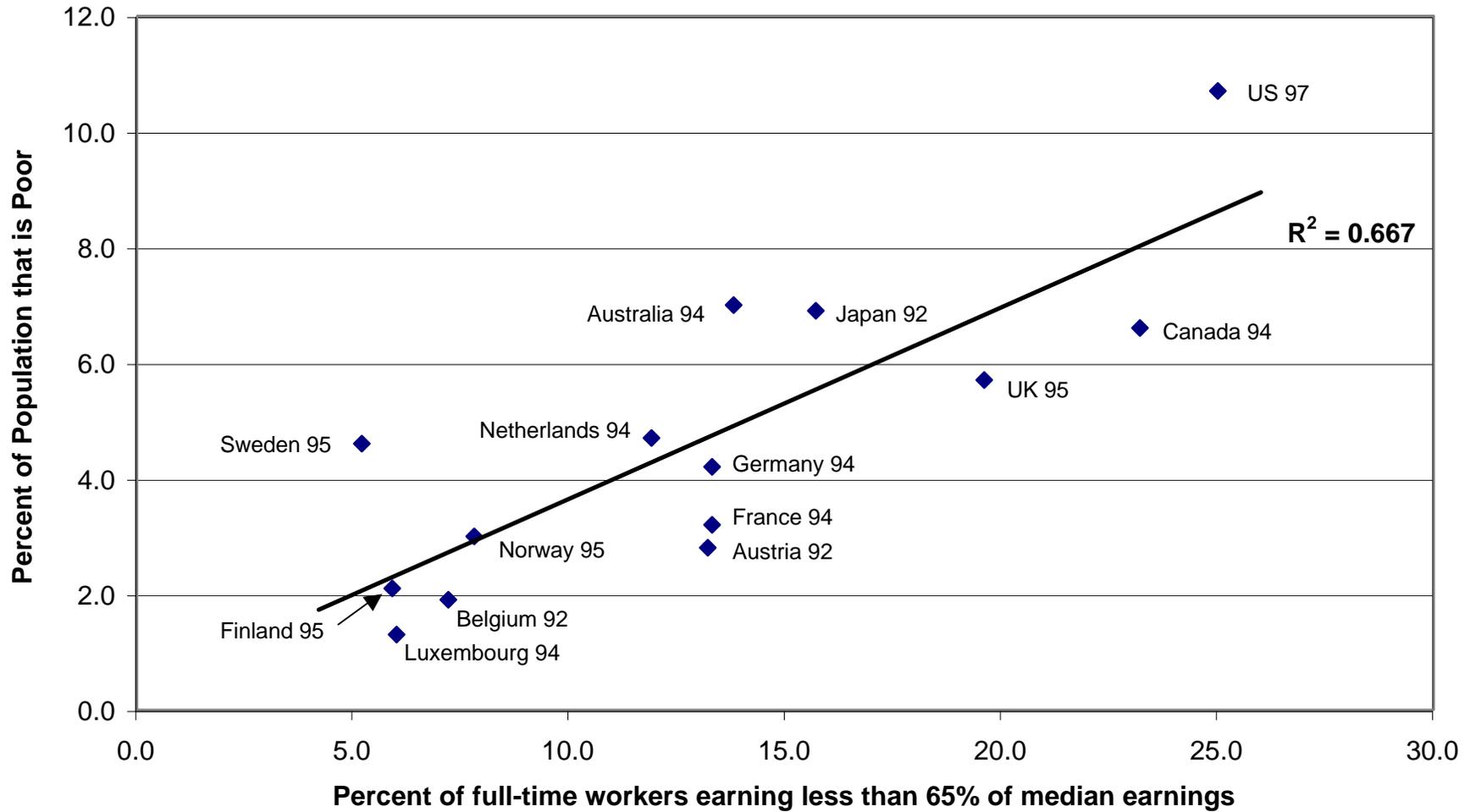
**Figure 1. Relative Poverty Rates of Industrial Nations in the 1990s**



*Note:* Poverty is measured as a percent of median adjusted disposable personal income (DPI) for individuals. Incomes are adjusted by  $E=0.5$  where adjusted DPI=actual DPI divided by household size (S) to the power E: Adjusted DPI=DPI/S<sup>E</sup>.

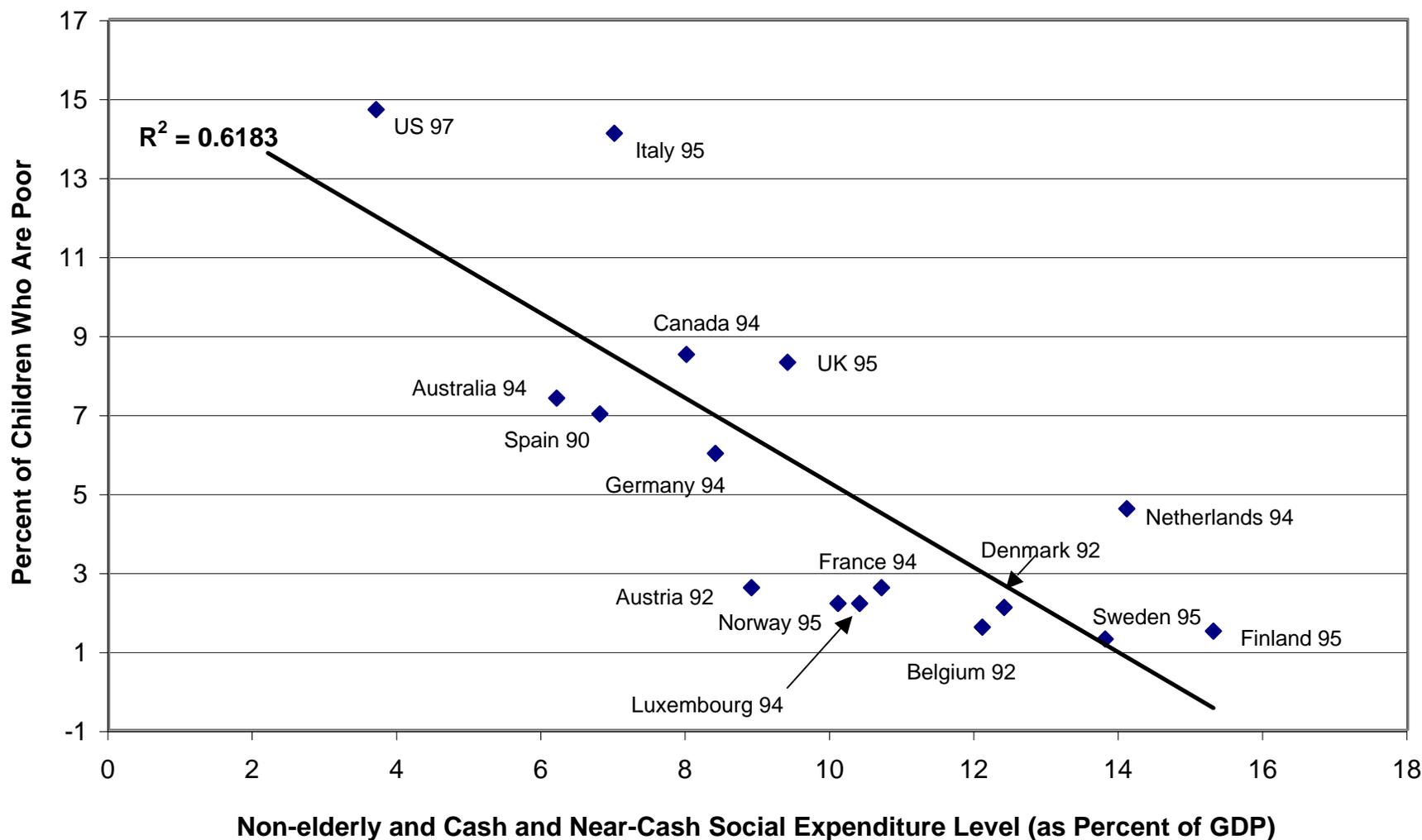
*Source:* Authors' tabulations of LIS files; see Table A-1 for exact values.

**Figure 2. Relationship of Low Pay and Poverty Rates in Fourteen Industrialized Countries in the 1990s**



Source: OECD (1996) and authors' tabulations of the LIS data files. See Table A-2 for values.

**Figure 3. Relationship of Cash Social Expenditures and Child Poverty Rates in Sixteen Industrialized Countries in the 1990s**



Source: OECD (1999) and authors' tabulations of the LIS data files; see Table A-2 for values. Cash and non-cash social expenditures exclude health, education, and social services, but include all forms of cash benefits and near cash housing subsidies, active labor market program subsidies and other contingent cash and other near cash benefits. Non-elderly benefits include only those accruing to household head under age 65.

**Table A-1**  
**Poverty Rates for All Persons, Children (Persons Under 18) and Elderly (Persons Over 65)**

<b>All</b>						<b>Elderly</b>					
<b>Country</b>	<b>Year</b>	<b>40% Level of Poverty</b>		<b>50% Level of Poverty</b>		<b>Country</b>	<b>Year</b>	<b>40% Level of Poverty</b>		<b>50% Level of Poverty</b>	
		<b>Rate</b>	<b>Rank</b>	<b>Rate</b>	<b>Rank</b>			<b>Rate</b>	<b>Rank</b>	<b>Rate</b>	<b>Rank</b>
United States	1997	10.7	1	17.8	1	Australia	1994	12.2	1	28.9	1
Italy	1995	8.9	2	13.9	2	United States	1997	12.0	2	20.7	2
Australia	1994	7.0	3	6.7	13	Israel	1992	11.2	3	17.2	4
Canada	1994	6.6	4	11.4	4	Austria	1992	6.8	4	17.4	3
United Kingdom	1995	5.7	5	13.2	3	Italy	1995	4.7	5	12.4	7
Spain	1990	5.2	6	10.4	5	Belgium	1992	4.2	6	11.9	8
Israel	1992	5.2	6	10.2	6	United Kingdom	1995	4.0	7	13.9	6
Netherlands	1994	4.7	8	7.9	7	Germany	1994	4.0	7	7.0	13
Sweden	1992	4.6	9	6.5	15	Spain	1990	3.9	9	11.4	9
Germany	1994	4.2	10	7.5	8	Denmark	1992	3.7	10	11.1	10
Switzerland	1992	4.0	11	6.9	11	France	1994	3.6	11	10.2	11
Denmark	1992	3.6	12	7.1	10	Netherlands	1994	3.1	12	6.2	15
France	1994	3.2	13	7.4	9	Switzerland	1992	3.1	12	7.4	12
Norway	1995	3.0	14	6.9	11	Canada	1994	1.2	14	4.7	17
Austria	1992	2.8	15	6.7	13	Luxembourg	1994	0.9	15	6.7	14
Finland	1995	2.1	16	5	17	Finland	1995	0.9	15	5.1	16
Belgium	1992	1.9	17	5.5	16	Norway	1995	0.7	17	14.5	5
Luxembourg	1994	1.3	18	3.9	18	Sweden	1992	0.7	17	2.6	18
Overall Average		4.7		8.6		Overall Average		4.5		11.6	

<b>Children</b>					
<b>Country</b>	<b>Year</b>	<b>40% Level of Poverty</b>		<b>50% Level of Poverty</b>	
		<b>Rate</b>	<b>Rank</b>	<b>Rate</b>	<b>Rank</b>
United States	1997	14.7	1	22.3	1
Italy	1995	14.1	2	18.9	3
Canada	1994	8.5	3	15.3	4
United Kingdom	1995	8.3	4	20.1	2
Australia	1994	7.4	5	15.0	5
Spain	1990	7.0	6	12.8	6
Germany	1994	6.0	7	10.6	8
Israel	1992	4.8	8	11.6	7
Netherlands	1994	4.6	9	7.9	9
Switzerland	1992	4.4	10	7.5	10
France	1994	2.6	11	6.7	11
Austria	1992	2.6	11	5.9	12
Luxembourg	1994	2.2	13	4.4	14
Norway	1995	2.2	13	3.9	17
Denmark	1992	2.1	15	4.8	13
Belgium	1992	1.6	16	4.4	14
Finland	1995	1.5	17	4.1	16
Sweden	1992	1.3	18	2.6	18
Overall Average		5.3		9.9	

Source: Authors' calculations from LIS database.

**Table A-2.**  
**Low-Wage Workers and Social Transfers**  
**(Data Source: Figures 2 and 3)**

Country	Year	Percent of Country's GDP Devoted to					
		Poverty Rate		Percent Low- Wage Workers *	Cash and Noncash Total Social Transfers **	Cash and Noncash Non-Aged Social Transfers **	
		All	Children				
Australia	1994	7.0	7.4	13.8	9.3	6.2	
Austria	1992	2.8	2.6	13.2	18.6	8.9	
Belgium	1992	1.9	1.6	7.2	19.3	12.1	
Canada	1994	6.6	8.5	23.2	12.5	8.0	
Denmark	1992	3.6	2.1	na	18.9	12.4	
Finland	1995	2.1	1.5	5.9	23.3	15.3	
France	1994	3.2	2.6	13.3	21.0	10.7	
Germany	1994	4.2	6.0	13.3	18.4	8.4	
Israel	1992	5.2	4.8	na	na	na	
Italy	1995	8.9	14.1	na *	18.0	7.0	
Japan	1992	6.9	na	15.7	6.9	1.9	
Luxembourg *	1994	1.3	2.2	6.0 *	17.2	10.4	
Netherlands	1994	4.7	4.6	11.9	21.0	14.1	
Norway *	1995	3.0	2.2	7.8 *	15.9	10.1	
Spain	1990	5.2	7.0	na	14.1	6.8	
Sweden	1995	4.6	1.3	5.2	22.0	13.8	
United Kingdom	1995	5.7	8.3	19.6	16.0	9.4	
United States	1997	10.7	14.7	25.0	9.2	3.7	

\* Source: LIS database for Low Wages; rest OECD (1996). Italian OECD estimate is inconsistent with other sources of Italian wage data.

\*\* Source: OECD (1999a). Cash and non-cash social expenditures exclude health, education, and social services, but include all forms of cash benefits and near cash housing subsidies, active labor market program subsidies and other contingent cash and other near cash benefits. Non-elderly benefits include only those accruing to household with head under age 65.