

Equal opportunities for children: Social welfare expenditures in the English-speaking countries and Western Europe

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In all developed nations, governments frequently affirm the importance of providing equal opportunities and a fair chance at life to every child. The Bush administration in the United States vows to “leave no child behind,” the Labour government in the United Kingdom to halve child poverty in ten years and eliminate it in twenty. Yet by many conventional measures of child poverty, there exist widespread disparities within and across these nations. The Luxembourg Income Study (LIS), using a measure of disposable income, finds great variation in the percentages of children in developed nations who are living below the poverty level.¹ At one end of the spectrum in the year 2000 was Finland, with 2.8 percent of children below poverty; at the other end was the United States, with 21.9 percent of children below poverty. The English-speaking nations in general compare poorly with the major European nations by this measure.

But how one judges the success of a nation’s policies to improve the well-being of children depends very much upon how one measures the nation’s performance. In this article we take into account social welfare benefits not usually included in the standard measures of income and poverty—especially expenditure on two very large in-kind benefits, education and health care—to gain a better understanding of public and family resources at the disposal of children.

The ultimate test of efforts to equalize children’s opportunities would have a very broad reach, judging family and state inputs by such “outputs” as future health status, educational attainment, and economic and social well-being. Our goal is more modest: to measure the degree to which social welfare expenditures, broadly defined, close the gap in the economic resources afforded to poor versus

middle-income children and poor versus rich children in rich countries.²

The nations we choose include the four largest predominantly English-speaking countries, Australia, Canada, the United Kingdom, and the United States. To provide a wider European context, we also include Belgium, France, the Netherlands, and Germany, and Finland and Sweden from the northern tier.

Adjusting the measure of income

To construct our measures of welfare state expenditures we use data sources compiled by the Organisation for Economic Co-operation and Development (OECD), in particular the *OECD Social Expenditure Database*, which includes many categories of cash and in-kind social benefits—old age and disability, occupational injury, sickness, unemployment, family benefits and services, public health expenditures, and housing benefits, among others. We derive employer-provided benefits and aggregate tax expenditures from data compiled by the OECD and the Employee Benefit Research Institute (EBRI) in the United States.³ Microdata concerning household market income in the ten nations come from the LIS database, which now contains household income data files for 29 nations, covering the years 1967 to 2002. The LIS data give us good estimates of the distribution of cash expenditures, and the income and earnings data enable us to estimate the payroll, property, and sales tax burdens across income classes. We begin with the household, which, for cross-national comparisons of inequality, is the only comparable income-sharing unit available for most nations, including those discussed here. From this we derive a measure of adjusted income per child.⁴

Health care and education spending

Health care and education constitute the greatest portion of noncash benefits for children in every nation we examined. The amounts spent on these two and some other in-kind benefits suggest that studies that take account only of cash transfers are omitting very large components of what the welfare state does. In this analysis we make a first attempt at incorporating in-kind benefits into the comparative analysis of welfare states.

Education spending is represented simply by the spending per elementary and secondary school child in each country as estimated by the OECD; we add the value of early childhood education for children aged 3–5.⁵

Luxembourg Income Study Summer Workshop, 2005

The Luxembourg Income Study has made comparable over 130 large microdata sets containing comprehensive measures of income and economic well-being for a set of 29 modern industrialized welfare states. The LIS databank currently covers countries including: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Luxembourg, Mexico, the Netherlands, Norway, Poland, Romania, Russia, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, the United Kingdom, and the United States.

The LIS Summer Workshop is a one-week pre- and postdoctoral workshop designed to introduce young scholars in the social sciences to comparative research in income distribution and social policy using the LIS database. The 2005 Summer Workshop, our 17th such event, will be held in Luxembourg. Arrival will be the evening of Sunday, July 10 and departure the afternoon of Saturday, July 16. Tuition of €1,200 will cover instructional materials, accommodations, and full board. Transportation to and from Luxembourg is the responsibility of the student. Applications are available from the LIS homepage at: <http://www.lisproject.org/workshop.htm> and are due by April 15, 2005. Please note that space is limited.

The language of instruction will be English. The course of study will include a mix of lectures and assistance and direction using the LIS database to explore a research issue chosen by the participant. Workshop faculty will include the entire LIS staff (including Timothy Smeeding, Overall Project Director; Janet Gornick, Associate Project Director, Markus Jäntti, LIS Research Director; and John Coder, LIS Technical Director) and other experienced LIS users.

For more information about the workshop, please contact:

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We use OECD estimates of health care spending per capita.⁶ From cross-national estimates of the cost of health care for people of different ages, we assume that health care spending increases with age. The baseline is the average government cost of subsidized health care per capita for people aged 19–34. Costs range from a low of 75 percent of the baseline for children below age 18 to a high of 4 times the baseline for adults over age 75. We assume an equal distribution of health and education ex-

penditures across the income distribution in all countries except the United States. Because the United States, alone among the nations examined, does not have a universal, national health insurance or health service, we impute average expenditure for individuals in each income quintile, adjusted for age. Our data for this imputation come from the EBRI and the Centers for Medicare and Medicaid Services. For uninsured persons, we impute an amount equal to about half the amount provided the insured.⁷

We call our measure of post-tax, post-transfer income that includes noncash benefits *full income*, as opposed to the commonly used measure of post-tax, post-transfer *cash* or *disposable income*.

Measures of redistributive effects

The difference between market income (primarily earnings) and full income for those in each income decile is a rough accounting measure of the redistributive effect of welfare state expenditures. To the extent that transfers induce changes in work, savings, or marriage behavior, the measure is biased. Especially for households with children, however, it provides a useful first approximation of the fiscal effects of state policies and their efforts to redistribute opportunities.⁸

From the distribution of all children across income quintiles, we compute the full income of a low-income, median-income, and high-income child.⁹ The difference between children living in families with high and low incomes, respectively, can be seen as a measure of “economic distance”: we like to think of it as a measure of equality of opportunity within the nation. Nations with smaller economic distances have more equality of opportunity across the population of children. We focus on the distance between the low- and middle-income child as a measure of “fair chance.” All this is designed to show which nations leave many children behind, which ones give them a good start, and by how much.

Aggregate social welfare spending and gross domestic product

A tabulation of aggregate social welfare benefits (Figure 1), makes several important points.

First, all these countries spend a substantial fraction—a least a quarter—of their gross domestic product (GDP) on social welfare.

Second, there is some variation within the English-speaking countries, and the relative position of the United States depends on whether tax-subsidized, employer-provided health insurance and pensions are counted. The United States ranks last if employer-provided health and pension benefits are not counted; it puts nearly 23 percent

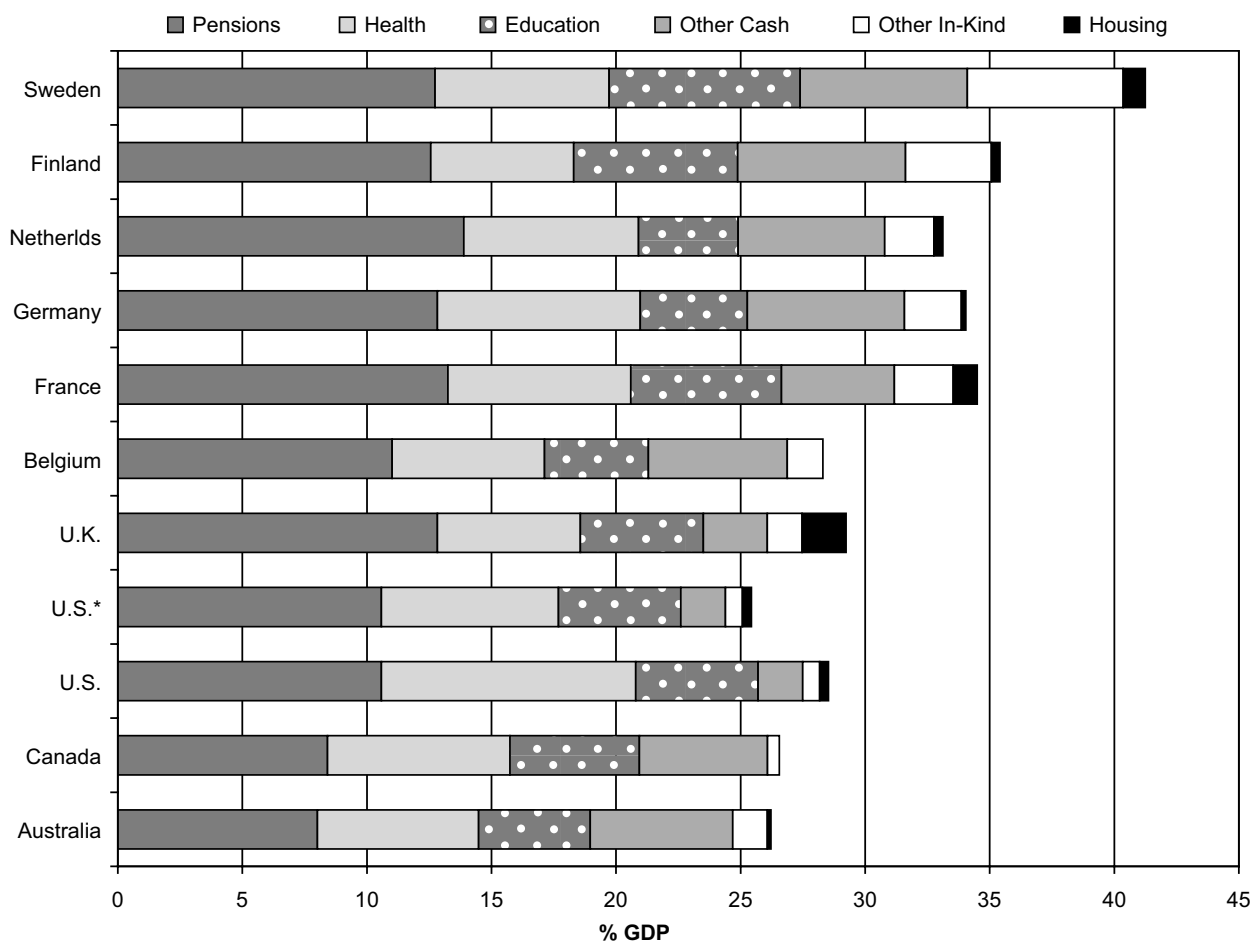


Figure 1. Size and composition of welfare state expenditures in 10 OECD nations.

Note: The asterisked U.S. bar subtracts employer-provided health insurance and pension benefits. All other bars include employer-provided health and pension benefits. Data from the OECD and the Employee Benefit Research Institute.

of GDP into social welfare expenditures. It ranks second at nearly 29 percent, just below the United Kingdom, if employee health and pension benefits are counted. None of the other countries rely upon employer-provided health insurance and all rely much less on employer-provided pensions.

Third, in the broader context of the continental West European and Scandinavian nations, the differences among the English-speaking nations are much smaller than the differences between these nations and all the others.¹⁰ Most of these differences are attributable to history, culture, and political choices. The Scandinavian countries, where expenditures are highest, have had strong labor movements and social democratic parties committed to reducing class and gender inequalities. In other continental European countries, particularly those with strong Catholic parties, corporatist and statist traditions have encouraged the state to play a major role in providing economic security.¹¹ In the English-speaking countries, strong beliefs in limited government, in the tradition of 19th century liberalism, have curbed this kind of intervention.

Adding taxes

If the gross value of cash transfers is adjusted to take into account income taxes on those transfers and the level of indirect taxes (sales and value-added taxes), the differences in social welfare expenditures shrink. The Scandinavian and continental European countries are more likely to tax cash transfers and to finance social welfare expenditures through indirect taxes than the English-speaking countries, most particularly the United States. Sweden still spends the most and the United States the least, but the ratio of Swedish to U.S. expenditures declines from about 1.5 to about 1.2.

Absolute levels of expenditures

The relationship of welfare state expenditures to GDP, although a good measure of the degree to which countries differ in the proportion of income devoted to welfare state functions, is not a good indication of the absolute amounts of such expenditures. Although Sweden devotes over 40 percent of GDP per capita to social welfare expenditures and the United States only 25 percent, the United States spends a good deal more than 25/40 of the

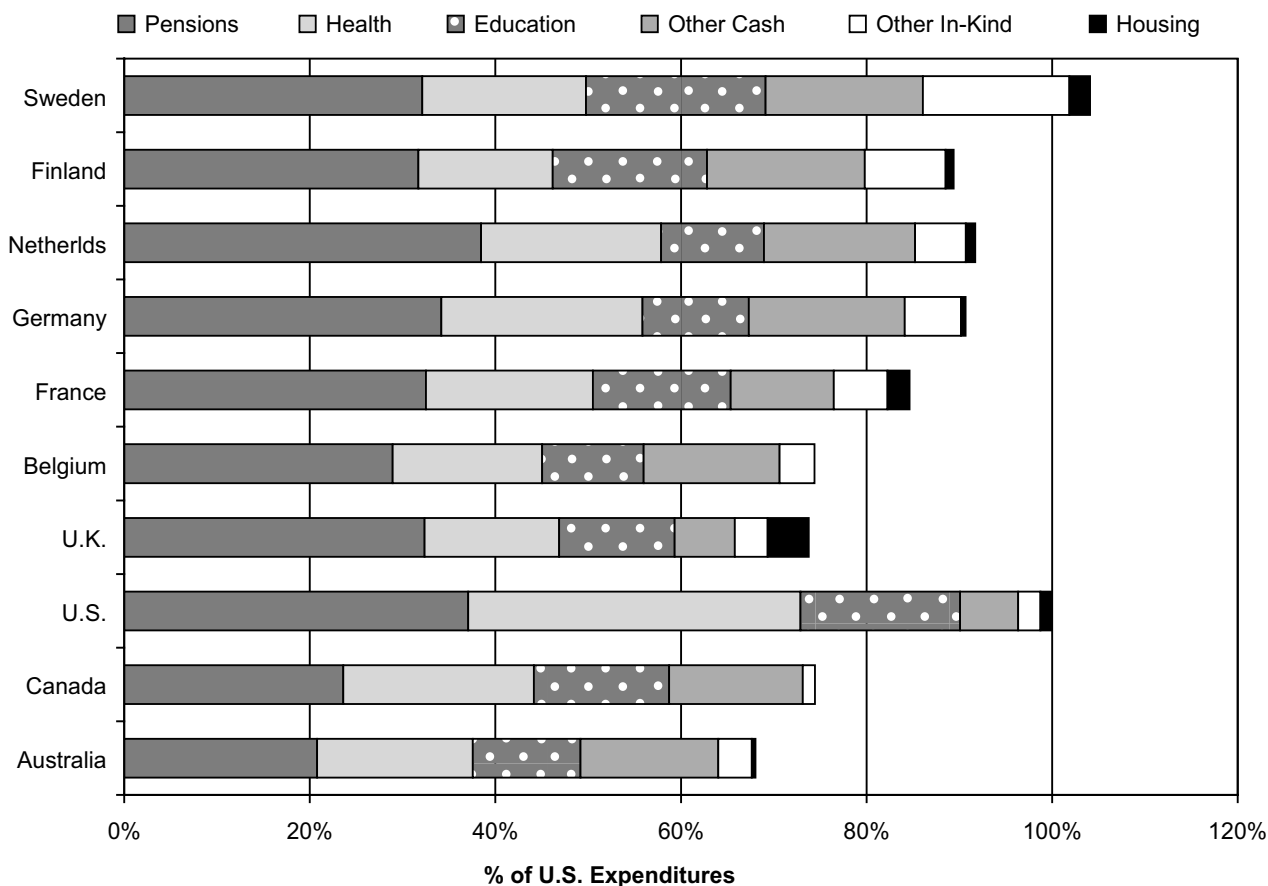


Figure 2. Per capita social welfare expenditures relative to the United States (U.S. = 100%), fiscal year 1997. Data from the OECD.

amount spent by Sweden, where GDP per capita is only 70 percent of U.S. GDP per capita. To compare absolute levels of expenditures across countries, we multiply the proportions of GDP devoted to social welfare in every nation (Figure 1) by the ratio of its GDP to U.S. GDP. By this measure, real per capita social welfare expenditures in the United States are larger than expenditures in all other nations except Sweden (Figure 2). The other English-speaking nations still lag behind the continental European and Nordic nations.

The major domains of state welfare spending are also clear from Figures 1 and 2. In most countries, the biggest single share of social welfare expenditures is for cash retirement pensions, including employer-provided pensions, and the second biggest is for health. Spending on education is the third largest component of expenditures. The proportion spent on housing is everywhere very small; the United Kingdom, at 2 percent, is the most generous.

In several areas, the United States is an outlier. It spends much more on health than other industrialized countries—\$4,631 per capita, more than twice the OECD median (\$1,983)—yet U.S. citizens fall below the OECD median in their usage of health services. Americans, it

appears, pay more, but receive fewer services in return than people in other OECD nations.¹²

The United States was a pioneer in free public education, and throughout most of the 20th century led all other nations in the expansion of secondary and higher mass education. As Figure 1 shows, it is no longer in the lead, primarily because it lags behind the Scandinavian countries, France, and the United Kingdom in expenditures on early childhood education.

The United States also spends markedly less than all other countries on cash transfers (other than pensions) and on near-cash benefits.¹³ In 1999, U.S. spending on cash and near-cash assistance for the nonelderly (families with children and the disabled) was less than 3 percent of GDP, not even half the amounts spent by Canada or the United Kingdom, and not a quarter of Finnish expenditures. Comparisons of child well-being that rely on disposable-income figures reflect these lesser cash and near-cash expenditures and show a 20-year trend. From 1980 to 1999, the United States has increasingly diverged even from the other English-speaking nations; by 1999 its per capita welfare expenditures were closer to those of Mexico than of other OECD nations (Figure 3).

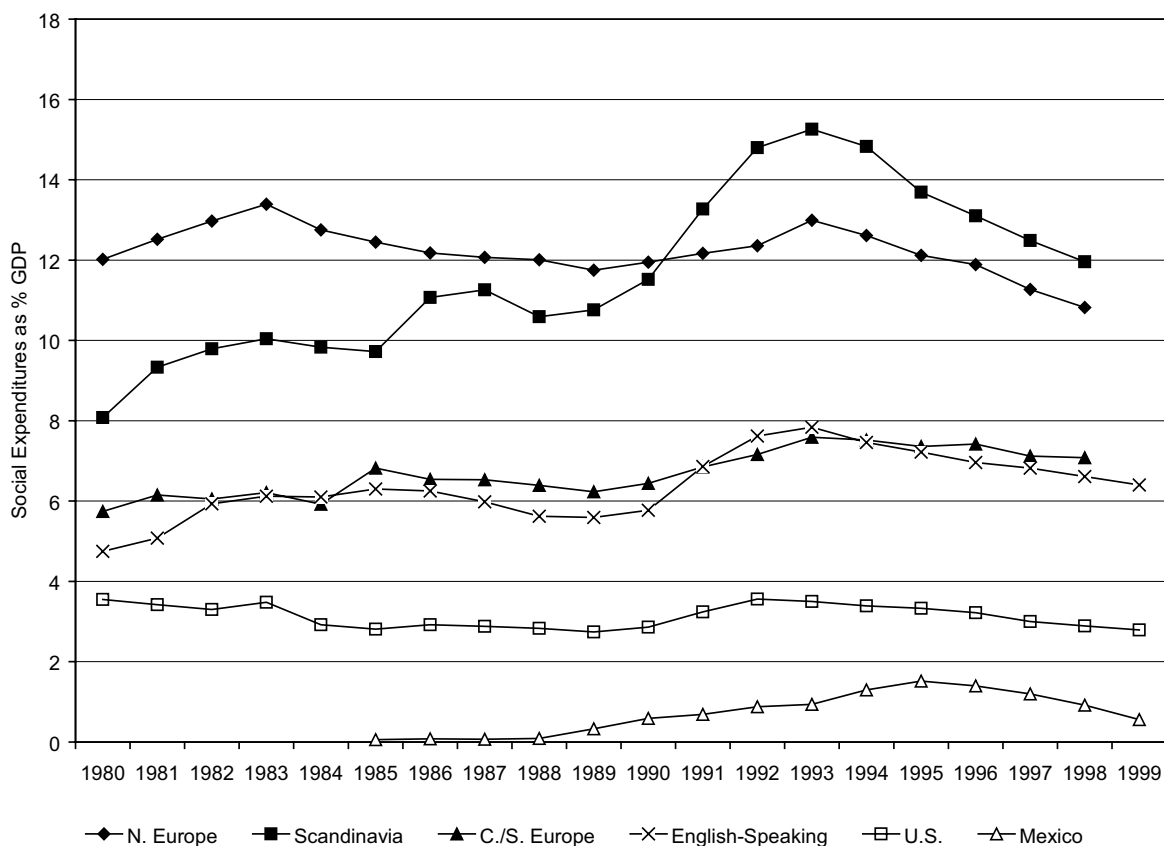


Figure 3. Average social expenditures on the nonelderly population in 6 groups of 17 OECD nations.

Source: OECD, 1980–1998: *20 Years of Social Expenditures—The OECD Database*. OECD, Paris, 2002. <http://www.oecd.org/dataoecd/3/63/2084281.pdf>

Note: Total nonelderly expenditures include all cash plus near-cash spending (e.g., food stamps) and public housing. Health care and education spending are excluded here. Northern Europe includes **Belgium**, Denmark, **Netherlands**; Scandinavia includes **Finland**, Norway, **Sweden**; Central/Southern Europe includes Austria, **France**, **Germany**, Italy, Luxembourg, Spain; English-speaking countries include **Australia**, **Canada**, **U.K.**, and the **United States** (shown separately).

The redistributive effects of expenditures on resources for children

To what degree do these expenditure differences among countries affect the distribution of resources for children? In all countries, welfare state benefits, net of taxes, substantially increase the resources available to children in the bottom quintile, where market incomes are low and social welfare benefits are high (Table 1). The range of increase, however, is very great. In all the English-speaking nations, children in the bottom quintile get very large increases in their market incomes from welfare state benefits, ranging from 137 percent in the United States to 772 percent in the United Kingdom. In both countries, many parents in this lowest quintile are single mothers with little or no earnings. In all countries examined, the taxes required to finance welfare state benefits take a nontrivial proportion of resources from families in the high-income quintile, from 12 percent to 28 percent. The United States, Finland, and the Netherlands take the least from these families.

In most nations, taxes paid and benefits received by families with children are close to equal. The biggest gains and losses are relatively small: for families with children in Finland, net benefits increase market income by 7 percent (Table 1, last column). In Belgium and France, families with children are net taxpayers, losing, on average, over 9 percent of market income.

Measuring the relative well-being of children within countries

We examine three measures: (1) to replicate previous research, we estimate cash disposable income, which adds cash and near-cash transfers to market income and subtracts direct taxes; (2) we estimate full income, which takes into account noncash transfers and indirect taxes; finally, (3) we adjust full income by including some estimates of the quantity and quality of services received. (See Table 2.)

Table 1
Mean Net Total Benefits to Households with Children (Transfers, School, Day Care, Health) as a Percentage of Market Income

Nation and Year of Data	Average Net Benefit as Percentage of Market Income, for Household Equivalent Market Income Quintiles ^a					All Families with Children
	1 (Low)	2	3	4	5 (High)	
Australia 1994	747.8	41.3	5.3	-7.7	-21.9	3.6
Canada 1997	205.2	31.1	4.3	-7.6	-18.8	1.3
United Kingdom 1999	772.1	82.6	4.7	-9.9	-20.5	6.6
United States 2000	136.9	33.3	11.2	-0.6	-12.9	5.5
Belgium 1997	218.6	8.0	-9.4	-19.0	-28.2	-9.5
France 1994	60.8	2.7	-9.0	-14.4	-24.7	-9.2
Germany 2000	187.4	17.7	-2.8	-11.6	-21.2	-1.9
Netherlands 1999	129.2	15.9	1.3	-6.6	-14.3	2.5
Finland 2000	173.9	28.5	9.1	-5.1	-12.0	7.2
Sweden 2000	184.9	20.3	-4.0	-14.0	-21.0	-2.1

Note: In row 1, the 747.8 percent in column 1 indicates that in Australia, the average child in the lowest income quintile receives net benefits equal to nearly 8 times the family's net income, the -21.9 percent in column 5 that the average child in the highest quintile loses nearly 22 percent of market income through welfare state transfers and taxes. The 3.6 percent in the last column shows that in Australia families with children pay just a little less in taxes to finance social welfare benefits than they receive.

^aMarket income consists of earnings, interest, dividends, rents, and private pensions. To arrive at equivalent income per child, household income is divided by the square root of household size.

Cash disposable income

A fair chance: If a "fair chance" is identified as the ratio of the income of the child at the 10th percentile of cash disposable income to the income of the child at the median (the P10/P50 ratio in Table 2), the United States fares very poorly; the income available to the poorer child is just 39 percent of that available to the child at the median. These ratios for the other English-speaking nations range from 45 to 53 percent; the continental nations have ratios in the 50s, and in Sweden children at the 10th percentile have family incomes that are 63 percent of the income available to children at the median (not in Table 2).

A measure of equal opportunity: the ratio of the child at the 90th percentile of income to the child at the 10th percentile (the P90/P10 ratio in Table 2) is greatest in the United States, over 5 to 1. For comparison, the average P90/P10 ratio for ten countries is just over 3.5 to 1. In Finland and Sweden, the children at the highest level have incomes around 2.5 times the income of children at the lowest level (not shown in Table 2).

After-tax, after-transfer full income

Use of the full income measure changes the results substantially. In all countries except Finland, the distance between poor and rich children shrinks. In the United States, the P90/P10 ratio is now 3.1; the ten-country average is 2.7 (Table 2).

Full income changes the ratios dramatically for two main reasons. First, compared to other industrialized nations the United States is short on cash and long on in-kind

benefits. Second, the big-spending welfare states rely more heavily on indirect taxation and taxation of cash benefits than the United States. The United States provides by far the highest values of education and health care benefits and therefore the highest total benefits to families with children. In the United States, cash benefits are on average 14 percent of all benefits; health and education spending absorbs 85 percent of benefits. In the other nations, health and education spending makes up between 40 and 48 percent of total benefits, and cash benefits are much higher. For those who cling to the notion that the U.S. welfare state is undersized, the U.S. benefit to each household with children becomes staggeringly large when health and education spending is included; the average benefit is \$23,982 and the median \$22,259.

Adjustments for the quantity and quality of services

The preceding results are sensitive to a number of assumptions that may prove to be untrue. First, the results assume that noncash benefits are the same for rich and poor children. For the United States, our full-income calculations took into account differences in health benefits, but assumed education spending was equal. But school spending relative to children's needs differs, though estimates of the size of the difference vary; moreover, such differences may exist in other nations.¹⁴

The valuation of in-kind benefits is particularly knotty in cross-national research. In large part, the differences between U.S. expenditures on education and health and those elsewhere are due to the higher absolute salaries of U.S. doctors, nurses, teachers, and the like.¹⁵ But do dif-

Table 2
Redistributive Effects of U.S. Social Welfare Benefits to Children in Comparative Perspective

Children's Median Income Measure	Low Income (P10/P50)		High Income (P90/P50)		Economic Distance (P90/P10 decile ratio) ^a	
	United States	10-Country Average	United States	10-Country Average	United States	10-Country Average
Equivalent Disposable (Cash) Income	39%	53%	207%	178%	5.24	3.57
Full Income	58	61	181	162	3.12	2.72
Quality-adjusted	52	61	195	162	3.74	2.74
Adjusted for 10-nation avg. benefit	56	61	182	162	3.24	2.68

Note: "Low income" figure in columns 1 and 2 indicates that the income of the child at the 10th percentile is 39 percent of the income of the child at the median in the United States, compared to 53 percent across the 10 countries. The measure of economic distance reflects the ratio of the income of the child at the 90th income percentile to that of the child at the 10th income percentile—5.4 times in the United States and 3.57 times across the 10 states. For definitions of the income measures, see the text.

^aSmall differences in the 90/10 averages are due to rounding errors.

ferences in expenditures translate dollar for dollar into differences in the quantity and quality of services?

We approach this problem empirically in two ways. One simple way is to assume that the *quantity and quality* of health and education services are the same across nations. We thus simulate equal benefits, using the mean benefit across nations but preserving the differences in financing costs. This procedure heavily discounts the value of U.S. health and education benefits. A second approach is to use purchasing power parity (PPP) to adjust expenditures, controlling for the quantity of care. This adjustment reduces differences across nations but does not eliminate them.

Table 2 compares each of these three measures for the United States with the same measures averaged across all 10 nations. In both cases, differences between the full income measure and the two quality-adjusted measures are relatively small, compared to the difference based on disposable income. No matter how we have valued benefits, they make a large difference in the resources available to children, especially in the United States. And in all the scenarios examined, the addition of health and education expenditures reduces differences among nations in general and improves the position of the United States in particular.

The sensitivity of our findings to the measures of health and education expenditures emphasizes the importance of undertaking research on differences in those expenditures within income classes in each country. And even if expenditures are equal, there are other conceptual problems. For example, per pupil expenditures in some inner-city U.S. schools are equal to or even higher than expenditures in some suburban districts. But inner-city schools may have inferior physical plants, less qualified teachers, and students with greater learning and disciplinary problems. The same is true for health care, in which the United States is often accused of having a "two-track" system,

one for the well-off and the other for the poor. It is not clear how to resolve these issues.

More generally, should expenditures be valued at their cost to the government? Economists generally assume that in-kind benefits are worth less to recipients than their cash value would be. Because the proportion of in-kind to cash income is largest among poor children and their families, the difference between market value (cost to the government) and the value to recipients is likely to be largest for these families. Discounting in-kind benefits in general and discounting them more for lower-income groups would bring the results closer to the disposable income than to the full income results. Without further research we cannot know if doing so undervalues in-kind benefits for children. But the importance of these benefits in the spectrum of welfare state programs makes it clear that we should make every effort to value them.

Conclusions

In all nations, the redistributive effects of social welfare expenditures are large, both raising the level of resources at the bottom of the income ladder and reducing levels of resources at the top. But the rankings are very sensitive to the assumptions and measures used. Among the four English-speaking nations examined here, for example, the United States ranks last if employer-provided health benefits are not counted, but second if they are. But because U.S. GDP is so much higher than the GDP of the other nations, *per capita* social welfare expenditures in the United States are barely below the level of Sweden and higher than in all the other nations we consider.

Whatever measures of income and benefits we use, however, the English-speaking nations devote less of their GDP to social welfare spending than do the continental European and Nordic nations. Poor children in the English-speaking nations are relatively worse off than their

continental European counterparts. They remain so even after we take into account in-kind benefits and the taxes required to finance them. ■

¹More precisely, whose disposable income places them at 50 percent or less of the median, a standard relative definition of poverty. The LIS database defines “disposable income” as the sum of market income (e.g., earnings, pensions), cash and near-cash benefits, and social insurance payments, less taxes and mandatory employee contributions. See the table of Summary Income variables on the LIS Web site, <http://www.lisproject.org/techdoc/summary.pdf>.

²This article summarizes the research reported in detail in I. Garfinkel, L. Rainwater, and T. Smeeding, “Welfare State Expenditures and the Distribution of Child Opportunities,” Luxembourg Income Study Working Paper 379, June 2004. On the LIS Web site at <http://www.lisproject.org/publications/liswps/379.pdf>. A version presented at the Conference on “Supporting Children: English-Speaking Countries in International Context” held at Princeton University, January 7–9, 2004, is included in *Supporting Children: English-Speaking Countries in International Context*, ed. by N. Folbre, I. Garfinkel, S. McLanahan, and T. Smeeding (submitted to Russell Sage Foundation).

³OECD, *1980–1998: 20 Years of Social Expenditures—The OECD Database*, OECD, Paris, 2002; Employee Benefit Research Institute, *Employer Health Benefits, 2002*, EBRI, Washington, D.C., 2003. The methodology and assumptions we employ are fully described in the article on which this summary is based (see note 2).

⁴Various equivalence scales have been used in cross-national comparisons of well-being among households of different compositions. We adjust household incomes for differences in household size by dividing income by the square root of household size. This results in a measure of adjusted or equivalent income per child. For further information see A. Atkinson, L. Rainwater, and T. Smeeding, *Income Distribution in OECD Countries: Evidence from the Luxembourg Income Study (LIS)*, Social Policy Studies no. 18, OECD, Paris, October 1995.

⁵OECD, *Education at a Glance: OECD Indicators 2002*, OECD, Paris, 2002; J. Gornick and M. Meyers, *Families that Work: Policies for Reconciling Parenthood and Employment* (New York: Russell Sage Foundation, 2003); M. Meyers, personal communication to the authors on early childhood education estimates for 12 nations, October 1, 2003. Data are insufficient to allow us to impute the costs of tertiary education.

⁶OECD, *Health Care Expenditures Database*, OECD, Paris, 2002.

⁷This is consistent with the amount of care received by the uninsured in the 1998 Medical Care Expenditure Survey; see B. Wolfe, “Estimates of Health Care Subsidies for the Uninsured Using the Medical

Care Expenditure Survey,” unpublished manuscript, November 16, 2002.

⁸The authors examine redistributive effects for the elderly and for those without children in “Welfare State Expenditures and the Redistribution of Well-Being: Children, Elders, and Others in Comparative Perspective,” Luxembourg Income Study Working Paper No. 387. On the LIS Web site at <http://www.lisproject.org/publications/liswps/87.pdf>.

⁹The low-income child is measured at the 10th percentile (median of the bottom quintile); the high-income child is measured at the 90th percentile (median of the top quintile).

¹⁰These patterns are consistent with the findings of other comparative studies; see, e.g., G. Esping-Andersen, *The Three Worlds of Welfare Capitalism* (Princeton, NJ: Princeton University Press, 1990); T. Smeeding, “Government Programs and Social Outcomes: The United States in Comparative Perspective,” presented at the conference on Poverty, the Distribution of Income, and Public Policy, University of California, Berkeley, December 2003; revised 2004.

¹¹See, e.g., P. Lindert, *Growing Public: Social Spending and Economic Growth since the Eighteenth Century* (New York: Cambridge University Press, 2004).

¹²G. Anderson, U. Reinhardt, P. Hussey, and V. Petrosyan, “It’s the Prices, Stupid: Why the United States Is So Different from Other Countries,” *Health Affairs* 22, no. 3 (2003): 89–105.

¹³These include unemployment insurance, cash assistance, the earned income credit and other child tax credits and allowances, family leave, and health insurance. The pattern is similar for near-cash expenditures such as those for housing and food stamps.

¹⁴Some studies find that education spending in the United States may differ by up to 50 percent between rich and poor districts. Other work using the LIS data found that benefits per student differed by only about 10 percent across the income distribution, but that when differences in needs arising from poverty, disability, and English as a second language were included, benefits for children in the highest income quintile were 25–30 percent larger than those for poor children. For discussions of these issues, see D. Card and A. Payne, “School Finance Reform, the Distribution of School Spending, and the Distribution of SAT Scores,” NBER Working Paper 6766, Cambridge, MA, 1998; K. Wilson, K. Lambright, and T. Smeeding, “School Finance and Equality of Opportunity: Equal Dollars or Equal Chances for Success?” unpublished manuscript, Syracuse University Center for Policy Research, June 2004.

¹⁵Anderson and others, “It’s the Prices, Stupid.”