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Welfare State Expenditures and the Distribution of Child Opportunities

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WELFARE STATE EXPENDITURES AND THE DISTRIBUTION OF CHILD OPPORTUNITIES

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Abstract

This paper estimates the redistributive effects of welfare state expenditures on children and disparities in the economic well-being of children in ten nations and relates the two. Data from the Organization for Economic Cooperation and Development (OECD) and other sources for cash and non-cash social welfare benefits are used to describe differences in the size and nature of welfare states and their distributional effects. The OECD data are combined with micro data on household incomes from the Luxembourg Income Study (LIS) both to estimate the redistributive effects of the expenditures and taxes and to construct measures of the differences in the relative standard of living among children at various points in the income distributions of their countries. These measures may be thought of as capturing at least one of the essentials of the degree to which the poorest children in the country have a "fair chance" and "an equal opportunity chance" to succeed economically. The results indicate a wide range of differences in levels of economic resources and support for children within, as well as between, nations. The degree to which children have fair and equal opportunity chances varies considerably across countries and depends critically upon welfare state benefits. Taking account of non-cash benefits substantially reduces cross national differences, but does not eliminate them. Subject to a number of qualifications mentioned at the end of the paper, we find that non-cash benefits are particularly important for low-income American children and their families.

I. Introduction

The purpose of this paper is to describe the size, nature, and redistributive effects of welfare state expenditures for children in ten advanced industrialized nations and to relate these to differences across nations in disparities in the economic well-being of children. Equality of opportunity for children, and a fair chance at life's opportunities, are something that all nations aspire to provide to each and every child. The belief in economic and social mobility for youth and the chance to attain one's aspirations are at the heart of policies affecting fertility, human development and human needs, the social exclusion or inclusion of children, and the way that we judge societies more generally. For instance, President Bush in America has recently vowed to "leave no child behind," while Prime Minister Blair in the United Kingdom has vowed to halve child poverty in ten years and eliminate it in twenty (Bradshaw 2003). The belief that every child and youth should be provided with a decent education, basic health care, and a satisfactory standard of living permeate the United Nations Human Development Reports and their Millennium Development Goals, the UN-UNICEF Charter on Children, and Amartya Sen's notion that every child should be provided with capabilities to succeed in life (Sen 1992).

In keeping with the focus of this volume on English speaking nations, the nations we choose here include the four largest predominately English speaking nations, Australia, Canada, the United States, and the United Kingdom. To place the English speaking nations in broader European context, we also include Belgium, France, Finland, Germany, the Netherlands, and Sweden.

For each country, we begin with market income and rank the population of all households by equivalent household market income. We then add cash transfers and non-cash benefits for health care and education, including early childhood education (valued at government cost) and subtract the taxes paid to finance these social transfers. The LIS data give us good estimates of

the distribution of cash expenditures and the income and earnings data allow us to do relatively accurate simulations of the tax burdens across income classes. We assume fairly equal distributions of publicly financed health and education expenditures in all nations. Only employer provided health care in the United States differs in this regard. The difference between market income and post-tax, post transfer incomes by decile is a crude accounting measure of the redistributive effect of welfare state expenditures. To the extent that the transfers we add induce changes in work, savings, or marriage behavior, this measure is biased. But it is a useful first approximation, especially for families with children. The difference between market income and post-tax, post transfer income, which we call "full income," is a more comprehensive measure than the difference between market income and post-tax, post transfer cash income for assessing the efforts of welfare states to redistribute opportunities. Differences in full income across the income distribution are also a more comprehensive measure of the relative value of benefits to children in different countries than are differences in cash incomes alone.

Child well-being, as it relates to equality of opportunity, is measured by the public and family resources at the disposal of children and their families. Linking these "inputs" to "outputs" such as future health status, educational attainment, and economic and social well-being, is the ultimate test of the success or failure of these efforts. Our aim in this paper is less ambitious—to measure the degree to which social welfare expenditures close the gap in economic resources afforded to poor versus middle-income children and poor versus rich children in rich countries.

II. Data and Methods

We use several data sources compiled by the Organization for Economic Cooperation and Development (OECD) to construct our measures of welfare state expenditures. Most of the

public expenditure data is derived from the *OECD 1980-1998: 20 Years of Social Expenditure – the OECD Database* (2002c), with the exception of education data, which is derived from *OECD Education At A Glance* (2002b). The *OECD Social Expenditure Database* includes the following categories of social benefits: old-age cash benefits; disability cash benefits; occupational injury and disease; sickness benefits; services for the elderly and disabled; survivors; family cash benefits; family services; active labor market policies; unemployment compensation; housing benefits; public health expenditure; and other contingencies (e.g., cash benefits to those with low income). Such benefits may be cash transfers or the direct in-kind provision of goods and services. A detailed rationale for, and accounting of, these benefits is provided in *The OECD Social Expenditure Database 1980-1997* (2002c). Employer provided benefits and aggregate tax expenditures are also derived from data compiled by the OECD and the Employee Benefit Research Institute (EBRI 2003; Adema 2001).

The OECD categories are re-arranged as follows: pensions include old age, disability, survivors insurance and employer provided pension benefits; health includes public health expenditures (Medicare and Medicaid in the United States) and employer provided health benefits; education includes public expenditures on formal day care, primary, secondary and post-secondary education as well as Head Start in the United States; other cash transfers include occupational injury and disease, sickness, unemployment compensation, family allowance, parental leave, other contingencies, child welfare, family cash benefits and tax breaks for social purposes that are similar to cash; other in-kind benefits include services for the elderly and disabled, family services (food stamps, low income home energy assistance, women and children nutrition programs) and active labor market programs; and housing includes cash housing subsidies for countries other than the United States and public housing and vouchers in the United States.

While data on public benefits encompasses expenditures paid and controlled by all levels of government (federal, state and local), the quality of the data varies across countries, particularly with respect to lower tiers of government (OECD 2002c). The country data is also limited with respect to housing and tax expenditures. The OECD housing data includes only cash expenditures; in-kind and tax expenditures for housing are omitted. Therefore we do not include housing tax expenditures for the United States. Tax expenditures in general are not included in the micro data presented here, except as they are already reflected in the lower taxes which LIS households pay. Similarly, we are not able to easily identify students in higher education and are therefore unable to accurately distribute post-secondary education benefits.

The micro data that we use for this analysis are from the Luxembourg Income Study (LIS) database, which now contains over 135 household income data files for 29 nations covering the period 1967 to 2002 (www.lisproject.org). For this paper, as noted above, we limit the analysis to ten nations, and their most recent datasets. Within each country, we begin with the LIS measure of household market income (earnings plus private pensions and income from assets) and add employer payroll taxes (and in the United States, employer provided health insurance) to earnings in order to get a pre-tax, pre-transfer estimate of market income.[1]

For cross-national comparisons of inequality, the household is the single best unit for income aggregation. It is the only comparable income-sharing unit available for most nations, including all those used in this paper. While the household is the unit used for aggregating income, the person is the unit of analysis. Household income is assumed to be equally shared among individuals within a household, including children. A variety of equivalence scales have been used in cross-national comparisons, in order to make comparisons of well-being between households with differing compositions. We adjust household incomes to reflect differences in household size by dividing income by the square root of household size (Atkinson, Rainwater,

and Smeeding 1995). This results in a measure of adjusted or equivalent income per child. We rank the population of all households with children within each country by equivalent household pre-tax, pre-transfer market income.

Imputations

We then add cash transfers and non-cash benefits for health care and education, including early childhood education (all valued at government cost) and subtract the taxes paid to finance these social transfers. This measure of full income is then divided by the square root of household size to obtain equivalent full income per child. Within each country, the taxes subtracted from income equal the social transfers received for the population as a whole. (Though taxes and benefits are equal for the entire population within each nation, our analysis focuses on families with children where taxes paid may be less or more than transfers received and these net transfers to families with children are reported below.) The LIS data give us good estimates of the distribution of cash expenditures and the income and earnings data allow us to do relatively accurate simulations of the tax burdens across income classes. Payroll taxes are assumed to be proportional to individual earnings up to maximums, which vary across countries. Property taxes are assumed to be proportional to housing consumption for both owners and renters. Sales and value added taxes are assumed to be proportional to total consumption. Decile specific consumption to income ratios are taken from micro data surveys for four nations (Canada, France, the United Kingdom, and the United States) and an average of the four is applied to other nations.

With the exception of health in the United States, we assume an equal distribution of health and education expenditures across the income distribution within all nations. We use OECD estimates of health care spending per capita and elementary education and secondary education spending per enrolled person taken from their *Health Expenditure* (OECD 2002a) and

Education at a Glance (OECD 2002b) databases for each nation. Based on recent cross-national research on the cost of health care by age groups in OECD countries (Smeeding and Freund 2002), we assume health care spending for children 18 years old or less is equal to .75 of the average government cost of subsidized health care per capita (or government plus employer subsidized health care in the United States) and 1.0; 1.25; 1.75; 3.0; and 4.0 times the average, respectively, for adults aged 19-34; 35-54; 55-64; 65-74; and 75+ in each nation.

Because the United States, alone among the nations examined, does not have a universal national health insurance or health service, the expenditures are distributed as follows. Using data from EBRI and the Center for Medicare and Medicaid Services (CMMS) on average expenditures per covered recipient, and the percent of individuals in each quintile of household income who are recipients of charity benefits as uninsured, or who are insured by their employer, or by Medicare or by other public programs (principally Medicaid), the average expenditure per person in that quintile is imputed (adjusted for the age of the individual as specified above). For uninsured persons, we imputed a lower amount consistent with the amount of unpaid care received by the uninsured in the 1998 Medical Care Expenditure Survey (MEPS) as provided by Barbara Wolfe (2002). Expenditures for care provided to the uninsured is on average about half the amount provided to an insured person. Employer benefits were derived from EBRI estimates. Medicaid and Medicare figures were taken from the *Green Book* (U.S. Congress 2004) and from the CMMS webpage.

Education spending is estimated simply by the spending per elementary and secondary school child in every country as estimated by OECD (2002b). Finally, we utilize OECD data and data from Gornick and Meyers (2003) and Meyers (2003) to add the value of early childhood education expenditures (for children between the ages of three and five). For the LIS simulations we ignore tertiary education benefits and all other non-cash benefits for youth including child

care subsidiaries for children under age three.[2] Omitting tertiary education is a serious limitation, but the LIS provides insufficient data to allow us to impute its value to families. Elementary and secondary education and health care cover the vast majority of children's non-cash benefits in every nation studied. See appendix for more detail on these imputations and sources.

Measure of Redistributive Effects

For each country as a whole, the benefits and taxes are equal across the entire population. In this paper, however, we present results for only households with children. In later work, we will include elders and the childless. The difference between market income and post-tax, post transfer incomes by decile is a crude accounting measure of the redistributive effect of welfare state expenditures. To the extent that the transfers induce changes in work, savings, or marriage behavior, this measure is biased. But it is a useful first approximation, especially for families with children. The difference between market income and post-tax, post transfer income, which we call full income, is a better measure than the difference between market income and post-tax, post transfer cash income for assessing the efforts of welfare states to redistribute opportunities. Differences in full income across the income distribution are also a better measure of fiscal effects of governments than are differences in cash incomes of the relative well-being of children in different countries. Still, they may not be a wholly accurate measure of the value of these benefits to households, as we mention at the end of this chapter.

We use these data to compute the full income of a low-income child, the median-income child, and a high-income child in each nation (from the distribution of all children). The low-income child is measured at the 10^{th} percentile (median of the bottom quintile) while the high-income child is measured at the 90^{th} percentile (median of the top quintile). We further refer to the difference between children living in families with high- and low-incomes as "economic distance" in making the comparisons which follow. We like to think of the measure of economic

distance as a measure of equality of opportunity within each nation. Nations with smaller economic distances (or smaller decile ratios) have more "equality of opportunity" across the population of children. We also like to focus on the distance between the middle-income child and the low-income child as a measure of "fair chance." All of this is designed to show which nations leave their children behind, which ones give them a good start, and by how much.

III. Differences in Welfare State Expenditures among Ten Advanced Industrial Nations

Figure 1 displays full aggregate social welfare benefits as a proportion of the Gross Domestic Product (GDP) for each of the ten nations we examine. Social welfare benefits are defined to include tax expenditures and employer provided health insurance and retirement benefits.[3] Although other nations also have employer provided retirement pensions, the United States private system is larger and none, save the United States, has employer provided health insurance. Thus for the United States, we have two bars: one that counts and one that does not count employer provided health expenditures.[4] Several points stand out.

First, all of the countries spend a substantial fraction—at least one fourth—of their GDP's on social welfare. Second, there is some variation within the English speaking countries, with the United States spending nearly as much as the United Kingdom, if tax subsidized, employer provided health insurance is counted, but less than Canada and Australia if employer provided insurance is not counted. Indeed, if employer provided health insurance is subtracted from the United States, total social welfare expenditures would amount to only 21 percent. Third, and most important for this volume, in the broader context of the continental West European and Scandinavian nations, the differences among the English speaking nations are small compared to the differences between the English speaking nations and the continental European and

Scandinavian nations. The English speaking nations spend the least, the European nations substantially more, and the Scandinavian nations spend the most. These patterns are consistent with findings of other comparative studies (Kamerman and Kahn 1978; Smeeding, O'Higgins, and Rainwater 1990; Esping-Andersen 1990; Smeeding 2004). Most of the differences are attributable to history, culture, and political choices. The Scandinavian countries have strong labor movements and social democratic parties that are committed to reducing class and gender inequalities. The continental European countries have strong Catholic parties that after World War II, when faced with the threat of Communism, became committed to providing security for the population through a corporatist social structure (Lindert 2004). The English speaking countries have a strong 19th century liberal belief in limited government (Kamerman and Kahn 1978; Esping-Andersen 1990; Hollingsworth, Schmitter, and Streeck 1994; Gornick and Meyers 2003; Huber and Stephens 1999).

If the gross value of cash transfers is adjusted to take account of income taxes on the transfers and the level of indirect (sales and value added) taxes, the differences across countries in social welfare expenditures shrinks considerably. Figure 2 displays the proportions of GDP for both gross and net social welfare expenditures. It is apparent from Figure 2 that 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. And, amongst the English speaking countries, the United States relies least on indirect taxes and taxing cash transfers. Sweden still spends the most and the English speaking countries the least for either gross or net, but when the more appropriate net expenditures measure is used instead of gross expenditures, the ratio of Swedish to United States expenditures declines substantially - from about 1.5 to about 1.2.

Although welfare state expenditures relative to GDP is a good indicator of the degree to which countries differ in the proportions of their incomes devoted to the welfare state, such differences are not a good indication of the absolute amounts of expenditures devoted to welfare state expenditures. For example, though Sweden devotes over 40 percent of GDP to welfare state expenditures, compared to the United States proportion of 25 percent, Sweden's GDP per capita is only 70 percent of the United States GDP per capita. Consequently, in absolute terms, the United States spends a lot more than 25/40 of what Sweden spends on a per capita basis. Therefore, to compare absolute levels of expenditures across countries, we multiply the proportions of GDP devoted to social welfare expenditures in every nation (Figure 1) by the ratio of its GDP to the United States GDP. The results, presented in Figure 3, indicate that real per capita social welfare expenditures in the United States are substantially larger than expenditures in the other three English speaking nations. Indeed, except for Sweden, United States expenditures are larger than those in all other countries.

Figures 1 and 2 also display the major domains of welfare state expenditures. In most countries the biggest single source of welfare state expenditures is for cash retirement pensions - including employer provided pensions. The second biggest expenditure is on health. Spending on education and cash transfers other than retirement pensions are the third and fourth largest components in all countries and on average are nearly equal across countries. In view of the large size of health and education expenditures and to a lesser extent, other in-kind benefits, studies that take account of only cash transfers are omitting very large components of what the welfare state does. Though we do not attempt to estimate the effects of other in-kind benefits, we make a first attempt at incorporating in-kind benefits into the comparative analysis of welfare states by taking account of health and education expenditures in our estimates of how the welfare state affects opportunities for children.

There are a few other aspects of the nature of the American and more generally the English speaking welfare state(s) that stand out in Figure 1 and merit comment. The most striking feature of American social expenditures, compared with other industrialized countries, is how much more is spent on health. Indeed, more than a third of United States social expenditures are spent on health![5] The main reason the United States differs from others is that we pay much higher prices for health care than do other nations. Anderson et al. (2003) suggests that the United States is below the OECD median in terms of health services use, but with total health care spending per capita ($4,631 in 2000 dollars) that is more than twice the OECD median ($1,983). This suggests that Americans pay more but receive fewer health care services in return than do people in most OECD nations.

The United States, which was a pioneer in free public education in the first half of the 19th century and led the expansion of secondary and higher mass education throughout most of the 20th century in this area (Heidenheimer and Laysen 1982; Lindert 2004), is no longer in the lead. A primary reason for this is that the United States lags behind the Scandinavian countries, France, and the United Kingdom in expenditures on early childhood education programs.

The United States also spends far less than all of the other countries on cash transfers other than pensions. These other cash transfers include, in the United States, Unemployment Insurance, TANF (Temporary Assistance for Needy Families), EITC (Earned Income Tax Credit), child credits and deductions in the income tax and in other countries child allowances, family leave, and sickness insurance (see Figures 4 and 5 below). The pattern is similar for "other in-kind" benefits—including programs such as family services, services for the elderly or disabled, child nutrition, food stamps, etc.—with the United States being on the low side. Finally, social spending on housing is very small everywhere. At 2 percent, the United Kingdom is the biggest spender. France, which spends only half that amount, is the next most generous.

But OECD housing data is limited– including only cash expenditures, and not in-kind or tax expenditures.

It is worth dwelling on the uniqueness of the United States in the small amount of its resources devoted to cash and near-cash social transfer programs for the nonelderly. In 1999 (latest year available for all nations data), the United States spent less than 3 percent of GDP on cash and near-cash assistance for the nonelderly (families with children and the disabled). This is less than half the amount spent by Canada or the United Kingdom; less than a third of spending in Germany, the Netherlands, or Belgium; and less than a quarter of the amount spent in Finland or Sweden. Thus, disposable income comparisons for families with children, which have dominated previous research, will reflect these lesser cash and near-cash expenditures.

In order to examine these differences, we show the generosity of income transfer programs by tracing the trend in nonelderly (omitting pensions) cash and near-cash (food and housing) benefits for OECD countries back over the past 20 years, using data from the OECD (2002c). We present these estimates in comparable format in Figure 4. Here the 17 OECD nations, all of the major nations except for the Central and Eastern Europeans, have been grouped into six clusters: Scandinavia and the Nordic nations (including Finland and Sweden); Northern Europe (including Belgium and the Netherlands); Central and Southern Europe (including France and Germany); Anglo Saxon (including Australia, the United Kingdom, and Canada); the United States; and Mexico. Our ten nations are shown in bold at the bottom of the figures.

The Scandinavian and Northern Europeans shown in Figure 4 follow similar patterns—high levels of spending which varied with the recession of the early 1990s in Sweden and Finland (when transfers rose and GDP fell), and a tapering of outlays after these events. The Central and Southern Europeans and the Anglo Saxon nations show remarkably similar spending

patterns, again rising in the early 1990s, but overall at a level distinctly below that of the other two groups.

In fact, our cash benefits to nonelderly (mainly families with children) differ from the other Anglo nations, as well. Figure 5 shows that only in the early 1980s did we spend an amount near what the Australians spent, and always below spending in Canada and the United Kingdom. Since then, we have increasingly diverged from the amount spent in Australia, Canada, and the United Kingdom. The United States is significantly below all these others and, by the late 1990s is spending at a level closer, in terms of a fraction of GDP per capita, to Mexico (Figure 4) than to the other richer OECD nations, including the other three Anglo nations. Even before the "Bush revolution," we are a distinct lower bound outlier in cash social spending on the nonelderly. On the other hand, we spend nearly as much or more on health and education. Consequently, we expect that incorporating education and health benefits into the analysis of resources available to children should have bigger effects in the United States than in other countries.

IV. The Redistributive Effects of Expenditures and Relative Living Standards for Children

Having established that there are small but potentially significant differences in the size and nature of the English speaking welfare states, and even larger differences between the English speaking and continental West European and Scandinavian countries, we investigate next the degree to which these differences effect the distribution of resources for children within countries. As explained above, we examine only a subset of the social welfare benefits displayed in Figure 1. In particular, public housing and some other in-kind benefits, like higher education benefits, are omitted from the analyses below. Moreover, we focus on benefits to families with

children in this paper, excluding those benefits and taxes which accrue to the elderly and to the childless nonelderly.

Table 1 displays the mean net benefits of health, education, and cash social welfare expenditures, minus taxes, as a percent of equivalent market income by household quintiles for all households with children. The term equivalent is designed to remind the reader that household income is divided by the square root of household size. For the entire population, taxes equal benefits, including benefits for the aged as well as children, but Table 1 displays the results for only the population of families with children (ranked by overall equivalized market income). The 747.8 figure in the first column of the first row, for example, indicates that in Australia, the average child in the 1st quintile receives net benefits equal to nearly 8 times their family's market income. Similarly the 21.9 figure in the next to last column of the first row indicates that in Australia, the average child in the fifth quintile loses nearly 22 percent of market income as a net result of welfare state transfers and taxes. Finally, the 3.6 figure in the last column indicates that in Australia, families with children pay just a little bit less in taxes to finance social welfare benefits than the benefits they receive, such that the net benefit to families with children equals 3.6 percent of market income.

Several findings stand out from the table. First, in all of the countries, welfare state benefits, net of taxes, substantially increase—from 60 percent to well over 1000 percent—the resources available to children in the bottom quintile. The increases are large because market incomes in the bottom quintile in all countries are low and social welfare benefits are high. Second, in all the English speaking nations children in the bottom quintile get a very high proportion of their full income from welfare state benefits—ranging from over half in the United States to close to 90 percent in the United Kingdom. The proportions are so large because so

many of the parents in the bottom quintiles of these countries are single mothers with little or no earnings.

Third, in all countries the taxes required to finance welfare state benefits take away a non-trivial proportion of resources from families with children in the top quintile—from 12 percent to 28 percent. Finland, the United States, and the Netherlands take away the least. Perhaps the most surprising finding in the table is that the Scandinavian nations take away less from the top quintile than the continental European nations.

Fourth, as shown in the last column that gives the net tax-benefit for families with children, taxes paid and benefits received are close to equal in most nations. Still there are some notable differences. Finland has the highest net benefits to families with children relative to taxes paid by those families, and the net benefits increase market income by 7 percent. In Belgium and France, families with children are net tax-payers and lose 9 percent of market income. In all other nations, net benefits or taxes are within 5 percent of market income.

Relative Well-Being of Children Within Countries

To replicate prior research, we begin our analyses with cash disposable income, which adds to market income cash and near-cash transfers and subtracts direct taxes. Figure 6 presents data on the distribution of cash disposable incomes among children in ten nations. The first column presents the ratio of incomes of the child at the 10^{th} percentile compared to the income of the child at the median—a fair chance. At 39, the United States has the lowest ratio. The ratios for the other English speaking nations range from 45 to 53. The continental European nations have ratios in the 50's and the two Scandinavian nations have ratios of 63. Similarly, the ratio of the 90^{th} to the 50^{th} percentile are generally highest in the English speaking countries and lowest in the Scandinavian countries, with the United States and United Kingdom having the greatest distance between the median and upper-income child. Finally, the economic distance between

the child at the 10th percentile and the child at the 90th percentile—our measure of an equal opportunity chance—is greatest in the United States, with the child at the 90th percentile having 5.24 times the income of the child at the 10th percentile. The other English speaking nations have ratios in the high 3's; the continental nations have ratios in the high 2's or low 3's; and the Scandinavian countries have ratios of just under 2.5. These patterns conform with previous LIS research (Smeeding and Rainwater 2002; Smeeding 2002; 2004).

Figure 7 presents data on the distribution of after tax, after transfer full incomes among children in our ten nations. Taking account of non-cash transfers and the indirect as well as direct taxes required to finance them changes the results substantially. The 10/50 ratio rises in all countries and, except for Finland, the distance between the poor and rich child shrinks in all countries. Among the English speaking nations, though the United States still has the largest 90/10 ratio, with respect to the 10/50 ratio the United States is closer to the top than bottom, and most important the differences across Anglo countries in both measures are small. And while the English speaking nations still have the lowest 10/50 ratios, and the Scandinavian countries the highest, the differences between these groups have shrunk considerably. The differences in the 10/50 and 90/10 ratios between the least and most unequal countries—the United States and Sweden—shrink, respectively, from 62 percent to only 10 percent and from 212 percent to only 145 percent.

Why do the results change so dramatically when we include the value of the in-kind education and health benefits and take account of the taxes required to finance these benefits? There are two reasons, both already discussed. First, as seen in Figures 1, 4, and 5, compared to other advanced industrialized nations, the United States is short on cash and long on in-kind benefits. Second, as seen in Figure 3, the big spending welfare states rely more heavily on indirect taxes and taxation of cash benefits than the United States. Together, these two factors

explain the big shift when we go from cash disposable income to full income. The point becomes even clearer by a quick perusal of Table 2, which provides data on median and mean welfare state benefits for families with children in our ten countries. These benefits are per household—i.e., not equivalized or per child.

Whereas the United States provides the lowest cash benefits to households with children of all countries except Australia (where average cash and near-cash benefits are about the same in real terms), it provides far and away the highest values of education and health benefits of all countries (whether viewing mean or median value) and therefore, the highest total benefits to families with children. While we provide on average 14 percent of benefits in cash, we provide the rest—85 percent—in health and education (with education nearly half of all benefits for kids all by themselves). In other nations, average cash benefits are twice as high as a percent of total benefits, while non-cash health benefits are much lower. Education spending makes up between 40 and 48 percent of total benefits in every nation. For those of us who cling to the notion that the United States welfare state is undersized, the absolute size of the United States total mean and median welfare state benefits per household with children—$22,259 (or $23,982 mean)—is staggering once one includes health and education spending.[6]

Sensitivities

The results in Figure 7, however, may be sensitive to a number of assumptions underlying the simulations, including: 1) non-cash benefits are the same value for rich and poor children and 2) cross national differences in expenditures on health and education measure real differences in quantity of services. With respect to the first assumption, for the United States, for example, we take some account of differences in health benefits but not in education. If school spending (relative to children's needs) is lower for low-income children compared to high-income children, the result might be somewhat different. Card and Payne (1998), Wilson (2000),

and Duncombe and Yinger (1997) find that public school spending in the United States may differ by up to 50 percent between rich and poor districts.[7] Wilson, Lambright and Smeeding (2004) find that while per student benefits differ across the parental income distribution by only about 10 percent, when corrected for differences in needs due to poverty, disability and English as a second language, benefits for top quintile children are 25 to 30 percent larger than for poor children. If poor children received education benefits of only two thirds to half those received by rich children, the results for the United States would be closer to the results of Figure 6. But, expenditures on schooling may differ by income class in other countries besides the United States.

The valuation of in-kind benefits is particularly knotty in cross-national research. As we have seen, the United States spends substantially more on education and health than all other nations. In large part the differences are attributable to higher absolute salaries of doctors, nurses, school teachers and other personnel in the United States (Anderson et al. 2003). It is hard to believe that the differences in expenditures translate dollar for dollar into differences in the quantity and quality of services received. One simple way to address this issue empirically is to assume that the quantity and quality of education and health services is the same across nations. Thus we simulate equal benefits of education and health across nations, using the mean benefit across nations, but preserving the difference in financing costs. This has the effect of seriously discounting the value of United States health and education benefits. In a second simulation, we used estimates of purchasing power parity (PPP) to estimate adjusted health care expenditures where the quantity of care is controlled for. This adjustment reduces differences across nations, but does not eliminate them.

Figures 8 and 9 present the results from these simulations and Table 3 summarizes results from Figures 6, 7, 8, and 9 for the United States compared to the average nation. Table 3

suggests that the quantity adjusted, or "PPP", results for the United States are still very close to the original "full value" simulated results. Even the results for the equal benefit value across all nations' scenario are closer to the full income than to the disposable income results. Hence, no matter how we have valued benefits in this paper, they make a large difference in resources for children across all nations and especially to United States children.

Under all scenarios examined, taking account of health and education expenditures substantially reduces differences among nations in general and improves the position of United States children in particular. The remaining differences between the English speaking, continental, and Scandinavian countries are large enough to make us confident that they are real. But, among the English speaking nations, the differences are small enough relative to our knowledge regarding distributions of expenditures and the appropriate valuation of expenditures to give us pause.

The sensitivity of our results also points to the need to undertake research on differences in expenditures on health and education within countries by income class (as in Wilson, Lambright, and Smeeding 2004). But there are other conceptual problems. Even if the expenditures were equal across income classes, the value of benefits to children might differ by income class. For example, per pupil expenditures in some inner city American schools are equal to and, in some cases, higher than expenditures in their suburban counterparts. But the inner city schools have inferior physical plants, inferior teachers, more difficult to educate students, and more disciplinary problems resulting in unequal learning opportunities (Phillips and Chen 2003). Similarly, the quality of health care varies substantially within cities where Medicaid financed low-income clinics and public hospitals deal with different populations than do their suburban counterparts. It is not clear how to address these issues empirically.

More generally, it is not clear that expenditures should be valued at government cost. Economists generally assume that in-kind benefits are worth less to recipients than the cash equivalent value would be. These differences are liable to be the largest where the ratio of in-kind to cash income is the largest, among poor children and their families. Since the 10/50 ratio for low-income children rises by almost 50 percent (from 39 to 58) once these benefits are added in, the differences between market value (government cost) and recipient value are liable to be largest for low-income families. And because high-income units are net taxpayers and are also more mobile than are low-income families, one should assume that the high-income family values education and health benefits closer to their market value (government cost).

Both discounting in-kind benefits in general and discounting them more for lower income groups would make the results look more like the disposable income than the full income results. On the other hand, it could be argued that we have underestimated the value to children of the in-kind benefits because though education is targeted exclusively at children, we add the value of education to household disposable income and then divide by the square of household size to obtain equivalent income per child. Arguably, it would be more appropriate to add the value of education per child to equivalent disposable income. Doing so would give more even more weight to the in-kind benefits. Future research should examine the sensitivity of results to all of these variations.

V. Summary and Conclusion

This paper estimates the redistributive effects of welfare state expenditures on children and disparities in the economic well-being of children in ten nations. Data on cash and non-cash social welfare benefits are used to describe differences in the size and nature of welfare states. We combined aggregate OECD data on social welfare expenditures with micro data on

households from the Luxembourg Income Study (LIS) to estimate the redistributive effects of the expenditures and to construct measures of the differences in the relative standard of living among children at various points in the income distributions of their countries.

Similar to previous research, we find that the English speaking nations devote less of their GDP to social welfare spending than do the continental European and Scandinavian nations. Differences amongst the English speaking nations are smaller than the differences between the English speaking and other nations. Amongst the English speaking nations, the United States ranks last if employer provided health benefits are not counted, but second, just below the United Kingdom, if employer provided health insurance benefits are counted. Differences between countries are substantially narrower for net social welfare expenditures than for gross social welfare expenditures. Because the United States GDP is so much higher than the GDP of the other nations, however, per capita social welfare expenditures in the United States are the second highest, just a bit below the level in Sweden, and substantially higher than levels in all other English speaking nations. Finally, the United States spends much less on cash and near-cash assistance than other countries and as much or more on education and health.

In all nations, the redistributive effects of social welfare expenditures are large—both in raising the level of resources at the bottom and reducing levels of resources at the top. In general, the English speaking nations raise the bottom the most because such a large proportion of children at the bottom are cared for by a non-working single mother.

Similar to previous research, we also find that poor children in English speaking nations are relatively worse off than their continental European and, especially, their Scandinavian counterparts. These rankings remain even after taking account of in-kind benefits and the taxes required to finance them, but the differences are narrowed substantially. When cash disposable income is the metric, the difference between the 10/50 ratio in Sweden and the United States is

nearly 2 to 1 and the difference in the 90/10 ratio is more than 2 to 1. These differences shrink by at least half when health and education benefits are valued at cost and added to cash incomes net of the taxes used to finance these benefits. Moreover, the relative rankings within the English speaking nations are very sensitive to assumptions about how expenditures are distributed across income classes.

How to value in-kind benefits is problematic both conceptually and empirically (Smeeding 1982). In this paper, we have taken only a first stab at the problem. But, conceptually it is clear that these benefits are worth something to both rich and poor children. Empirically, health and education are a much larger part of what the welfare state does for families with children than are the provision of cash benefits in all nations and most especially in the United States.

Endnotes

1. We assume that employer payroll taxes and employer provided health insurance in the United States are taken from wages that employers would otherwise pay. Thus, the "incidence" is on labor and to calculate income gross of benefits, we added these to market income. Direct taxes—personal income and employee payroll taxes—were allocated to the households and workers paid for them. Corporate taxes and value added taxes were assumed to be shifted to the consumer and were allocated according to total consumption (see text). Property taxes are assumed to fall on owners and renters and were distributed in proportion to housing consumption.

2. OECD data on early childhood education are by their own admission incomplete and inaccurate. Sources provided by Gornick and Meyers (2003) were more complete and consistent, except for subsidized child care for children under age three, where data is even less complete. Consequently, we omitted child care for children under age three.

3. Tax expenditures for housing are not counted.

4. The distribution of expenditures varies systematically with their provider. If tax expenditures and employers subsidize 'social' spending, the distribution of these benefits will be much more pro-rich than if the distribution is subsidized by governments directly.

5. Furthermore, Chart 1 understates how much more Americans spend on health than citizens of other countries because private, out of pocket, health expenditures, which are quite substantial in the United States—another 2 percent of GDP—are not reflected in the table.

6. Of course the taxes needed to pay for these benefits should also be counted. This will be addressed in the next draft.

7. In a recent study, Wilson, Lambright, and Smeeding (2004) find that elementary and secondary education benefits to rich children are 28 percent higher in the highest quintile than the lowest quintile once one takes account of the extra costs of educating limited English proficiency children and poor children.

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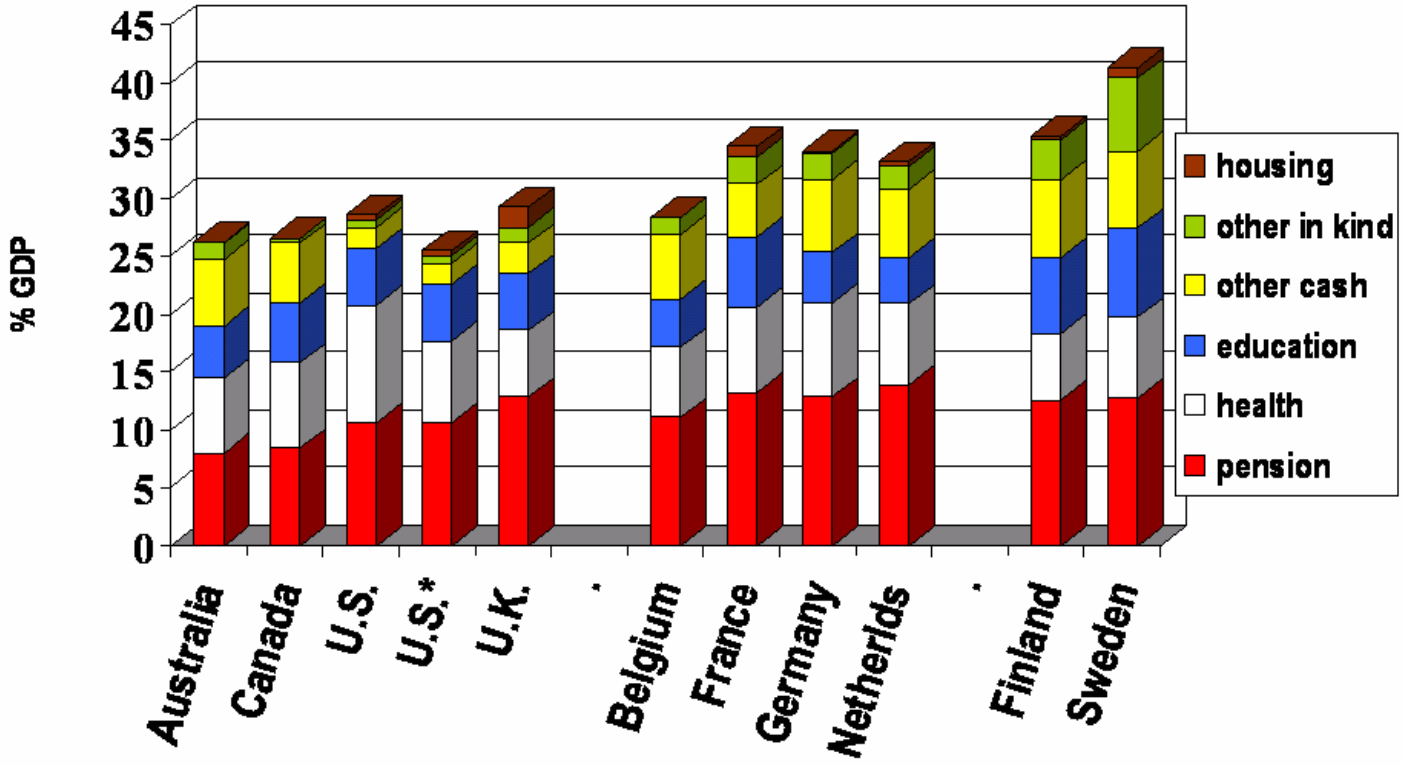
Figure 1

Size and Composition of the U.S. and Other Welfare States

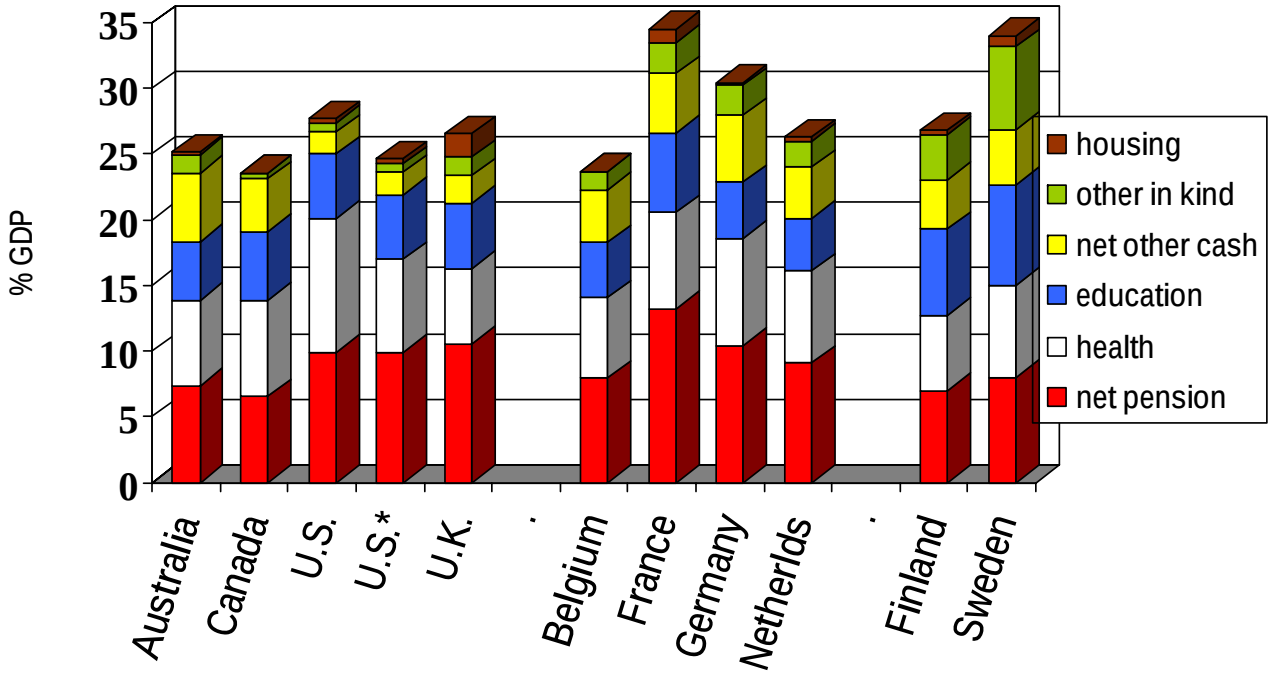
FY 1997



*Does not include employer-provided health benefits.

Figure 2

Net Size and Composition of the U.S. and Other Welfare States



*Does not include employer-provided health benefits.

Figure 3

Per Capita Social Welfare Expenditures Relative to the United States FY 1997

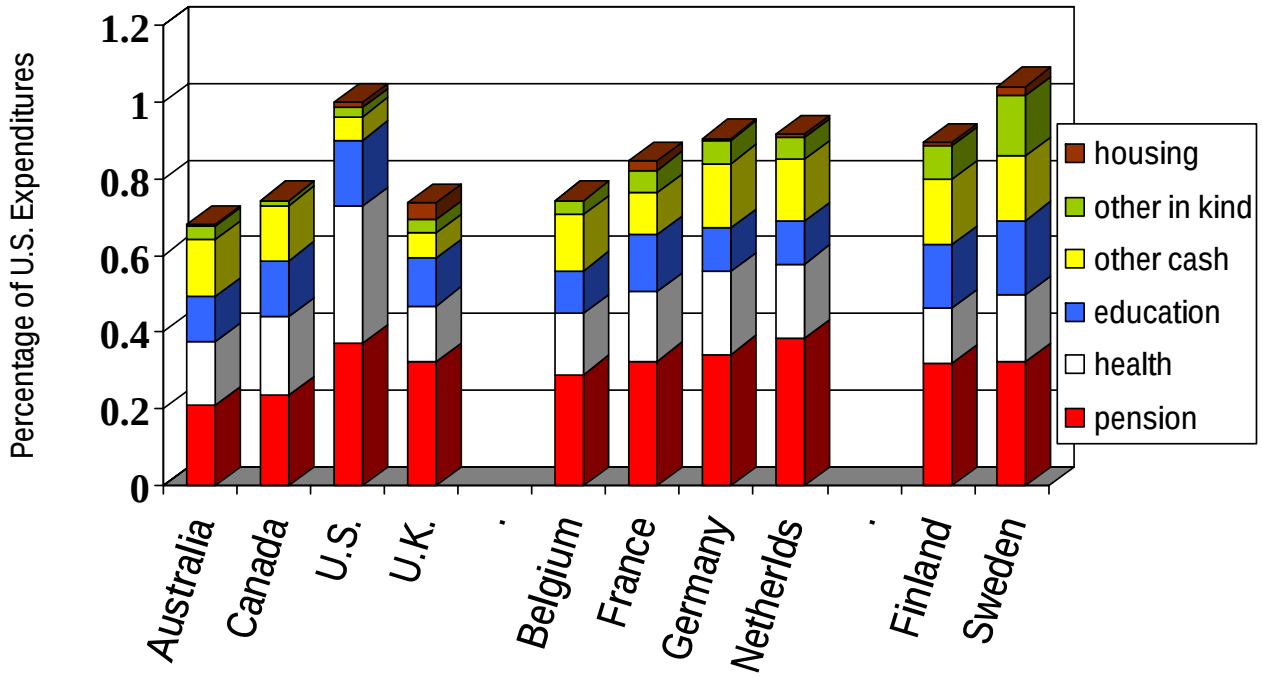
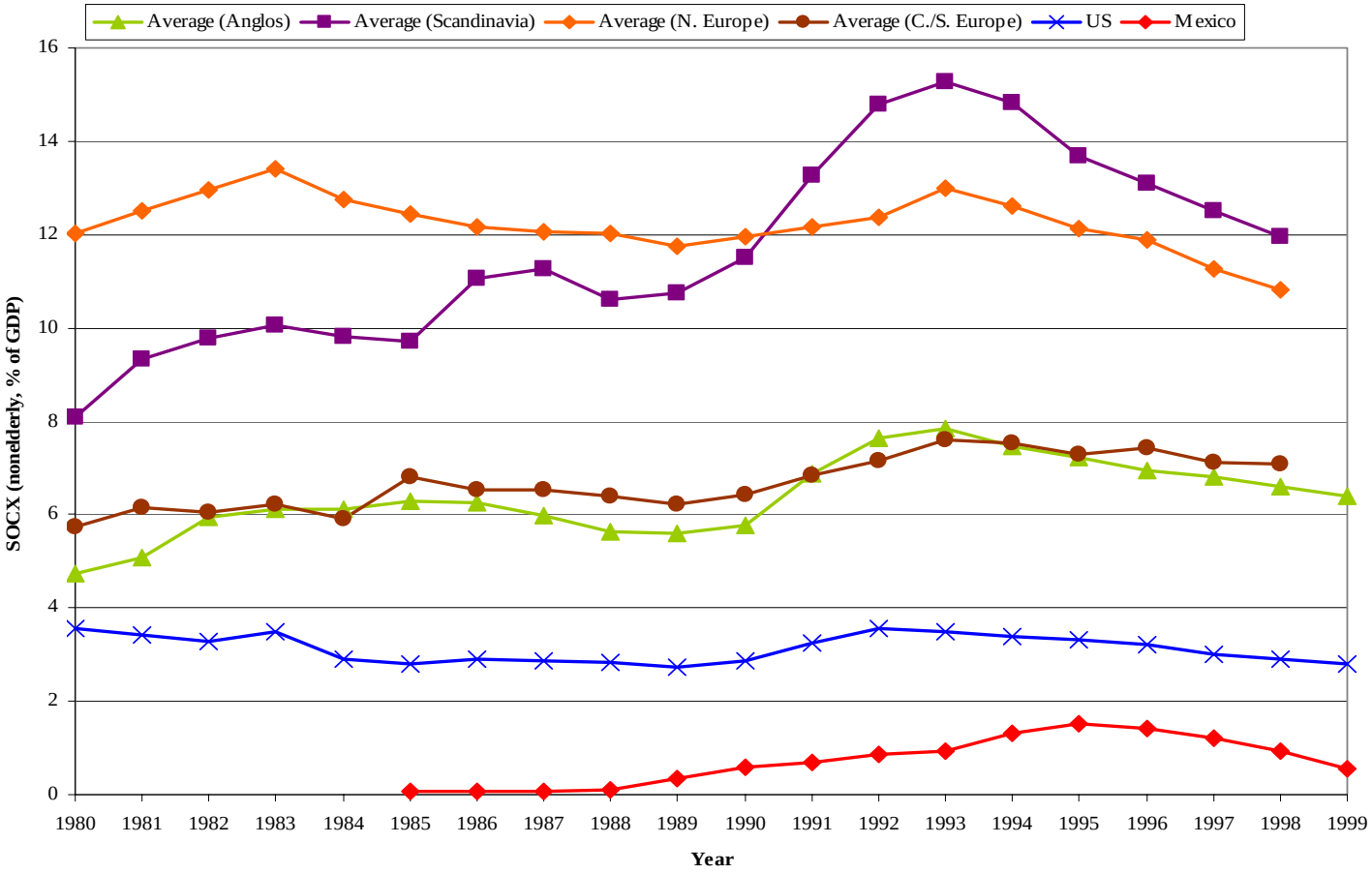


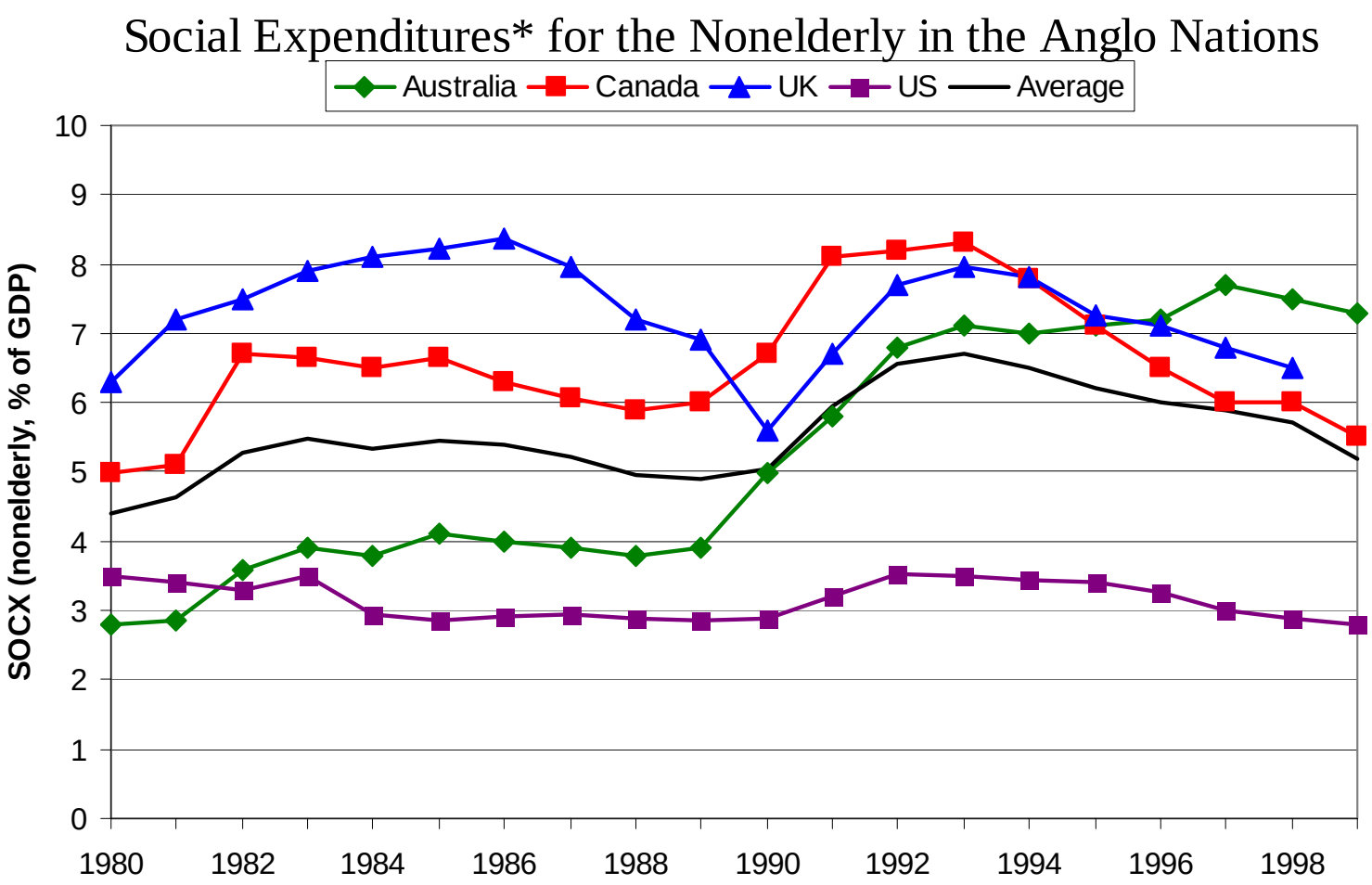
Figure 4

Nonelderly Social Expenditures in 6 sets of 17 Nations*



* Total Nonelderly Social Expenditures (as percentage of GDP), including all cash plus near cash spending (e.g., food stamps) and public housing but excluding health care and education spending. OECD (2002c). Anglos include **Australia**, **UK**, **Canada**; Scandinavia includes **Finland**, Norway, **Sweden**; Northern Europe includes **Belgium**, Denmark, **Netherlands**; Central/Sourthern Europe includes Austria, **France**, **Germany**, Italy, Luxembourg, Spain.

Figure 5



Source: OECD (2002c).

*Total noneldery expenditures (as percentage of GDP), including all cash plus near cash spending (e.g., food stamps) and public housing but excluding health care and education spending.

Figure 6

Children's Relative Economic Well-being

(numbers given are percent of children's median equivalent disposable income in each nation)

	P10/P50 (Low Income)	Economic Distance — Length of bars represents the gap between high and low income children	P90/P50 (High Income)	P90/P10 (Decile Ratio)
Australia 1994	49		175	3.58
Canada 1997	45		176	3.91
United Kingdom	53		208	3.93
United States 2000	39		207	5.24
Belgium 1997	53		155	2.89
France 1994	56		182	3.23
Germany 2000	56		168	3.00
Netherlands 1999	55		152	2.77
Finland 2000	63		154	2.43
Sweden 2000	63		156	2.47
Average	53		178	3.57

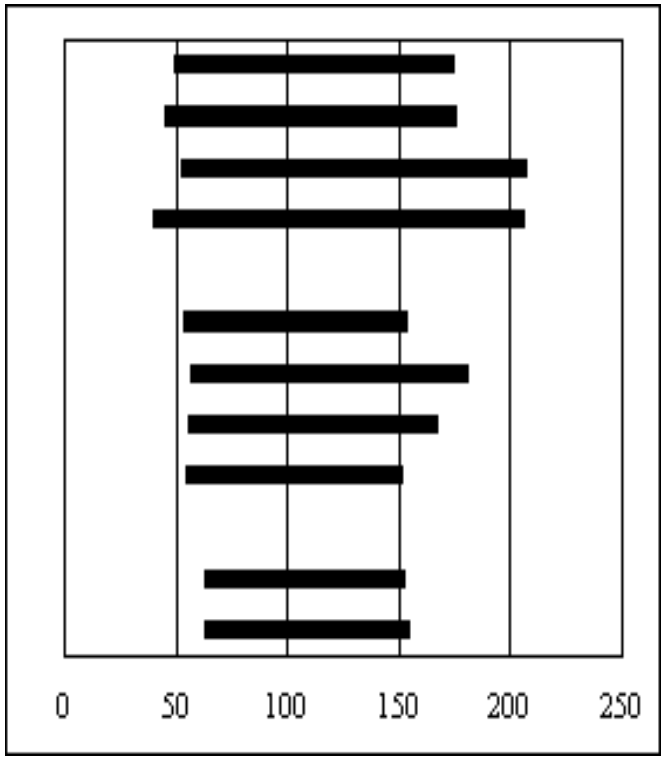


Figure 7

Children's Economic Well-being based on Full Income

(numbers given are percent of children's median full income in each nation)

	P10/P50 (Low Income)	Economic Distance — Length of bars represents the gap between high and low income children	P90/P50 (High Income)	P90/P10 (Decile Ratio)
Australia 1994	58		158	2.71
Canada 1997	54		161	2.96
United Kingdom 1999	59		175	2.96
United States 2000	58		181	3.12
Belgium 1997	61		158	2.59
France 1994	63		161	2.57
Germany 2000	62		155	2.52
Netherlands 1999	64		149	2.33
Finland 2000	63		155	2.48
Sweden 2000	68		146	2.15
Average	61		162	2.72

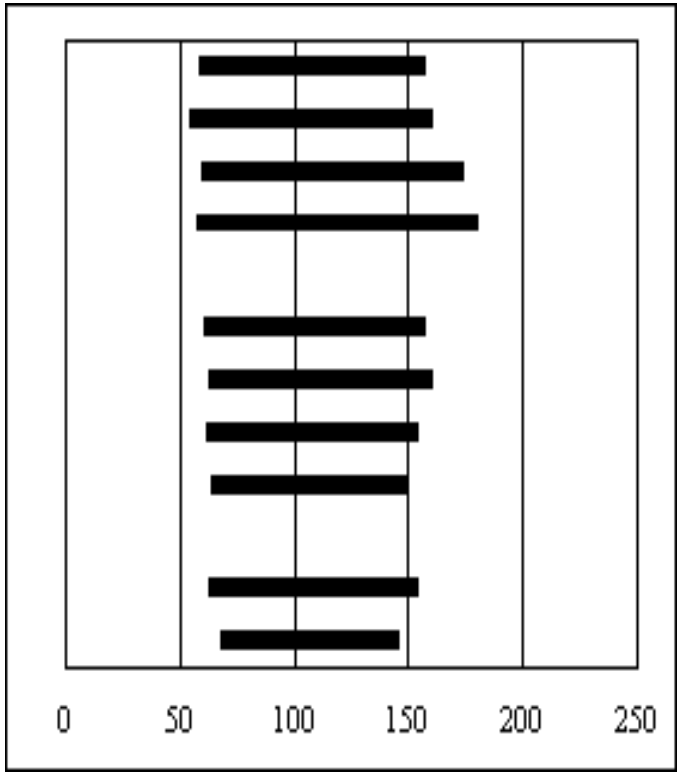


Figure 8

Children's Economic Well-being based on Quality Adjusted Full Income

(numbers given are percent of children's median quality adjusted full income in each nation)

	P10/P50 (Low Income)	Economic Distance — Length of bars represents the between high and low income children	P90/P50 (High Income)	P90/P10 (Decile Ratio)
Australia 1994	58		158	2.72
Canada 1997	54		161	2.97
United Kingdom 1999	58		172	2.95
United States	56		182	3.24
Belgium 1997	61		159	2.62
France 1994	63		161	2.55
Germany 2000	62		152	2.44
Netherlands	63		154	2.43
Finland 2000	63		155	2.47
Sweden 2000	68		149	2.18
Average	61		162	2.68

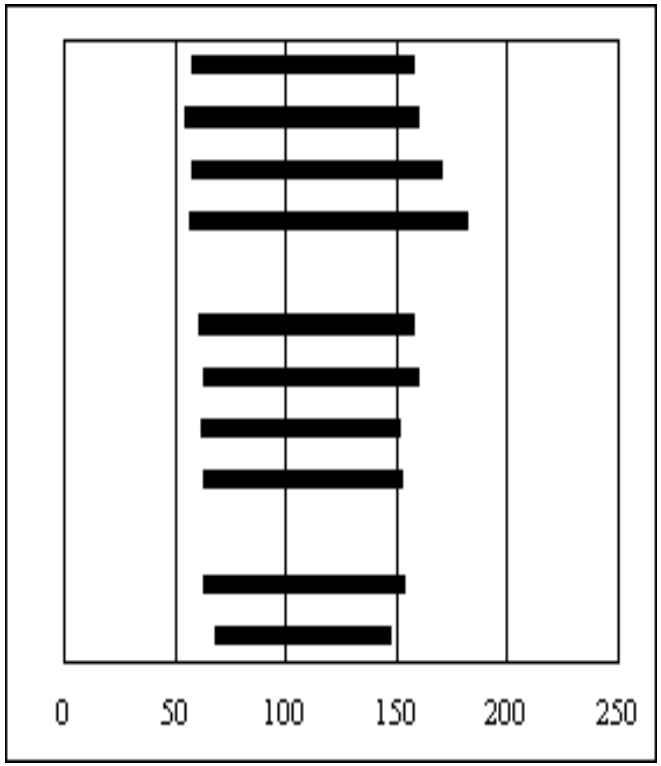


Figure 9

Children's Economic Well-being based on Full Income Adjusted for 10 Nation Average Benefits

(numbers given are percent of children's median full income adjusted for 10 nation average benefits in each

	P10/P50 (Low Income)	Economic Distance — Length of bars represents the between high and low income children	P90/P50 (High Income)	P90/P10 (Decile Ratio)
Australia 1994	62		153	2.48
Canada 1997	54		161	2.98
United Kingdom 1999	60		171	2.86
United States	52		195	3.74
Belgium 1997	62		155	2.49
France 1994	64		158	2.48
Germany 2000	61		156	2.55
Netherlands	64		148	2.30
Finland 2000	63		153	2.43
Sweden 2000	68		149	2.20
Average	61		162	2.74

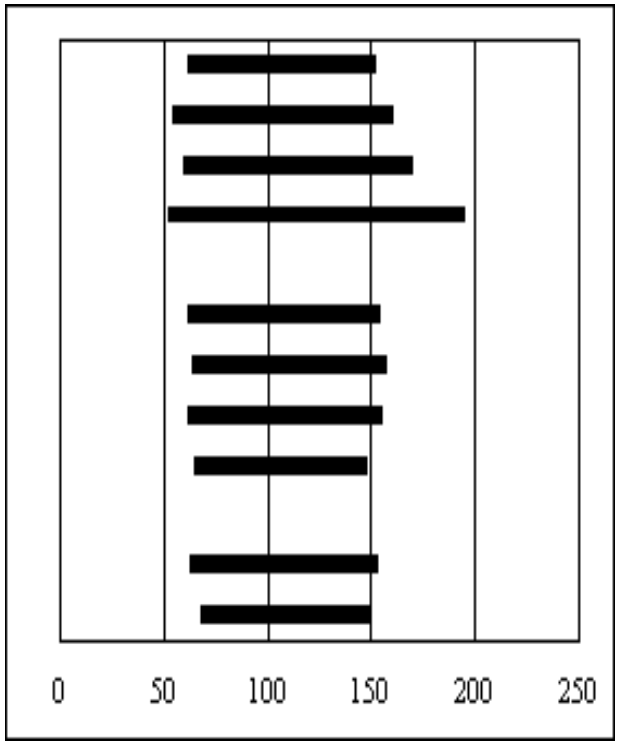


Table 1

Mean Net Total Benefits to Households with Children (transfers, school, daycare, health) as a Percent of Market Income by Households Equivalent Market Income Quintile

NATION	**LOW**	**2**	**3**	**4**	**HIGH**	**TOTAL**
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	7724.1	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: This table uses the mean net benefit and mean market income of each quintile to compute the percentages.

Table 2. Benefits to Households with Children
(in real 2000 U.S. PPP Dollars)

A. Medians[1]

Nation	All Benefits	Cash and Near Cash Transfers	Noncash Benefits: Education	Noncash Benefits: Health	Percent Shares[1]: Cash and Near Cash Transfers	Percent Shares[1]: Education	Percent Shares[1]: Health
Australia 1997	$ 11,053	$ 978	$ 4,055	$ 3,512	8.8	36.7	31.8
Canada 1997	17,852	2,579	6,844	4,883	14.4	38.3	27.4
United Kingdom 1999	15,561	2,769	6,625	3,625	17.8	42.6	23.3
United States 2000	22,259	226	8,537	8,856	1.0	38.4	39.8
Belgium 1997	16,951	3,875	6,238	4,011	22.9	36.8	23.7
France 1994	15,118	3,380	6,510	4,101	22.4	43.1	27.1
Germany 2000	16,703	3,916	6,674	5,006	23.4	40.0	30.0
Netherlands 1999	15,138	2,400	8,250	4,343	15.9	54.5	28.7
Finland 2000	15,453	5,437	6,079	3,283	35.2	39.3	21.2
Sweden 2000	19,790	6,676	7,237	4,590	33.7	36.6	23.2

B. Means

Nation	All Benefits	Cash and Near Cash Transfers	Noncash Benefits: Education	Noncash Benefits: Health	Percent Shares[1]: Cash and Near Cash Transfers	Percent Shares[1]: Education	Percent Shares[1]: Health
Australia 1997	$ 12,681	$ 3,809	$ 5,289	$ 3,583	30.0	41.7	28.3
Canada 1997	18,835	5,510	8,318	5,007	29.3	44.2	26.6
United Kingdom 1999	17,928	6,799	7,531	3,598	37.9	42.0	20.1
United States 2000	23,982	3,372	11,404	9,206	14.1	47.6	38.4
Belgium 1997	18,801	7,122	7,566	4,113	37.9	40.2	21.9
France 1994	17,446	5,631	7,624	4,191	32.3	43.7	24.0
Germany 2000	18,726	5,916	7,910	4,901	31.6	42.2	26.2
Netherlands 1999	16,404	4,392	7,879	4,133	26.8	48.0	25.2
Finland 2000	17,429	7,143	7,032	3,255	41.0	40.3	18.7
Sweden 2000	22,193	9,014	8,774	4,405	40.6	39.5	19.8

Source: Authors' calculations from the Luxembourg Income Study.

Note:[1]There is no reason for medians to add to 100 percent.

Table 3. U.S. In Comparative Perspective					
	P_{10}		P_{90}		P_{90}/P_{10}	
Income Measure	US	Average	US	Average	US	Average
Cash[1]	39	53	207	178	5.24	3.57
plus Full Value[2]	58	61	181	162	3.12	2.72 [5]
plus PPP Value[3]	56	61	182	162	3.24	2.68 [5]
plus Equal Value[4]	52	61	195	162	3.74	2.74 [5]
Notes:						
[1] Taken from Figure 6.						
[2] Taken from Figure 7.						
[3] Taken from Figure 8.						
[4] Taken from Figure 9.						
[5] Small differences in 90/10 averages are due to rounding errors.						

Appendix: Technical Imputation Description

We begin with Luxembourg Income Study net after direct tax and cash transfer disposable income for ten nations. To this cash and near cash data we add third party health care subsidies (public spending in all nations, and employer subsidies in the United States) and education subsidies (public sector support for early childhood education (ECE), elementary and secondary schooling, but not tertiary schooling or public daycare for children under age three). We then subtract direct and indirect taxes, including the LIS direct taxes (income and payroll taxes), and also VAT (sales, excise), corporate taxes, and real property taxes. We next rebalance total taxes to just equal total expenditures for the entire population. Thus, we exclude taxes paid for government final goods and services, and only subtract out taxes to the extent that they equal overall benefits paid in each country.

We use OECD (2003) purchasing power parities to put all non-cash benefits into 2000 United States PPP adjusted dollars, nationally price indexed to the correct nation year (1997 to 2000 for all but France and Australia, both 1994). When given OECD or other PPP adjusted benefits, we can then convert these to country currency, or vice versa. (For instance, we use both ECE data provided by Marcia Meyers (2003), which comes from Danish sources and is in national currency, and OECD data in United States dollars.) Given imputed benefits and taxes, we then analyze the relative effects of both on the entire population. Here we report only the results for families with children and then only on a relative basis in these nations. Later work will expand our analyses to the whole

population and to other policy relevant groups. Here we present only the highlights of our imputation schemes and analyses. Additional detail is available from the authors.

Health Care Benefit

Health Insurance and third party expenditures on health care are the largest single element of non-cash benefit in every major country. We begin with OECD average public subsidy per person taken from OECD (2002a). These subsidies are given in Appendix Table A-1. The United States amount is not just public subsidy, but includes two additional amounts: employer subsidies, taken from the Employment Benefit Research Institute (2003), and an amount for the uninsured (about 15 percent of the United States population) who are receiving charity or other public care with a value of half of the amount provided by the public sector. Thus, for 2000, these per capita amounts are: $2,005 (public subsidy); $2,535 (employer subsidy); $1,002 (uninsured subsidy). From the Current Population Survey (CPS) data which underlie LIS we can separate the United States population into those with public subsidy (Medicare, Medicaid, other); those with employer provided insurance; and the uninsured (from estimates provided by Barbara Wolfe 2002), and assign each person an average subsidy. In every other country we just assign public subsidies alone.

We then decided to impute the "insurance value" of coverage to each person based on their age. That is, we take each national average per capita amount, assign that to 19-34 year olds, and from there adjust the insurance subsidy according to a person's age. The insurance value is the amount that an insured person would have to pay in each age category so that the third party provider (government, employer, other insurer) would just have enough revenue to cover all claims for such persons. The multipliers we used

were .75 for persons under age 18; 1.0 for persons age 19-34; 1.25 for 35-54; 1.75 for 55-64; 3.0 for 65-74; and 4.0 for those 75 and over. These age related factors were taken from a paper by Smeeding and Freund (2002) who surveyed the literature on the topic. The same adjusters were used in all countries. We then readjusted the individual amounts so that the overall average imputed benefit just equaled the OECD overall average subsidy (and OECD, employer and uninsured overall subsidies in the United States) in each country. The resulting amounts are shown in column 1 of Appendix Table A-1. The amounts ranged from $1,063 in Australia (1994), to $3,715 in the United States (2000). Germany, at $2,086, is the closest nation to the United States. These were the "base case" or "full benefit" imputed amounts used in the simulation.

We also used two other valuations of health care. In one case, reading Anderson et al. (2003), we were taken aback by the fact that even starting with OECD health care expenditure per capita, the United States (PPP adjusted!) expenses still produced a situation where the average United States resident was spending at least twice the amount of any other nation, but receiving a lower than average quantity of most health care services. Using the data in this article and other OECD data, Richards and Smeeding (2004) recalculated a new "PPP-adjusted" or "quantity-adjusted" expenditure per person using United States consumer expenditure weights, but normed to the ten country "average" market basket of health care items which we observe in each nation. Adjustments were made for physician visits, hospital days, technology use and availability, and other categories of expense common across these ten nations. When recalibrated to the average consumption of health care services across these ten nations, using United States weights for the amount of health care dollars spent on each item, we

arrived at the expenditures per person shown in column 2 of Appendix Table A-1. Note that the overall average PPP adjusted expenditure for the ten nations ($1,707) was very close to the $1,719 actual average expenditure. Average benefits rose in some nations (e.g., Germany), fell in others (e.g., United States), and were relationally close to the original amounts in others. The same age adjustments and overall benefit level adjustors were used to impute this set of health care benefits.

As a final technique, and to determine the affects of "equal" spending and thus the effect of "average" non-cash benefits alone in all nations, we assigned the overall average amount of $1,719 (bottom row, Column (1), Appendix Table A-1) to each and every person in each and every one of the ten countries. Again, we used the same age and overall benefit level adjustors to impute final amounts.

Education

We used OECD (2002b) data to obtain average primary and secondary public expenditure per pupil in each country year (columns 3 and 4 of Appendix Table A-1). These were assigned students according to starting and ending ages of primary and secondary school in each nation up to age 18. No account was taken of drop-outs or attending nonpublic schools. Each person received the same national average benefit according to OECD estimates. That was the easy part.

The hard part was determining the level and amount of spending for early childhood education (ECE) in each country. OECD (2002a) outlays were at odds with all other available data sources. Marcia Meyers (2003) was kind enough to share the data used in here recent book with Janet Gornick (Gornick and Meyers 2003) and to help us update these data. We used several sources including the Clearinghouse on International

Developments in Child, Youth, and Family Policy at Columbia University (http://www.childpolicyintl.org/) and the European Union "Eurydice" website (http://www.eurydice.org/). These sources gave us five parameters: (1) number of children using ECE benefits in each nation; (2) number receiving full day vs. half day benefits; (3) average amount spent per child per day; (4) average number of days attended; and (5) total spending in each country. We limited benefits to children aged three or over in the survey year; we randomly assigned children each benefit amount; and we integrated benefits in each nation with the year they began normal elementary schooling. Full details are available from authors.

These amounts are included in the overall average amount of benefit per child aged 3-18 in Appendix Table A-1, columns 3 and 4, bottom row. We also considered a "PPP" type adjustment for education based on the average pupil-teacher ratio in each nation. However, the overall average and variance were so small that we ignored these differences. Thus, our "PPP-Quantity Adjusted" benefits for education are the same as those shown in Appendix Table A-1, columns 3 and 4.

In our third and final simulation we assigned the overall average education benefit for elementary, secondary and ECE to each child in each nation. This amount, $5,181, is found at the bottom of columns 3 and 4 in Appendix Table A-1.

Taxes

We used OECD data on tax to GDP ratios and on the relative distribution of taxes by source for each nation, covering five taxes: personal income, payroll, corporate income, property, and "goods and services" (value added, sales, or excise) taxes. The LIS gives us the first two taxes directly (though the amount of employer payroll tax had to be

imputed and then counted in the tax balancing equations). We assumed the incidence of the corporate tax, and goods and services tax, was on the consumer, and thus distributed according to overall consumption; the incidence of the property tax was assumed to fall on housing consumption. We assigned corporate and "goods and services" taxes (and property taxes) according to LIS calculated ratios of overall expenditure (housing expenditure) to income ratios by LIS disposable income decile provided by Eva Sierminska and Thesia Garner from their LIS-based consumption work (Sierminska and Garner 2002). We then rebalanced all taxes to arrive at the average mix across taxes within nations, and to just equal total benefits paid in transfers or subsidies (cash and near-cash benefits, education, and health care) in each nation for the aggregate only. Hence, benefits just equal taxes in every nation. Again, greater detail is available from the authors upon request.

Appendix Table A-1.
National Health and Education Benefits for Each Country

	National	**Health Care**	**Education**[1]	
	(1)	(2)	(3)	(4)
Country	(OECD $/person)	(PPP adjusted)	Elementary	Secondary
Australia 1994	1063	1025	2810	4530
Belgium 1997	1420	1710	3633	5570
Canada 1997	1532	1437	5000	5900
Finland 2000	1276	1247	4136	6079
France 1994	1398	1387	3222	5761
Germany 2000	2086	2895	3929	6672
Netherlands 1999	1461	1334	4162	5670
Sweden 2000	1866	1684	5879	5973
United Kingdom 1999	1371	1197	3627	5608
United States[2]	3175	3151	6912	8537
Overall All Nation Average	$1719	$1707	$4331	$6030
Average across All Types of Benefit	$1719	$1707	$5181[3]	

Notes: [1]Overall Education benefits per child by type of schooling. Ages of schooling vary by country.
[2] Includes OECD public subsidies, plus employer and other third party subsidies.
[3] Overall average education benefit including ECE which is not separately counted above.