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# Luxembourg Income Study Working Paper Series

Working Paper No. 2

Poverty in Major Industrialized Countries

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Rein, and Gaston Schaber

July 1985

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Luxembourg Income Study (LIS), asbl

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# "POVERTY IN MAJOR INDUSTRIALIZED COUNTRIES"

Initial Research Paper of the  
Luxembourg Income Study

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July 1985

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## I. Introduction to LIS and the Paper

The Luxembourg Income Study (LIS) project began not quite two years ago to collect and make comparable income and demographic survey microdata sets from seven countries: Canada, Israel, Norway, Sweden, United Kingdom, United States, and West Germany. The technical details which underly this data set are contained in Smeeding, Schmaus, and Allegrezza (1985). The LIS database contains up to 42 income and wage variables and 35 sociodemographic variables for each country. When these are combined a matrix of dimension 77 (42 income plus 35 sociodemographic variables) by 7 (countries) can be easily envisioned. Within this matrix, the LIS project has made the datasets, income concepts and demographic variables as comparable as possible, given the limitations imposed by the datasets.

Based on the LIS dataset, this paper compares the extent of income poverty and the relative composition of the poor across these seven countries. The next section of the paper (II) provides the reader with some idea both of the wide range of available choices for defining poverty, given a flexible research tool such as LIS, and of the specific choices made for this paper. From this set of definitions, tabular results emerge and are summarized in Section III. These tables present poverty rates before and after transfers, income poverty gaps before and after transfers, and group specific poverty comparisons. Section IV discusses these results by comparing them to some earlier and less complete comparative studies of poverty, and by suggesting the likely country specific explanations which underly these results. It will be seen that LIS is a double-edged sword, offering the researcher wide latitude in defining concepts using comparable data, but also then, some

need for institutional background information to explain the similarities and differences which emerge from the tabular results. As such the LIS database and this first paper based upon it open new vistas for comparative research. In the conclusion (Section V), we argue that while the knowledge costs associated with this (and similar) undertakings are high, the benefits of the LIS approach for those who truly intend to learn from comparative social policy research, are well worth the efforts.

## II. Background: Defining Poverty with LIS

All modern industrialized countries face the very basic problem of poverty or low income. From Rowntree's (1901) classic study in the UK to the more recent writings of Harrington (1963) in the U.S. "income poverty" has provided a challenge to every modern nation. As we shall see, some have been more successful than others in attacking this problem. However, assessing the relative effectiveness of public and private efforts to reduce poverty in such countries may be confounded by differences in the basic data which is used to measure the extent and depth of income poverty. Thus a resource such as LIS offers the opportunity to substantially reduce the question of data comparability in this instance.

The basic question is straightforward: how does the researcher measure relative economic deprivation or economic poverty when he/she has a primary and flexible database such as LIS? To be sure, the choices are not unlimited. For instance the LIS data base does not contain enough of a comparable set of social indicators: e.g. measures of health status of family (household) members,<sup>1</sup> or measures of lifestyle, social access, or participation in major social institutions to use these to define

poverty (Schaber, 1984); nor does it contain information on the availability of social goods or subjective feelings about family well-being (van Praag, Hagenaars, and van Wieren, 1982). The researcher is at this point confined to an economic definition of poverty: family economic resources as compared to family economic need and within this context LIS contains a dearth of data on wealth levels (though homeownership is available) and noncash income. However all major components of regular money income and direct taxes are both available and fully comparable.<sup>2</sup> In addition, several sets of equivalence scales defined according to family size and age, and other relevant sociodemographic variables (e.g., homeownership, location) can be used to adjust for relative household needs both within and between countries (Appendix Table A-1). The purpose of this section of the paper is to review the possible choices before us: population universe, income accounting units, income definitions, adjustments for relative needs (the equivalence problem), and the measures of poverty itself. This set of choices is important in that to some large extent it will guide the results which emerge in the next section of the paper. Only technical issues which relate to the problem of poverty measurement using LIS are treated here. More general issues of comparability are included in Smeeding, Schmaus, and Allegrezza (1985).

Population Universe. All LIS data bases exclude the institutionalized and the homeless. For five countries this reduces the sample population by 1 or 2 percent as compared to the true population. The West German dataset also excludes persons living in families or households with foreign heads but not foreign spouses<sup>3</sup> (reducing the

true population by 8 percent), while the Israeli dataset excludes those living in places of 2000 persons or less (rural residents) as well as the institutionalized and those in kibbutzum (reducing their sample population by 11 percent). These differences should be kept in mind when comparing these countries to the rest. For instance, if the families of male "gastarbiten" in Germany are largely excluded by the dataset population, we may eliminate some substantial fraction of the poor. While rural Israeli family income is hard to measure because of the large component of income received in kind (e.g. Smeeding, 1983) they may still have a living standard substantially below that of other nations. Last, but certainly not least, because all datasets exclude the homeless, who are by and large among the poorest groups in each country, we may differentially underestimate the true extent of income poverty depending on the relative size of this group in each country (Atkinson, 1985).

Often poverty studies are confounded by particular groups of individuals who may appear to be poor, but are in fact not meaningfully poor on a full income basis. The three primary groups who fit this definition are those with negative incomes (usually large business losses), farmers (with or without large business losses), and students. Overall negative incomes can be treated in several ways: left alone, totally excluded, incomes set to zero overall, or only negative income components can be set to zero (counting positive income components only). For pure definitional purposes, it is probably best to either ignore this problem or to set overall negative incomes to zero (in order to avoid misleading definitions of income deprivation or poverty gaps). For purposes of measuring social need, large business losses -- usually

income tax related -- are not meaningful because of substantial positive asset holdings. Most such families are neither in need of, nor would be eligible for, social assistance. Within the LIS datasets, this problem may be only of relatively large importance in Norway where income tax files are the basis of their data (see endnote 4 however). Farmers often have substantial amounts of income in-kind which make them richer than they otherwise appear. But is there any reason to treat them differently from any other self-employed person? Other than comparison with the Israel sample (which excludes rural households) we think not. For both of these groups overall negative incomes are set to zero but no other adjustments are made.<sup>4</sup> The only other feasible alternative might be to exclude the self-employed and farmers altogether. However, such a decision would be quite arbitrary, arguing in effect that poverty among these groups is either nonexistent or unimportant.

College students present a different problem. In most countries, family structures are determined at the time of the survey. Thus college students temporarily away from home but largely supported through interhousehold transfers are often counted as independent single adult units. This situation creates two problems. First, it is often difficult to practically separate these "away from home" students from truly independent single students who are in need of aid to meet basic needs.<sup>5</sup> Secondly, regardless of their source of income, one could argue that all students are voluntarily poor, having freely chosen to sustain temporary economic poverty for longer term rewards. Students are not separately counted below, though in cases where they have a significant impact on the poverty count, they are identified.<sup>6</sup> For



this first cut at comparing the poor across our seven countries, then, we do not omit any particular portion of the populations covered in our survey. Of course, should this lead to erroneous or misleading results, these groups can be singled out later for additional study.

Income Accounting Unit. The income accounting unit used in this paper is the family -- i.e. two or more persons related by blood, marriage or adoption. Single unrelated individuals living alone or with others to whom they are not related are treated as one person families. Households -- all persons sharing common living arrangements whether married or not -- are only available for 5 of our 7 datasets. One of the other datasets, Sweden, defines only adult units (nuclear families which treat related but unmarried adults over age 18 as separate families), while the other, Norway, only treats such persons as independent units if they are self supporting. Data checks indicate that for the most part (with Swedish students the only likely exception), Swedish and Norwegian units are very close to the family definition given above. Two other datasets, the German and Israel files, have incomes counted only over households and not over families. However, while incomes cannot be broken down by family within multi-household families, we can identify these units. In Germany, 2.4 percent of households, and in Israel 2.2 percent, are multi-family units. Thus about 5 percent of families in Germany and 4.4 percent in Israel are combined with others to whom they are not related. Again, for this first look at poverty, we do not adjust for this problem.

Thus we have selected the following set of units: 3 datasets (USA, U.K., Canada) with fully comparable family units; and four datasets that

are very close to fully comparable: one with adult units (Sweden), one with adult units plus dependency adjustments (Norway), and two with households only (Israel, Germany), though one of them further adjusts for dependency as well (Germany, see endnote 5). Of course, finer future analysis could use households as the unit (thus excluding Norway and Sweden), or they could base their analyses only on completely intact families not living with other related or unrelated adult units (thus excluding only the multiple family households in all countries), or they could use several other possible formulations (see Smeeding, Schmaus, and Allegreza, 1985). Our choice is at this point to include all countries on the basis specified above.

The choice between families or households for poverty analyses is not straightforward. Counting incomes by households does take account of economies of scale in living arrangements because household capital goods (stoves, heat, refrigerators) are assumed to be equally shared by all inhabitants.<sup>7</sup> This is probably the case. However, household income accounting also assumes that money incomes are shared equally between household members, and this is likely not the case in most households or even in many families (Lazear and Michael, 1984). On the other hand, while the family unit gets around the problem of intrahousehold but interfamilly money income sharing by assuming that none exists whatsoever, it ignores household economies of scale. Definitive studies that indicate the nature and extent of these biases for measuring poverty remain to be completed.<sup>8</sup>

Within the family income accounting framework our analysis is couched in terms of both the individual and the family. For purposes of poverty

measurement a good case can be made for using both types of units, particularly when average family size differs greatly between countries. However, to the extent that we base our analyses on persons, we will be able to somewhat avoid the definitional differences in the number of "families". which we find across our seven countries. Following Danziger and Taussig (1979) and Sen (1979) we base our relative or "bottom quintile" measure of poverty on equal person population quintiles (ranked by family income) since individual persons are the basis for most analyses of economic welfare. If we were to base the study on equal family or household quintiles, we would end up with different numbers of persons in each quintile. Moreover, because there are usually many fewer households than families in any given country, average household size is larger than average family size. Thus equal numbers of households in Germany or Israel would produce larger counts of persons than in the other family based datasets. Of course, because the Swedish family is defined a bit smaller than the typical family, we would end up with a lower family count here. By counting equal numbers of persons in each quintile regardless of income accounting unit we avoid the independent effect of the unit definition problem on our measure of quintile poverty.

Income Measure. The income measure on which we base this analysis is money and nearmoney income after direct tax, or disposable personal income. Nearmoney income includes such items as rent rebates in Sweden and the UK, housing allowances in Germany, and Food Stamp benefits in the United States. These are treated the same as money income because they have a "cash equivalent" value that is virtually identical to their cost to the government. In other words, they do not distort recipients

consumption patterns and are therefore treated by consumers as equivalent cash income. For instance, Germany housing allowances are cash payments to tenants to reduce their housing costs. These payments are designed such that they do not induce recipients to differentially purchase more expensive housing. Thus they are no different in practice than cash benefits. In contrast, housing benefits to German and U.S. families who live in public housing units which offer submarket rents are not counted as near cash income because these benefits have substantial independent effects on housing consumption and are thus not equivalent to an equal cost cash grant (see Smeeding, Schmaus, Allegreza, 1985).

For five datasets the analysis is done in terms of annual income. In two others (Germany and UK) the measure is normal monthly income, i.e. actual monthly income adjusted to take account of intra-annual but intermonthly differences (e.g. differences in property income and unemployment income flows; see Smeeding, Schmaus, and Allegreza, 1985). Property taxes on homeowners are not counted as direct taxes, nor are church taxes (tithing). The incidence of the former is in some doubt, while many would argue that the latter are not legally taxes at all. Only personal income and employee payroll taxes are subtracted from money income. This definition of income is consistent across all seven datasets.<sup>9</sup> Moreover, the use of after direct tax income implicitly adjusts for differences in the employer-employee payroll tax mix across countries.

Income in-kind is not included except when it is virtually identical to cash. For all countries except the US, national health care systems produce differences in health care income in-kind largely due to

differences in needs for such care alone. In these cases, where the same system of health care provision is generally available to all persons, aside from making sure that differences in need for health care (e.g. elderly vs. nonelderly) are taken care of, health care subsidies are distributionally neutral and should be avoided.<sup>10</sup> Food income in-kind for farm and for nonfarm families who largely grow their own is not taken into account. In some countries food subsidies are directly given to recipients (e.g. free school lunches or employee luncheon vouchers in the UK) while in other cases food prices are artificially held down as a form of subsidy (e.g. Norway). None of these differences were taken into account. Possibly the most glaring omission comes in the ignorance of some forms of housing income in-kind. Some countries have large and monetarily quite important housing subsidy systems for renters (e.g. Sweden and the UK). Others have small or nonexistent rental housing subsidy programs (e.g. Canada and the U.S.). Only nearcash housing subsidies were counted. Income in-kind for homeowners in the form of implicit rent is evident in all countries, but because we cannot also adjust for rented housing subsidies (except for those that are termed near cash income because they do not affect housing consumption patterns and/or income tax subsidies to owners), we do not adjust for housing income in-kind. Later in Table 9 we differentiate homeowners from nonowners among the poor in order to get some idea of income poverty compared to the relative asset holdings of the poor in the various countries.

In order to assess the relative effectiveness of public sector social welfare expenditures on poverty we also compare the poor under our

disposable income definition to the poor based on pre transfer (but post tax) income. This income concept includes all forms of market income plus private interfamily transfers (e.g. alimony or regular payments from a relative) and occupational pensions (even when the employer is a form of government) minus income and payroll taxes. Thus the difference in the number of poor and in the poverty gap based on pre transfer and post transfer (or disposable) income indicate the effectiveness of each country's social expenditure system alone in alleviating pre transfer or "latent" poverty (Murray, 1984).<sup>11</sup>

Equivalence Scales. Adjustments for family size are made by using a set of equivalence scales that are halfway between no adjustment for family size and the income per-capita adjustment. Equivalences are normalized to the three person unit (which is given a weight of 1.00). Equivalent income is derived by dividing disposable income by the appropriate adjustor. Thus equivalent income for a one person family is derived by dividing disposable income by .50; for two persons by .75; for four persons by 1.25, etc. No further adjustments are made for age of family members or site-specific location differences. While several sets of equivalence factors could have been used: those based on actual consumption budget outlays (e.g. van der Gaag and Smolensky, 1982), those based on experts' adjustments of needed allowances for various basic commodities (e.g. Orshansky, 1965), or those based on subjective assessments of need (van Praag, et al., 1982), we chose only a simple adjustment, one that is halfway between no adjustment and per capitalization of income, and one that is constant across all countries.<sup>12</sup> All measures of poverty are based on equivalent income so

defined. Experiments with alternative equivalences are left for another paper.

Poverty Measures. Two measures of poverty are used in this paper. First of all we array family units by equivalent post transfer family income such that 20 percent of persons are in each equivalent income quintile. By this "bottom quintile" poverty measure, the bottom 20 percent of persons (the lowest quintile) are termed poor in each country. This leads to an equal proportional number of relatively poor persons (but an unequal proportion of poor families) in each country.

Our second poverty definition, "economic distance" poverty is given by all persons living in families with equivalent post transfer family income below one half median equivalent family income. We term it the "economic distance" poverty line because families who have incomes below this poverty line cannot be said to fully enjoy the same level of living as the typical family in any given country. Simply put, they are disadvantaged. In this case, countries with more equal equivalent income distributions will have less poor than those countries with more unequal distributions. The poverty lines so defined and their relationship to each other and to median equivalent income within each country are given in Table 1. Pre transfer poverty is defined relative to these same post transfer income based poverty lines.

In countries with relatively more equal distributions, we find that one half of median equivalent income -- the "economic distance" poverty line -- is further below the "bottom quintile" poverty line -- the income level which divides the lowest from the second quintile -- than in countries having generally less equal distributions. In other words,

there are fewer people below half the median in countries with more equal income distributions. Also the more equal the distribution, the closer the bottom quintile poverty line to the overall median income. Table 1 bears out these results. In Sweden, the country with the most equal post-transfer equivalent income distribution, the economic distance poverty line is 66 percent of the bottom quintile poverty line, while in the United States, with the least equal distribution, it is 90 percent of the bottom quintile poverty line. In turn, the bottom quintile poverty line in the U.S. is only 56 percent of median income compared to 75 percent in Sweden. The Norwegian relationships are close to the Swedes while the Israelis are closest to the U.S. estimates. The other three countries are more or less in the middle.

### III. Results

Our results concentrate on overall and group specific poverty counts; on pre and post transfer poverty counts; and on the pre and post transfer poverty gap. The three groups who we chose to highlight are the elderly, single parent families with children (under age 18 living in the same family), two parent families with children (also under age 18 in the same family) and all other units (as the remainder). These groups were chosen for several reasons. First of all, they are groups toward which social policy and social concern are frequently directed. Social pensions, child allowances, and legally enforced alimony play a large role in keeping the elderly and single parent families from poverty. Any evaluation of a country's social policy must deal particularly with its effectiveness in keeping these two groups from poverty. Secondly, other papers in this conference deal with the elderly and single parent groups



TABLE 1  
EQUIVALENT INCOME POVERTY LINES IN COUNTRY CURRENCY

Country	(1) Bottom Quintile Poverty Line <sup>1</sup>	(2) Economic Distance Poverty Line <sup>2</sup>	(3) Ratio of Poverty Lines: $\frac{(2)}{(1)}$	(4) Bottom Quintile Line $\frac{1}{2}$ Median Income
USA	7889	7104	.90	.56
Israel	9298	8068	.87	.58
Sweden	65211	43333	.66	.75
UK	3304	2603	.79	.63
Norway	50356	35182	.70	.72
Canada	13002	10400	.80	.63
W. Germany <sup>3</sup>	1818	1333	.73	.68

Notes:

<sup>1</sup>Upper bound of lowest tax and post transfer equivalent income quintile.

<sup>2</sup>One half median family post tax and transfer equivalent income.

<sup>3</sup>Monthly figures (all others annual).

as well, while the "two parent with child" modal family (at least in terms of total persons) in most countries is of general interest. Often poverty among this group is determined more by labor market conditions than by social welfare or income transfer policy. Yet it will be seen that our seven countries' social expenditure systems deal quite differently with two parent families. Program eligibility rules and benefit levels for child allowances, for means tested social assistance, and for extended unemployment benefits differ widely across countries. The final group, "other families", are expected to show less poverty than the other groups. The large majority of persons in this group are nonaged single persons and married couples.<sup>13</sup>

Population and Poverty Counts. Table 2 begins by presenting total family and person counts and average family size (persons per family) for each group in each country. A high degree of variability across countries is immediately evident. Owing perhaps in part to their definition of "family," Sweden has the smallest family size in each case. Despite its definitional similarities with Sweden, Norway looks very much like the remaining countries in the table, except for the "other family" group which looks very much like Sweden. Since other family is the category in which the Scandinavian nuclear family definition will become most apparent, we should be careful to single out this group. Overall family size is largest in Israel -- almost twice as large as in Sweden. Canada, U.K. and U.S. families seem closest to average family size.

These basic data serve as a backdrop for the bottom quintile and economic distance poverty estimates in Tables 3 and 4. Comparing the

bottom quintile poverty figures in Table 3 with the overall population figures in Table 2, we find that the overall average family size the bottom quintile of persons is virtually identical to that of the population at large. However, different countries and different groups are not uniformly average. For instance, in Israel almost all types of poor families are larger than average. This is particularly true for poor two parent families in Israel with an average size of almost seven persons! In contrast, poor elderly families are in every country except for Israel, smaller than average. This pattern probably reflects the fact that among older families, the oldest (usually single widows) are the poorest group. In Israel and Norway relatively poor single parent families with children are larger than average size, but close to average in other countries. Poor two parent families are generally larger than average in all countries, especially (as noted above) in Israel. Among the "other family" group smaller units are more likely to be poor than larger units. In general single unrelated individuals are poorer than couples due to lack of sharing of incomes and resources,<sup>14</sup> thus generally explaining this pattern.

Turning to Table 4 and the economic distance poverty measures, a similar pattern emerges, but with a few notable differences. First of all, there are virtually no poor Swedish elderly measured on this basis.<sup>15</sup> Among single and two parent families with children, average family size among the poor is about the same regardless of which definition of poor is used, except for two parent poor families in the U.K. and Israel which are a bit larger by the second, more severe poverty definition. Here the poorest among the poor are living in larger families.

TABLE 2

POPULATION PARAMETERS: MILLIONS OF PERSONS,  
FAMILIES,<sup>4</sup> AND AVERAGE FAMILY SIZE

Country	Population Measure	Total <sup>9</sup>	Population Group			
			Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Families	4.364	1.124	.192	.881	2.168
	Persons	8.186	1.543	.467	3.334	2.842
	Persons per family	1.88	1.37	2.43	3.78	1.31
U.K. <sup>12</sup>	Families	6.888	1.794	.261	2.400	2.433
	Persons	18.310	2.943	.814	9.976	4.577
	Persons per family	2.66	1.64	3.12	4.16	1.88
Israel <sup>1</sup>	Families	.893	.203	.022 <sup>b</sup>	.429	.239
	Persons	3.066	.405	.078 <sup>b</sup>	2.101	.481
	Persons per family	3.43	2.00	3.55 <sup>b</sup>	4.90	2.01 <sup>b</sup>
USA	Families	83.982	16.403	6.708	24.964	35.908
	Persons	217.693	27.999	22.183	107.207	60.524
	Persons per family	2.59	1.69	3.31	4.29	1.69
Norway	Families	1.640	.447	.138	.583	.472
	Persons	4.076	.662	.377	2.389	.648
	Persons per family	2.49	1.48	2.73	4.10	1.37
Canada	Families	8.953	1.536	.562	3.089	3.767
	Persons	23.764	2.620	1.547	13.064	6.533
	Persons per family	2.65	1.71	2.75	4.23	1.73
W. Ger- many	Families	22.844	6.665	.699	6.741	8.739
	Persons	54.412	10.515	1.990	26.717	15.600
	Persons per family	2.38	1.58	2.85	3.96	1.79
Average	Persons per family	2.58	1.64	2.95	4.20	1.68

Note: Set of footnotes common to all tables (2-9) follows this table.

## Notes for Tables 2-9

b=sample not reliable at 5% level.

<sup>1</sup>Israel figures for urban populations only.

<sup>2</sup>Bottom quintile poverty is defined as families or persons in families in the lowest equivalent income quintile.

<sup>3</sup>Economic distance absolute poverty is defined as families or persons in families with equivalent income below one-half of median family equivalent income.

<sup>4</sup>Families are two or more persons living together who are related by blood, marriage, or adoption or single (unrelated) individuals. More than one family may occupy one household.

<sup>5</sup>Elderly families are those headed by a person age 65 or older.

<sup>6</sup>Single parent families are nonelderly families with only one natural parent present and children under age 18.

<sup>7</sup>Two parent families are nonelderly families with two natural parents and children under age 18.

<sup>8</sup>Other are mainly nonelderly childless couples and nonelderly single individuals.

<sup>9</sup>Totals may not equal sums across rows due to rounding errors.

<sup>10</sup>Simple unweighted average of the seven country estimates.

<sup>11</sup>Percent reduction is defined as (Post-Pre)/(Pre).

<sup>12</sup>UK data are actual number of person or family records, not millions of persons.

TABLE 3

POST TAX AND TRANSFER BOTTOM QUINTILE POVERTY:<sup>2</sup> MILLIONS OF  
PERSONS, FAMILIES,<sup>4</sup> AND AVERAGE FAMILY SIZE

Country	Population Measure	Total <sup>9</sup>	Population Group			
			Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Families	.892	.312 <sup>b</sup>	.053	.171	.356
	Persons	1.636	.376 <sup>b</sup>	.146	.716	.397
	Persons per family	1.83	1.21 <sup>b</sup>	2.75	4.19	1.12
U.K. <sup>12</sup>	Families	1.693	.997	.119	.316	.261
	Persons	3.657	1.421	.369	1.514	.353
	Persons per family	2.16	1.43	3.10	4.79	1.35
Israel <sup>1</sup>	Families	.145	.057	.004 <sup>b</sup>	.064	.020 <sup>b</sup>
	Persons	.612	.117	.017 <sup>b</sup>	.439	.039 <sup>b</sup>
	Persons per family	4.22	2.05	4.25 <sup>b</sup>	6.86	1.95 <sup>b</sup>
USA	Families	16.939	4.677	3.493	3.492	5.276
	Persons	45.534	9.070	12.514	17.057	6.894
	Persons per family	2.69	1.51	3.58	4.88	1.31
Norway	Families	.360	.152	.041	.081	.076
	Persons	.815	.210	.133	.388	.084
	Persons per family	2.26	1.30	3.24	4.79	1.11
Canada	Families	1.911	.515	.242	.533	.620
	Persons	4.753	.743	.705	2.497	.808
	Persons per family	2.49	1.44	2.91	4.68	1.30
W. Ger- many	Families	4.621	1.949	.228	1.294	1.150
	Persons	10.868	2.784	.648	5.768	1.677
	Persons per family	2.35	1.43	2.84	4.46	1.44
Average Poor	Persons per poor family	2.57	1.48	3.24	4.95	1.37

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

TABLE 4

POST TAX AND TRANSFER ECONOMIC DISTANCE ABSOLUTE POVERTY: MILLIONS  
OF PERSONS, FAMILIES,<sup>4</sup> AND AVERAGE FAMILY SIZE

Country	Population Measure	Total <sup>9</sup>	Population Group			
			Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Families	.240	.001 <sup>b</sup>	.016	.040	.183
	Persons	.410	.002 <sup>b</sup>	.043	.166	.200
	Persons per family	1.70	2.00 <sup>b</sup>	2.69	4.15	1.09
U.K. <sup>12</sup>	Families	.741	.387	.079	.130	.145
	Persons	1.606	.532	2.37	.751	.186
	Persons per family	2.17	1.37	3.00	5.01	1.28
Israel <sup>1</sup>	Families	.109	.048	.002 <sup>b</sup>	.645	.013 <sup>b</sup>
	Persons	.446	.096	.009 <sup>b</sup>	.314	.026 <sup>b</sup>
	Persons per family	4.09	2.00	4.50 <sup>b</sup>	6.98	2.00 <sup>b</sup>
USA	Families	14.289	3.759	3.168	2.774	4.587
	Persons	36.879	5.687	11.479	13.795	5.919
	Persons per family	2.58	1.51	3.62	4.97	1.29
Norway	Families	.087	.023	.015	.017	.033
	Persons	.195	.030	.047	.081	.037
	Persons per family	2.24	1.30	3.13	4.76	1.12
Canada	Families	1.145	.193	.197	.309	.446
	Persons	2.882	.302	.580	1.442	.556
	Persons per family	2.52	1.56	2.94	4.67	1.25
W. Ger- many	Families	1.580	.687	.129	.206	.558
	Persons	3.234	.980	.361	1.047	.842
	Persons per family	2.05	1.43	2.80	5.08	1.51
Average Poor	Persons per poor family	2.47	1.60	3.24	5.02	1.36

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

Poverty Rates. Intercountry differences in poverty rates among persons can be most clearly seen in Table 5. This table (and the following one) lie at the heart of this paper. Our bottom quintile poverty estimates count the lowest 20 percent of persons in families ranked by equivalent income in each country as poor. But within each country these poverty rates vary widely among groups. For instance, almost half of all persons in UK elderly families are among those in the bottom quintile. In contrast, only about one quarter of Swedish and USA elderly are so situated. In Israel only between a fifth and a fourth of single parent families are in the bottom quintile, while over 56 percent of such persons are poor in America. In general, single parent families have the highest bottom quintile poverty rates. The Canadians and the UK have bottom quintile poverty rates among persons in single parent families of over 45 percent; for the remaining countries rates for single parents are at about one-third. The chance of a single parent family being in the bottom quintile over the entire group is greater than 3 in 8. There is much less variance among two parent families with between 15 and 22 percent of this group among the bottom quintile poor in each country. In all cases relative poverty rates are lowest among the other group, with the relatively high figures in Sweden most likely hiding college students who are counted as living alone. In fact, there are 73,000 single persons under age 25 who were primarily students (major activity was school) in the bottom quintile of the Swedish distribution. These make up only 4.5 percent of all persons in the bottom quintile but 18.4 percent of the "other" group. However, we cannot determine whether these students are truly living alone at low income levels, or whether



TABLE 5

POST TAX AND TRANSFER POVERTY RATES FOR PERSONS: BOTTOM QUINTILE  
POVERTY<sup>2</sup> AND ECONOMIC DISTANCE POVERTY<sup>3</sup>

Country	Poverty Measure	Percentage of Persons Who are Poor in:				
		Total <sup>9</sup>	Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Bottom Quintile	20.0%	24.3%	31.4%	21.5%	14.0%
	Economic Distance	5.0	.1 <sup>b</sup>	9.2	5.0	7.0
U.K.	Bottom Quintile	20.0	48.3	45.3	15.2	7.7
	Economic Distance	8.8	18.1	29.1	6.5	4.1
Israel <sup>1</sup>	Bottom Quintile	20.0	28.9	22.3 <sup>b</sup>	15.2	8.1
	Economic Distance	14.5	23.8	11.8 <sup>b</sup>	14.9	5.5
USA	Bottom Quintile	20.0	25.4	56.4	15.9	11.4
	Economic Distance	16.9	20.5	51.7	12.9	9.8
Norway	Bottom Quintile	20.0	31.7	35.3	16.2	13.0
	Economic Distance	4.8	4.6	12.6	3.4	5.7
Canada	Bottom Quintile	20.0	28.3	45.6	19.1	12.4
	Economic Distance	12.1	11.5	37.5	11.0	8.5
W. Germany	Bottom Quintile	20.0	27.6	32.6	21.6	10.7
	Economic Distance	6.0	9.3	18.1	3.9	5.4
Overall Average Poverty Rates <sup>10</sup>						
	Bottom Quintile	20.0	30.6	38.4	18.6	11.0
	Economic Distance	9.7	12.7	24.3	8.2	6.6

Note: Set of footnotes common to this and Tables 2-9 is on page 15.

they are living alone but are economically dependent on other persons (e.g. parents), or whether they actually live with their parents (even while at school).

One way to look at the bottom quintile poverty rates in each country would be to compare the overall poverty rate of 20 percent to each subgroup's poverty rate. A situation where poverty was equally spread among groups would be one where poverty rates approached 20 percent for each subgroup. A highly unequal incidence of poverty would be found in cases where poverty rates differed radically between groups. Israel comes closest to most equally spreading relative poverty among the three main subgroups of the population. Sweden and Germany are not far behind. In the U.S. and Canada, single parent families are disproportionately poor. In the UK and in Norway to a lesser extent, relative poverty is heavily concentrated among the elderly and single parent families.

Economic distance based poverty -- persons living in families with equivalent disposable incomes below half the median -- varies substantially across countries: the poverty rate in the U.S. (16.9 percent) is over three times the rates in Norway (4.8) and Sweden (5.0). Poverty in Israel (14.5) and Canada (12.1) is almost as high as that in the USA -- about two and one half times as great as in the Scandinavian countries. The UK at 8.8 percent poor is closest to, but still far below, the group average rate of 9.9 percent. The Germans at 6.0 percent are closer still to the Scandinavians. As a group, our estimates indicate that about half (9.9 percent overall) of the bottom equivalent income quintile of persons have incomes below half the median.

Within subgroups the differences in economic distance poverty rates are even more astounding. Except for one statistical anomaly,<sup>15</sup> there are no elderly living with equivalent incomes below one half the median in Sweden. Norwegian rates are almost as low. This is in sharp contrast to the USA and Israel where over one-fifth of the elderly fall below half the overall median income. Differences between bottom quintile and economic distance poverty rates reflect two factors: first, the level of overall inequality which governs the difference between these two poverty lines (see Table 1); and second, the effectiveness of social policy in placing a floor under the incomes of the poorest members in each group. In the U.S. a somewhat lower than average proportion of elderly were among the bottom quintile poor, but a much higher than average proportion were among the poor on an economic distance basis. Even though these two poverty lines are fairly close in the U.S., it does appear that while there are relatively few elderly in the bottom quintile, those who do fall into this group are not very well off. In contrast, in the UK where almost half of the elderly are found in the bottom quintile, less than 20 percent are below the economic distance line. The Norwegians also have a higher fraction of elderly among the bottom quintile poor, but a much lower proportion among the economic distance poor, while the Swedes have completely prevented poverty among the elderly on this latter basis. Obviously laws governing minimum cash incomes for the elderly differ radically between these countries.

A similar pattern can be found among single parent families with many countries' social minima somewhere between the two poverty lines. In the USA, however, over half of all persons in single parent families are poor

on an economic distance poverty basis while in Canada 37.5 percent are poor. Poverty among persons in two parent families by the economic distance poverty measure exceeds 10 percent only in Israel, the USA, and Canada. No country has more than 9.8 percent of other families in poverty on this basis. The Germans have reduced two parent poverty rates to Scandinavian levels.

Appendix Table A-2 tells much the same story, but for families instead of persons. Now, however, 20 percent of all families are bottom quintile poor only if, as in Sweden and Germany, the average family size of the poor is just about the same as in the rest of the population. Israeli poor families are of a very large size and so only 16.2 percent of families are in the bottom equivalent income quintile of persons. In contrast, because elderly poor families -- the largest group of UK poor families -- are relatively smaller in size in the UK, we find almost one quarter (24.6 percent) of families in this quintile. Again wide variances in rates can be seen among the elderly and single parent families. In every category of analysis, families in the USA exhibit the highest poverty rates.

Pre and Post Transfer Poverty. One important dimension of intercountry comparisons of poverty is the ability of the social welfare system -- the cash transfer system in particular here -- to prevent persons and families with otherwise inadequate private incomes from falling into poverty. Table 6 presents estimates of the percentage of total persons and persons in each group who are poor after taxes are subtracted from both pre transfer (private market) equivalent income and post transfer (equivalent income). The percentage of pre transfer poor pulled out of poverty is also given in each case.

Overall about one-fourth of all persons live in families with pre transfer equivalent incomes below half of the median. With the exception of Sweden, this overall ratio varies only from 24.1 percent in Norway to 29.1 percent in Israel. The very large Swedish welfare state (see below) and our inability to separate occupational from social pensions here (and also to some extent in Norway) contribute to the high overall pre transfer poverty rate. But otherwise within group differences are much larger. As mentioned above, some of this problem is purely definitional. Because of heavy reliance on public sector pension transfers -- i.e. social security -- among the elderly, pre transfer poverty rates for this group are very high everywhere but in countries which rely more heavily on occupational pensions. Occupational pensions, whether from public or private sector, are counted as pre transfer income here. In the USA, where occupational pensions play a large role for only a minority of the elderly, we still find 72 percent are pre transfer poor. Israel has a relatively young occupational pension system but still they have the lowest pre-transfer elderly poverty rates. This may also be attributable to the propensity of the elderly to live with their children and/or the prevalence of regular interhousehold transfers between extended families. Average retirement age also affects this pattern. Germany has the highest pre transfer poverty rate among the elderly, but also the lowest age of retirement. Thus most elderly persons (in families headed by a person age 65 or over) in Germany have no earnings. In Israel, earnings and property income are much more prevalent among the elderly than in Germany or in the USA (Hedstrom and Ringen, 1985).

Among single parent families, pre transfer poverty rates reflect two things: the ability of single mothers to generate their own earned

TABLE 6  
PRE AND POST TRANSFER ECONOMIC DISTANCE  
POVERTY<sup>3</sup> RATES FOR PERSONS

Country	Poverty Measure	Percentage of Persons Who Are Poor In:				
		Total <sup>9</sup>	Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Pre-Transfer	41.0%	98.4% <sup>b</sup>	55.0%	21.3%	30.5
	Post-Transfer	5.0	.1 <sup>b</sup>	9.2	5.0	7.0
	Percent Reduction <sup>11</sup>	-87.8	-99.9 <sup>b</sup>	-83.3	-76.5	-77.0
UK <sup>12</sup>	Pre-Transfer	27.9	78.6	56.3	17.6	12.8
	Post-Transfer	8.8	18.1	29.1	6.5	4.1
	Percent Reduction <sup>11</sup>	-68.5	-77.0	-48.3	-63.1	-68.0
Israel	Pre-Transfer	29.0	56.8	52.6 <sup>b</sup>	26.1	14.3 <sup>b</sup>
	Post-Transfer	14.5	23.8	11.8 <sup>b</sup>	14.9	5.5 <sup>b</sup>
	Percent Reduction <sup>11</sup>	-50.0	-58.1	-77.6 <sup>b</sup>	-42.9	-61.5 <sup>b</sup>
USA	Pre-Transfer	27.3	72.0	58.5	16.0	15.4
	Post-Transfer	16.9	20.5	51.7	12.9	9.8
	Percent Reduction <sup>11</sup>	-38.1	-71.5	-11.6	-19.4	-36.4
Norway	Pre-Transfer	24.1	76.9	44.0	7.8	18.7
	Post-Transfer	4.8	4.6	12.6	3.4	5.7
	Percent Reduction <sup>11</sup>	-80.1	-94.0	-71.4	-56.4	-69.5
Canada	Pre-Transfer	25.6	73.6	48.4	18.5	15.2
	Post-Transfer	12.1	11.5	37.5	11.0	8.5
	Percent Reduction <sup>11</sup>	-52.7	-84.4	-22.5	-40.5	-44.1
W. Germany	Pre-Transfer	28.3	80.3	34.8	12.9	20.1
	Post-Transfer	6.0	9.3	18.1	3.9	5.4
	Percent Reduction <sup>11</sup>	-78.8	-88.4	-47.1	-69.8	-73.1

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

income, and the effectiveness (and generosity) of alimony and child support laws. Countries with high proportions of single parents who are pre transfer poor -- UK, USA, Canada, and Israel (though the latter has very few single parent units) -- reflect low earnings and poor private alimony/child support arrangements. Particularly in large diverse countries with state (USA) or provincial (Canada) child support collection systems, it is often difficult to effectively enforce these laws. The Germans do the best here (most likely because of their program to make child support advance payments to single parents whose spouses are behind in their support obligations), followed by Norway and Canada.

Pre transfer poverty among two parent families reflects relatively low wages among earners, and/or high unemployment. Israel, Canada, Germany, the UK and the USA had high unemployment during their survey years.<sup>16</sup> The Germans and Norwegians both have high wages at the bottom of the distribution (more so for Germany) but only the Norwegians had a relatively low unemployment rate in their survey year.<sup>17</sup> Norway's unemployment rate was 2.0 percent in 1979. Pre transfer poverty among persons in "other" families shows less variance than for the other subgroups, except in Sweden where the adult units income accounting practice may disguise intrafamily income sharing.

The largest differences are, of course, in the ability of the transfer system to pull the pre-transfer poor over the poverty line. The overall variance here runs from over 87.8 percent of the pre-transfer poor removed from poverty in Sweden to only 38.1 percent in the USA. Countries with larger transfer systems (as a percentage of GDP) are generally more effective in this regard than are countries with smaller

transfer systems. Thus the USA and Canada do relatively poorly, while Sweden, Norway, Germany, and the UK do better. The Israel situation is less easily explained. However, high inflation rates in Israel coupled with lags in child allowance and old age pension cost of living adjustments keep many poor families close to but just below the economic distance poverty line.

Again, however, these overall figures hide considerable intergroup differences. The German and Canadian public old age pension systems are second only to that of Norway and Sweden in preventing poverty among the elderly. The UK system is close behind. The Israeli system does the worst, owing most likely to the large role of interfamily aid from younger to older households in that country, and the lag in cost of living adjustments. Some countries, e.g. Sweden in particular, but also Norway and Israel, are very effective in pulling pre transfer single parent units from poverty. Other countries do a middle-level job (e.g. UK and Germany), while Canada and the U.S. in particular do a very poor job (again, likely to their ineffectiveness in collecting alimony and child support from absent parents).

Among two parent families, the generosity and availability of unemployment aid, social assistance, and/or child allowances determine the effectiveness of the transfer system in preventing poverty. Here the German and UK systems do the best job, followed by Norway. Less than half of the pre transfer poor are pulled out of poverty in Israel (42.9 percent) and Canada (40.5 percent), due to very large families in Israel and low benefit rates for these families in Canada (i.e. a universal but quite modest child allowance program). In the USA, where extended



unemployment benefits, child allowances, and social assistance (other than Food Stamps which are counted here) are virtually nonexistent, less than 20 percent of the pre transfer poor persons in two parent families are pulled out of poverty. While both Canada and the U.S. subsidize children through special income tax exemptions and child care deductions, these are not enough to prevent widespread poverty among parents and children in families which experience long term unemployment or low wages or both.

Poverty Composition. The next set of results in Table 7 looks at the composition of the entire population as compared to the composition of the poor under both poverty definitions. Here we can take each triplet of numbers to see if any group is particularly more or less prevalent among the poor than among the entire population. Whatever the absolute level of poverty, countries with roughly the same fraction of a given type of persons or families among the poor as compared to their share in the entire population is less likely to favor one group over another in terms of effectively preventing poverty for that group. The opposite situation indicates that countries have either a fairly good or a fairly bad income maintenance system for groups that are underrepresented or overrepresented, respectively, among the poor. Whether such a pattern is defensible or not is up to the author's and the reader's interpretation.

For instance, consider the case of Sweden. Here the elderly are clearly underrepresented among the economic distance poor, while single parent families and other families are overrepresented. Because the elderly are generally less able to help themselves than are other groups in society, their low representation among the poor is generally thought

TABLE 7

POPULATION COMPOSITION OF PERSONS: ALL PERSONS: PERSONS IN  
POST TAX AND TRANSFER BOTTOM QUINTILE POVERTY;<sup>2</sup> PERSONS  
IN ECONOMIC DISTANCE POVERTY<sup>3</sup>

Country	Poverty Measure	Percentage of Poor Persons Living In:				
		Total <sup>9</sup>	Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Total	100.0%	18.9%	5.7%	40.7%	34.7%
	Bottom Quintile	100.0	23.0	8.9	43.8	24.3
	Economic Distance	100.0	.2 <sup>b</sup>	10.4	40.5	48.8
U.K. <sup>12</sup>	Total	100.0	16.1	4.4	54.5	25.0
	Bottom Quintile	100.0	38.9	10.1	41.4	9.7
	Economic Distance	100.0	33.1	14.8	40.5	11.6
Israel <sup>1</sup>	Total	100.0	13.2	2.5	68.5	15.8
	Bottom Quintile	100.0	19.1	2.8 <sup>b</sup>	71.7	6.4 <sup>b</sup>
	Economic Distance	100.0	21.5	2.0 <sup>b</sup>	70.6	5.8 <sup>b</sup>
USA	Total	100.0	12.8	10.2	49.2	27.8
	Bottom Quintile	100.0	16.2	28.7	39.2	15.8
	Economic Distance	100.0	15.4	31.1	37.4	16.0
Norway	Total	100.0	16.2	9.3	58.6	15.9
	Bottom Quintile	100.0	25.8	16.3	47.6	10.3
	Economic Distance	100.0	15.4	24.1	41.5	19.0
Canada	Total	100.0	11.0	6.5	55.0	27.5
	Bottom Quintile	100.0	15.6	14.8	52.5	17.0
	Economic Distance	100.0	10.5	20.1	50.0	19.3
W. Germany	Total	100.0	18.6	3.7	49.1	28.7
	Bottom Quintile	100.0	25.6	6.0	53.0	15.4
	Economic Distance	100.0	30.3	11.2	32.3	26.2

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

to be a good thing. Similarly "other" families, generally single individuals and childless couples, are more likely to have some element of own choice, e.g. going to school in the latter case, involved in their poverty situation. If so, an overrepresentation of poor persons in these families should not be seen as a condemnation of public policy. The case of single parents is more vexing. Since they are a fairly low percentage of the entire population in Sweden, perhaps the fact that 10.4 percent of them are among the poorest group is less troubling. Only Israel has a much lower share of poor persons who are in female headed families (but owing to small sample size these figures may be erroneous).

In the UK, as compared to Sweden, the opposite situation emerges: the elderly are not very well off with one-third of them among the economic distance poor as compared to their overall population share of about one-eighth. The German situation among the elderly poor is similar to that in the UK. There are three times as many poor single parent units in poverty so measured as in the population at large in all countries but Sweden and Israel. Two parent units and other families do a much better job in avoiding poverty, except for Israel where extremely large two parent units keep up the share of these among the poor. Although the Israelis have a slightly larger share of poor who are elderly than in the entire population, they seem to come closest to equally spreading poverty among the four groups. In the USA, the elderly are not much worse off as a share of the poor than as a share of the total population. The Norwegians and Canadians also do pretty well for their elderly but not so well for persons in single parent units. In Germany we find significantly larger shares of persons in elderly and

single parent families among the poor as compared to persons in other types of units.

The family composition patterns in the countries are shown in Appendix Table A-II. In general they are much the same as in the person patterns, except for Israel where the larger than average size of nonelderly poor families drastically increases the share of the elderly among the poor. In the UK about half of all poor units are elderly.

Poverty Gaps. Poverty headcounts often mask the depth of poverty among poor persons, as measured by their average poverty gap: the total dollar differential from the economic distance poverty line. The pre and post transfer economic distance poverty gaps in Table 8 correspond to the pre and post transfer poverty rates shown in Table 6. In Table 8, Poverty gaps are defined as the aggregate equivalent income distance from the poverty line as a percentage of the poverty line. Thus pre transfer poverty gaps exceed post transfer gaps.

Whereas overall pre transfer poverty rates in Table 6 were quite similar across countries, pre transfer poverty gaps differ widely in some cases. For instance the German dataset indicates a high degree of pre transfer income deficit (86.3 percent of the poverty line), followed by Sweden (80.7 percent) and by Norway (79.7 percent). The UK, USA, and Canada are close together at about 70 percent while in Israel the pre transfer poverty gap is only about 57.6 percent on average. Post transfer poverty gaps differ by less, but are still substantial. After transfers, the average Israel and UK poor family is only 16 percent away from its poverty line. In Canada the difference is about one-third, and in Germany about 30 percent, while in the USA, Sweden, and Norway, the remaining post transfer poverty gaps are about 40 percent.

TABLE 8

PRE AND POST TRANSFER POVERTY GAPS: EQUIVALENT  
INCOME DEFICIT AS A PERCENTAGE OF ECONOMIC  
DISTANCE POVERTY LINE<sup>3</sup>

Country	Poverty Measure	Percentage Poverty Gap Among Persons Living In:				
		Total <sup>9</sup>	Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Pre-Transfer	80.7%	97.8% <sup>b</sup>	57.3%	39.0%	67.4%
	Post-Transfer	40.0	45.2 <sup>b</sup>	33.4	28.2	43.2
	Percent Reduction <sup>11</sup>	-50.4	-53.8 <sup>b</sup>	-41.7	-27.7	-35.9
UK <sup>12</sup>	Pre-Transfer	72.6	83.1	67.1	33.0	70.7
	Post-Transfer	16.0	10.9	17.7	10.8	24.3
	Percent Reduction <sup>11</sup>	-78.0	-86.9	-73.7	-67.3	-65.6
Israel <sup>1</sup>	Pre-Transfer	57.6	72.1 <sup>b</sup>	55.5	36.6	58.3 <sup>b</sup>
	Post-Transfer	16.3	13.4 <sup>b</sup>	13.7	20.4	13.3 <sup>b</sup>
	Percent Reduction <sup>11</sup>	-71.7	-81.4 <sup>b</sup>	-75.3	-44.3	-77.2 <sup>b</sup>
USA	Pre-Transfer	71.0	81.2	59.3	43.0	67.1
	Post-Transfer	39.9	29.1	43.0	33.3	50.6
	Percent Reduction <sup>11</sup>	-43.8	-64.2	-27.5	-22.6	-24.6
Norway	Pre-Transfer	79.7	87.4	59.7	37.1	79.5
	Post-Transfer	40.8	48.3	27.7	29.2	47.6
	Percent Reduction <sup>11</sup>	-48.8	-44.7	-53.6	-21.2	-40.1
Canada	Pre-Transfer	69.8	83.3	72.3	42.0	65.7
	Post-Transfer	33.9	18.8	37.0	30.5	41.8
	Percent Reduction <sup>11</sup>	-51.4	-77.4	-48.8	-27.4	-36.3
W. Germany	Pre-Transfer	86.3	94.1	61.1	36.6	81.4
	Post-Transfer	30.6	28.5	31.4	23.2	48.4
	Percent Reduction <sup>11</sup>	-68.2	-69.7	-48.6	-36.6	-40.5

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

The relative ability of transfer systems to reduce poverty gaps is not always the same as their effectiveness in reducing poverty rates. For instance, Sweden and Norway showed the largest reduction in pre transfer poverty rates in Table 6, but the third and second lowest reduction in poverty gaps in Table 8.<sup>18</sup> Some part of this difference may be due to the fact that among those few persons left in poverty in the Scandinavian countries, there are persons who are not eligible for assistance or who understate their real incomes. Germany was second best at reducing pre-transfer poverty rates, but not as effective at reducing the poverty gap as was Israel or the U.K. The comparable figures for other countries are relatively consistent. The USA transfer system did the worst in reducing both rates and gaps, followed by the Canadians, Israelis, and UK.

Group specific differences in poverty gap reductions are also interesting. The Norwegians and Swedes did worst of all among the elderly (though only 4.6 percent of the elderly remained poor after transfers in Norway and there is only one poor elderly family record in Sweden!). In the UK and in Israel, poverty gap reductions are largest for both the elderly and for single parents. The U.S. does poorly for single parents as previous evidence would predict; but so do the Swedes relative to other countries. For two parent units, the British unemployment and child allowance system is most effective in reducing the pre-transfer poverty gap. Israel does second best, even given the substantial fraction of large poor two parent families after transfer. While Sweden, Norway and Canada do a better job of reducing pre transfer poverty rates than the USA, the Canadians don't do much better and the

Norwegians the worst in reducing the poverty gap for these two parent units (though see footnote 18 for one explanation of the Norway result). The UK and Israel transfer systems both remove a high fraction of the poverty gap among "other" poor families. All things considered, the UK income maintenance system appears to be most effective in reducing poverty gaps, followed by the Israelis. Both are characterized by universal transfer systems that offer high coverage but fairly low benefit rates. Other than the reduction in the poverty gap for persons in two parent families, the Israelis compare well with the UK.<sup>19</sup>

Poverty and Homeownership. All of our figures are based on either annual or subannual income. There is no account taken of wealth in the form of financial or nonfinancial assets. Because income from financial assets is usually poorly reported on surveys (e.g. Radner, 1983), we decided to compare poverty among renters and owners to get some idea of the permanence of poverty among families. Our rationale is that poor renters are more likely to be long term poor than are poor homeowners. Table 9 shows both the relative overall percentages of homeowners and renters in parentheses, and then group specific bottom quintile and economic distance poverty rates among owners vs. renters.

In all countries except for Germany, poor families who are renters have about twice the bottom quintile poverty rate of owners. Thus those with enough assets to be owners are less likely to have incomes that place them in the lowest equivalent income fifth of families. This is true even though relative homeownership is large only in Israel and the USA. In Canada and Britain more overall families are owners than are renters. In Norway and Germany renters outweigh owners in the population

at large, while in Sweden only three in ten families are owners. Only in Germany is homeownership relatively neutral among the poor. The differences in economic distance poverty rates between homeowners and renters are even more pronounced than are the bottom quintile poverty differences, especially in Scandinavia.

If homeownership is a sign of higher than average net worth and higher long term income, we should perhaps be more concerned with economic distance poverty rates among renter families as opposed to overall family poverty rates. While both the variance and level of economic distance poverty rates among renters is higher than the variance and level of poverty rates among the population at large, there is virtually no change in ranking. Countries with high relatively absolute poverty rates among the whole population also have high rates among renters and vice versa.

#### IV. Discussion

No doubt the reader has by now succumbed to the blizzard of numbers and percentages contained in the first nine tables. What remains is to explain the social income transfer system and institutions which produced these facts and figures. We do this in three parts. First we compare our results to those of earlier less complete studies based on less internally comparable data. Next we briefly review the major findings in Section III; and finally we explain these results with reference to specific country income maintenance policies.

Other Studies. Table 10 compares the overall post-tax and transfer poverty rates from Table 5 in this paper to three earlier and less



TABLE 9

POST TRANSFER BOTTOM QUINTILE<sup>2</sup> AND ECONOMIC DISTANCE POVERTY  
RATES<sup>3</sup> AMONG FAMILIES<sup>4</sup> WHO ARE OWNERS, RENTERS, (AND  
TOTAL SHARES OF OWNERS AND RENTERS IN PARENTHESES)

Country	Poverty Measure	Total <sup>9</sup>	Owners	Renters
Sweden	(All Units)	(100.0%)	(29.5%)	(70.5%)
	Bottom Quintile	20.4	13.6	23.3
	Economic Distance	5.5	2.4	6.8
U.K. <sup>12</sup>	(All Units)	(100.0)	(53.2)	(46.8)
	Bottom Quintile	24.6	16.2	34.1
	Economic Distance	10.8	7.8	14.1
Israel <sup>1</sup>	(All Units)	(100.0)	(77.5)	(22.5)
	Bottom Quintile	16.2	12.7	28.4
	Economic Distance	12.1	9.8	20.3
USA	(All Units)	(100.0)	(66.4)	(33.6)
	Bottom Quintile	20.2	15.0	30.3
	Economic Distance	17.0	12.5	25.9
Norway	(All Units)	(100.0)	(42.7)	(57.3)
	Bottom Quintile	22.0	14.0	27.9
	Economic Distance	5.3	2.7	7.2
Canada	(All Units)	(100.0)	(58.9)	(41.1)
	Bottom Quintile	21.3	15.3	30.0
	Economic Distance	12.8	8.1	19.5
W. Germany	(All Units)	(100.0)	(44.1)	(55.9)
	Bottom Quintile	20.2	20.6	20.0
	Economic Distance	6.9	6.4	7.3

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

complete sets of figures: those of the OECD (1970), those of Beckerman (1973) (and Hauser and Nouvertne (1980) who duplicated Beckerman's measure for Germany), and those of the EEC (1981). The last two studies were rather small in their coverage of LIS countries. All studies used poverty measures that were linked to family or adult mean or median equivalent income (see notes to Table 10). The Beckerman and Hauser-Nouvertne estimates were microdata based while in the EEC study countries provided their own estimates of income poverty. The OECD estimates were either garnered from published data (or from country statistical offices who were asked to prepare these data).

Just looking at the two common countries to all studies, Germany and the UK, there is obviously some sort of basic inconsistency. This inconsistency could arise from different income definitions, different equivalence factors, or a host of other reasons alone or in combination. According to the EEC, the UK poverty rate was 6.3 percent for 1975, far below Beckerman's estimate of 9.9 percent. On the other hand, Hauser and Nouvertne's estimate for Germany using the Beckerman technique (3.9 percent) was in turn far below the EEC German estimate of 6.6 percent. Our estimate is more in agreeance with the EEC for Germany, but the OECD estimate is close to the Hauser-Nouvertne figure. For the UK, both our LIS figure and the OECD estimate are somewhere between those of Beckerman and the EEC. Only the EEC changes the rank order, arguing that German poverty rates are above those for the U.K.

Other comparisons yield much the same confusion. For instance, while the OECD figures are for roughly the same year as Beckerman, and while they also indicate that Norway had a lower poverty rate than the UK, they

TABLE 10  
ECONOMIC DISTANCE POVERTY RATES (PERCENTAGE OF  
PERSONS POOR) FROM SEVERAL STUDIES

Country	Study (Date Year)			
	LIS (1979-1981) <sup>1</sup>	OECD (early 1970's) <sup>2</sup>	Beckerman (1973) Hauser-Nouvertne (1973) <sup>3</sup>	EEC (1975) <sup>4</sup>
Norway	4.8%	5.0%	7.7%	-%
Sweden	5.0	3.5	-	-
Germany	6.0	3.0	3.9	6.6
U.K.	8.8	7.5	9.9	6.3
Canada	12.1	11.0	-	-
Israel	14.5	-	-	-
USA	16.9	13.0	-	-

Sources and Notes:

<sup>1</sup>This paper, Table 5 or 6.

<sup>2</sup>OECD (1979). Standardized poverty line set equal to two-thirds average disposable income per person. Equivalence scales are shown in Table A-1 under OECD.

<sup>3</sup>Hauser and Nouvertne (1980) duplicated the techniques of Wilfred Beckerman (1979) to determine poverty rates in Germany that were comparable to his for Norway and the U.K. Poverty in both studies is based on somewhat comparable income definitions using UK equivalence scales. Poverty line is set at one-half median equivalent income.

<sup>4</sup>EEC "comparable" estimates from the EEC Final Poverty Report (1981). Poverty line was set at one-half adult average equivalent median income and was computed for 1975 by each country expert.

do not exactly correspond. Moreover, OECD's estimates do not look at all like the EEC estimates. The largest difference between OECD and Beckerman was for Norway where Beckerman found a 7.7 percent rate as compared to the OECD's 5.0 percent rate. As compared to the EEC poverty rates for 1975, the OECD indicates a much lower rate for Germany (than does the EEC) and a much higher rate for the UK. While these differences are most likely related to the OECD's different poverty definition (two-thirds average disposable income per person) and different equivalence scales (see Table A-1 for the OECD scales), they are still very large differences. Our LIS data for these two countries also show that Norway had a lower poverty rate in 1979 than did the UK, but that the figures were much wider apart than the Beckerman and OECD estimates indicate. Possibly the difference is somewhat explained by the difference in data years, but other unknown factors are likely at work in the Beckerman and OECD studies.

The OECD study is the most comparable to ours in terms of the number of countries analyzed. The highest three poverty rates in our study (for 1979 and 1981) correspond exactly in rank order to those which the OECD published for the early 1970s. Because of the better condition of the world economy in the early 1970s and owing to their different poverty definition as compared to 1979, the OECD rates are lower than ours. The lowest three poverty rates are a bit different. According to our data, the Germans have the third lowest poverty rate, preceded by Sweden and then Norway with the lowest overall rate. According to OECD, Norway is only third lowest preceded by Sweden and then Germany with the lowest rate. Like the others, these differences could come from several sources

(e.g. different years, data sources, accounting units, poverty lines, equivalence scales, etc.) Differences in data sets most likely underly the Germany poverty rate differential, with OECD's estimates based on official government survey data provided by the Bundesamt (German National Statistical Office) as compared to our German University research survey. The Swedish and Norwegian differences are more likely due to use of different poverty measures and differences in definitions used by the Swedes and Norwegians in preparing the OECD estimates.

In summary our results do not correspond exactly to those published by others. Yet why should they do so? While some similarities might be noted, we feel that our series is based on more truly "comparable" data and concepts than those employed in any of these previous studies. To the extent that the differences noted in Table 10 for the OECD, Beckerman, Hauser and Nouvertne, and EEC studies as compared to this paper are due to different people compiling different estimates based on different income and poverty concepts, rather than just different time periods or equivalences, the value of basing comparative poverty studies on one internally consistent database as we have done here, should be fairly obvious. Moreover while it would be difficult to experiment with alternative income or poverty definitions or different equivalence scales in any of these other studies, such insensitivity tests are easily carried out using LIS.

Summary of Results. The data presented in Section III and summarized in Table 11 lead to the following general results:

1. U.S. has the highest overall economic distance poverty rates, with Israel and Canada following. The Scandinavians have the lowest poverty rates with the Germans and UK somewhere in between.

2. Poverty among groups differ in many important ways. There are few if any elderly poor in Sweden, but many elderly poor in the UK by either poverty definition. Poverty in single parent, largely female headed, families is a major problem in all countries, unless as in Israel, there just aren't very many female heads. Among two parent families, poor units tend to be large (e.g. Israel) and more prevalent in countries with relatively weak income support systems for intact families (US), or with relatively low wages (UK). Extended periods of unemployment with little public aid also plays a large role. The "other" group is generally a hodge-podge of childless couples or younger single persons with relatively low poverty rates.
3. The effectiveness of the income transfer system in reducing poverty is strongest in Sweden, Norway and Germany, and also in the UK. The largest intercountry differentials are noted for two parent units where absence or presence of child allowances, extended unemployment compensation, and means tested social assistance produce large differential effects.
4. The UK does remarkably well in reducing the pre-transfer post-tax poverty gap given their relatively low percentage of GDP spent on income transfers. Countries with large and well-developed welfare state transfer systems, e.g. Germany, Norway, Israel, and Sweden, tend to do better than those with less well developed systems (e.g. USA or Canada).<sup>20</sup>
5. Homeownership does not affect the ranking of countries by poverty rates, but in all countries but Germany, those with homes have substantially lower poverty rates than those without homes.

TABLE 11  
ECONOMIC DISTANCE POVERTY RATES AND POVERTY GAPS:  
A SUMMARY<sup>1</sup>

Country	Poverty Rates:			Poverty Gaps:		
	Pre-Transfer	Post-Transfer	Percent Change	Pre-Transfer	Post-Transfer	Percent Change
Norway	24.1%	4.8%	-80.1%	79.7%	40.8%	-48.8%
Sweden	41.0	5.0	-87.8	80.7	40.0	-59.4
W. Germany	28.3	6.0	-78.8	86.3	30.6	-64.5
UK	27.9	8.8	-68.5	72.6	16.0	-78.0
Canada	25.7	12.1	-52.7	69.8	33.90	-51.4
Israel	29.0	14.5	-50.0	57.6	16.3	-71.7
USA	27.3	16.9	-38.1	71.0	39.9	-43.8

Notes

<sup>1</sup>Poverty rates taken from Table 6; poverty gaps from Table 8.

Explanation. The reasons for these results are not always obvious, but can be traced to several proximate causes. First and foremost, expenditure on income transfers as a percentage of GDP help explain the overall effectiveness of the transfer systems in reducing poverty. Secondly, the universality of the transfer system in terms of helping all or only certain types of poor citizens is important, and finally the structure of the pension system and of wages in the private economy are important. The Scandinavians, Israelis, and Germans spend the highest proportions of GDP on transfers, 9.0 percent or more of GDP according to the OECD (1979). The UK, USA, and Canada spend more on the order of 7 percent of GNP on income transfers. No doubt this explains much of the difference noted above and in Table 11.

All countries but the USA and Canada have strong national and nearly universal income maintenance systems. Only the USA has no child allowance program (though there is a universal means tested near cash Food Stamp program in the USA). The UK system seems fairly well targeted on the poor as does the Israeli system. One interesting comparison is in the strong effectiveness of Israel in reducing the poverty gap (71.7 percent) as compared to their ability to reduce the poverty count (50.0 percent), and the opposite result in Sweden where the poverty count falls by 80.7 percent and the poverty gap only by 50.4 percent. Norway is much the same as Sweden. Israel's strong universal transfer system helps virtually all low income families, but because of indexation lags, transfers do not rise as fast as wages. Thus the gap falls by more than the count. In Sweden and in Norway, the few poor who are left are far below their poverty lines. This possibly reflects inconsistencies in the definition of income units and/or uncounted income among these persons.



In contrast, the USA system is plagued by categorical eligibility rules which provide meager benefits for some (e.g. two parent units) and relatively plentiful benefits for others (e.g. the elderly). Both the USA and Canada have large intergovernmental (i.e. interstate and interprovince) differences in benefit levels and problems in child support enforcement mechanisms which help explain the relatively weak anti-poverty effectiveness of their transfer systems. Low wages in the UK and wide wage differentials coupled with a weak unemployment benefit system in the USA help explain the higher poverty and lesser antipoverty effect transfers in these countries. The Germans and Scandinavians have relatively high wages even at the bottom end of the wage distribution, thus helping keep poverty rates among two parent and "other" families fairly low.

For the elderly, those countries with high minimum pension levels, e.g. Scandinavia, or high universal social assistance minima, e.g. Germany, have low poverty rates. For countries with less unified systems (USA, Canada) or for countries with relatively low minimum pensions (UK) poverty rates are higher among the elderly.

Most significant, we feel, is the lack of almost all countries to adequately deal with the single parent family problem. There are no universal social insurance programs for these specific families in any of our countries. Most receive child allowances, while some countries do better than others in enforcing income support from the absent parent. The overall average poverty rate for this group is 38.4 percent -- going as high as 51.7 percent in the USA. Even in Sweden almost 10 percent of persons in these families are poor.

## V. Summary and Conclusion.

The facts and figures presented here weave an interesting pattern. No doubt as we circulate this paper to others with greater knowledge of the antipoverty system of transfer in their specific countries, a more detailed explanation of causes and explanations will emerge. Further, different definitions of income units, poverty, and especially equivalences could tell a slightly different story. Compared to the jumble of other estimates in Table 10, however, we are confident that while there is a great deal of researcher discretion in just how to define poverty with LIS, once this decision is made our database allows the researcher to reduce the several definitional sources of potential errors in these estimates by a great deal. Of course, researchers who would like to delve deeper into the poverty question or into other matters of income comparability can use the LIS database to do so. The User's Guide to LIS (Rainwater and Smeeding, 1985) indicates the terms and conditions under which interested parties can access the database. We invite you to do so.

## Notes

<sup>1</sup>The income data here are, technically speaking, arranged into families, though for the most part we use the two words interchangeably in this paper.

<sup>2</sup>Actually, payroll taxes are not available for Canada and some forms of near cash income are included in our definition. See Smeeding, Schmaus, Allegrezza (1985) and Section II below for additional detail.

<sup>3</sup> Thus if a German born male marries a foreign born female they are included in the population sampling frame from which the data set is drawn, but if a German born female marries a foreign born male, they are excluded as are all families with two foreign born spouses. Further, in all two parent families and in all families containing two or more adults of different sexes, a male is termed the household head, not because we wish it but because two data sets are defined only that way. The other data sets were redefined to produce consistent classifications which are consistent with this definition.

<sup>4</sup>In our sample, 2.7 percent of German families had zero incomes, followed by 1.2 percent of U.S. families. Income reporting adjustments using the LIS net overall income variable and other data imputations reduced the count of zero German incomes to .3 percent of all cases. There were no negative incomes in Israel. The other data sets contained from 1.1 to .4 percent of units with negative incomes. In Norway, only .4 percent of units had overall negative incomes, yet some larger fraction had at least some negative income components. Thus while overall negative incomes were low in Norway, we might still find substantial negative income components on their tax based datafiles.

<sup>5</sup>In Germany, even students living apart from their parents' household are counted as members of their parents' household if they are dependent upon them. However, all other countries share this dependency-independency problem for students.

<sup>6</sup>In Sweden, individuals age 18 or over are equally counted as separate adult units whether or not they live with other relatives. Thus even students living at home may be counted as "poor" persons in Sweden because their accounting units ignore even intrahousehold and intrafamily support networks. See Section III for an estimate of the impact of students on poverty in Sweden.

<sup>7</sup>Note that while using equivalence scales to adjust needs for household/family size accounts for differences in income need due to household capital sharing across different size units, it does not account for differences due to several different size families living in the same size household. That is, family based equivalence scales which vary by family size adjust for three vs. four-person family needs. But they may not correctly adjust for needs when three related persons (a three-person family) share one household unit as compared to two

two-person families who share another; nor may they correctly adjust for two two-person families as compared to one four-person family (both of whom live in four-person households).

<sup>8</sup>The Luxembourg Panel Study, which began in May 1985, is investigating not only intrahousehold-interfamily resource sharing, but also intrafamily income sharing. In the United States, research by Smeeding (1977) indicates that all else equal, counting poverty on a household basis instead of on a family basis reduces the income poverty count by about 6 percent.

<sup>9</sup>Except that, for Canada only, payroll taxes are not included. However, we expect that this difference would have only a minor effect on our analysis.

<sup>10</sup>That is, except for the United States where employee contributions to health insurance are not funneled through the payroll tax system due to the private health care system. In all other countries payroll tax finance of health care is taken account of in measuring disposable income.

<sup>11</sup>The reader should note that in most of our countries a large proportion of cash transfers are taxed as income to the recipient. Thus some might argue for a pretax and pretransfer distribution to independently determine the effect of the tax system on poverty. However, because the poor pay little, if any, income tax in any LIS country, this decision would have little effect on our results.

<sup>12</sup>Appendix Table A-1 presents our choice of half way equivalences as compared to several alternatives. The reader should note that the halfway equivalences are not the average of no adjustment and per capitization of family income.

<sup>13</sup>While several of our country data files allow us to identify the disabled, who often live alone or with a spouse, we do not single out this group in this first paper. Most of these persons are therefore in the other category.

<sup>14</sup>Possibly this is due to our definition of family which ignores income and household capital sharing among unrelated individuals who live together in the same household (or housing unit).

<sup>15</sup>On this basis, only one elderly poor two-person family record, with some negative income amounts but with overall positive income, was found in Sweden.

<sup>16</sup>A large part of Israel's pre-transfer poverty problem is also be due to large family size relative to low wages among earners in this situation.

<sup>17</sup>All data are for 1979 except for Canada and Germany, both of which were for 1981. Germany's overall unemployment rate was 5.3 percent in 1981. However, much of this unemployment is thought to be

concentrated among foreign born guest workers (gastarbiten) who are largely excluded from this dataset.

<sup>18</sup>The Norwegian data set does not include local social assistance and local extended unemployment benefits which are less than .8% of total survey income. Yet with the low poverty rate in Norway of 4.8 percent, these could be a considerable uncounted share of the poverty gaps. Another possibility here is that of tax losses which was mentioned earlier.

<sup>19</sup>In Table A-1 we see that our halfway equivalence scales are rather more generous to larger families than are many other equivalences. This means that very large families such as those in Israel, find the equivalence factor (which divides into cash income to produce equivalent income) depresses their equivalent incomes considerably. If we were to use a different equivalence scale -- one that did not allow for such generous increased levels of income for third, fourth, or fifth children, Israeli two-parent poverty rates might be considerably lower.

<sup>20</sup>One must be careful to note that in some well-developed social welfare states, e.g. Scandinavia and Germany, high pretransfer poverty rates may be due to the systems themselves. This seems particularly true for the elderly.

TABLE A-1  
THE RANGE OF EQUIVALENCIES: SUBJECTIVE,<sup>1</sup> BUDGET,<sup>2</sup> AND EXPERT<sup>3</sup>

S <sup>4</sup> I Z E	NO ADJUST	van Praag, Ilagenaars, van Weeren:		(All Subjective Scales)		Rain- water (Subjective- Ireland)	van der G.- Smolensky (Budget)	Pov/Food Poverty		LIS HALF- WAY	O'Higgins Lindbeck		OECD Social Indicators (Expert)	PER CAPITA
		France	Belgium	Britain	Denmark	Nether- lands	West Germany	Ireland	USA (Expert)	Canada (Budget)	(Expert)	(Expert)	(Expert)	
1	1.00	.88	.83	.82	.79	.78	.75	.71	.64	.57	.50	.46	.44	.33
2	1.00	.96	.93	.93	.91	.91	.90	.89	.77	.75	.75	.77	.80	.67
3	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	1.00	1.04	1.04	1.06	1.06	1.06	1.08	1.12	1.10	1.15	1.25	1.23	1.20	1.33
5	1.00	1.06	1.09	1.10	1.25	1.11	1.16	1.18	1.18	1.34	1.50	1.46	1.42	1.67
6	1.00	1.09	1.12	1.14	1.27	1.16	1.21	1.25	1.27	1.47	1.75	1.70	1.64	2.00

## Notes:

1"Subjective" Equivalence Scales are based on households' feelings about their own or other households' basic needs.

2"Budget" Equivalence Scales are based on actual consumer expenditure patterns.

3"Expert" Equivalence Scales are based on various expert judgments about relative needs for food, housing, and other commodities.

4Differences are shown only for family size, even if particular scales are also differentiated by sex and/or age of children.

TABLE A-2  
 POVERTY RATES FOR FAMILIES:<sup>4</sup> BOTTOM QUINTILE<sup>2</sup> POVERTY  
 AND ECONOMIC DISTANCE POVERTY<sup>3</sup>

Country	Poverty Measure	Total <sup>9</sup>	Relative Share of Population Group			
			Elderly Families <sup>5</sup>	Single Parent Families <sup>6</sup>	Two Parent Families <sup>7</sup>	Other Families <sup>8</sup>
Sweden	Bottom Quintile	20.4%	27.8%	27.7%	19.4	16.4%
	Economic Distance	5.5	.1 <sup>b</sup>	8.1	4.6	8.5
U.K. <sup>12</sup>	Bottom Quintile	24.6	55.6	45.6	13.2	10.7
	Economic Distance	10.8	21.6	30.3	5.4	6.0
Israel <sup>1</sup>	Bottom Quintile	16.2	28.3	16.6 <sup>b</sup>	15.0	8.2
	Economic Distance	12.1	23.5	10.4 <sup>b</sup>	10.5	5.6
USA	Bottom Quintile	20.2	28.5	52.1	14.0	14.7
	Economic Distance	17.0	22.9	47.2	11.1	12.8
Norway	Bottom Quintile	22.0	36.2	29.9	13.8	16.1
	Economic Distance	5.3	5.1	10.8 <sup>b</sup>	2.9 <sup>b</sup>	6.9
Canada	Bottom Quintile	21.3	33.5	43.1	17.3	16.5
	Economic Distance	12.8	12.6	35.1	10.0	11.8
W. Germany	Bottom Quintile	20.2	29.3	32.6	19.2	13.2
	Economic Distance	8.7	13.9	19.7	3.7	7.7
Overall Average Poverty Rates <sup>10</sup>						
	Bottom Quintile	20.7	34.2	35.4	16.0	13.7
	Economic Distance	10.3	14.2	23.1	6.9	8.5

Note: Set of footnotes common to this and Tables 2-9 is on page 18.

TABLE A-3

COMPOSITIONS OF FAMILIES:<sup>4</sup> TOTAL; BOTTOM QUINTILE POVERTY;<sup>2</sup>  
ECONOMIC DISTANCE POVERTY<sup>3</sup>

Country	Poverty Measure	Total <sup>9</sup>	Relative Share of Population Group			
			Elderly <sup>5</sup> Families	Single Parent <sup>6</sup> Families	Two Parent <sup>7</sup> Families	Other <sup>8</sup> Families
Sweden	Total	100.7%	25.7%	4.4	20.2%	49.7%
	Bottom Quintile	100.0	35.0	5.9	19.2	39.9
	Economic Distance	100.0	.4	6.7	16.7	76.3
U.K. <sup>12</sup>	Total	100.0	26.0	3.8	34.8	35.3
	Bottom Quintile	100.0	58.9	7.0	18.7	15.4
	Economic Distance	100.0	52.2	10.6	17.5	19.6
Israel <sup>1</sup>	Total	100.0	22.8	2.4	48.0	26.8
	Bottom Quintile	100.0	39.3	2.8	44.1	13.8
	Economic Distance	100.0	44.0	2.8	41.3	11.9
USA	Total	100.0	19.5	8.0	29.7	42.8
	Bottom Quintile	100.0	27.6	20.6	20.6	31.2
	Economic Distance	100.0	26.3	22.2	19.4	32.1
Norway	Total	100.0	27.3	8.4	35.5	28.8
	Bottom Quintile	100.0	25.8	16.3	47.6	10.3
	Economic Distance	100.0	26.4	17.2	19.5	37.9
Canada	Total	100.0	17.2	6.3	34.5	42.1
	Bottom Quintile	100.0	26.9	12.7	27.9	32.4
	Economic Distance	100.0	16.9	17.2	27.0	39.0
W. Germany	Total	100.0	29.2	3.1	29.5	38.3
	Bottom Quintile	100.0	42.2	4.9	28.0	24.9
	Economic Distance	100.0	46.5	6.9	7.5	34.0

Note: Set of Footnotes common to this and Tables 2-9 is on page 18.



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