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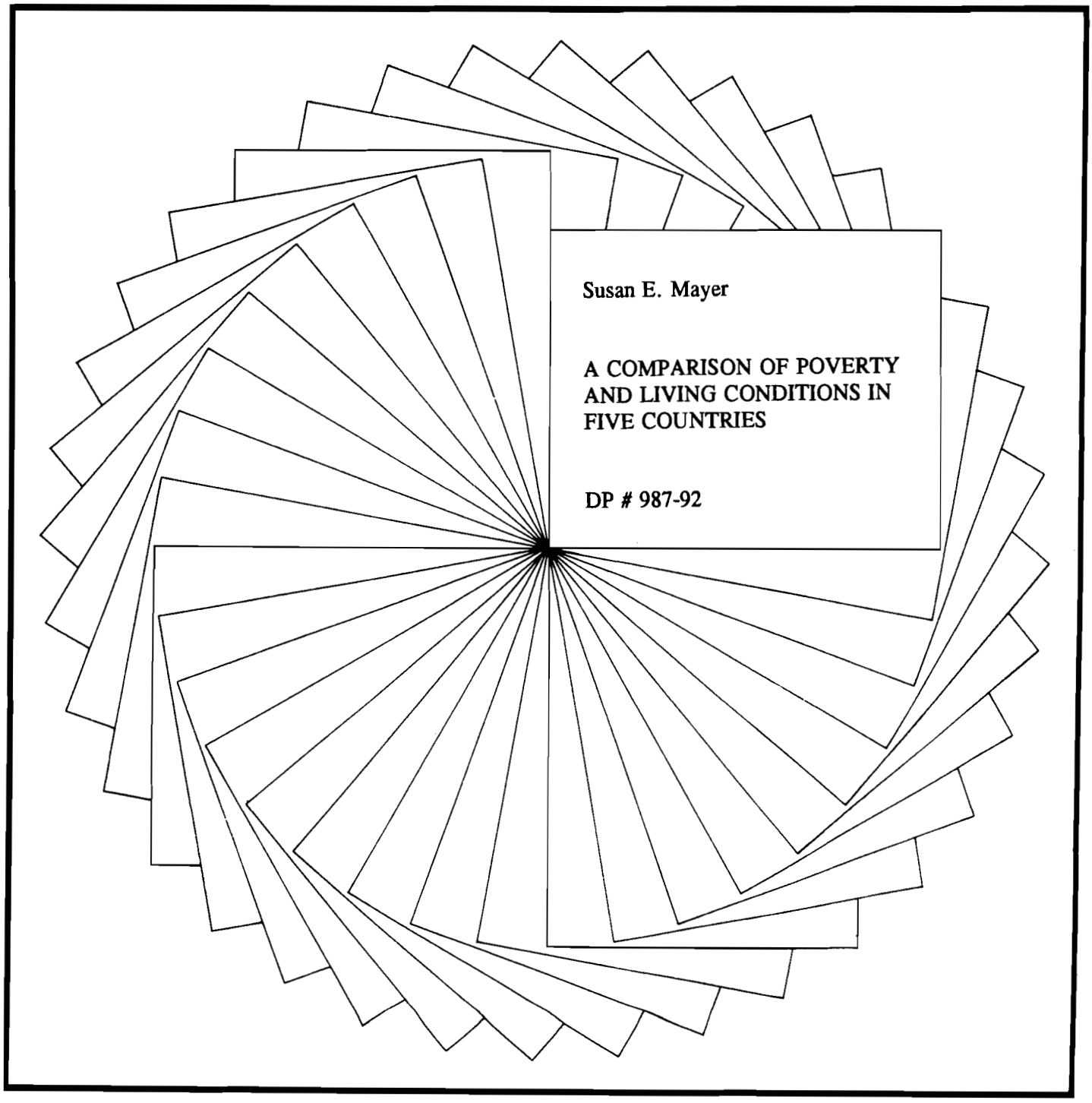

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A Comparison of Poverty and Living Conditions in Five Countries

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NOTE: THE RESULTS FOR FRANCE IN THIS PAPER ARE PRELIMINARY. THEY HAVE NOT BEEN VERIFIED AND MAY BE WRONG.

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Abstract

The poorest 10 percent of Americans have a much smaller share of income than the poorest 10 percent of Swedes, Germans (before unification), Canadians, or French people. However, comparisons across countries of the distribution of housing conditions, consumer durables, health, and visits to the doctor and dentist suggest that compared to the average person in their country, low-income Americans are no worse off than low-income residents of these other countries. Americans whose incomes are low for a long time may suffer more material deprivation than Canadians whose incomes are low for a long time, and low-income American blacks suffer more material deprivations than other Americans with the same income. Taken together, these results suggest that conclusions about economic well-being based on measured income alone may be quite different than conclusions based on deprivation in living conditions.

A Comparison of Poverty and Living Conditions in Five Countries

INTRODUCTION

In trying to assess how well America is doing in providing for its low-income citizens, social scientists often assess how things have changed over time. Another strategy is to compare conditions in the United States with conditions in other countries. By either assessment the United States appears to have done a remarkably bad job. Not only has family income grown more unequal over the past twenty years, but the distribution of income is more unequal in the United States than in most other advanced capitalist countries (Smeeding, Torrey, and Rein 1988).

However, in the United States current household income is only weakly related to a variety of living conditions (Mayer and Jencks 1989). Social scientists in other countries also find a surprisingly weak relationship between income and measures of living conditions (Townsend 1979; Ringen 1987; Glatzer 1987; Travers and Richardson 1989). Furthermore, comparisons of trends in the distribution of income, consumption, and living conditions (such as housing quality, use of medical care, food expenditures, and ownership of consumer durables) in the United States between 1960 and the mid-1980s suggest that trends in these measures do not always mirror one another and that they can yield different conclusions about trends in economic inequality (Mayer and Jencks 1992). This raises doubts that the distribution of income in a country reflects its distribution of goods and services across income groups.

In this paper I compare the living conditions of low-income Americans with the living conditions of low-income Swedes, Germans (before unification), and Canadians. I also include some preliminary comparisons with France. These results suggest that income measures of inequality may not rank nations the same as do measures of deprivation in living conditions. Rankings of income inequality are important not only because nations assess their successes and failures in social welfare

policy in light of such rankings, but also because they are used to assess the causes and consequences of poverty.

INCOME AND LIVING CONDITIONS

Table 1 shows that the share of income going to the poorest 10 percent of Americans is much smaller than the share of income going to the poorest 10 percent of Canadians, Swedes, Germans, and French people. The share going to the second-poorest decile is also smaller in the United States than in these other countries. Since low-income Americans (those in the poorest decile) have a smaller share of income than low-income residents of the other countries, most analysts assume that they also have a smaller share of goods and services.

However, Figure 1 presents a model of the relationship between income and living conditions that suggests that current income is only one of many factors that affect the way families live. In all social surveys many families seriously underreport their income. This is an especially serious problem at the top and bottom of the income distribution, at least in the United States (Coder 1991). Borrowing and savings affect how much money families can spend on goods and services. How much families actually consume is a function of not only how much they spend, but also of how much they get without having to spend anything (noncash transfers), how much they get from the service flows of past consumption, and how much they must pay in taxes.

A family's living conditions depend on both how much it consumes and its need for consumption. For instance, all else equal, large families must consume more than small families to have the same living conditions. Other factors such as medical expenses, work-related expenses like transportation and child care, local variations in the cost of living, and the efficiency with which families spend their money also influence need for current consumption. All of the factors affecting living conditions presumably vary across countries, but in most cases we do not know by how much.

TABLE 1

Distribution of Household Income and Proportion of Households with Selected Measures of Living Conditions, by Household Income Deciles

	Income Deciles							
	1	2	3-4	5-6	7-8	9	10	Mean
INCOME SHARE								
United States	.013	.034	.115	.174	.240	.159	.265	
Germany	.021	.045	.130	.183	.243	.156	.238	
Sweden	.031	.052	.145	.193	.238	.142	.199	
Canada	.025	.043	.131	.183	.242	.154	.222	
France	.026	.046	.132	.178	.231	.149	.238	
LIVING CONDITIONS								
HOUSING								
No complete bathroom								
United States	.077	.049	.027	.016	.011	.004	.005	.024
Germany	.101	.053	.066	.047	.029	.022	.011	.046
Sweden	.099	.050	.026	.009	.005	.000	.003	.023
France	.328	.208	.108	.070	.054	.019	.017	.104
No complete kitchen								
United States	.053	.035	.019	.009	.008	.005	.007	.017
Germany	.038	.022	.016	.002	.015	.002	.000	.012
Sweden	.071	.039	.012	.007	.007	.002	.005	.017
France	.237	.151	.070	.045	.028	.013	.018	.071
Rents home								
United States	.589	.509	.413	.261	.175	.119	.088	.300
Germany	.736	.683	.607	.534	.470	.431	.317	.531
Sweden	.571	.555	.462	.313	.273	.246	.157	.362
Canada	.579	.459	.388	.275	.170	.136	.078	.289
France	.527	.582	.544	.468	.370	.333	.262	.447
Crowded								
United States	.138	.137	.111	.083	.073	.061	.054	.092
Germany	.075	.064	.140	.209	.192	.137	.173	.157
Sweden	.028	.011	.033	.032	.020	.039	.015	.026
Canada	.036	.053	.050	.052	.041	.043	.014	.043
DURABLES								
No car available								
United States	.353	.172	.077	.030	.014	.008	.013	.079
Sweden	.664	.460	.256	.102	.084	.071	.106	.219
Canada	.504	.243	.117	.065	.036	.033	.030	.123
France	.548	.380	.204	.105	.048	.026	.020	.169
No clothes washer								
United States	.447	.422	.340	.255	.202	.128	.112	.260
Canada	.360	.244	.194	.133	.101	.059	.044	.155
France	.347	.231	.120	.051	.039	.024	.023	.105

(table continues)

TABLE 1 (continued)

	Income Deciles							
	1	2	3-4	5-6	7-8	9	10	Mean
No clothes dryer								
United States	.612	.599	.493	.379	.234	.175	.157	.372
Canada	.572	.427	.324	.241	.192	.121	.109	.274
No dishwasher								
United States	.748	.748	.719	.597	.549	.313	.199	.558
Sweden	.925	.890	.776	.642	.565	.475	.268	.653
Canada	.927	.840	.780	.689	.631	.578	.533	.707
France	.915	.899	.882	.791	.644	.472	.340	.726
No telephone								
United States	.216	.151	.091	.038	.017	.010	.009	.068
Sweden	.058	.029	.021	.006	.006	.000	.005	.016
France	.244	.186	.119	.098	.046	.017	.021	.099
Number of five durables[a]								
United States	2.32	2.35	2.82	3.32	3.89	4.19	4.43	3.36
Canada	1.99	2.71	3.18	3.59	3.87	4.07	4.21	3.45
	Difference from the Mean							
HOUSING								
No complete bathroom								
United States	-.053	-.025	-.003	.008	.013	.020	.019	
Germany	-.055	-.007	-.020	-.001	.017	.024	.035	
Sweden	-.076	-.027	-.003	.014	.018	.023	.020	
France	-.224	-.104	-.004	.034	.050	.085	.087	
No complete kitchen								
United States	-.036	-.018	-.002	.008	.009	.012	.010	
Germany	-.026	-.010	-.004	.010	-.003	.010	.012	
Sweden	-.054	.022	.005	.010	.010	.015	.012	
France	-.166	-.080	.001	.026	.043	.058	.053	
Rents home								
United States	-.289	-.209	-.113	.039	.125	.181	.212	
Germany	-.205	-.152	-.076	-.003	.061	.100	.214	
Sweden	-.209	-.193	-.100	.049	.089	.116	.205	
Canada	-.290	-.170	-.099	.014	.119	.153	.211	
France	-.080	-.135	-.097	-.021	.077	.114	.185	
Crowded								
United States	-.046	-.045	-.019	.009	.019	.031	.038	
Germany	.082	.093	.017	-.052	-.035	.020	-.016	
Sweden	-.002	.015	-.007	-.006	.006	-.013	.011	
Canada	.007	-.010	-.007	-.009	.002	.000	.029	

(table continues)

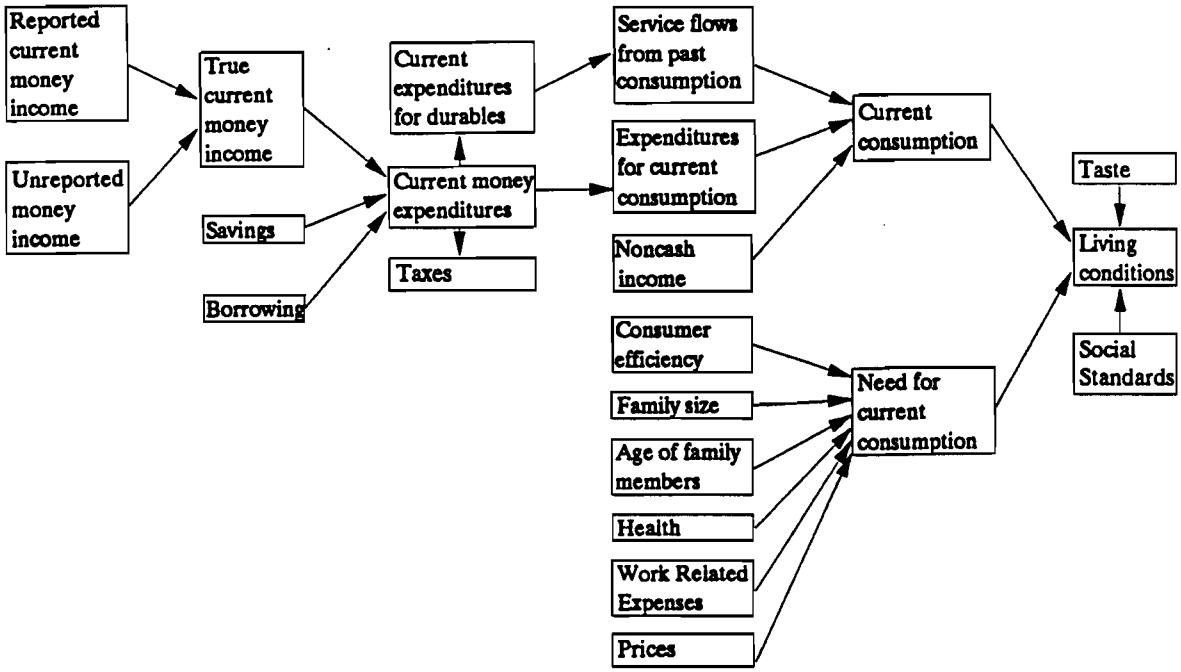
TABLE 1 (continued)

	Income Deciles							Mean
	1	2	3-4	5-6	7-8	9	10	
DURABLES								
No car available								
United States	-.274	-.093	.002	.049	.065	.071	.066	
Sweden	-.445	-.241	-.037	.117	.135	.148	.113	
Canada	-.381	-.120	.006	.058	.087	.090	.093	
France	-.379	-.211	-.035	.064	.121	.143	.149	
No clothes washer								
United States	-.187	-.162	-.080	.005	.058	.132	.148	
Canada	-.205	-.089	-.039	.022	.054	.096	.111	
France	-.242	-.126	-.015	.039	.066	.081	.082	
No clothes dryer								
United States	-.240	-.227	-.121	-.007	.138	.197	.215	
Canada	-.298	-.153	-.050	.033	.082	.153	.165	
No dishwasher								
United States	-.190	-.190	-.161	-.039	.009	.245	.381	
Sweden	-.272	-.237	-.123	.011	.088	.178	.385	
Canada	-.220	-.133	-.082	.013	.076	.129	.174	
France	-.189	-.173	-.156	-.065	.082	.254	.386	
No telephone								
United States	-.148	-.083	-.023	.030	.051	.058	.059	
Sweden	-.042	-.013	-.005	.010	.010	.016	.011	
France	-.145	-.087	-.020	.001	.053	.082	.078	
Number of five durables[a]								
United States	1.04	1.01	.54	.04	-.53	-.83	-1.07	
Canada	1.46	.74	.27	-.14	-.42	-.62	-.76	

Note: See the appendix for the sources of these data and an explanation of the variables.

[a]Includes own home, car, clothes washer, clothes dryer, and dishwasher.

Figure 1
Determinants of Living Conditions



Adapted from Mayer & Jencks (1992).

Living conditions derive meaning from their cultural, social, and economic contexts. Thus, the weight that residents of different countries place on specific living conditions is likely to vary, leading to variations in the level of specific living conditions across countries. For example, many people think that Americans have a culturally based affinity for cars that is not shared by residents of other countries. If true, Americans will be more likely than residents of other countries to own cars.

The importance of any particular living condition also depends on available substitutes. For instance, cars may be very important to individuals living in areas with no public transportation. Thus, we would expect average levels of car ownership to be higher in countries with large rural populations or weak public transportation systems.

The likelihood of having a particular living condition also depends on its price relative to other goods and services. Cars may be cheaper relative to a visit to the doctor in the United States than in other countries. If so, we expect higher car ownership rates and fewer doctor visits in the United States than in the other countries.

Finally, the level of living conditions depends on the overall wealth of a country. In 1980 per capita GDP (using purchasing power parities) was $11,804 for Americans, $10,924 for Canadians, $9,173 for Swedes, $8,683 for French people, and $8,838 for West Germans. The ratio of U.S. GDP per capita to GDP per capita in these other countries was similar in 1980 and 1985 (US Bureau of the Census 1991, Table 1450). Thus, we expect Americans to enjoy somewhat higher levels of living conditions than residents of Sweden, Canada, France, or western Germany.

The existence of cross-country variations in culture, available substitutes, relative prices, and national wealth means that comparing absolute levels of living conditions can mislead us about the relative well-being of low-income individuals in different countries. Instead we should compare how those with low incomes fare relative to the normative standards in their own country.

The complexity of the relationship between income and living conditions suggests that income is unlikely to accurately reflect the conditions in which families live. If we are interested in these living conditions, we ought to measure them directly.

MEASURING LIVING CONDITIONS

Ethnographic accounts make it clear that people rank themselves and others in terms of their material standard of living (Rainwater 1974; Coleman and Rainwater 1978). But there have been few attempts to directly measure living conditions. Ideally we would like a single measure of living conditions analogous to measures of income that allowed us to say that one family lives twice as well as another. To do this we would need to measure all of the important living conditions and weight them by their relative importance. Unfortunately, none of the data sets that I use include measures of all living conditions that are important. For instance, none include information on food consumption. Absent measures of all of the important living conditions, we could collect information on a random selection of goods and services. But none of the data sets include a random selection of living conditions either. Furthermore, no set of weights exists for creating a single measure of living conditions.

Judging by government expenditures, most Americans believe that adequate housing, food consumption, and medical care are very important. In this paper I include measures of housing conditions, health and visits to the doctor and dentist, and expenditures on food. I also include access to cars, ownership of other consumer durables, and expenditures on necessities as measures of living conditions.

There are several additional obstacles to comparing the living conditions of low-income households across countries. First, each survey collects data on a different subset of measures of living conditions, so that only a few of the measures can be compared across all countries. Second,

even survey questions which seem to measure the same thing are not completely comparable, since questions which seem identical in translation can mean quite different things in different countries. Third, accounting periods for measures differ and the data are not for the same year for all countries.

DATA

U.S. data on housing amenities and some consumer durables are from the 1980 decennial census; data on health and use of medical and dental care are from the 1980 Health Interview Survey (HIS); and data on consumer durables and expenditures are from the 1984-85 Consumer Expenditure Survey (CEX). Swedish data are from the 1981 Level of Living Survey. This is the latest Level of Living Survey (LOL) from which data are available. Canadian data are from the 1982 Survey of Family Expenditures. German data are from the 1984 Socioeconomic Panel survey. French data are from the 1984-85 French Family Budget Survey.

Since the Swedish survey includes only households headed by someone who is between eighteen and seventy-five years old, the samples in all other data sets have been limited to households headed by someone in the same age range. All surveys are weighted to be representative of the civilian noninstitutionalized population of the country in which they were collected. Since most people care about the well-being of individuals rather than households or families, I weight individuals equally in all analyses. A description of each data set is in the appendix.

Cross-national comparisons of inequality should in theory be made at comparable points in each country's business cycle. During recessions inequality may increase, but much of this increase is attributable to people who have low incomes for only a short period of time. People who are poor for only a short time can draw on past accumulations of resources and borrow against future earnings to smooth their living standard. Thus, during recessions there may be more income inequality, but

those with low incomes may have a higher standard of living than those who have low incomes during periods of economic growth.

In 1980 France, Germany, Sweden, Canada, and the United States were all close to a peak in the business cycle. By 1983-84 Canada, the United States, and West Germany were near a trough. In Canada unemployment increased from 7.4 percent in 1980 to 10.9 percent in 1982. In West Germany unemployment increased from 3.0 percent in 1980 to 7.1 percent in 1984. Unemployment in the United States increased from 7.0 percent in 1980 to 9.5 percent in 1982 and then decreased to 7.4 percent in 1984 (Organization for Economic Cooperation and Development 1990, pp. 44-45). In France unemployment increased steadily from 6.3 percent in 1980 to 10.2 percent in 1985. If high unemployment increases short-term poverty more than long-term poverty, the living conditions of low-income Canadians in 1982 and low-income residents of France and West Germany in 1984 may have been somewhat better than the living conditions of those with low incomes in these countries in 1980. Comparisons between Canada in 1982, France in 1984-85 and West Germany in 1984, and the United States in 1980 may, therefore, be somewhat biased, though the difference is not likely to be large.

COMPARISONS OF INCOME AND LIVING CONDITIONS ACROSS COUNTRIES

Since low-income Americans have a much smaller share of income than low-income Swedes, Canadians, French people, or Germans, most analysts expect that relative to the social standards in their country, low-income Americans live worse than low-income Swedes, Germans, French people, or Canadians.[1]

Table 1 shows the proportion of individuals who lack each living condition by income groups. Since I am mainly concerned with living conditions among low-income individuals, I collapsed the middle deciles into quintiles to make the table easier to read. To show how low-income residents of

each country fare relative to the social standard in their country, I subtract the mean for each decile from the country's grand mean for each living condition. This difference is also shown in Table 1. This number represents the change in the within-decile mean that would have to occur for the members of that decile to on average fare as well as the average resident of the country.[2] I mainly focus on these differences from the mean.[3] When information is not presented for a country, the information was not available.

Housing Amenities

Housing policies, especially those aimed at the poor, vary greatly across countries. Housing policy can subsidize either consumers or producers (or both). Both Germany and Sweden have universal housing allowances intended to assure that families do not spend more than some fixed share of income on rent. Consequently, all poor households get a direct subsidy. In the United States only about 20 percent of poor households get direct housing subsidies (in the form of either public housing or Section 8 subsidies). The United States also provides fewer government subsidies to producers. In the United States nearly all housing units are built by private investors. In 1985 about 90 percent of dwellings completed in Germany and only 42.4 percent of those completed in Sweden were built by such private builders (Heidenheimer et al. 1990). On the other hand, the United States offers greater tax incentives to homeowners than these other countries. Thus, we would expect differences across countries in the quality of housing for the poor.

Nearly everyone in rich industrial democracies believes that adequate housing includes a bathroom and a kitchen. The first panel of Table 1 shows that low-income Americans are more likely than low-income Germans, Swedes, or French people to have a complete bathroom and that low-income Americans are more likely than low-income Swedes or French people to have a complete kitchen.

The importance of home ownership depends in part on tax policies covering interest and mortgage payments and on the social meaning of home ownership. Thus, we expect variations across countries in the proportion of people owning their own homes. Table 1 shows that residents of Germany and France are much more likely than Americans, Swedes, or Canadians to rent their home.

Since there are different standards for home ownership and other living conditions, the second panel of Table 1 also shows the difference between the proportion of the entire sample who are renters and the proportion of those in the poorest income decile who are renters. Relative to the average person, low-income Americans are more likely to rent their home than low-income Swedes, Germans, or French people, and they are about as likely to rent as low-income Canadians.

There is no consensus on what constitutes crowded living conditions, and norms about crowding are likely to vary across countries. I follow the U.S. Census Bureau practice, defining a household as crowded when it has more than one person per room. Using this definition, low-income Americans are more likely than Canadians, Swedes, or Germans to live in crowded housing. Compared to the average person, low-income Americans are more likely than those with low incomes in any of these other three countries to live in crowded housing. Indeed, low-income Canadians and Germans are less likely than the average person in their country to be crowded.

Consumer Durables

Few believe that governments ought to provide their poor citizens with consumer durables such as clothes washers and dryers, dishwashers, and cars. However, consumer durables may be proxies for unmeasured aspects of living conditions such as adequate clothing and structurally sound housing. Indeed, the data used in this paper provide some evidence that durables may be at least as good a proxy as income for living conditions. For instance, in the United States, owning a clothes washer has a higher correlation than income with owning a home, having a refrigerator, and having a stove. Having a car has a higher correlation than income with living in crowded conditions, having a

complete kitchen, and having a complete bathroom. In Sweden having a washing machine and having a dishwasher both correlate higher than income with whether a household has central heat. Having a dishwasher is more highly correlated than income with having seen a doctor in the last year, and having a stereo is more highly correlated than income with almost all of the measures of housing amenities and use of physician services. Similarly, in both Canada and western Germany some durables are more correlated than income with housing conditions and visiting the doctor.

In addition, if households purchase goods and services in order of their importance, when the poor are as likely as the rich to have consumer durables, they will also be as likely to have their basic needs for food and shelter met. Thus, while dishwashers, clothes dryers, and other durables may not be socially defined as necessities, their distribution is probably a good indicator of the distribution of unmeasured necessities.

The importance of consumer durables varies depending on their social meaning, available alternatives, and other factors. However, since low-income Americans are poorer than low-income residents of other countries, we expect that relative to the average person, they will have fewer consumer durables than low-income residents of other countries.

Relative to the mean, low-income Americans are more likely than low-income residents of Sweden, Canada, or France to have a car. They are more likely than low-income residents of Canada or France to have a clothes washer and more likely than low-income Canadians to have a clothes dryer. They are more likely than low-income Swedes or Canadians and about as likely as low-income French people to have a dishwasher.[4] But they are less likely than low-income Swedes to have a phone.

The first wave of the German Socioeconomic Panel does not include information on ownership of durables. However, Eurostat (1988) has published data on households' ownership of durables by household income quartiles from the 1979 German Family Budget Survey. Using CEX

data to classify American households by the same income measure, 46 percent of American households in the poorest income quartile compared to 54 percent of West German households in the poorest quartile had a washing machine. However, 18 percent of Americans but only 1.2 percent of Germans in the poorest quartile had dishwashers, and 56 percent of Americans but 15.2 percent of Germans in the poorest quartile had access to a car. Compared to the average for their country, low-income Americans were more likely than low-income Germans to have cars and washing machines, but not a dishwasher.[5]

No single survey includes measures of all of the housing amenities and durables in Table 1, but both the Canadian and U.S. expenditure surveys include information on five measures, namely whether the household owns its own home and whether it as a car, a clothes washer, a clothes dryer, and a dishwasher. If I assign a weight of 1 to all measures and sum them, Canadians average 3.45 of these advantages, while Americans average 3.36. However, low-income Canadians average fewer of these advantages than low-income Americans (1.99 versus 2.32).

Health and Access to Medical Care

Most people believe that good health is related to income. Wealthier countries have healthier citizens, and within countries high-income individuals are usually healthier than poor citizens. Unfortunately, income data as grouped in the 1980 HIS make it impossible to categorize U.S. measures of health and access to medical care by income deciles. Table 2 shows this information for available categories.

Interpretations of physical conditions are influenced by cultural norms about illness and economic and noneconomic incentives to be sick. This means that comparing absolute levels of health across countries is likely to be misleading and that cross-national comparisons of health must be considered with caution. For instance, Table 2 shows that twice as many Germans and Swedes as Americans report a limitation of activity due to a health condition. Germans are also much more

TABLE 2
Proportion of Individuals with Selected Health Conditions and Visits to the Doctor, by Household Income Deciles

	Income Deciles				
	1	2,3,4	5,6,7	8,9,10	Mean
Limitation of activity due to health					
United States	.339	.217	.122	.102	.167
Germany	.516	.444	.306	.273	.355
Sweden	.558	.358	.245	.190	.333
Chronic health condition					
United States	.353	.237	.148	.134	.192
Germany	.488	.403	.279	.265	.331
No doctor visit in the last year					
United States	.240	.262	.263	.258	.259
Sweden	.323	.360	.420	.417	.379
No doctor or dental visit in the last three months					
United States	.411	.425	.374	.313	.375
Germany	.229	.290	.314	.317	.300
Limitation of activity and no doctor visit in the last year					
United States	.051	.029	.014	.012	.022
Sweden	.291	.319	.363	.370	.334
No dental visit in the last year					
United States	.476	.436	.315	.210	.336
Sweden	.585	.379	.279	.198	.355
	Difference from the Mean				
Limitation of activity due to health					
United States	-.172	-.050	.045	.065	
Germany	-.161	-.089	.049	.082	
Sweden	-.225	-.025	.088	.143	
Chronic health condition					
United States	-.161	-.045	.044	.058	
Germany	-.157	-.072	.052	.066	
No doctor visit in the last year					
United States	.019	-.003	-.004	.001	
Sweden	.056	.019	-.041	-.038	
No doctor or dental visit in the last three months					
United States	-.036	-.050	.001	.062	
Germany	.071	.010	-.014	-.017	
Limitation of activity and no doctor visit in the last year					
United States	-.029	-.007	.008	.010	
Sweden	.043	.015	-.029	-.036	
No dental visit in the last year					
United States	-.014	-.100	.021	.126	
Sweden	-.230	-.024	.076	.157	

Note: See the appendix for the sources of these data and an explanation of the variables.

likely than Americans to report that they have a chronic health condition. It is unlikely that these differences are due solely to variations across countries in physical conditions.

Sweden and Germany have generous government disability transfers and more liberal requirements for demonstrating disability than the United States. This is likely to contribute to a difference in reported illness and disability across countries. Since a third of Swedes who reported a limitation of activity did not visit a doctor during the previous year, while only 2.2 percent of Americans with such a disability failed to visit a doctor in the same length of time, Swedes reporting a limitation of activity may be healthier than Americans reporting such conditions.

Even though there appears to be important differences across countries in the interpretation of illness, we can get some idea of how the health of the poor compares to the health of the average person in their country. Table 2 shows that, as expected, in all three countries low-income residents are more likely than the affluent to be sick. However, relative to the average person in their country, low-income Americans are about as likely as low-income Germans and less likely than low-income Swedes to report a limitation of activity due to a health condition, and they are about as likely as low-income Germans to report a chronic health condition.

Canada, Germany, and Sweden have national health insurance programs, while the United States has a universal health insurance program only for those over sixty-five years old (Medicare). The only other major government health insurance program, Medicaid, is means tested and reaches only about 40 percent of the poor. About 15 percent of Americans have no health insurance at all (U.S. Bureau of the Census 1991, Table 140). Thus, we would expect large differences between the United States and these other countries in access to medical care.

Table 2 shows that in both Sweden and the United States, those with low-incomes are about as likely as the average person to visit a doctor in a year. Low-income Americans are more likely than average Americans to report a limitation but no doctor visit in the last year. However, low-

income Swedes are less likely than the average Swede to have a limitation of activity and no doctor visit.

Low-income Americans are about as likely as average Americans to have visited a doctor or dentist in the last three months, but low-income Germans are slightly more likely than average Germans to have visited a doctor or dentist in the last three months.[6] Unfortunately we cannot tell from these data whether poor Germans visit doctors or dentists or both more often than poor Americans.

Low-income Americans are more likely than low-income Swedes to have visited a dentist in the last year, whether we consider absolute levels or differences from the mean.

The Canadian Survey of Family Expenditures does not include information about either health status or visits to the doctor. However, published data (Statistics Canada 1981) show that in 1979 7.0 percent of Canadians in the lowest income quintile had visited the doctor in the previous two weeks. In 1980 15 percent of Americans in the lowest income quintile had visited the doctor in the previous two weeks. Thus, poor Americans were twice as likely as poor Canadians to have visited the doctor in the past two weeks. In neither country was visiting the doctor correlated with income, since 7.5 percent of all Canadians and 14.7 percent of all Americans had visited the doctor in the previous two weeks.[7]

Summary of the Comparison of Living Conditions

Although low-income Americans have a smaller share of income than low-income residents of these other countries, they are better off on some living conditions, worse off on others, and about the same on yet others. (In the discussion that follows and for the rest of the paper, I count health and access to medical care as living conditions. They were shown in different tables because I could not construct the same income intervals with the health data as with the data on the other living conditions.) Comparing differences from the mean across countries shows that of ten living

conditions measured in both Sweden and the United States, low-income Americans are better off on six and low-income Swedes are better off on five. Germany and the United States are about equal on half of the six living conditions measured in both countries and Americans fare better than Germans on one more. Americans are equal or better off than low-income Canadians on four of the six living conditions measured in both countries.

Another way to compare the relative living conditions of low-income residents of these countries is to compare the average difference from the mean for living conditions. This provides some idea of how low-income citizens fare overall compared to the average living conditions in their country. The magnitude of the difference from the mean is sensitive to which living conditions are averaged, since differences from the mean are small for "necessities" such as kitchens, bathrooms, and doctor visits, and large for "luxuries" such as owning a home, a dishwasher, and a clothes washer. This is what we would expect if people purchase goods and services in order of their importance.

The mean difference from the mean for ten living conditions measured in both Sweden and the United States is -.120 for low-income Americans and -.150 for low-income Swedes. The mean difference from the mean for six living conditions is -.205 for low-income Americans and -.231 for low-income Canadians. For six living conditions the mean difference from the mean is -.049 for low-income Germans and -.105 for low-income Americans. Thus, compared to national norms for these living conditions, low-income Americans fare better than low-income Canadians and low-income Swedes, but not as well as low-income Germans. As I noted above, published data suggest that relative to the average person in their country, low-income Americans are more likely than low-income Germans to have a car and a clothes washer, but not a dishwasher. Had the comparison between the United States and Germany included these consumer durables, the difference between the two countries would have been smaller.

These comparisons weight all living conditions equally. Different weighting schemes might yield different comparisons across countries. Since there is no strong pattern to the kinds of living conditions that countries fare better or worse on, most weighting schemes will likely yield results similar to these.

EXPENDITURES AND LIVING CONDITIONS OF U.S. AND CANADIAN HOUSEHOLDS

Since wealthy families spend a smaller proportion of their economic resources on necessities and a larger proportion on luxuries than poor families, many economists have suggested that one way to assess economic well-being is to examine the proportion of a household's economic resources that it must spend on necessities such as food (Engel 1885). In addition, since households probably try to even out how much they spend when their income fluctuates, expenditures may be a better proxy than current income for permanent income.

Neither the German nor Swedish data include information on expenditures. However, Table 3 shows the distribution of total expenditures in Canada and the United States. The Canadian and American surveys differ in ways that probably make comparisons of the levels of expenditures in the two countries somewhat unreliable. But survey differences are unlikely to affect the distribution of expenditures within countries.[8]

Comparing Table 1 and Table 3 shows that while the distribution of income is much more equal in Canada than in the United States, the distribution of expenditures is very similar in the two countries.[9] This suggests that permanent income may be distributed in the same way in Canada and the United States. Duncan et al. (1992) lend some support to this notion. They find that 13.8 percent of American families with children, but only 12 percent of Canadian families with children, who are poor in one year are no longer poor a year later.

TABLE 3
Distribution of Total Household Expenditures and Proportion of Total Household Expenditures Allocated to Selected Expenditure Categories, by Household Expenditure Deciles

	Expenditure Deciles							
	1	2	3-4	5-6	7-8	9	10	Mean
SHARE OF TOTAL EXPENDITURES								
United States	.027	.044	.125	.174	.237	.155	.238	
Canada	.028	.048	.138	.185	.230	.150	.211	
ALLOCATION OF EXPENDITURES								
Food								
United States	.293	.257	.230	.207	.188	.162	.142	.209
Canada	.271	.220	.199	.172	.154	.141	.122	.179
Shelter								
United States	.204	.194	.189	.190	.184	.184	.178	.188
Canada	.204	.157	.141	.136	.131	.120	.114	.143
Shelter for renters only								
United States	.261	.261	.242	.228	.198	.201	.163	.235
Canada	.307	.227	.193	.173	.155	.140	.136	.206
Utilities								
United States	.142	.139	.118	.099	.096	.074	.062	.103
Canada	.100	.075	.058	.050	.045	.040	.033	.056
Medical care								
United States	.056	.065	.061	.053	.049	.041	.042	.053
Canada	.023	.024	.023	.021	.018	.018	.017	.021
	Difference from the Mean							
Food								
United States	-.084	-.048	-.021	.002	.021	.047	.067	
Canada	-.092	-.041	-.017	.009	.030	.038	.057	
Shelter								
United States	-.016	-.006	.001	.002	.001	.004	.010	
Canada	-.061	-.014	-.002	.007	.012	.023	.029	
Shelter for renters only								
United States	-.026	-.026	-.007	.007	.035	.034	.072	
Canada	-.101	-.033	.013	.033	.051	.066	.070	
Utilities								
United States	-.039	-.036	-.015	.004	.007	.029	.041	
Canada	-.044	-.019	-.002	.006	.011	.016	.023	
Medical care								
United States	-.003	-.012	-.008	.000	.004	.012	.000	
Canada	-.002	-.003	-.002	.000	.003	.003	.004	

Note: See the appendix for the sources of these data and an explanation of the variables.

The first part of Table 3 shows that low-expenditure Canadians allocate a smaller share of their total expenditures than low-expenditure Americans to food, utilities, and medical care. They allocate about the same share to shelter. Low-expenditure Canadians allocate 59.8 percent of their total expenditures to food, shelter, utilities, and medical care. Low-expenditure Americans allocate 69.5 percent of their total expenditures to these things. This suggests that low-expenditure Canadians are better off than low-expenditure Americans.

Shelter expenditures include the cost of mortgage interest and home maintenance and repair. These are partly investments for future consumption. If the poor spend a lot on rent while the rich spend a lot investing in their homes for future consumption, the numbers in Table 3 would be misleading--the poor would be spending while the rich were saving. Table 4 shows that low-expenditure Canadians are more likely than low-expenditure Americans to own their own home. Thus, it is likely that a greater share of Canadians' than Americans' shelter expenditures is actually savings rather than current consumption. This, too, suggests that low-expenditure Canadians are better off than low-expenditure Americans.

The second part of Table 3 shows that even though low-expenditure Canadians allocate a smaller share of their total expenditures to these things, the difference between what those with low expenditures spend and what the average person spends on these things is greater in Canada than in the United States.[10] Since compared to the average person in their country low-expenditure Canadians spend more on housing than low-expenditure Americans, it would not be surprising to find that their housing amenities are more like those of the middle class. Table 4 shows that relative to the mean, Canadians with low expenditures are more likely than Americans with low expenditures to have clothes washers, clothes dryers, and dishwashers.[11]

TABLE 4

Proportion of Individuals with Selected Measures of Living Conditions, by Household Expenditure Deciles

	Expenditure Deciles							
	1	2	3-4	5-6	7-8	9	10	Mean
Rents home								
United States	.619	.483	.414	.294	.206	.142	.079	.315
Canada	.535	.445	.367	.287	.194	.145	.095	.289
No car available								
United States	.515	.287	.119	.074	.061	.028	.035	.135
Canada	.528	.233	.108	.062	.045	.032	.023	.123
No dishwasher								
United States	.916	.835	.714	.549	.398	.292	.215	.557
Canada	.939	.862	.768	.694	.632	.542	.540	.707
No clothes washer								
United States	.567	.425	.330	.230	.161	.122	.109	.263
Canada	.351	.249	.177	.140	.100	.073	.043	.155
No clothes dryer								
United States	.778	.596	.470	.307	.245	.197	.141	.375
Canada	.604	.413	.314	.238	.188	.135	.105	.274
Number of five durables[a]								
United States	1.51	2.33	2.92	3.50	3.96	4.15	4.43	3.36
Canada	1.98	2.69	3.24	3.56	3.84	4.08	4.18	3.45
	Difference from the Mean							
Rents home								
United States	-.304	-.168	-.099	.021	.109	.173	.236	
Canada	-.246	-.156	-.078	.002	.095	.144	.194	
No car available								
United States	-.380	-.152	.016	.061	.074	.107	.100	
Canada	-.405	-.110	.015	.061	.078	.091	.100	
No dishwasher								
United States	-.359	-.278	-.157	.008	.159	.265	.342	
Canada	-.232	-.155	-.061	.013	.075	.165	.167	
No clothes washer								
United States	-.304	-.162	-.067	.033	.102	.144	.154	
Canada	-.196	-.094	.024	.015	.055	.082	.112	
No clothes dryer								
United States	-.403	-.221	-.095	.068	.130	.178	.234	
Canada	-.330	-.139	-.040	.036	.086	.139	.169	
Number of five durables[a]								
United States	1.85	1.03	.44	-.14	-.60	-.79	-1.07	
Canada	1.64	.76	.21	-.11	-.39	-.63	-.73	

Note: See the appendix for the sources of these data and an explanation of the variables.

[a]Includes own home, car, clothes washer, clothes dryer, and dishwasher.

I have only one measure of a living condition that is not associated with food, shelter, utilities, or medical care, namely cars. Relative to the average in their country, Americans with low expenditures are about as likely as Canadians with low expenditures to have a car.

Among individuals with low expenditures, the average difference from the mean for the five living conditions in Table 4 is -.356 in the United States and -.292 in Canada. Low-expenditure Americans average 1.85 fewer of these advantages than average Americans. Low-expenditure Canadians average 1.64 fewer than average Canadians. Thus, low-expenditure Americans have worse living conditions than low-expenditure Canadians. Since most of these living conditions are related to housing, and low-expenditure Americans spend less than low-expenditure Canadians on housing, this is perhaps not surprising. Nonetheless, if low expenditures are a proxy for long-term low income, this suggests that long-term poor Americans have worse living conditions than long-term poor Canadians.

VARIATIONS IN THE NEEDS OF HOUSEHOLDS

As Figure 1 suggests, households with the same income will differ in their living conditions depending on their needs. For instance, big households need more income than small households to have the same living conditions. In the United States those who are under sixty-five years old report more material hardships than those over sixty-five years old with the same income (Palmer, Smeeding, and Jencks 1988; Mayer and Jencks 1989), and single-parent families may fare worse than married-couple families with the same income if they produce less in the home, have greater credit constraints, or have less past accumulation than married-couple families with the same income.

Thus, demographic differences in the low-income population across countries could account for why variations in living conditions are smaller than variations in income. Table 5 shows the age and family composition of the poorest income decile in the United States, Sweden, Germany, and

TABLE 5

Demographic Composition of Individuals in the Poorest Income Decile

	United States	Sweden	Canada	Germany
Age of Household Head				
18-24	.131	.138	.097	.132
25-44	.363	.210	.295	.268
45-64	.214	.217	.225	.244
65-75	.278	.436	.383	.356
Household Type				
Single	.311	.635	.372	.538
Single parent	.257	.023	.179	.100
Married couple				
With children	.207	.082	.182	.052
No children	.138	.168	.219	.208
Other	.087	.092	.048	.102

Note: See the appendix for the sources of these data.

Canada. Among these countries, low-income Americans are the least likely and low-income Swedes are the most likely to live in households headed by someone over sixty-five years old. All else equal, if the elderly have better living conditions than those with the same income who are younger, low-income Americans would have the worst living conditions and low-income Swedes the best among these countries.

Low-income Americans are more likely than low-income residents of other countries to live in households with children and less likely to live alone. If, as most analysts expect, increases in family size diminish living standards, then all else equal, low-income Americans ought to have the worst living conditions among low-income people in these countries.

In addition, many more low-income Americans than low-income Germans, Swedes, or Canadians live in single-parent families. This too suggests that the living conditions of low-income Americans ought to be worse than the living conditions of low-income residents of these other countries.

Thus, comparisons of the income share going to the poorest decile and comparisons of the demographic composition of the poorest decile suggest that relative to the national average, low-income Americans ought to have the worst living conditions among low-income individuals in these countries.

However, variations in living conditions are a function of not only differences across countries in the demographic composition of the low-income population, but also differences in how those characteristics affect living conditions. To test the hypothesis that the effect of household size, age, and single parenthood on living conditions varies across countries, I regressed measures of housing conditions and durables on (log) household income, (log) household size, age of the household head, and whether the head is a single parent. The U.S. HIS does not include sufficient information to determine if someone lives in a single-parent household. However, I show the effect

of age of the household head and household size on health status and likelihood of visiting the doctor. These results are shown in Table 6.

The first equation in Table 6 shows the effect of log income on each living condition when I control no other characteristics of households. Since the variance of income is greater in the United States than in these other countries, when the income coefficient is also greater the living condition will be more unequally distributed in the United States. Thus, these coefficients reflect the results in Table 1.[12]

The second part of Table 6 shows that in all four countries the young fare better than the elderly on some living conditions and worse on others with no strong pattern. In all four countries the effect of age is small for all outcomes. Consequently, differences across countries in the age composition of the low-income population are unlikely to affect variations across countries in living conditions.

Table 6 shows that in every country, single-parent families are better off on at least one living condition, although one would expect them to be worse off on all conditions. Averaging the coefficients for single-parent households shows that compared to other household types with the same income and size, single-parent households in the United States have worse housing and fewer consumer durables than single-parent households in any other country, although these differences are not large. The average of seven regression coefficients for single-parent families is -.054 in the United States and -.039 in Sweden. The average of six coefficients is -.076 in the United States and -.056 in Canada. The average of four coefficients in Germany is -.035 and in the United States -.044.

Table 6 shows that, contrary to expectations, in all of the countries for which I have data, large families are more likely than small families to own their home and to have a car, a clothes washer, and a clothes dryer. This is presumably because these living conditions are more important

TABLE 6
Effects of Household Characteristics on Living Conditions: Ordinary Least Squares Estimates

Household Characteristic	Equation 1	Equation 2			
	Log Income	Log Income	Log Size	Age/10	Single Parent
Owns home					
United States	.175	.141	.165	.040	-.177
Germany	.170	.097	.234	.009	-.224
Sweden	.223	.109	.288	.060	-.244
Canada	.240	.191	.211	.090	-.155
Crowded					
United States	-.027	-.067	.246	.000	.015
Germany	.053	.070	.281	-.000	-.127
Sweden	.001*	-.042	.086	-.000*	-.041
Canada	-.004	-.053	.144	.000	-.029
Kitchen					
United States	.017	.019	-.009	-.000	.005
Germany	.015	.006	.024	.000	.002
Sweden	.034	.030	.007*	-.002*	.021
Bathroom					
United States	.025	.029	-.019	-.000	.011
Germany	.032	.029	.011	.060	-.025
Sweden	.050	.041	.017	-.000*	.029
Car available					
United States	.129	.106	.035	.000	-.165
Sweden	.311	.198	.193	-.030	-.217
Canada	.230	.189	.075	-.009	-.157
Phone					
United States	.071	.075	-.014	.010	-.012
Sweden	.029	.020	.025	.005	-.012*
Dishwasher					
United States	.123	.132	-.010	.000	-.027
Sweden	.322	.201	.248	-.007*	.109
Canada	.188	.162	.073	.000	-.015
Clothes washer					
United States	.100	.070	.173	.050	-.032
Canada	.158	.091	.247	.040	-.017
Clothes dryer					
United States	.137	.111	.107	.030	-.041
Canada	.232	.167	.209	.020	-.018
Sick and no doctor visit in the last year					
United States	-.139	-.015	.002	.001	NA
Sweden	.044	-.002*	.067	.003	NA
No doctor or dental visit in the last three months					
United States	.081	-.015	.002	.001	NA
Germany	.042	.000*	.084	.002	NA
Dental visit in the last year					
United States	.110	.130	-.080	-.050	NA
Sweden	.209	.107	.133	-.049	NA

Note: See the appendix for the sources of these data and an explanation of household characteristics.
* Not statistically significant at the .05 level.

to families with children than families without them. But in all cases the benefits to large households are greater in Sweden, Germany, and Canada than in the United States.

In order to have these advantages, big families presumably must forgo other advantages. In all four countries, large families are more likely than small families with the same income to be crowded. Big American families are also less likely than small families with the same income to have a kitchen, a bathroom, a phone, and a dishwasher. They are less likely to visit the doctor when they are sick[13] and to have visited the dentist in the last year. In Sweden and Germany, however, big families are more likely than small families with the same income to have a kitchen and a bathroom, and in Sweden they are more likely to have a phone and a dishwasher as well. In Canada big families are more likely than small families with the same income to have a dishwasher.

The average size coefficient for the six living conditions is .112 in Canada and .037 in the United States. The average size coefficient for the nine living conditions is .084 in Sweden and -.002 in the United States. The average size coefficient for the five living conditions is -.019 in Germany and -.025 in the United States. This implies that net of income, the living conditions of families in Sweden and Canada improve with increases in family size, but they stay about the same in the United States and Germany.

These results support the notion that the "correct" equivalence adjustment (the one that equalizes the well-being of different-size families with the same income) may vary across countries. If this is true, research that imposes the same size adjustment to income across countries may produce biased estimates of families' well-being.

Since the effect of family size on living conditions varies across countries, adjusting for family size could produce different results than those shown in Table 1 and Table 2. Comparing the distribution of living conditions over per capita income deciles (not shown), rather than unadjusted income deciles, suggests that compared to the average resident of their country, low-per-capita-income

Americans have worse housing and fewer consumer durables than low-per-capita-income Swedes, Germans, and Canadians. However, among those with low per capita incomes, Americans are no more likely than Swedes to suffer a health limitation or to have visited a doctor in the last year. This implies that Americans are more willing than Swedes, Germans, or Canadians to forgo housing amenities and consumer durables in favor of children. Among those with low per capita incomes, the mean difference from the mean on ten living conditions is -.039 for Sweden and -.132 for the United States. The mean difference from the mean on six living conditions is -.197 for low-per-capita-income Americans and -.133 for low-per-capita-income Canadians. On six living conditions the mean difference from the mean is -.122 for the United States and -.071 for Germany.

Additional adjustments for need, such as whether the household lives in an urban or rural area, health of household members, and consumer efficiency, are also potentially important. Unfortunately, these data sets do not have consistent measures of such needs.

THE SPECIAL CASE OF AMERICAN BLACKS

American blacks are unique in both their current and historical circumstances. Neither Sweden, Germany, France, nor Canada has a racial minority anywhere near as big as the black population in America. With the possible exception of reservation Indians in Canada (who are not included in the Canadian data set), no racial minority in any of these other countries has experienced the degree of residential segregation and labor market discrimination that American blacks have experienced.

Table 7 shows the distribution of American blacks and others by income groups. Blacks are more than twice as likely as others to have low incomes. A fifth of all blacks are in the poorest income decile. Although the average income of American blacks is only about 72 percent of the average income of other Americans, Table 7 shows that the average income of blacks in the poorest

TABLE 7
Distribution of Living Conditions among Blacks and Others in the United States, by Income Deciles

	Income Deciles						
	1	2	3-4	5-6	7-8	9	10
Proportion in Income Group							
Black	.210	.150	.231	.164	.147	.056	.043
Others	.085	.093	.196	.205	.207	.106	.108
Mean Household Income (in 1980 Dollars)							
Black	2,851	7,329	12,726	19,709	27,382	36,365	56,575
Other	2,916	7,410	12,804	19,733	27,403	36,573	61,097
LIVING CONDITIONS							
HOUSING							
Rents home							
Black	.722	.623	.528	.384	.293	.197	.197
Other	.542	.484	.395	.247	.163	.113	.083
Crowded							
Black	.226	.267	.243	.192	.240	.208	.262
Other	.107	.108	-.092	.071	.057	.051	.043
No complete kitchen							
Black	.080	.074	.045	.023	.027	.004	.031
Other	.044	.026	.015	.008	.006	.005	.005
No complete bathroom							
Black	.109	.094	.057	.040	.033	.009	.032
Other	.066	.039	.022	.013	.009	.004	.004
DURABLES							
No car available							
Black	.583	.374	.208	.109	.056	.041	.086
Other	.272	.128	.056	.021	010	.006	.009
No telephone							
Black	.288	.212	.154	.076	.035	.032	.055
Other	.191	.138	.081	.034	.015	.009	.007
No dishwasher							
Black	.959	.938	.875	.834	.750	.548	.545
Other	.692	.726	.692	.596	.440	.300	.178]
No clothes washer							
Black	.570	.561	.427	.571	.212	.330	.063
Other	.417	.405	.315	.224	.156	.121	.113
No clothes dryer							
Black	.847	.794	.689	.692	.332	.374	.090
Other	.550	.573	.460	.339	.227	.166	.160

Note: See the appendix for the sources of these data and an explanation of the variables.

income decile is about the same as the average income of others in the same decile. Black families are bigger than white families, but even the per capita income of blacks is only slightly less than the per capita income of others in the poorest income decile (not shown in table). Thus, we would not expect the living conditions of low-income blacks to differ greatly from the living conditions of other low-income Americans.

Table 7 shows the percentage of American blacks and nonblacks with each living condition by income group. On all measures of housing amenities and durables, low-income American blacks are much worse off than other low-income Americans. Comparing Table 7 to Table 1 shows that relative to the average in their country, low-income American blacks are also worse off than low-income Swedes, Germans, French people, and Canadians on each living condition.

Table 8 shows that low-income American blacks are only slightly more likely than other low-income Americans to report a chronic condition and a limitation of activity due to a health condition, and they are more likely to have visited the doctor in the last year whether or not they report a limitation of activity due to health. Low-income American blacks are less likely than other low-income Americans to have visited a dentist in the last year.

Relative to the mean, low-income American blacks are about as likely as low-income Swedes or Germans to have a limitation of activity due to a health condition, and they are about as likely as low-income Swedes to have visited a doctor in the last year. They are slightly less likely than low-income Swedes to have visited a dentist in the last year. Thus, relative to the mean, low-income American blacks do not appear to be in greatly worse health or to visit the doctor or dentist much less than low-income Swedes or Germans.

Table 9 shows that 23 percent of American blacks are in the poorest expenditure decile compared to only 8.2 percent of other Americans. This is consistent with previous research showing that poverty spells are longer for blacks than whites (Duncan et al. 1992). This same table shows,

TABLE 8

Proportion of Individuals with Selected Health Conditions and Visits to the Doctor, by Household Income Deciles: Blacks and Others in the United States

	Income Deciles			
	1	2,3,4	5,6,7	8,9,10
Limitation of activity due to health				
Black	.367	.207	.105	.069
Other	.331	.218	.123	.104
Chronic health condition				
Black	.399	.234	.159	.108
Other	.340	.237	.148	.135
No doctor visit in the last year				
Black	.234	.238	.239	.217
Other	.242	.265	.265	.260
No doctor or dental visit in the last three months				
Black	.418	.461	.424	.410
Other	.410	.420	.370	.308
Limitation of activity and no doctor visit in the last year				
Black	.046	.025	.012	.013
Other	.052	.030	.014	.012
No dental visit in the last year				
Black	.513	.515	.393	.301
Other	.466	.424	.309	.205

Note: See the appendix for the sources of these data and an explanation of the variables.

TABLE 9
Total Expenditures and Proportion of Expenditures Allocated to Selected Expenditure Categories: Blacks and Others in the United States

	Expenditure Deciles						
	1	2	3-4	5-6	7-8	9	10
Proportion in Expenditure Group							
Black	.234	.181	.236	.163	.119	.035	.031
Other	.082	.089	.195	.205	.211	.109	.109
Mean Expenditures (in 1980 Dollars)							
Black	3,576	6,008	8,728	12,480	16,963	--	--
Other	3,742	6,095	8,798	12,392	17,050	22,470	34,497
Allocation of Expenditures							
Food							
Black	.316	.273	.215	.203	.188	--	--
Other	.284	.253	.238	.207	.178	.162	.143
Shelter							
Black	.212	.187	.184	.180	.173	--	--
Other	.201	.196	.188	.188	.186	.185	.176
Shelter for renters only							
Black	.253	.244	.229	--	--	--	--
Other	.260	.268	.245	.220	.195	.201	--
Utilities							
Black	.163	.161	.148	.119	.099	--	--
Other	.134	.134	.113	.096	.085	.073	.062
Medical care							
Black	.041	.046	.045	.053	.040	--	--
Other	.061	.070	.061	.054	.049	.042	.042
Proportion with Living Condition							
Rents home							
Black	.747	.599	.485	.320	.175	--	--
Others	.570	.451	.410	.286	.219	.138	.079
No car available							
Black	.687	.469	.158	.095	.010	--	--
Others	.449	.237	.091	.069	.070	.029	.036
No dishwasher							
Black	.979	.965	.875	.750	.598	--	--
Other	.878	.799	.645	.530	.380	.277	.210
No clothes washer							
Black	.653	.576	.415	.256	.225	--	--
Other	.533	.384	.305	.200	.159	.123	.115
No clothes dryer							
Black	.902	.809	.635	.525	.265	--	--
Other	.729	.538	.440	.380	.245	.191	.138
Number of five durables[a]							
Black	1.03	1.58	2.40	2.90	3.71	--	--
Other	1.84	2.59	3.15	3.65	3.91	4.24	4.43

Note: See the appendix for the sources of these data and an explanation of the variables.
[--] = Fewer than 100 cases.
[a]Includes own home, car, clothes washer, clothes dryer, and dishwasher.

however, that blacks with low expenditures spend only slightly less than others with low expenditures. But among those with low expenditures, blacks allocate a greater share of their expenditures than others to food, utilities, and shelter, though not to medical care.

Length of poverty spells presumably accounts for some of the difference in living conditions between low-income American blacks and other low-income Americans and between low-income American blacks and low-income residents of other countries. However, Table 9 shows that among those with low expenditures (which is a better proxy for permanent income than current income), blacks are much less likely than others to own a home and to have a car, a dishwasher, a clothes washer, or a clothes dryer. Some of this difference is accounted for by the bigger family size among low-income blacks. But even among those with low per capita expenditures, blacks are worse off than others on every measure of living conditions. In fact, in a regression equation[14] controlling (log) expenditures, (log) family size, age, and whether the respondent lives in a single-parent household, an owner-occupied house, and an urban area, blacks are significantly less likely than others to have a car, a dishwasher, a clothes washer, and a clothes dryer. Their homes also have fewer rooms.

CONCLUSIONS

These results suggest that there is less disparity across countries in the distribution of living conditions than in the distribution of current income. Comparing households in the second-lowest decile provides a similar picture. These results also suggest that there is much less disparity between Canada and the United States in the distribution of expenditures than in the distribution of income.

Conclusions about how the living conditions of low-income Americans compare with the living conditions of low-income Swedes, Germans, French people, and Canadians depend in part on how we adjust for differences in the needs of families and on what aspect of living conditions we

compare. Conclusions about how well low-income Americans fare may also depend on whether we compare those with currently low income or permanently low-income. Nonetheless, comparisons of economic inequality across countries based solely on current income or on one aspect of living conditions are likely to give a misleading picture of how the economic well-being of low-income Americans compares with the economic well-being of low-income Swedes, Canadians, French people, or Germans.

The results in this paper must be interpreted with caution. I am unable to include many important measures of living conditions in these analyses. Because most data sets collect information on only a small subset of living conditions, I cannot assess whether those whose living conditions are inadequate in one area are inadequate in another.

In addition, material deprivation is only one reason that we are concerned with poverty rates and the distribution of income. Low-income American families may be more likely than low-income families in other countries to live in neighborhoods devoid of jobs, security, good educational opportunities, and other amenities that affect life chances. The mechanisms through which families make ends meet may also vary in important ways across countries. Edin and Jencks (1992) found that welfare mothers in Illinois got less than 60 percent of their income from AFDC and food stamps. The remainder (which is mostly unreported to the welfare office and is presumably unreported to census interviewers) came from a variety of sources including boyfriends, absent fathers, parents, and other relatives. Other income comes from irregular work including prostitution and selling drugs. These income sources are both irregular and dangerous. Some mothers hold regular jobs under assumed names. Since American welfare mothers cannot make ends meet on either welfare alone or work alone, they are forced to make ends meet by getting income from irregular, often dangerous sources. In addition, welfare mothers who "cheat" even to feed their children undermine the political acceptability of AFDC.[15]

In trying to explain why the living conditions of low-income Americans appear to be no worse than the living conditions of low-income residents of other countries, I have emphasized differences across countries in the needs of households. As Figure 1 suggests, correcting measured income to take into account noncash income, wealth, and the availability of credit ought to strengthen the relationship between income and measured living conditions.

Appendix

DATA SETS USED IN THE ANALYSIS

All data sets used in this paper are representative of the noninstitutionalized population of the respective countries. In all cases data have been weighted by household size so that the unit of observation is the individual. Sweden does not collect data on individuals older than seventy-five years and because of sampling problems described below, I limit the Swedish sample to people eighteen and older. I restricted all of the other data sets to include only those in households headed by someone eighteen to seventy-five years old.

United States

Data on housing and living conditions come from the 1980 decennial Census of Population and Housing 1 in 1,000 sample. These analyses are restricted to individuals living in households, so they exclude members of the armed forces living on bases, college students living in dormitories, individuals living in lodging homes, patients in nursing homes, and inmates of institutions. There are 220,918 cases in the 1980 decennial census.

Data on health status and use of physician services are from the 1980 Health Interview Survey (HIS). There are 67,026 cases in the HIS sample of respondents eighteen to seventy-five years old. The HIS interviews all members in targeted households.

Data on consumer durables and expenditures are from the 1984-85 Consumer Expenditure Survey (CEX). CEX data are for consumer units that are complete income reporters. A consumer unit consists of all members of a household that share certain major household expenses. For convenience in the text I refer to consumer units as households. About 97 percent of consumer units are households. Complete income reporters are consumer units that report income from at least one

of the major sources of income, such as wages, social security, self-employment, or social assistance. Complete income reporters may not have provided a full accounting of all sources of income.

In the CEX the recall period for expenditures is three months. Total expenditures are then aggregated over four quarters. Respondents are interviewed quarterly over five quarters. They are asked income questions in the second and fifth interview and are asked to recall their income over the previous twelve months. Consequently, neither income nor expenditures correspond to a calendar year, but for most respondents expenditures and income are for the same time period. This sample includes all consumer units that potentially had all four quarters of data between the beginning of calendar years 1984 and the first quarter of 1986. For a more complete description of the CEX data and how they differ from both the census and the CPS, see Mayer and Jencks (1992). There are 10,080 consumer units in the CEX.

CEX and HIS data are weighted to adjust for probability of being sampled.

Canada

Canadian data are from the 1982 Survey of Family Expenditures (SFE). The survey is conducted in urban and rural areas of the ten provinces as well as Whitehorse and Yellowknife. People living on Indian reservations were excluded.

The consumer unit concept is the same in the U.S. CEX and the Canadian SFE. In the SFE, missing income data are imputed using a "hot deck" procedure. Statistics Canada attempts to reconcile reported income and expenditures. Note that in the U.S. CEX, missing income values are set to zero, which may result in lower income amounts. There are 10,938 cases in the 1982 SFE. The data were collected in one survey during which respondents were asked to recall both income and expenditures for calendar year 1982. Note that the recall period for expenditures in the U.S. CEX is only three months, which may result in differences in the level of reported expenditures between it and the SFE.

West Germany

German data are from the 1984-1985 wave of the German Socioeconomic Panel. It contains 16,013 cases weighted to be representative of the noninstitutionalized West German population. Guest workers and other foreigners are included in the sample. A full description of these data is in Universitaten Frankfurt (1988).

Sweden

Swedish data are from the 1981 Level of Living Survey (LOL). Income data are from Swedish tax records. People aged eighteen and over have their own tax record, so even if they live with their parents they appear as having their own household. To the extent that such people live with and share resources with other family members, this inflates the actual number of low-income families (and biases living conditions toward equality). The analyses shown in this paper omit heads of households younger than nineteen years old which diminishes, but does not eliminate, this problem.

I do not use the sample weights provided on the LOL survey. The LOL is a survey of Swedish adults. LOL survey weights adjust for the probability that some adults are more likely to be sampled than others, but it does not adjust for the fact that some households are more likely to be sampled than others because they have more adults. The weights used in this paper make this adjustment.

I omit cases with missing data, leaving a weighted sample size of 4742 cases. A description in English of the sampling and data collection procedures is in Erikson and Aberg (1987). A more complete explanation in Swedish is in Institutet for Social Forskning (1984).

France

French data are from the French Family Budget Survey of 1984-85. It is administered by the Institut National de la Statistique et des Etudes Economique. Data are weighted to be representative of the noninstitutionalized population of France. About 20,000 "ordinary households" are included in this survey, meaning that about 2 percent of the population that is institutionalized or living in communal living arrangements such as religious communities are excluded. A description of this data set is in Moutardier (1988).

DESCRIPTION OF THE VARIABLES

INCOME--Cash income before taxes from all sources for all household members. Income includes all cash government transfers in all countries.

HOUSEHOLD SIZE--The number of people living in the household at the time of the interview.

OWNS HOME--Equal to 1 if the respondent lives in an owner-occupied housing unit.

CROWDED--Equal to 1 if the number of rooms in the housing unit, not counting bathrooms, divided by the number of household members is greater than 1.

BATHROOM--Equal to 1 if the housing unit has a shower or tub and a toilet and piped water; 0 otherwise. In the U.S. data, the housing unit must have both hot and cold piped water to be coded as having a complete bathroom. There is no requirement that the unit have hot water for it to be coded as having a complete bathroom in West Germany.

KITCHEN--Equal to 1 if the housing unit has a stove, refrigerator, and sink with piped water; 0 otherwise. In the U.S. data, the housing unit must have both hot and cold piped water to be coded as having a complete kitchen. There is no requirement that the unit have hot water for it to be coded as having a complete kitchen in West Germany.

CAR AVAILABLE--Equal to 1 if the members of the household have a car or truck available for private use; 0 otherwise. In West Germany this is only asked of individuals with a driver's license. In the United States and Sweden it is asked of the head of the household.

NO DOCTOR VISIT IN THE LAST YEAR--Equal to 1 if the individual has not visited a doctor in the last twelve months; 0 otherwise. Data are for those over seventeen years old in all countries.

NO DOCTOR OR DENTAL VISIT IN THE LAST THREE MONTHS--Equal to 1 if the individual has seen either a doctor or a dentist in the previous three months. In Germany respondents were asked whether they had seen a doctor or dentist in the last three months. In the United States respondents were asked how long it has been since they had seen a doctor, and responses were coded as less than two weeks, two weeks to six months, six months to a year, one to two years, and more than two years. Respondents were also asked how long it had been since they had seen a dentist, and their responses were coded in the same way. To estimate the proportion of respondents who had seen a doctor or dentist in the last three months, I averaged the proportion who had seen either a doctor or dentist in the last two weeks and the proportion who had seen a doctor or dentist in the last six months. Data are for respondents over seventeen years old.

LIMITATION OF ACTIVITY--West German respondents were counted as having a limitation of activity if they had a health condition that interfered with their daily activities more than once a month. U.S. respondents were counted as having a limitation of activity if they had a chronic condition that limited their usual activities or the kind or amount of other activities such as work or school that they can do. Swedish respondents were coded as having a limitation of activity if they reported that their health limits the type or amount of work that they can do.

CHRONIC CONDITION--Equal to 1 if the respondent reports having a chronic health condition.

FOOD EXPENDITURES--Includes both food at home and meals eaten away from home.

SHELTER EXPENDITURES--Includes expenditures for owned home including mortgage interest, property taxes, maintenance, repairs and replacement (expenditures which maintain or restore the condition of the property but do not increase its value), condominium charges, and homeowners' insurance premiums. For rented living quarters they include rent paid by the consumer unit, tenants' maintenance, repairs and alterations, and tenants' insurance premiums. Shelter also includes the cost of other accommodations including owned or rented vacation homes, traveler accommodations, and other accommodations away from home.

UTILITIES--Includes expenditures for water, fuel, electricity, and telephone.

MEDICAL CARE EXPENDITURES--Includes all out-of-pocket expenditures for prescription drugs, doctor visits, hospital stays, health insurance premiums, dental visits, medical supplies, and eye-care goods and services.

Notes

[1]Since census income is more unequally distributed than CPS income (Mayer and Jencks 1992), the U.S. income distribution in Table 1 is more unequal than income distributions derived from the Luxembourg Income Study or other results based on CPS income. However, even CPS income is much more unequally distributed than income in these other countries.

[2]Another plausible strategy would be to divide the within-cell mean by the grand mean. However, when the outcome is dichotomous, as are most of the measures used in this paper, the size of this ratio depends on whether we look at the probability of having the living condition or lacking it. This is because this measure is sensitive to the absolute level of the grand mean.

Some analysts prefer to analyze differences in dichotomous outcomes by computing differences in the logged odds of the outcome. Like the arithmetic difference between proportions, logged odds yield the same results regardless of whether one counts people with an attribute or without it. But when the base rate is very high or very low, a small absolute gain can translate into a very large change in the odds ratio. Changes in odds ratios are therefore unlikely to have a plausible linear relations ship to an utility function. This problem is not solved by using arithmetic differences but it is lessened. For a fuller discussion of this issue see Mayer and Jencks (1992).

[3]The sample sizes for all data sets are relatively large, so comparisons across countries of the difference between the grand mean and the mean of the poorest decile are usually statistically significant. This can be shown with this equation which tests the null hypothesis that the difference of the difference of proportions is 0:

$$Z = \sqrt{\frac{(p_{d1x} - p_{1x'}) - (p_{d2x} - p_{2x'})}{\frac{p_{d1x}\ q_{d1x}}{N_1} + \frac{p_{x'}\ q_{x'}}{N_2} + \frac{p_{d2x}\ q_{d2x}}{N_3} + \frac{p_{2x'}\ q_{2x'}}{N_4}}}$$

where d1x is the mean of the poorest decile in country 1 on living conditions x; x′ is the within-country grand mean of x; N_1 and N_3 are the within-cell means; and N_2 and N_4 are the country sample means. Sweden has the smallest sample size and Canada the next smallest. If we use the sample size of these countries and conservatively set p_{d1x} and p_{d2x} to .5, we can estimate that differences of differences greater than .03 will be statistically significant. Smaller differences of differences will be statistically significant for living conditions, such as bathrooms and kitchens, that have smaller variances, and for differences in differences between countries such as Germany and the United States with larger samples.

[4]Unlike the CPS and Census, the CEX does not impute values for missing income data. Instead it substitutes zeros for values not reported by respondents. The analyses in this paper use only complete income reporters (described in the appendix), but many respondents classified as complete income reporters have failed to report some income. Substituting zeros for missing data presumably understates income and may result in more income inequality. Mismeasuring income weakens the correlations between income and living conditions, thus biasing the distribution of durables over income groups toward equality. For a more detailed discussion of this issue see Mayer and Jencks (1992).

[5]Since average levels of ownership of durables hardly changed between 1980 and 1984 in the United States, it is unlikely that the difference between the United States and Germany changed over this time.

[6]German data on health and access to medical care are for 1984-85 while U.S. data are for 1980. The Omnibus Budget Reconciliation Act of 1981 reduced the number of people eligible for Medicaid and imposed new costs for Medicare patients. Thus, one might suppose that access to medical care among the poor decreased between 1980 and 1985. Published HIS data show that neither the distribution of a limitation of activity due to a chronic condition nor use of physician services changed

appreciably between 1983 and 1988 and that low-income Americans continued to visit the doctor more often than affluent Americans (Mayer 1992a; 1992b). Data from the Survey of Income and Program Participation confirm that in 1984 income had little effect on individuals' chances of seeing a doctor in the previous year (Mayer 1992a; 1992b).

[7]Comparisons of published data from both Canada (Statistics Canada 1987) and the United States (National Center for Health Statistics 1986) suggest that in 1985 low-income Americans were more likely than low-income Canadians to visit a doctor in the last year and in both countries chances of visiting a doctor in the last year were only weakly related to income.

[8]CEX expenditure data are collected in annual surveys with a three-month accounting period. Canadian expenditure data are collected annually with a one-year accounting period. BLS conducts both a diary survey covering a single week and an interview survey. Diary reports of food expenditures are higher and more closely correspond to the National Income Accounts than reports of food expenditures from the interview survey. This suggests that the shorter recall period in the CEX may lead to higher estimates of expenditures than the longer recall period in the Canadian survey. It is unlikely, however, that the shorter recall period affects the distribution of expenditures.

[9]These measures of expenditures include income and payroll taxes. They exclude down-payments on houses, payments of mortgage principals, and expenditures for home improvements, on the grounds that these are savings rather than consumption. Due to data limitations these estimates include the full purchase price of consumer durables, even when the purchase is partially financed by borrowing. This exaggerates inequality in total expenditures. Current consumption would be preferable to total expenditures as a measure of current economic well-being; however, data limitations prevent me from adequately estimating current consumption.

[10]It is not possible to compare the distribution of expenditures over income groups in the United States and Canada. In Canada missing values for both income and expenditures are imputed using a

"hot deck" procedure, and Statistics Canada makes some effort to reconcile expenditures and income. CEX public use data tapes included imputed values for expenditures, but not income (see note 4).

[11]The differences between those with low incomes and low expenditures in the proportion with dishwashers, clothes washers, and clothes dryers are much greater in the United States than in Canada. This is partly due to the unreliability of CEX income data as discussed above. However, the difference between those with low incomes and low expenditures in having a car and owing a home is also greater in the United States than in Canada and the income distribution of cars and home ownership is from the Census not the CEX so this is not the entire explanation.

[12]Although these living conditions are all dichotomous, I show OLS results rather than the results of more-appropriate nonlinear regressions. Since I am constrained to use a correlation matrix to produce these estimates for Sweden and Germany, I cannot do nonlinear regressions. With the exception of bathrooms and kitchens, these living conditions are not highly skewed, suggesting that the OLS coefficients are unlikely to be seriously biased. Furthermore, since I am less interested int he point estimate than in comparing coefficients across countries, the extent of bias would have to vary across countries to affect the comparisons. This is unlikely. When I reestimate the models shown in Table 6 for Canada and the United States using logistic regression, the partial derivatives are similar to the OLS coefficients, and the qualitative conclusions for the two countries are the same as those produced from the OLS results.

[13]The positive coefficient means that as family size increases, an individual in that family is more likely to have no doctor visits.

[14]Results available from the author upon request.

[15]The types of jobs held by welfare mothers is from Edin and Jencks (1992); the remainder is my deductions from Edin and Jencks's conclusions.

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