

Smeeding, Timothy; Torrey, Barbara; Rein, Martin

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## Patterns of Income and Poverty: The Economic Status of the Young and the Old in Eight Countries

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# Luxembourg Income Study Working Paper Series

Working Paper No. 8

Patterns of Income and Poverty: The Economic Status of  
the Young and the Old in Eight Countries

Timothy Smeeding, Barbara Torrey and Martin Rein

May 1987

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PATTERNS OF INCOME AND POVERTY:

THE ECONOMIC STATUS OF THE YOUNG AND THE OLD IN EIGHT COUNTRIES

by

Timothy Smeeding  
Barbara Torrey  
Martin Rein

Prepared for Sloan Foundation Conference volume on "The Changing Well-Being of the Aged and Children in the United States: Intertemporal and International Perspectives."

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PATTERNS OF INCOME AND POVERTY: THE ECONOMIC STATUS OF THE YOUNG  
AND THE OLD IN EIGHT COUNTRIES

The two major dependent groups in industrial countries are the young and the old. They put the greatest demand on public resources and in turn receive a majority share of public income transfers and services. The economic status of these two groups, therefore, is of particular concern for public policymakers.

In the United States, the economic status of the young and old changed dramatically between 1970 and 1985 (U.S. Bureau of the Census, 1986). Two previous chapters in this volume have discussed in some detail how these changes occurred and their effects on groups within the young and old (Danziger, et al.; Duncan, et al.). One indication of the economic change was the fall in poverty rates of the elderly as the rates for the children increased. While the first trend was welcomed, the second has become an increasing concern in the United States.

This reversal in the economic status of the young and the old in the United States occurred without an explicit policy to favor one group over the other. Rather, the reversal was the result of an accumulation of policy decisions interacting with social changes. The reversal in poverty trends for the young and old was not anticipated at the beginning of the 1970s; and their divergence was not carefully documented until the 1980s (Preston, 1984).

One of the many issues raised by the changing fortunes of the young and old in the United States is whether this is an inevitable trend in aging societies. As the old become an increasing proportion of a society, do they gain more influence and demand a disproportionate share of social resources? If this is an inevitable trend in aging democratic societies, then we might expect to see similar trends in other industrial countries. If, however, the

aged in other countries do not enjoy an economic advantage relative to children, then the U.S. reversal in fortunes may be caused by social policies and attitudes that are unique to the United States.

Comparable income trend data by age is difficult to find for other countries but the roughly comparable trend data for the 1970-1984 period, which we have in Appendix 1 for the U.K. and Canada, is similar to the trends in the U.S. In all three countries the incomes of the aged increased faster than the incomes of the general population, especially in the U.S., where overall real incomes were flat, while the incomes of single parent families with children either increased more slowly (Canada) or fell (U.K., U.S.) in real terms over the 1970-1984 period.

International income comparisons in the past have been limited by the lack of comparable data for pre- and post-tax and transfer income and for the demographic unit. Comparable income and demographic data did not exist for most countries until the Luxembourg Income Study (LIS) reported its first results at a conference in the summer of 1985. LIS has created comparable cross-sectional income data files for several countries plus the United States. As a consequence, LIS data offers us our first clear economic window through which to look at individuals in industrial societies and learn the lessons such comparisons can teach.

These international comparisons of the United States with seven other countries suggest that the relative economic advantage of the aged in the United States over the young is shared by Canada and Sweden. However, in both countries the rates of poverty are much lower than in the United States. Four other countries (Norway, Germany, Switzerland and the U.K.) have considerably higher poverty rates for the old than the young; in Australia the poverty rates of the two groups are similar.

These comparisons reinforce the concerns in the United States about the economic status of U.S. children. In 1979, the year of the U.S. survey examined in detail in this chapter, the poverty rate of children was only slight higher than the rate for the aged. By 1985 the most recent poverty rate estimates are 20.1 percent for children and 12.6 percent for the aged (U.S. Bureau of the Census, 1986), a child poverty rate nearly 60 percent above the elderly rate. But what the international comparisons in this chapter suggest is that not only are U.S. children at a disadvantage relative to the U.S. aged, but also that the U.S. children also have considerably higher poverty rates than the children in all of the other countries examined, except Australia.

After introducing the reader to LIS, this chapter examines in detail the income level and inequalities of the young and old in eight countries in the 1979-1981 period. It then compares the low income and poverty level of each group within and among countries. The penultimate section discusses the social, demographic and economic factors in each country that help to explain some of the differences among countries, while the final section summarizes the findings.

#### I. Luxembourg Income Study (LIS) Data File

Between 1979 and 1982, nine countries conducted national household surveys that collected detailed income data. The data from these nine surveys were adjusted for definitional differences of both income and income sharing units. The adjusted data from these surveys have become the core of the LIS data set. The LIS data base includes nine countries, the eight included in

this paper and Israel. Israel's economic situation is so anomalous compared with the other countries that it does not add sufficient insights to include in a paper limited to this topic. Each survey covers at least 92 percent of the noninstitutionalized population; 97 percent excluding West Germany and Switzerland.<sup>1</sup> While some ethnic groups, such as Laps in Norway or Aleuts in the United States, have too small sample sizes to be representative, the age cohorts which are our major concern in this paper are well represented. Appendix 2 presents an overview of the LIS datasets (Table A-2) and further information on LIS.

Disposable personal income (post-tax; post-transfer income) is the main measure of well-being used throughout this paper. It includes all forms of cash income (earnings, property income, all cash transfers) net of direct taxes (that is, employer and employee payroll taxes and income taxes). In some cases we also use pre-tax and pre-transfer market income and gross income (disposable income plus direct taxes). These family income amounts were further adjusted for differences in family size and composition. Adjusted income is calculated by dividing disposable income by the equivalence scale appropriate to each family size and age composition. Appendix 3 explains how this measure is calculated. The equivalence scale is normalized to a family of three persons.

A number of different equivalence scales have been used on the LIS data. For simplicity's sake, however, in this chapter the equivalence scale used is the one inherent in the U.S. poverty rate calculation. For a more thorough discussion of the range of equivalence scales and the effect which the U.S. poverty line equivalence scale has on the measurement of economic status, see Smeeding, Schmaus, and Allegrezza (1985), and Appendix 3 to this paper.

## II. The Average Income of the Young and Old in Six Countries

Economic comparisons of different groups within a country require a standard measure. The national average adjusted disposable income for all households in each country is used as the standard for intra-country comparisons in this section.<sup>2</sup> We are specifically interested in the economic comparisons of families with children and the elderly. We, therefore, have not included economic comparisons of non-aged households without children. However, in all cases the average income of the non-aged childless household was higher than the households with children. In many age groups, however, the differences were slight.

The overall mean income of households with children in the eight countries is .93 of the national average as compared to .89 for the elderly. In Canada and Germany the overall adjusted incomes of elderly families and families with children are about the same. In Australia, the Scandinavian countries and in the United Kingdom, families with children have higher adjusted mean incomes than do elderly families. Only in Switzerland and the United States do we find that on average elderly families are better off than are families with children. (The difference, however, is not significant in the United States). In fact, in the United States, the adjusted incomes of those 75 and over are higher than those of much younger (heads age 34 or under) families with children. In Switzerland, they are above the incomes of all families with children age 44 or younger. Across the other countries, the adjusted mean incomes of the very old (age 75 or over) are only higher than the incomes of the youngest families with children (head over 24 or under) in Canada and Germany.

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 Table 1 about here  
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Table 1

Ratio of Adjusted Disposable Income to National Mean<sup>1</sup>  
for Families with Children in Eight Countries

Country	Families with Children <sup>2</sup>					Elderly Families <sup>3</sup>			
	Less than 25 years	25-34 years	35-44 years	45-54 years	55-64 years	Less than 64 total	65-74 years	75 yrs and over	65 and over
Australia	0.68	0.80	0.89	1.07	1.05	0.90	0.88	0.80	0.8
Canada	0.65	0.84	0.93	1.02	0.96	0.91	0.94	0.81	0.9
Germany	0.62	0.79	0.89	0.86	0.96	0.86	0.85	0.79	0.8
Norway	0.80	0.93	0.99	1.03	1.15	0.99	1.01	0.79	0.9
Sweden	0.91	0.98	1.01	1.09	1.01	1.01	0.96	0.78	0.9
Switzerland	0.60	0.77	0.89	0.98	1.16	0.91	1.11	0.91	1.0
United Kingdom	0.80	0.87	0.95	1.10	1.14	0.95	0.76	0.67	0.7
United States	0.62	0.82	0.93	1.02	0.94	0.90	0.99	0.84	0.9
Overall Mean <sup>4</sup>	0.71	0.85	0.94	1.02	1.05	0.93	0.94	0.80	0.8

<sup>1</sup>Disposable income is post-tax and transfer income. The adjustment of disposable income for family size is done by dividing actual disposable income by the U.S. Poverty Line equivalence scale shown in Table A-3. For a fuller discussion, see Smeeding, Schmaus and Allegreza (1985) and Appendix 3. The national mean adjusted disposable income equals 1.00.

<sup>2</sup>Families with children are families age 24-64 containing at least one child less than 18 years of age.

<sup>3</sup>Elderly families are those headed by a person age 65 or over. In some countries a small number of elderly families may contain children under age 18.

<sup>4</sup>The overall mean is the simple unweighted average of the means within each age group.

In general, adjusted disposable income relative to the national mean of households with children is highest for heads aged 45 to 64 years. In Germany, Norway, Switzerland and the United Kingdom the income of the households aged 55 to 64 years with children is larger than in the 45 to 54 year old household group. Because several members of this cohort may already be retired, the incomes of those still working are even higher, on average, relative to those ages 45 to 54 than the figures in this table suggest. As people reach retirement age, their earnings begin to drop significantly, reducing their adjusted disposable income (Achdut and Tamir, 1985).

The older the elderly are, the lower their income is relative to the national mean in every country. The average elderly person aged 65 to 74 years had an income that was 94 percent of the national average. The average elderly income of people 75 and older, however, was only 80 percent of the national mean. Interestingly, the largest drop in income between 65 to 74 years old and 75 years and over households is in Switzerland, Sweden and Norway. The United States had the third highest ratio of adjusted disposable incomes for 65 to 74 year olds and the second highest ratio for people 75 and over; only the Swiss were higher. The average incomes of all the U.S. elderly relative to the national mean income is the second highest among the countries examined here; again, with only the Swiss higher. This fact is confirmed in the last column of Table 1 where the overall mean adjusted disposable income of households with heads 65 years of age and over relative to the overall mean income is .94 in the United States and 1.02 in Switzerland compared to a .89 average.

One final comparison of interest involves single-parent families with other families. As one might well expect, the adjusted disposable incomes of

single parents with children are everywhere considerably lower than for all families with children (Appendix Table A 5.1). A more interesting comparison is that between the aged and single-parent families with children. The aged in every country also had considerably more income than single parent families. In fact, the aged in the U.S. have almost twice as high an adjusted income as do single-parent families with children.

Comparisons of the income of various households to the national average in each country is a useful beginning to a study of relative economic status. However, because these comparisons are based on averages, they provide no information about the people who are not average. The patterns of overall income inequality and particularly of individual poverty discussed below show a more complex picture than one taken through the simple filter of national means.

### III. Relative Low Income and Absolute Poverty Rates Among the Young and Old

International poverty comparisons raise both conceptual and methodological issues (Rein, 1984). Poverty may be defined in terms of absolute income; but deprivation is also a relative concept. In this chapter, relative "low income" is defined as the percentage of people or families who have post-tax and transfer income adjusted by the U.S. poverty line equivalence scale (adjusted disposable income) below one half the national median adjusted income. Absolute poverty is defined as the percentage of people who have adjusted disposable income below the U.S. poverty line converted into national currencies using the purchasing power parities developed by the Organization for Economic Cooperation and Development (OECD, 1985).<sup>3</sup> Appendix 4 explains

how the absolute poverty lines were adjusted over time and across countries.<sup>4</sup> The U.S. poverty standard is 42 percent of the adjusted median income in the United States. (See Appendix 4 and Table A-4.) The impact of using the U.S. poverty standard instead of one-half the median is dramatic in the U.S.; it reduces the poverty rates of the U.S. aged by a third in Table 2 (from 23.9 to 16.1 percent). In four countries, the U.S. poverty line, adjusted for differences

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Table 2 about here  
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in currency using OECD purchasing power parities, is slightly above one half the equivalence adjusted median income. In the United States, Switzerland, Canada, and Sweden it is below half the median. Poverty rates are, therefore, very sensitive to where the poverty line is located relative to the median income.<sup>5</sup>

One fact stands out most clearly in Table 2: The United States has a higher proportion of children in low income families, by either the relative or the absolute measure, than in any other country. In fact, with the exception of Canada and Australia, the United States has more than twice the percent of children in low income families than the other countries. Over 22 percent of children have low income by the relative standard; 17 percent are poor using the absolute U.S. poverty line. This absolute poverty rate is just above Australia's and more than 60 percent higher than the next two closest countries, the United Kingdom and Canada.

In contrast, the poverty of the U.S. aged, using the absolute U.S. poverty definition, is lower than in the United Kingdom, Australia and Norway, and not far above Germany's rate. If we use the relative low income line, the United

Table 2

Relative Low Income and Absolute Poverty Among Children, Adults  
and the Aged, for Selected Countries: 1979, 1981

Country and Poverty Measure	Children	Poverty Rate		Overall	Ratio of Child to Aged Poverty Rate
		Adults	Aged		
Australia					
Relative <sup>1</sup>	15.9	9.9	15.7	12.2	1.01
Absolute <sup>2</sup>	16.9	10.5	19.2	13.2	0.88
Canada					
Relative <sup>1</sup>	15.5	10.7	17.2	12.6	0.90
Absolute <sup>2</sup>	9.6	7.5	4.8	7.4	2.00
Germany					
Relative <sup>1</sup>	4.9	4.5	11.1	5.6	0.44
Absolute <sup>2</sup>	8.2	6.5	15.4	8.3	0.53
Norway					
Relative <sup>1</sup>	4.8	5.4	5.6	5.2	0.86
Absolute <sup>2</sup>	7.6	7.1	18.7	8.6	0.41
Sweden					
Relative <sup>1</sup>	5.0	6.7	0.8	5.3	6.25
Absolute <sup>2</sup>	5.1	6.7	2.1	5.6	2.43
Switzerland					
Relative <sup>1</sup>	7.8	8.1	11.4	8.5	0.68
Absolute <sup>2</sup>	5.1	6.2	6.0	5.8	0.85
United Kingdom					
Relative <sup>1</sup>	9.3	5.7	29.2	9.7	0.32
Absolute <sup>2</sup>	10.7	6.9	37.0	11.8	0.29
United States					
Relative <sup>1</sup>	22.4	13.4	23.9	17.1	0.94
Absolute <sup>2</sup>	17.1	10.1	16.1	12.7	1.06

<sup>1</sup>Relative low income includes all persons with adjusted incomes below half the median adjusted national income (see Appendix 4).

<sup>2</sup>Absolute poverty includes all persons with adjusted incomes below the official U.S. government three-person poverty line, converted to other currencies using OECD purchasing power parities, where adjusted incomes are computed using the U.S. poverty line equivalence scales (see Appendix 4 for additional detail).

States and the United Kingdom have more low income aged than any of the other countries. Poverty among the aged in Sweden has been virtually eliminated due to the high minimum benefit levels in their social insurance system. On the other hand, the relatively low minimum benefits in the U.K. public retirement system in 1979 left 37 percent of them poor, according to the U.S. poverty measure in Table 3.<sup>6</sup>

If the poverty levels of the young and the old in the six countries had been similar and if the relative poverty position of the young and old had been the same, then their poverty trends might be the result of fundamental, universal trends in industrial and democratic societies. The reality, however, is quite different. The rate of poverty varies considerably between groups and across countries. Three of the European countries have clearly more poverty among their aged than their children; Sweden had more poverty among its children, but both rates were so low that the difference was very small; in the United States poverty rates for both age groups was similar in 1979, but were high relative to the other countries. In Australia and Switzerland, where the poverty rates of the former country are more than double the rates of the latter, elderly poverty exceeds child poverty slightly. The challenge is to try to understand why these differences occur, and to estimate how they might change in the future.

#### IV. Possible Explanations for the Differences in the Poverty Status of the Young and the Old

The social conditions and transfer policies that may be related to the economic status of the young and the old found in the eight countries, which are explored in this chapter include:

- equivalence scales;
- relative size of the two age groups;
- family structure (including changing structures over the life course);
- heterogeneity of population;
- contribution of secondary earners to family income;
- income inequality within age cohorts; and
- effectiveness of the tax and transfer system.

The first two factors turn out not to be important in explaining the differences in poverty among the countries included here. The next four factors--differences in family structure, heterogeneity, secondary earners, and income inequality--provide some insight in explaining the patterns of poverty. Finally and, we feel, most important, the tax and transfer systems of each country help describe the de facto public response to the patterns of poverty found in nations. The effectiveness of these public programs play the largest role in determining how much pre-tax and transfer poverty is reduced and hence the ultimate pattern of post-tax and transfer poverty both within and across countries.

Equivalence Scales. The calculations of the percentage of children and elderly in poverty are sensitive to the equivalence scale that adjusts their income for relative family size and age structure as discussed in Chapter 2 of this volume. But there is little agreement as to which one is "best". Choice of equivalence scales affect the poverty rates of countries in similar directions. (See Table A-3.2 in Appendix 3). Further, different equivalence scales sometimes change the relative position of young and old poverty within some countries.<sup>7</sup> But the most important fact is that, with one minor exception (Australia using a subjective equivalence scale), the poverty of U.S. children

is the highest of all eight countries regardless of which equivalence scale is used. Excluding Australia, the United States poverty rate for children is 58 percent, 60 percent and 83 percent higher than the next closest country using the United States, LIS and subjective equivalence scale, respectively.

Therefore, the choice of equivalence scale may change the absolute numbers, but they do not explain the patterns of child poverty across countries.

Relative Size of Age Groups. There are least two conflicting hypotheses about how poverty may be related to the relative size of the age group. The first or a "relative burden" hypothesis is that countries with relatively large and growing dependent populations may find it difficult to allocate enough economic resources to these groups to maintain their relative economic well-being. Therefore, large numbers of aged and/or children in the population would increase aged and/or child poverty rates. The second or "political clout" hypothesis is that large dependent groups, aged or children, will create political pressure to increase the group's share of the economic pie. In this case, poverty rates will be negatively correlated with group size. But the evidence is not strong for either of these hypotheses.

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 Table 3 about here  
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In Table 3 we present the percentage of the total population of each country which is young (age 0-17), old (65 and over) and the combined total of these, sometimes referred to as the total dependency ratio. Finally we have tabulated the ratio of the young to old population share and included the ratio of child to age and poverty rates from Table 3.



Table 3

Relative Size of the Young and Old as Percent of  
Total Population Relative to Absolute Rates

Country	Young 0-17	Aged 65 & over	Young and Old Combined (Dependency Ratio)	Ratio of Young to Old Share in Population	Ratio of Young to Old Poverty <sup>2</sup>
Australia	30	9	39	3.3	0.9
Canada	28	8	36	3.5	2.0
Germany	24	15	39	1.6	0.5
Norway <sup>1</sup>	32	13	45	2.5	0.4
Sweden	23	18	41	1.3	2.4
Switzerland	26	14	40	1.9	0.8
U.K.	28	13	41	2.3	0.3
U.S.A.	29	11	40	2.6	1.1

Note:

<sup>1</sup>The Norwegian figures for children and elderly are taken from OECD population figures. The LIS estimate of the percent of children in Norway is 36 percent and of elderly 12 percent. Because the Norwegian file identifies children via tax dependency, and because in Norway some tax dependents may not be children, e.g. disabled adults living with other family members, we decided to use the OECD population estimates instead of the LIS estimates.

<sup>2</sup>Taken from Table 3, final column.

In all of the countries the dependency ratio (young, plus the old as a percent of total population) is fairly similar varying only from 36 to 45 percent. And in all of the countries the young are a considerably larger proportion of the population than the old. Yet within each country children do not have consistently more or less poverty than the aged. Children from three countries have more poverty than their elderly; in five countries they have less.

The comparison of poverty rates of children in the eight countries also indicates no consistent relationship to the relative group size within each country. Neither is there a consistent pattern of aged poverty and relative size of the aged within their own country across countries. The lack of consistent relationships means that neither the relative burden nor the political clout hypothesis is supported by the cross-sectional data on the eight countries examined.

Family Structure. Some family structures are less vulnerable to poverty than others. In all of the countries two adult families, both young and old, had higher average income than one adult families. They were also less vulnerable to poverty. But vulnerability to poverty by family structure varied considerably by country.

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Table 4  
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In all eight countries children in one-parent families were considerably more likely to have less than one-half the media income (Table 4 Panel A) and to be in absolute poverty (Table 4, Panel B) than children living in two parent families (Table 4). But curiously the percent of children in

Table 4

Poverty and Low Income Among Children and Children  
by Family Type for Selected Countries

A. Relative Low Income<sup>1</sup> Rates of Children by Family Type

Country	Percent of Children in Each Family Type Who Are Low Income:			
	One-Parent Families <sup>2</sup>	Two-Parent Families <sup>3</sup>	Other Families <sup>4</sup>	All Types of Families
Australia	63.5	11.4	10.2	15.9
Canada	51.0	12.0	11.1	15.5
Germany	30.6	2.0	7.8	4.9
Norway	8.6	3.0	10.0	4.8
Sweden	8.3	4.4	0.5	5.0
Switzerland	18.4	6.4	10.0	7.8
United Kingdom	36.2	8.1	14.1	9.3
United States	59.3	13.8	22.1	22.4

B. Poverty Rates<sup>5</sup> of Children by Family Type

Australia	65.0	12.4	10.6	16.8
Canada	38.7	6.8	5.5	9.6
Germany	35.1	4.9	12.1	8.2
Norway	21.6	4.4	12.7	7.6
Sweden	8.6	4.5	0.5	5.1
Switzerland	12.9	4.1	3.8	5.1
United Kingdom	38.6	9.5	2.5	10.7
United States	51.0	9.4	16.2	17.1

C. Percentage of Children by Family-Type

Australia	9.1	75.3	15.6	100.0
Canada	9.6	71.1	19.3	100.0
Germany	5.5	72.2	22.3	100.0
Norway	15.7	78.1	6.2	100.0
Sweden	14.8	84.8	0.4	100.0
Switzerland	11.6	87.3	1.1	100.0
United Kingdom	8.0	76.7	15.3	100.0
United States	14.7	61.9	23.4	100.0

<sup>1</sup>Relative low income is as explained in Section III. Children are persons 17 years or under and adjusted income was calculated using the U.S. Poverty Line equivalence scales.

<sup>2</sup>Children in one-parent families are living with only one natural parent and no other adults in the family.

Table 4 (cont.)

<sup>3</sup>Children in two-parent families live in units with only two parents and no other adults.

<sup>4</sup>Children in other families may live with adults other than one parent alone or two parents alone, for example, living with grandparents, in extended family situations, foster homes, and so on.

<sup>5</sup>Absolute Poverty Rates as explained in Section III preceding.

one-parent families by country was unrelated to the rates of low income (Table 4, Panel C). Both Norway and Sweden have higher proportions of children in families with only one parent (15.7 percent and 14.8 percent, respectively) than the United States (14.7 percent). In Switzerland, 11.6 percent of children live in single-parent units. These are the highest shares (Table 4, Panel C) among the countries studied here. Yet, the low income and poverty rates of children in the one-parent families of Norway, Sweden, and Switzerland are the lowest in the eight countries studied! The highest poverty and low income rates among single parents can be found in Australia and the USA, followed by Canada, U.K. and Germany.

If anything, there appears to be a slight negative correlation between the percentage of children in single-parent families and poverty rates, except for the USA. While the proportion of U.S. children who are in single-parent families is somewhat higher than in the other countries, what appears to distinguish the U.S. and Australian situation is that the single-parent families are so much more vulnerable than in other countries. They have lower relative incomes (Appendix 5, Table A-5.1) and their low income rates are more than twice as high as the rates of other countries. While we are concerned about high Australian child poverty, the overall adjusted median family income in Australia is only about 78 percent of the U.S. level (Table A-4). Australia is much less rich than the USA and it also has a much lower share of children in single-parent families than the USA. Hence the most striking element of Table 4 is the contrast between the high levels of poverty in the USA given their high share of children in single-parent families. Other high income countries with similar demographics do much better than we appear to do for this group.

The varying family structures of the aged also provide some curious insights into the pattern of poverty (Table 5). The percentage of aged living alone is actually highest in Sweden where they have the lowest poverty rate.

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Table 5  
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The percentage of aged living alone in Sweden (50 percent) is much higher than in the United Kingdom (37), which has by far the highest poverty rate among the aged. Few elderly live alone in Australia, about one third, where poverty rates among the elderly living alone are very high. But in Canada where 36.5 percent of elderly live alone, poverty rates among the old are very low. Poverty rates among elderly couples are much lower than among singles in every country.

Poverty varies over the life course as well as by family structure. When age of the head is taken into account a definite "U" pattern is observed in all countries' high poverty rates at either end of the life course and lower rates in the prime years. Poverty declines as the family head enters middle age and rises again in the later years. This is life course poverty first observed by Booth (1934). But what is less well documented is the joint role of age and family structure. Consider the USA experience to illustrate the point.

Solo parenting is concentrated among young family heads--90 percent of these families are under 25 years of age. For this group poverty rates are especially high. While 12 percent of all families with a head under 25 have solo parents, nearly two-thirds of these mother-headed families are poor. By contrast, two-thirds of all families with children in this age group are

Table 5

## Living Arrangements and Poverty Among the Elderly

## Panel A. Living Arrangements      Percentage of Aged Persons Living:

Country	Alone:		In Married Couples	Other <sup>1</sup> Combinations	Total
	Male	Female			
Australia	8.4	25.1	59.4	7.1	100.0%
Canada	9.3	27.2	47.2	16.3	100.0
West Germany	6.3	36.7	48.5	8.5	100.0
Norway	15.1	41.2	10.7 <sup>2</sup>	33.0 <sup>2</sup>	100.0
Sweden	13.6	36.2	49.8	.5	100.0
Switzerland	10.4	39.5	49.7	0.3	100.0
United Kingdom	8.9	27.9	49.9	13.3	100.0
United States	7.6	27.5	50.0	14.9	100.0

Panel B. Poverty      Absolute Poverty Rate<sup>3</sup> Among Aged Persons Living:

Country	Alone:		In Couples	Other <sup>1</sup> Combinations	Overall Rate
	Male	Female			
Australia	40.1	48.0	6.1	2.9	19.2
Canada	6.2	9.4	1.6	5.5	4.8
West Germany	18.6	24.0	9.3	10.3	15.4
Norway	32.3	31.0	.4	3.1	18.7
Sweden	6.8	3.0	.2	.6	2.1
Switzerland	8.7	11.4	1.1	0.0	6.0
United Kingdom	55.1	69.5	24.1	5.2	37.0
United States	25.7	30.7	8.2	11.1	16.1

## Notes:

<sup>1</sup>Other Combinations include all elderly not living alone and not living in (married) couples.

<sup>2</sup>The Norwegian datafile lists two elderly adults living together as "couples" only if they are married. But, because living together unmarried is customary in Norway, even for couples who have been living together for several decades, other and couples are hard to distinguish.

<sup>3</sup>Poverty rates are calculated by comparing after tax money income to the official U.S. Poverty lines (converted to country currency using OECD purchasing power parities) for each family type.

married couples. While only 14% of children in these families are poor, this is still above the overall child poverty rate in the U.S. (9.4% percent in Panel C of Table 4).

Also poverty again rears its head in later old age and again mainly among females. Smeeding and Torrey (1986) use the LIS data for these same countries and find that both low income and poverty rates among the elderly are highest among single women living alone who are age 75 or over. In every country studied the poverty rates for the 75 and over group were at least 50 percent higher than among the 65-74 year old group. Moreover in every country studied, between 60 and 70 percent of the poor age 75 and over were single women living alone.

It is therefore the poverty among families with children headed by younger unmarried women (and married couples) and among very elderly single women that helps characterize social disadvantage in industrial societies, and particularly in the USA. In the United States, single adult households, both with children and aged, are much more vulnerable to poverty than two-adult households. But the poverty of our aged single households is a pattern we share with the other countries; the poverty of our single-parent and two-parent families with children, however, is considerably higher than in any other country but Australia.

Heterogeneity of population. If poverty rates vary by race or ethnic groups as they do in the United States, then countries with a more diverse population, such as Canada and the United States, may have higher poverty rates than homogenous countries. Among the nations which are included in this paper, only Australia, Canada, Switzerland and the U.S. have a culturally diverse enough population to separate minority subgroups within their populations. Sweden, Norway and the UK do not make such differentiation while the Germany dataset excludes foreign-born heads of households. In the United



States, black families with children are particularly economically disadvantaged relative to white anglo (non-black and non-hispanic) families (Table 6). The low income and poverty rates among black children are almost four times higher than the rates of white anglo children; the same rates for the black aged are more than two and one-half times the rates for white anglo aged. Hispanic poverty rates for children and elderly are double non-black non-hispanic rates.

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Table 6 here  
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People speculate that the U.S. poverty rates are high because of our diversity. According to this line of argument, if we compared the poverty rates of white anglos to those in other countries they would be more similar than the overall rates. But when we compare the poverty rate of the non-minority populations in several countries, the U.S. poverty rates for white anglos who are young and old still are comparatively high. Native born Canadians, both young and old, have lower poverty rates than whites in the U.S. So do the native born Swiss. The Australians, on the other hand have more poverty among their native born population than the U.S. does among its white population. Still the poverty rate among U.S. anglo children is higher than the overall (Table 3), minority and/or majority poverty rates for children in all countries but Australia.

Heterogeneity does matter; poverty rates are different for different populations and U.S. poverty rates are high due in part to its social and ethnic diversity. But this diversity doesn't matter enough to fully explain the broad differences in poverty among nations in general and the high poverty of U.S. children in particular.

Table 6  
Poverty Rates<sup>1</sup> Among Selected Subgroups in  
National Populations<sup>1</sup>

	Children	Aged
Australia: Total	16.8	19.2
Native Born	17.1	19.7
Foreign Born	16.3	17.4
Canada: Total	9.6	4.8
Native Born	9.6	4.8
Foreign Born	9.6	4.6
(Arrival after 1971)	10.4	17.6
Switzerland: Total	3.8	6.0
Swiss	5.6	5.1
Foreigners	2.6	25.5
US: Total	17.1	16.1
Blacks	40.5	36.7
Hispanics	28.9	27.0
White-Anglo (non-Black and non-Hispanic) <sup>2</sup>	11.4	14.0

<sup>1</sup> Absolute: U. S. Measure includes all persons with adjusted incomes below the official U.S. government three-person poverty line, converted to other currencies using OECD purchasing power parities, where adjusted incomes are computed using the U.S. poverty line equivalence scales.

<sup>2</sup> Poverty rates for U.S. whites and others, including hispanics are 13.0 (children) and 14.3 (aged). Because hispanics may also be either black or white race, the easiest way to separate U.S. minorities from the U.S. majority is to calculate the non-Black and non-Hispanic poverty rate. We call this the "white anglo" poverty rate in this paper.

Income of Second Earners. The poverty status of children may depend on the ability of the "second earner" in a two-parent family to earn enough to pull the family from poverty. Conceptually, one can look at second-earners contribution as follows. In a traditional two-parent family with children, we most often find one parent usually the husband working full-time full year. This income of the "primary" earner, but sometimes the wife, forms the regular income base of the family, in effect their major means of avoiding poverty. If the primary earner does not earn enough to keep the family from poverty, or if the primary earner is unable to work due to unemployment, accident, sickness or disability, the family may need to depend on the income of a second earner to keep the family from poverty.

If we look at the income composition of the pre tax and transfer poor families, we find that secondary earners are not terribly important to child poverty rates. United States' poor families with children (before taxes and transfers) get more income from second earners (spouse or others) than families in any of the other seven countries examined. The share of income provided, however, is not in any country over 16 percent of the U.S. poverty line income. But, the role of the income of the second earner is very important in keeping many near poor families out of poverty. If the income of the second earner was eliminated and nothing else took its place, the number of families with children in poverty would increase considerably in every country from a 37 percent jump in Canada to 178 percent increase in Sweden. Viewed from this perspective, second earner appears to be a fairly important source of income for the keeping of otherwise poor families from poverty. If secondary earners did not or could not work, poverty would rise and the fiscal strain on the tax-transfer system would increase in every country examined.

Income Inequality. Poverty may occur not only when average incomes are low but also when average incomes are not low, but income inequality is high. Income inequality as measured by the gini coefficient describes the distribution of incomes for various groups within a population as well as for the country as a whole. In the countries examined the income inequality among the aged was higher than among families with children, except in Sweden. And the inequality among one-parent families was higher than among the aged in every country but Sweden and Norway where they were virtually the same (see Table A-5.2 in Appendix 5).

The United States had more income inequality among all groups than any of the other countries; Canada has the second highest levels of inequality. The level of income inequality in families with children is related somewhat to their poverty rates; the United States, which had the highest inequality, had the highest child poverty rates; Sweden had both the lowest inequality and poverty. However, child poverty rates in Switzerland are the same as in Sweden, despite significantly higher overall levels of inequality among families with children. The Australian child poverty rates are much higher than those in Germany and Canada despite similar or lower overall inequality levels among families with children.

This direct relationship is even less robust among the aged of various countries. The United States and Canada, which have the highest inequality, have the fourth and second lowest poverty rates. Inequality among the U.K. aged is tied with Switzerland for third lowest of the eight countries. However, their absolute poverty rates in 1979 are easily the highest among the countries studied. This may be explained by the low average ratio of aged incomes to the national mean (Table 1). The wage replacement of the British

social pensions level for the elderly is similar to the wage replacement ratios of Canada and Germany in 1980 (Smeeding and Torrey, 1986). But the wages themselves were sufficiently low that even with a relatively low degree of inequality, the average aged family in the United Kingdom had a relatively low income and therefore more poverty. In summary, the degree of income inequality is only a fair predictor of poverty among children, and a poor predictor of poverty among the aged in the eight countries examined.

The Income Support System. The first step in understanding how effective countries are in reducing their poverty populations is to understand the roles of government programs in the lives of the poor. Government programs among the eight countries studied vary considerably in how much they provide to their poverty populations and through which mixes of programs. And the comparisons of the roles of these various government programs suggest different social philosophies embedded in the transfer programs of the industrial countries studied.

The effectiveness of the tax and transfer system varies by country and by age of the poverty population. In every country the tax and transfer system reduces considerably the poverty population. But government programs are much more effective in reducing the poverty of the aged than the poverty of children in every country but the United Kingdom (Table A-5.3 in Appendix 5). Sweden's tax and transfer programs are considerably more effective for both age groups than are the programs of any other country. Only 2 percent of the aged and 28 percent of the children who are poor before tax and transfer programs, are poor after taking into account the effect of these programs. In contrast, the United States tax and transfer system reduces the poverty of U.S. children less than in any other country except Australia; over 80 percent

of poor children before taxes and transfers in the USA remain poor afterwards. The U.S. system is much more efficient in reducing poverty among the aged than among children, only 28.2 percent of the pre-tax and transfer poor remain so after these programs are counted. But government programs in six other countries, all except the U.K., reduce their aged poverty population by more than U.S. programs.

Families with children who are poor before the tax and transfer systems receive considerable government benefits in every country studied. But in every country, except the U.S. and Canada, the non-means tested social insurance benefits provide considerably more income than the welfare benefits not only as a share of total income, but also in absolute terms. In the U.S. as shown on Table 7, more than twice as much income is provided by means tested benefit than by social insurance.

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Table 7 here  
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One would expect that in countries that have them, child-related social insurance benefits such as the child allowance and maternity benefits, would be an important source of income for poor families with children. But, in fact, employment-related benefits: unemployment, sickness, accident and disability, are of more importance in every country that had both kinds of benefits (and by definition in those countries which had only the latter!).

Social insurance benefits are not means tested and therefore go to both poor and non-poor. The tax systems in every country studied, however, are related to incomes. It is therefore not surprising that the countries that rely heavily on social insurance programs to help the poor also appear to have

Table 7

## Income by Source as a Percent of Gross Income (Families with Children Who Were Poor Before Taxes and Transfers)

Source of Income	Australia	Canada	Germany	Norway	Sweden	Switzerland	United Kingdom	United States
Earnings	26.7	40.1	43.7	23.1	32.4	42.9	44.3	42.0
Soc. Insurance, Total:	60.1	28.6	45.7	62.2	47.3	38.5	31.5	15.4
Components:								
Sickness, Accident Disability	8.5	4.7	11.1	4/	10.6	15.1	11.5	6.3
Child Allowances	8.1	7.2	10.3	6.6	8.3	--	12.1	--
Maternity	--	--	--	4/	5.9	--	--	--
Unemployment	14.3	11.4	4.8	4/	7.2	0.7	3.3	2.1
Other Soc. Insurance	18.6	5.3	4.0	55.6	2.4	4.9	0.9	3.2
Social Retirement	10.6	3/	15.7	3	12.9	17.9	3.7	3.8
Means Tested	--	26.4	5.5	2.4	27.7	3.5	19.8	37.1
Property Income	11.1	1.5	0.2	4.3	-7.5 <sup>2</sup>	3.7	0.7	0.9
Other Income	2.1	3.4	4.9	8.1	--	11.5	3.7	4.6
Total Income <sup>1</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tax	-4.0	-1.9	-10.8	-7.2	-17.0	-9.8	-6.0	-3.1

<sup>1</sup>Components may not add exactly to totals due to rounding error.

<sup>2</sup>Sweden has negative property income because of its unique tax treatment of owner occupied homes.

<sup>3</sup>On the Canadian income file, Sickness, Accident and Disability pay cannot be directly separated from Social Retirement. However, the large majority of payments to families with children are for the former purpose and are therefore classified as sickness, accident and disability pay.

<sup>4</sup>In Norway, only child allowances can be broken out of total Social Insurance benefits. The residual is included as other social insurance.

higher effective tax rates to recover some of their broadly distributed benefits, even among the poor. The U.S., which provides most of its income support to poor families through means tested programs, and much less via social insurance which is in turn not heavily taxed, also has one of the lowest effective tax rates on poor families.

Many families with children who are poor before taxes and transfer remain poor afterwards. The average disposable income of these families after taxes and transfers is still below the U.S. poverty level in every country but Sweden and the U.K (Table 8). The disposable income of these families in the

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Table 8  
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U.S. and Australia after taxes and transfers reaches only three-fourths of the poverty line; and U.S. and Australia income levels for these families was lower than in any other country. Clearly these income support systems are inadequate as reflected in the high U.S. and Australian child poverty rates.

One reason why the disposable income of poor families was so low in the U.S. is that the level of public transfers (40.8 percent of the poverty line) was lower in the U.S. than in every other country but Switzerland (40.2 percent of the poverty line). The U.S. means-tested benefits, although presumably better targetted than social insurance benefits, were simply too low (28.8 percent of the poverty line) to lift the average poor family with children out of poverty in 1979. It appears that U.S. social insurance benefits, particularly employment related benefits, did not provide a great deal of assistance to families with poor children. For the U.S. to reduce its child poverty rate via the tax-transfer route, it appears that either social



Table 8

Income by Source as Percent of U.S. Poverty Line (Families with Children  
Who Were Poor Before Taxes and Transfers)

Source of Income	Australia	Canada	Germany	Norway	Sweden	Switzerland	United Kingdom	United States
Earnings	21.3	36.5	45.2	23.9	47.9	41.0	48.0	32.6
Social Insurance Total:	48.0	26.0	47.3	64.3	69.9	36.9	34.2	12.0
Components:								
Sick, Accident, Disability	6.8	4.4	11.5	2/	15.7	14.4	12.5	4.9
Child Allowances	6.4	6.6	10.6	6.8	12.2	--	13.1	--
Maternal	--	--	--	2/	8.7	--	--	--
Unemployment	11.4	10.4	4.9	2	10.7	0.6	3.6	1.6
Other Soc. Insurance	13.8	4.6	4.0	57.5	3.6	4.7	1.6	2.5
Social Retirement	8.5	1/	16.3	2/	19.0	17.1	3.4	2.9
Means-tested	0.0	24.0	5.7	2.5	40.9	3.3	21.5	28.8
Other Income	10.6	4.4	5.2	12.8	-11.0	14.5	4.7	4.2
Gross Income	79.9	90.9	103.4	103.5	147.7	95.8	108.4	117.5
Tax	-3.2	-1.7	-11.2	-7.4	-25.2	-9.3	-6.5	02.4
Disposable Income	76.7	89.2	92.2	96.1	122.5	86.4	101.9	75.1
Total Transfers <sup>3</sup>	48.0	50.0	53.0	66.8	110.8	40.2	55.7	40.8

<sup>1</sup>On the Canadian income file, Sickness, Accident and Disability pay cannot be directly separated from Social Retirement. However, the large majority of payments to families with children are for the former purpose and are therefore classified as sickness, accident and disability pay.

<sup>2</sup>In Norway, only child allowances can be separately broken out from total social insurances. The residual is included as other social insurance.

insurance or means tested benefits need to be increased and coverage broadened to raise benefits and to include more poor families with children.

The income support structure for the aged and poor in the U.S. is much more similar to the structures in other countries than the U.S. transfer system for poor children. Table 9 shows that the elderly who are poor in

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Table 9 here

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every country receive at least 73 percent of their income or more through social insurance, mainly social retirement. No country provides more than 8% of the income for the poor aged through means-tested programs. And with the exception of Germany and Sweden, the effective tax rate on the elderly poor is very low.<sup>8</sup> The sources of income of the U.S. elderly poor are remarkably similar to the sources of income of their peers in every other country studied. And in all of the countries the average elderly person who was poor before taxes and transfers is above the U.S. poverty line after taxes and transfers (Table 10). Not surprisingly, there is a strong inverse correlation

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Table 10 here

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between after tax and transfer poverty (Table 3) and total transfers to the elderly (Table 10). But here again the U.S. composition of elderly income relative to their poverty line is similar to that of most other countries. In particular, the net transfers (total transfers minus direct taxes) in the U.S. are very close to every country studied with the exception of the U.K. and Sweden. Of course, a number of elderly households are still poor in every

<u>Source of Income</u>	<u>Australia</u>	<u>Canada</u>	<u>Germany</u>	<u>Norway</u>	<u>Sweden</u>	<u>Switzerland</u>	<u>Kingdom</u>	<u>States</u>
Earnings	1.2	2.4	1.5	3.9	1.6	2.1	4.1	4.5
Soc. Insurance Total	87.0	77.4	93.3	84.9	84.2	73.5	73.0	74.3
Components:								
Sickness, Accident Disability	2.0	3	3.3	2	0.2	--	3.0	--
Unemployment	0.4	0.9	--	2	0.1	--	--	--
Other Soc. Insurance	14.8	2.6	3.5	2	1.3	0.3	1.2	3.1
Social Retirement	69.8	73.9	86.5	2	83.6	73.2	68.8	70.1
Means-tested	--	4.5	1.5	0.7	5.9	3.7	7.6	5.6
Property Income	8.7	9.8	1.3	5.7	8.3	13.4	5.1	8.7
Other Income	3.0	5.9	2.4	4.8	--	7.4	10.2	6.8
Total Income <sup>1</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Direct Taxes	-1.4	-0.4	-20.6	-6.2	-19.9	-4.2	-2.1	-0.4

<sup>1</sup>Components may not add to totals due to rounding error.

<sup>2</sup>In Norway, we are not able to separate social insurance into its component parts.

<sup>3</sup>In the Canadian LIS file, sickness, accident and disability cannot be directly separated from social retirement benefits. For the elderly the vast majority of benefits are the latter and are therefore counted as social retirement.

Table 10

Income by Source as Percent of U.S. Poverty Line (For Aged Families  
Who Are Poor Before Taxes and Transfers)

<u>Source of Income</u>	<u>Australia</u>	<u>Canada</u>	<u>Germany</u>	<u>Norway</u>	<u>Sweden</u>	<u>Switzerland</u>	<u>United Kingdom</u>	<u>United States</u>
Earnings	1.5	3.5	2.2	5.5	3.5	3.4	4.4	6.1
Social Insurance	109.0	112.5	142.0	119.7	178.5	116.7	78.8	99.7
Means-Tested	--	6.5	2.0	1.0	12.5	5.9	5.5	7.5
Property Income	10.9	14.3	2.0	8.0	17.6	21.2	5.5	11.7
Other Income <sup>1</sup>	3.8	8.5	3.8	6.8	0.0	11.7	10.9	9.1
Gross Income	125.2	145.3	152.2	141.0	212.1	1,589	107.5	134.1
Tax	-1.8	-0.5	-31.3	-8.7	-42.3	-6.8	-2.2	-0.6
Disposable Income	123.4	144.8	120.9	132.3	169.8	152.1	105.3	133.5
Total Transfers <sup>2</sup>	109.0	119.0	144.2	120.7	191.0	122.6	86.7	107.2
Net Transfers <sup>3</sup>	107.2	118.5	112.9	112.0	148.7	115.8	84.5	106.6

<sup>1</sup>Other income is mainly occupational pension benefits and other minor private income receipts.

<sup>2</sup>Total transfers equals social insurance plus means-tested benefits.

<sup>3</sup>Net transfers equals total transfers minus direct taxes.

country after the tax and transfer system. This residual poverty can be measured by the gap between the income of the poor households and the U.S. poverty line. This gap was considerably less in most countries for aged households than for families with children (Table 11). In Germany the poverty

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gap of families with children and the aged was the same after tax and transfer. In the U.S., however, the poverty level of the remaining poverty families with children was a third deeper than the poverty of the aged families, and considerably higher than in Australia, U.K. and Canada--the non U.S. countries with the highest poverty rates for children. Not only are fewer poor families with children in the United States removed from poverty by the tax and transfer system than the aged, but those families with children that remain in poverty are poorer than the remaining poor aged families as well.

#### V. Conclusions

The patterns of income and poverty described in this chapter suggest more diversity among the industrial countries than first suspected. The relative economic status of the young and old also varied considerably by country. There was, however, more similarity in the economic status of the aged in the eight countries than among the children. That is due in large part to the similarity of government programs for the aged and to the levels of benefits provided through the income tax and transfer systems in general, and the

Table 11

Average Poverty Gap<sup>2</sup> of Households Who Were  
Still Poor After Taxes and Transfers

<u>Country</u>	Type of Household	
	<u>Families with Children</u>	<u>Aged Households</u>
Australia	31.7	12.6
Canada	33.7	22.6
Germany	26.7	26.7
Norway	47.2	19.1
Sweden	35.1	2.3
Switzerland	(62.3 <sup>1</sup> )	(80.6 <sup>1</sup> )
United Kingdom	23.2	15.9
United States	40.6	30.0

<sup>1</sup>There are some very high negative incomes included due to tax losses. Were these eliminated, Swiss poverty gaps would approximate those in other countries.

<sup>2</sup>The Difference Between the Average Income and the Poverty Line Income Divided by the Poverty Line.

social insurance systems in particular. The economic status of children, however, varied much more than the status of the aged, as did the variety and level of benefits provided to poor families.

The poverty of U.S. children stands in glaring contrast to the poverty of the young in every other country but Australia (the country with the lowest adjusted median family income of those included here). Their poverty rate was 70 percent higher than their peers in Canada, our closest neighbor. U.S. children are not only at a disadvantage relative to the U.S. aged, they are at a disadvantage relative to all of their peers in other countries except Australia. The hypotheses offered in explanation of this disadvantage seem to lend themselves to straightforward interpretation and reaction:

- The high U.S. poverty and low income rates for children are not related to an inordinately large or small population share; nor are they due to a measurement quirk, e.g., choice of equivalence scales or low income/poverty measure; nor to overall income inequality levels.
- Neither poor minority populations nor a preponderance of single parent families adequately explain high U.S. poverty rates for children. Our minorities do have higher poverty rates than the white anglo majority, but so do other country minorities. Our majority poverty rate for children is still second highest among the countries studied. Although there are more single parent families than in several other countries, these families are economically much more vulnerable in the U.S. They have both more income inequality and poverty than similar families in other countries.
- The U.S. income transfer "system" for children seems most accountable for high child poverty rates. It relies on means-tested programs much

more than other countries to provide benefits to poor children. But despite the reliance on these targetted benefits the U.S. income transfer programs are much less effective in moving children out of poverty than any other country except Australia.

- The ineffectiveness is also, in part, because the level of benefits provided to U.S. children, including both welfare and social insurance, is less than for all other countries except Switzerland. It is also due in large part to the categorical nature of the U.S. means tested transfer system which excludes most poor two parent families with children from public support.

The social welfare programs of each country are a reflection of their social philosophy. Some national programs implicitly favor one group over another; some programs are considered a right of the beneficiaries while others are considered a favor. Some programs and philosophies may be transferable across borders; others, almost certainly, are not. In particular, the noncommittal nature of the U.S. transfer system for otherwise poor children stands out in sharp contrast to almost all other countries studied. While our public safety net system does an average to above average job for the otherwise needy elderly, poor families with children in the USA appear to be largely excluded from the safety net, or safety net benefits are too low if they are included, or both. In other words, the U.S. safety net for poor children was little more than a leaky fish net in 1979 and, if anything, has likely grown weaker since then.

This chapter has focused on the economic results at one point in time of the social programs of eight countries. The economic results are, in some



cases, anticipated and desired; in other cases such as the U.S. children, the results may have been anticipated by a few, but are undesirable to many. Any changes in social welfare programs must be done in the national context of each country's social philosophy. And the international comparisons of social systems and their economic consequences helps to define a range of options available to national policy makers. These comparisons also provide encouragement for improvements, since no economic outcome seems either immutable or inevitable in our aging, industrial societies.

## NOTES

1. The West German dataset excludes households with foreign-born heads in addition to the homeless and the institutionalized; the Swiss dataset excludes nonresident foreigners. See the footnotes to Table A-2 in Appendix 2.
2. However, tables identical to Table 1 using the LIS equivalence scale indicate virtually the same pattern as that shown here. Unadjusted incomes indicate a lower income for the elderly, but, in general, a higher income for younger childless couples as compared to younger families with children.
3. Since datasets are for 1981 and some for 1979, the U.S. poverty line and OECD purchasing power parities for the correct year were used in each case. The 1979 and 1981 U.S. poverty lines differ only by the change in the consumer price index over that period. For Switzerland (1982 data) and Australia (1981-1982 data), appropriate years adjustments were made using the same procedure.
4. Only the United States and Canada in the LIS data base offer a national standard for defining absolute "poverty". In Canada, the poverty line is called a "low income" line. In the United Kingdom neither "poverty" or "low income" are officially measured. However, there is a nationally administered and financed program of supplemental benefits with nationally set benefit standards. In effect supplemental benefit eligibility serves as a poverty determination process. In the advanced welfare state of Sweden we find the means-tested welfare programs administered at the local level which use different local benefit rules (or poverty lines). In this paper poverty lines are constructed by comparing adjusted incomes to the proper three-person family poverty line in each country. (See Appendix 3 for explanation.)
5. For instance, in Canada, 17.2 percent of the elderly have incomes below half the median. But if we use the U.S. poverty line and OECD purchasing power parities, we find that there are only 5 percent of elderly Canadians living below the U.S. poverty line (which is 39 percent of the adjusted Canadian median income according to Table A-4). In Switzerland, the U.S. poverty line is about 42 percent of median income just as it is in the U.S. However, the Swiss elderly low income rate is 11.4 percent while the Swiss elderly absolute poverty rate is 6.0 percent, a reduction of 47.4 percent. According to Table A-4 the Swiss and U.S. median incomes (in 1979 U.S. dollars) are also virtually identical. But the U.S. elderly absolute poverty rate fell only by 33 percent (from the U.S. elderly low income rate).

Though not shown here, if the U.K. supplemental benefit and housing allowance levels are used to count poverty among U.K. residents, the poverty rate among the elderly drops to 2.6 percent. Here because of the universal minimum public pension plan, few U.K. elderly have incomes below

65 percent adjusted disposable median income (U.K. poverty line as a percent of of median income) while almost one-fourth have incomes below 81 percent of the median.

Hence poverty rate changes depend on a host of factors including equivalence scales, overall inequality and group incomes, not just the relationship between half of the median income and the U.S. poverty line.

6. Although not shown here, if the U.K. supplemental benefit and housing allowance levels are used to count poverty among U.K. residents, the poverty rate among the elderly drops to 2.6 percent. Here because of the universal minimum public pension plan, few U.K. elderly have incomes below 65 percent adjusted disposable median income (U.K. poverty line as a percent of median income) while almost one-fourth have incomes below 81 percent of the median.
7. For instance, the use of the U.S. poverty line or the LIS equivalence scale on the 1979 U.S. data results in children having more poverty than the elderly; the Rainwater equivalence scales, however, result in the elderly having twice the poverty rate as the children. The rank order of the poverty rates among countries also may change with the equivalence scale. The use of the U.S. poverty line equivalence scale results in the U.S. elderly having the fourth highest poverty rate for the elderly among the eight countries; the Rainwater scale produces a U.S. elderly poverty rate that is the fifth highest.
8. The high German and Swedish social insurance and taxes on the elderly are part of the same package. In these countries means testing of transfers is largely accomplished via the income tax system which includes most, if not all, social insurance and other public transfers in the tax base.

## Appendix 1

### Trends in Family Income for the Aged and Other Households in the 1970s

Income changes over time provide some perspective to the cross-sectional analysis of the LIS data in this chapter. Three countries that have family income data over time are Canada, the United Kingdom, and the United States. Unfortunately, the available data in each country are not for the same years; during the time periods shown, the Canadian economy was growing considerably faster than the economy of the United States, which was in turn stronger than the economy of the United Kingdom. And definitions of the aged population differ from households with a reference person age 65 and over in the United States and Canada to those single elderly who are retired in the United Kingdom. Income trends for single parent families were disaggregated for males and females in Canada, aggregated for both in the United Kingdom, and calculated only for lone female parents in the United States. Therefore comparisons of relative income trends can be made only for different family types within a country rather than among countries.

Of course these intertemporal comparisons create only broad-brushed impressions rather than well-focused photographs of the income changes for the general and aged population over a 10-year period. Given the limitations of these data and the imprecision of the comparisons, small differences in either levels of income or changes in those levels should not be emphasized. But they do provide a useful perspective for better understanding the income trends in the United States.

In the three countries studied, the income of the aged increased more than general family income. The increase in aged income was slightly more than the general family income. The increase in aged income was slightly more than the general family income in Canada, but substantially more in both the United Kingdom and the United States (Table 1). In the United Kingdom, income of the retired could be calculated only for retired one-adult families, but the increase for this type of family income was more than three times as great as for family income in general.

The disproportionate increase in aged income in the United Kingdom occurred on an income base that was much lower than overall family income in 1973. And despite this increase, aged income was still lower than general income in 1979 as we will discuss later in the paper. In the United States as in other economies, the increases in income are particularly sensitive to the time span used (see Table 1, final three rows). Yet, regardless of the selection of different end points, the increase of income for the aged household is much higher than for all households in the United States. From 1973 to 1984, overall U.S. household income fell by 9 percent; the incomes of the aged rose by more than one-fifth. Moreover, were we to compare increases in the income for the aged to those for other largely "dependent" family types, such as single-parent families, the improvement in aged incomes would be even more dramatic in all three countries, especially in the United States.

In Canada, the income of single-parent families headed by women increased at 62 percent the rate of the general family income from 1970 to 1980. But in the United Kingdom, the income of single-parent families decreased as the family income in general increased modestly. And in the United States, the income of single parents decreased even more than the general decrease in

family incomes. If compared with the income changes for aged families, the income of single parents moved in opposite directions from the aged in both the United Kingdom and the United States. It is this diverging income trend that has become such a concern in the United States.

Different kinds of income are not expected to change at the same rates over time. Pension income of the aged is affected by different growth factors than wage income or welfare benefits of single parents. But when the trends go in opposite directions as they have in the United Kingdom and the United States, they require more careful scrutiny.

Table A-1

Percent Change in Economic Resources Per Capita and  
by Type of Family for Selected Countries

Country	Time Frame	Average Real Family Income Changes			
		All	Aged	Lone Parent Female	Male
Canada <sup>1</sup>	1970-80	+28.5	+30.2	+17.7	+34.5
United Kingdom <sup>2</sup>	1973-84	+ 6.9	+23.2 <sup>3</sup>	- 9.5	
United States <sup>4</sup>	1973-84	- 8.7	+21.3	-11.1 <sup>5</sup>	
	1970-80	+ 0.4	+20.1	NA <sup>6</sup>	NA <sup>6</sup>
	1970-84	+ 0.1	+34.8	NA <sup>6</sup>	NA <sup>6</sup>

<sup>1</sup>Changes in Income, Statistics Canada, 1985.

<sup>2</sup>Family Expenditure Surveys, 1973, p. 86; 1984, p. 64. Department of Employment, Government Statistical Service.

<sup>3</sup>Retired one-adult households.

<sup>4</sup>United States Current Population Surveys, various issues.

<sup>5</sup>For 1974-84.

<sup>6</sup>These figures will be added shortly.

## Appendix 2

### The Luxembourg Income Study (LIS)

The Luxembourg Income Study has gathered in one central location (the Center for Population, Poverty and Policy Studies (CEPS), in Walferdange, Luxembourg) and made comparable several recent large microdata sets which contain comprehensive measures of income and economic well-being for a set of modern industrialized welfare states. The dataset is accessible to researchers at low cost. Because of the breadth and flexibility afforded by microdata, researchers are free to make several choices of perspective (definition of unit: family, household, etc.; measure of income; and population to be studied, for example, males, females, urban families, elderly households) within the same research paper. This truly comparable microdata creates a potentially rich resource for applied comparative and policy research in economics, sociology, and public policy. The LIS databank currently covers nine countries--Australia, Canada, Germany, Israel, Norway, Sweden, Switzerland, the United Kingdom, and the United States, with France and Finland soon to be added. Table A-2 contains an overview of LIS country datasets. A copy of the User's Guide and further information can be obtained by writing to one of the following:

Professor Timothy Smeeding  
Economics and DSSR  
1141 Annex  
University of Utah  
Salt Lake City, Utah 84112  
U.S.A.

Brigitte Buhmann  
CEPS-LIS  
Case Postale #2  
L-7201 Walferdange, Luxembourg

Professor Lee Rainwater  
Sociology  
530 Wm. James Hall  
Harvard University  
Cambridge, Massachusetts 02138  
U.S.A.

Gunther Schmaus  
CEPS-LIS  
Case Postale #2  
L-7201 Walferdange, Luxembourg



APPENDIX TABLE A-2

## OVERVIEW OF LUXEMBOURG INCOME STUDY (LIS) DATASETS

Country	Dataset name	Income year	Dataset size <sup>1</sup>	LIS country coordinators	Population coverage <sup>3</sup>	Basis of household sampling frame <sup>8</sup>
Australia	Income and Housing Survey	1981	45,000	Peter Saunders	97.54	Decennial census
Canada	Survey of Consumer Finances	1981	37,900	Michael Wolfson Roger Love	97.54	Decennial census
Germany	Transfer Survey	1981 <sup>2</sup>	2,800	Richard Hauser Ingo Fischer	91.57	Electoral register on census
Israel	Family Expenditure Survey	1979	2,300	Lea Achdut Yossi Tamir	89.05	Electoral register
Norway	Norwegian Tax Files	1979	10,400	Stein Ringen Lief Korbøl	98.54	Tax records
Sweden	Swedish Income Distribution Survey	1981	9,600	Peter Hedstrom Robert Erikson	98.04	Population register
Switzerland	Income and Health Survey	1982	7,036	Brigitte Buhmann	95.59	Electoral register and Central Register of Foreigners
United Kingdom	Family Expenditure Survey <sup>2</sup>	1979	6,800	Michael O'Higgins Stephen Jenkins	96.56	Electoral register
United States	Current Population Survey	1979	65,000	Tim Smeeding John Coder	97.54	Decennial census

APPENDIX TABLE A-2 (Continued)

<sup>1</sup>Number of actual household units surveyed.

<sup>2</sup>The United Kingdom and German surveys collect subannual income data which is normalized to annual income levels.

<sup>3</sup>As a percent of total national population.

<sup>4</sup>Excludes institutionalized and homeless populations. Also some for northern rural residents (eskimos, lapps, etc.) may be under-sampled.

<sup>5</sup>Excludes rural population (those living in places of 2,000 or less), institutionalized, homeless, people in kibbutzum and guest workers.

<sup>6</sup>Excludes those not on the electoral register, the homeless, and the institutionalized.

<sup>7</sup>Excludes foreign-born heads of households, the institutionalized, and the homeless.

<sup>8</sup>Sample frame indicates the overall base from which the relevant household population sample was drawn. Actual sample may be drawn on a stratified probability basis, for example, by area, or age.

<sup>9</sup>Excludes nonresident foreigners and the institutionalized but includes foreign residents.

### Appendix 3

#### Equivalence Scales

An equivalence scale is a device for adjusting family income needs according to its household size and age composition. In this paper, we rely mainly on the equivalence scales implicit in the U.S. poverty line matrix. In one section of the paper we contrast the poverty rates for young and old obtained from these scales to those obtained from two other sets of equivalence scales: those developed by Lee Rainwater (1974) and those used in other LIS based research. Table A-3.1 presents the adjustments implicit in these scales relative to one another and relative to unadjusted income and per capita income, the two extreme alternatives to the equivalence scales used here.

Adjusted income is calculated by dividing unadjusted family disposable income by the factor shown in Table A-3.1. Thus the incomes of three person families, the family unit to which we normalize, is divided by 1.00 and does not change. Smaller families have their income divided by something less than 1.00 and therefore scaled up to the equivalent income of a three person family. Larger families experience the opposite adjustment: Their raw incomes are scaled down (since the factor by which raw income is divided exceeds one). The net effect of these adjustments is to transform or "adjust" each family's raw income into the equivalent income of a three person family.

Once this transformation is complete, poverty status can be determined by comparing adjusted income to any poverty line for a three person family. The net income is exactly the same that would be realized if the same equivalence scale was used to adjust poverty line for family size and these adjusted

poverty lines were compared to raw or unadjusted income. For instance, Table A-3.2 shows the sensitivity of poverty rates to choice of equivalence scale.

In Table A-3.2. poverty rates for the young and the old are calculated using the U.S. poverty line, but varying the equivalence scales that are shown in Table A-3.1. The first two columns are identical to the absolute poverty rates in Table 2 that were based on U.S. poverty line base and equivalence scale. The second set of rates uses the equivalence scale developed by Rainwater (1974) which is based on subjective measures of relative poverty and the 1st use the equivalence scales implicit in the original LIS studies (e.g., Smeeding, Rainwater, et al., 1985). This equivalence scale is similar to the OECD scale. These equivalence scales result in substantially different adjustments in income and poverty for different family sizes and structures. In general, the Rainwater-subjective scales are "flatter" than the others, i.e., a smaller additional amount of income is required for adding an additional person at a given family while keeping their incomes equivalent to that of a smaller family, and a smaller subtraction is required when decreasing family size by one member. The LIS scale does the opposite: i.e., it requires a larger than average additional income amount for an additional person and a larger than average subtraction when reducing family size by one person. A discussion of these differences can be found in Section IV of the paper.

Table A-3.1  
A Range of Equivalence Scales

Family Size	Reference Person's Age <sup>1</sup>	No Adjustment	Rainwater <sup>2</sup>	U.S. Poverty Line <sup>3</sup>	LIS <sup>4</sup>	Per Capita
1	65 or older	1.00	0.70	0.60	0.50	0.33
1	Less than 65	1.00	0.70	0.66	0.50	0.33
2	65 or older	1.00	0.88	0.76	0.75	0.67
2	Less than 65	1.00	0.88	0.84	0.75	0.67
3	All ages	1.00	1.00	1.00	1.00	1.00
4	All ages	1.00	1.18	1.28	1.25	1.33
5	All ages	1.00	1.27	1.52	1.50	1.67
6	All ages	1.00	1.35	1.71	1.75	2.00
7	All ages	1.00	1.43	1.86	2.00	2.33
Each Add'l Person		0	+0.08	+0.15	+0.25	+0.33

<sup>1</sup>Reference person is sometimes referred to as the "householder", the "head" or "principal person" in the family unit.

<sup>2</sup>Developed by Rainwater (1974) and derived from household survey data about the minimum amount of money needed to maintain one's own or other families' basic needs.

<sup>3</sup>Equivalence scales implicit in the U.S. poverty lines which are determined from expert judgments concerning the amount of food needed to make different size and structure families equally as well off as other size/structure families. See U.S. Bureau of the Census (1985) for additional detail.

<sup>4</sup>The LIS scale is a simplified version of that used by Hauser and Novertne (1980) and by the LIS project. Basically, the LIS equivalence scale counts the first person as a whole equivalent adult and each additional person as an additional one half equivalent adult. See Smeeding, Schmaus, and Allegrezza (1985).

Table A-3.2

Comparative Rates of Absolute Poverty<sup>1</sup> Using Three Different  
Equivalence Scales: U.S. Poverty Line

<u>Country</u>	<u>U.S. Poverty Line</u>		<u>Rainwater</u>		<u>L.I.S.</u>	
	<u>Elderly</u>	<u>Children</u>	<u>Elderly</u>	<u>Children</u>	<u>Elderly</u>	<u>Children</u>
Australia	19.2	16.9	28.7	13.9	5.2	16.6
Canada	4.8	9.6	10.6	6.4	3.0	9.5
Germany	15.4	8.2	24.0	4.0	12.3	7.7
Norway	18.7	7.6	32.5	4.5	5.5	7.7
Sweden	2.0	5.1	6.4	3.3	0.0	4.9
Switzerland	6.0	5.1	10.9	3.1	3.4	5.1
U.K.	37.0	10.7	55.2	6.0	23.5	11.0
U.S.A.	16.1	17.1	22.3	11.7	11.7	17.4

Notes:

<sup>1</sup>Percentage of persons of each type with disposable incomes below the official U.S. government poverty line, converted to other currencies using OECD purchasing power parities as described in Appendix 4..

## Appendix 4

### Setting National Low Income and Poverty Lines

The process and procedure of low income or poverty line determination on an international scale is not an easy one to cope with. In this paper we employ two constructs: relative low income and absolute poverty. The first of these measures is entirely relative and therefore much easier to deal with than the latter. We define relative low income as all persons in families with adjusted disposable income below one half median family adjusted disposable income as being in this state. The adjusted incomes are determined using the equivalence scales implicit in the U.S. Poverty Line as explained in Appendix 3; the one half median lines are shown in column one of Table A-4, in national currencies. All estimates use annual disposable income, except for Germany which is based on monthly amounts. By themselves, these half median figures are hard to interpret. However, once the absolute poverty measure issue is addressed, we will return to look at them converted to U.S. dollars.

Perhaps one of the most vexing issues facing scholars interested in comparative research is the thorny issue of absolutes. Because comparable absolute measures of income necessitate conversion to a standard currency, a conversion rate is needed. After experimenting with two techniques: three years average foreign exchange rates (World Bank method) and purchasing power parities (PPP, specifically the OECD consumption measure of PPP), we selected the latter method, largely because pricing out of standard market baskets of goods and services across countries, in effect the purchasing power parity methodology, is the theoretically preferred economic method. The other decision in measuring absolute poverty is the choice of a single poverty line

which can be converted to other currencies. Because few countries have official absolute poverty lines (see text) and because of our focus on U.S. poverty, we chose to focus our attention on the official U.S. government poverty line which, in 1979, was \$5763 for a three person family. The British maximum supplemental income benefit and housing allowance levels for 1979 were also experimented with, but dropped because of this low absolute level, about 75 percent as high as the U.S. poverty line. Because adjusted income is already standardized to the income of a three person family, OECD consumption based PPP's for 1979 were used to change the U.S. absolute dollar poverty line to pounds (UK) and Norwegian kroner (Norway). For other countries using non 1979 data, the correct year's poverty level was used instead. Because U.S. poverty lines have only changed year to year because of changes in consumer prices (CPI), such a procedure is tantamount to price adjusting the 1979 level. Thus for the non-1981 years, the 1979 U.S. poverty level was first inflated to the proper year using the U.S. CPI, and then converted to country currency using the proper year's OECD PPP's.

The results of this procedure are shown in columns 2 and 4 of Table A-4. The first set of estimates rely on exchange rates for currency; the second set use OECD PPP's, our preferred method. We also indicate the U.S. absolute poverty line as a percent of median income for both measures in columns (3) and (5). By and large, these two conversion methods produce results which are fairly close to each other, except in Canada and Norway. In Canada the exchange rate approach produces an absolute poverty line which is more than 4.0 percentage points higher as a fraction of median income than that estimated using PPP's. In Norway, the differential is 13.5 percentage points, an astounding difference. The choice of currency conversion may therefore



have yielded a poverty rate in Canada which is perhaps too low and one in Norway which may be too high. The reader should therefore be careful of studies which claim low Canadian and, especially high Norwegian, poverty as major findings.

Looking within the chosen PPP method, we find widely divergent poverty lines as a fraction of median income. In the U.S., the absolute line is 42.1 percent of median income. The Canadian and Swiss poverty lines are also well below the U.S. median. The Swedish low income and absolute poverty levels are virtually identical. All other countries have absolute poverty levels which exceed half the median relative low income measure. Hence we would expect different results in comparing absolute poverty and relative low income within each country.

Finally, columns (6) and (7) use PPP's (to convert currency) and U.S. CPI's (to adjust for price level changes over years) such that all half-median incomes in column (6) are expressed in 1979 U.S. dollars. Amounts are then expressed as a percent of the U.S. median (7). Swiss and U.S. median adjusted incomes were virtually identical in 1979. Among the others, converted median incomes ranged from a low of 75.4 percent of the U.S. figure (Germany, Norway) to 107.0 percent in Canada, again an unlikely occurrence based on usual measures of country economic well-being, e.g., GDP per capita. However, comparing adjusted median incomes in constant dollar country currencies is a complex issue which may vary due to equivalence scales, country specific income structures and an entire host of additional factors not mentioned above.

Table A-4

Measures of Relative and Absolute Poverty, Currency-Based and as Percent of Median Income, for Selected Countries

Country	(1) Relative poverty at or below half the median income	(2) Absolute poverty at or below:				(4) U. S. poverty line (converted using OECD purchasing power parities)	(5) Percent of median income	(6) Half of national median income (column 1) in 1979 U.S. dollars/ (using OECD pur- chasing power parities)	(7) As percent of U.S. estimate
		U.S. poverty line (converted using 3-year average exchange rates)		U. S. poverty line (converted using OECD purchasing power parities)					
		Currency- based	Percent of median income	Currency- based	Percent of median income				
Australia <sup>6</sup> (\$A)	6,797	n.a.	n.a.	6,994	51.4	\$5,403	78.0%		
Canada <sup>3</sup> (\$C)	10,000	8,694	43.5%	1,870	39.4	7,321	107.0		
Germany <sup>2,3</sup> (DM)	1,250	1,339	54.6	1,396	55.8	5,159	75.4		
Norway <sup>4</sup> (Nkr)	33,839	28,615	42.3	37,748	55.8	5,166	75.4		
Sweden <sup>3</sup> (Skr)	38,837	37,622	48.4	38,849	50.1	5,760	84.2		
Switzerland <sup>5</sup> (Sfr)	20,639	n.a.	n.a.	17,463	42.3	6,837	99.9		
United Kingdom <sup>4</sup> (£)	2,526	2,715	53.7	2,674	52.9	5,443	79.6		
United States <sup>4</sup> (\$)	6,841	5,763	42.1	5,763	42.1	6,841	100.0		

<sup>1</sup>One half median disposable (post-tax and transfer) income, adjusted for equivalence using the U.S. Poverty Line Equivalence Scale. See Appendix 3 and Table A-3 for explanation.

<sup>2</sup>Monthly income (all others annual income).

<sup>3</sup>19871 data year

<sup>4</sup>1979 data year.

<sup>5</sup>1982 data year.

<sup>6</sup>1981-82 data year.

<sup>7</sup>Adjusted to 1979 dollars using U.S. consumer price index (U.S. Bureau of Census, 1985).

## Appendix 5

### Supplemental Tables

Table A-5.1

Ratio of Adjusted Disposable Income to  
National Mean for Three Groups

Country	Families with Children: <sup>2</sup>					Elderly Families <sup>3</sup> : Head 65 or over (4)	Difference: Elderly Minus Single (5)=(4)-(2)
	All Heads Age 0 to 64 (1)	Single Parents Only <sup>5</sup> : Age 0 to 64 (2)	Difference: All Minus Single Parents (3)=(1)-(2)				
Australia	0.90	0.48	.42		0.85	.37	
Canada	0.91	0.57	.34		0.90	.33	
Germany	0.86	0.68	.28		0.84	.26	
Norway	0.99	0.90	.09		0.91	.01	
Sweden	1.01	0.85	.16		0.90	.05	
Switzerland	0.91	0.86	.05		1.02	.16	
United Kingdom	0.95	0.68	.27		0.73	.05	
United States	0.90	0.50	.40		0.94	.44	
Mean All Countries <sup>4</sup>	0.94	0.70	.24		0.87	.17	

<sup>1</sup>Disposable income is post-tax and transfer income. The adjustment of disposable income for family size is done using the U. S. Poverty Line equivalence scale. For a fuller discussion, see Smeeding, Schmaus and Allegreza (1985) and Appendix 3. The national mean adjusted disposable income equals 1.00.

<sup>2</sup>Families with children are families age 24-64 containing at least one child less than 18 years of age.

<sup>3</sup>Elderly families are those headed by a person age 65 or over.

<sup>4</sup>The overall mean is the simple unweighted average of the means within each age group.

<sup>5</sup>Single parent families are those with head age 0 to 64, one parent only in the family unit, and at least one child less than 18 years of age.

Table A-5.2

Adjusted Income<sup>1</sup> Inequality Among Three Groups

<u>Country</u>	All Families with <u>Children</u>	All Elderly <u>Families</u>	Only Single Parent Families <u>with Children</u>
Australia	0.264	0.293	0.298
Canada	0.266	0.316	-.360
Germany	0.256	0.285	0.319
Norway	0.210	0.285	0.319
Norway	0.210	0.268	0.269
Sweden	0.186	0.169	0.167
Switzerland	0.234	0.277	0.291
United Kingdom	0.235	0.277	02.87
United States	0.293	0.357	0.381

## Notes:

<sup>1</sup>Adjusted disposable income is post-tax and transfer income adjusted for family size using the U.S. Poverty Line Equivalence Scale. See Appendix 3.

Table A-5.3

The Effectiveness of Public Tax and Transfer  
Programs in Reducing Income Poverty

<u>Country</u>	Percent of pre tax and transfer poor who remain in poverty after taxes and transfers:	
	<u>Children</u>	<u>Aged</u>
Australia	85.6	26.7
Canada	63.8	8.6
Germany	68.8	18.9
Norway	51.7	24.6
Sweden	28.4	2.4
Switzerland	66.7	10.2
United Kingdom	54.8	48.0
United States	80.4	28.2

## SOURCES

- Achdut, Lea and Yosi Tamir, "Comparative Economic Status of the Retired and Nonretired Elderly," Luxembourg Income Study-CEPS Working Paper No. 5, presented at the LIS Conference, July 1985.
- Bane, Mary Jo and David T. Ellwood, "Slipping Into and Out of Poverty: The Dynamics of Spells," Journal of Human Resources, Winter 1986: 1-23.
- Booth, F. 1974. To be provided.
- Chomitz, Kenneth m., "A Relative Model of Labor Supply," unpublished doctoral dissertation, University of California, Irvine, 1984.
- Easterlin, Richard, "Does Economic Growth Improve the Human Lot? Some Empirical Evidence," in Paul A. David and M. W. Reder, eds., Nations and Households in Economic Growth, Academic Press, New York, 1974.
- van der Gaag, Jacques and Eugene Smolensky, "Consumer Expenditures and the Evaluation of Levels of Living," Review of Income and Wealth, Vol. 28, No. 1:17-27, 1982.
- Hauser, Richard and Ingo Fisher, "The Comparative Economic Well-Being of One-Parent Families," Luxembourg Income Study-CEPS Working Paper No. 6, presented at the LIS Conference, July 1985.
- Hauser, Richard and Uwe Nouvertne, "Poverty in Rich Countries," SB3 Discussion Paper No. 39, University of Frankfurt, West Germany, 1980.
- Hedstrom, Peter and Stein Ringen, "Age and Income in Contemporary Society," Luxembourg Income Study-CEPS Working Paper No. 4, presented at the LIS Conference, July 1985.
- Kilpatrick, Robert, "Income Elasticity of the Poverty Line," Review of Economics and Statistics, August 1973.
- O'Higgins, Michael, "Privatization and Social Welfare: Concepts, Analysis and the British Experience." Mimeo. Universit of Bath, March 1986.
- \_\_\_\_\_, G. Stephenson and G. Schmaus. "Income Distribution and Redistribution in Seven Countries." LIS-CEPS Working Paper #3. July 1985.
- Organization for Economic Cooperation and Development, Social Expenditure 1960-1990, OECD Social Policy Studies Reports, Paris, 1985.
- Orshansky, Millie, "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin, 1965.
- van Praag, Bernard, Aldi Hagenaars, and Hans van Weiren, "Poverty in Europe," Review of Income and Wealth, pp. 345-359, 1982.
- Preston, Samuel, "Children and the Elderly in the United States," Scientific American, Vol. 251, No. 6, December 1984.

Rainwater, Lee, What Money Buys: Inequality and the Social Meaning of Income, Basic Press, New York, 1974.

Rainwater, Lee and Timothy Smeeding, "LIS User Guide," Luxembourg Income Study-CEPS Working Paper No. 7, presented at the LIS Conference, July 1985.

Rein, Martin, "Problems in the Definition of Measurement of Poverty" in P. Townsend, \_\_\_\_\_, pp. 46-63.

Smeeding, Timothy, Lee Rainwater, Martin Rein, Richard Hauser, and Gaston Schaber, "Poverty in Major Industrialized Countries," Luxembourg Income Study-CEPS Working Paper No. 2, presented at the LIS Conference, July 1985.

Smeeding, Timothy, Gunther Schmaus, and Serge Allegreza, "An Introduction to LIS," Luxembourg Income Study-CePS Working Paper No. 1, presented at the LIS Conference, July 1985.

Smeeding, Timothy and Barbara Torrey. "An International Perspective on the Income and Poverty Status of the U.S. Aged: Lessons from LIS and the International Database on Aging." LIS-CEPS Working Paper #9. December 1986.

U.S. Bureau of the Census, "Monthly Income and Poverty Status of Families and Persons in the United States: 1985," Current Population Reports, Series P-60, No. 154. August 1986.

\_\_\_\_\_, "Money Income and Poverty Status of Families and Persons in the U.S.: 1984. Current Population Report, Series P-60, No. 149, August 1985.

\_\_\_\_\_, "Estimates of Poverty Including the Value of Noncash Benefits: 1984" Technical Paper #55. August 1985a.