Article: "Patterns of Economic Inequality in Western Democracies:
Some Facts on Levels and Trends"
Author: Andrea Brandolini, Timothy M. Smeeding,
Issue: Jan. 2006
Journal: *PS: Political Science & Politics*

*This journal is published by the American Political Science
Association. All rights reserved.*

Patterns of Economic Inequality in Western Democracies: Some Facts on Levels and Trends

Introduction

A large body of research has documented comparative levels of inequality among nations and also the substantial change in inequality across and within nations. Political scientists, sociologists, and economists have used these databases to make a number of claims about changes in inequality and their interrelations with economic and political life, patterns of redistribution, social institutions, and social and individual wellbeing more generally.

High income inequality is often seen as a threat to the social fabric. The recent report on *American Democracy in an Age of Rising Inequality* states right at the beginning that "progress toward realizing American ideals of democracy may have stalled, and in some arenas reversed" because of the recent rise of income and wealth disparities (APSA 2004, 1). The relationship between inequality and democracy has a long tradition not only in political science, but also in economics, and it can work both ways. In fact, in his famous model of an inverted-U shaped relationship between inequality and economic development, Kuznets (1955, 17) explained the falling part of such a relationship as follows: "In democratic societies the growing political power of the urban lower-income groups led to a variety of protective and supporting legislation, much of it aimed to counteract the worst effects of rapid industrialization and urbanization and to support the claims of the broad masses for more adequate shares of the growing income of the country." However, since Kuznets' day, quite the reverse has emerged: in fact an inverse Kuznets curve has emerged in many countries as we shall see below (see also Gottschalk and Smeeding 2000). Of course, Kuznets' Nobel Prize-level hypothesis was based on a total of 14 data points drawn from a wide range of incomparable data sources. Since his day, numerical and statistical resources have grown in both quantity and quality. And we have learned a great deal about the strengths and weaknesses of economic data, both aggregate and micro data based. As in Kuznets' day, no data is perfect, and the ratio of "signal" to "noise" is still the *sine qua non* for all empirical analyses.

by
Andrea Brandolini,
Banca d'Italia, Economic Research Department
Timothy M. Smeeding,
Syracuse University

The purpose of this paper is to briefly review patterns observed when analyzing the levels and trends in economic inequality in a cross-national context, especially considering Europe and other rich nations. The paper quickly moves from methodology and comparative nature of levels of income inequality to trends in inequality and their relation to aggregate data. Finally, we turn to the redistributive roles of governments before concluding.

Cross-National Differences in Economic Inequality: Methodological Issues

Inequality measures are sensitive to the way income data are treated. One must be aware of the following factors when comparing indices across countries or time: (a) the *measure of income*, namely whether it is before taxes and transfers (market income), after transfers but before taxes (gross income), or after direct taxes and transfers (disposable income); (b) the *reference unit*, i.e., whether it is the household, the family, the person or the taxpayer; (c) the *weighting unit*, the main alternatives being between weighting on a family-basis, i.e., counting each family or household as one regardless of its size, or a person-basis, i.e., replicating the observation as many times as the members of the family (so-called person weights used in Figure 1); (d) the *allowance for family composition*, that is whether income is adjusted by an equivalence scale to account for public redistribution. (See Gottschalk and Smeeding 2000; Atkinson and Brandolini 2001; Brandolini and Smeeding 2005, for details.)

With these qualifications in mind, our analysis concentrates on income inequality among persons living in households and does not directly address the issue of individual earnings inequality. Granted that earnings are generally the largest part of household income, nevertheless, these are very different phenomena. Earnings refer to persons, while household income not only pools the earnings of all members, but it includes taxes, transfers, pensions, and capital income, each of which is liable to make the distribution of household income very different from the distribution of individual earnings.

We measure both market income (MI) and disposable personal income (DPI). For most families, the primary income source is market income, which includes earned income from wages, salaries, and self-employment and other cash income from *private* sources—from
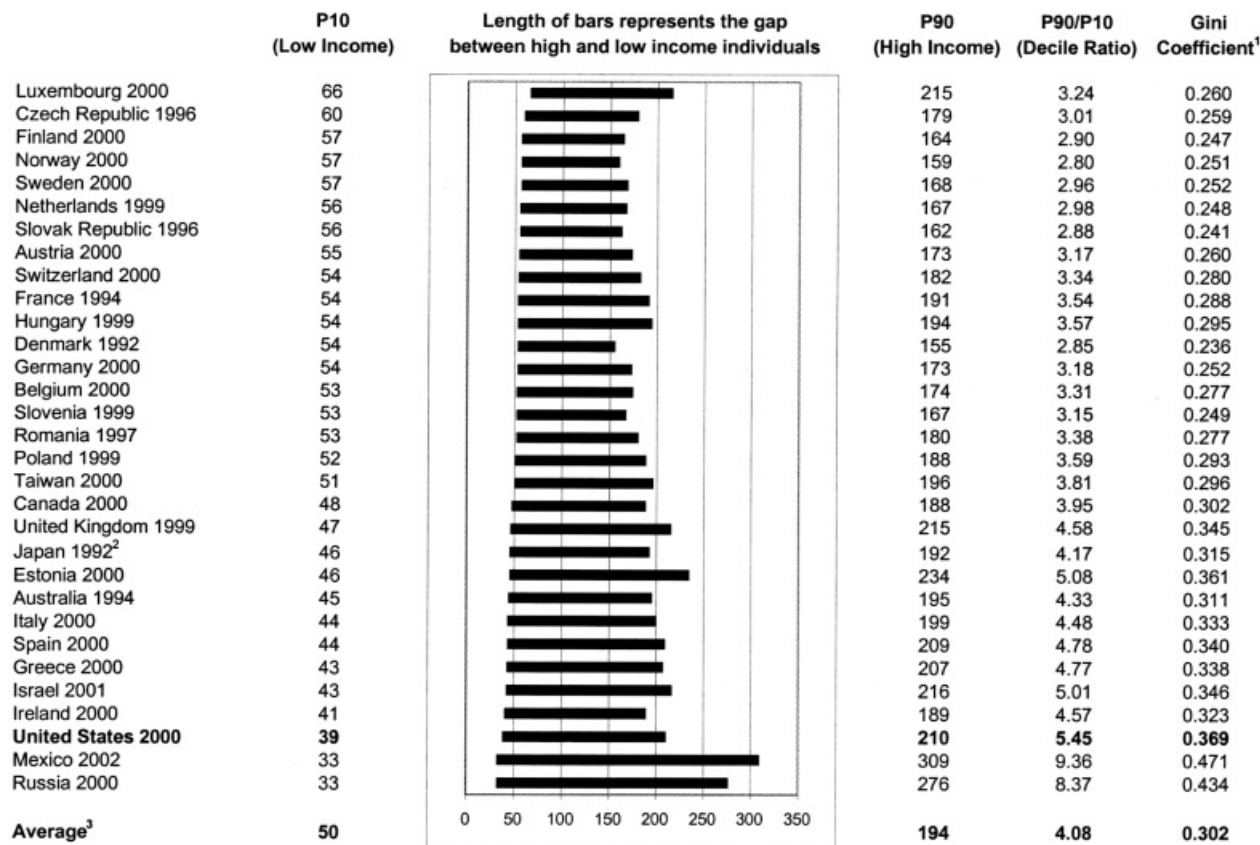
Figure 1
Economic Inequality and Social Distance
(numbers given are percent of median in each nation and Gini coefficent)

	P10 (Low Income)	Length of bars represents the gap between high and low income individuals	P90 (High Income)	P90/P10 (Decile Ratio)	Gini Coefficient[1]
Luxembourg 2000	66		215	3.24	0.260
Czech Republic 1996	60		179	3.01	0.259
Finland 2000	57		164	2.90	0.247
Norway 2000	57		159	2.80	0.251
Sweden 2000	57		168	2.96	0.252
Netherlands 1999	56		167	2.98	0.248
Slovak Republic 1996	56		162	2.88	0.241
Austria 2000	55		173	3.17	0.260
Switzerland 2000	54		182	3.34	0.280
France 1994	54		191	3.54	0.288
Hungary 1999	54		194	3.57	0.295
Denmark 1992	54		155	2.85	0.236
Germany 2000	54		173	3.18	0.252
Belgium 2000	53		174	3.31	0.277
Slovenia 1999	53		167	3.15	0.249
Romania 1997	53		180	3.38	0.277
Poland 1999	52		188	3.59	0.293
Taiwan 2000	51		196	3.81	0.296
Canada 2000	48		188	3.95	0.302
United Kingdom 1999	47		215	4.58	0.345
Japan 1992[2]	46		192	4.17	0.315
Estonia 2000	46		234	5.08	0.361
Australia 1994	45		195	4.33	0.311
Italy 2000	44		199	4.48	0.333
Spain 2000	44		209	4.78	0.340
Greece 2000	43		207	4.77	0.338
Israel 2001	43		216	5.01	0.346
Ireland 2000	41		189	4.57	0.323
United States 2000	**39**		**210**	**5.45**	**0.369**
Mexico 2002	33		309	9.36	0.471
Russia 2000	33		276	8.37	0.434
		0 50 100 150 200 250 300 350			
Average[3]	**50**		**194**	**4.08**	**0.302**

Source: Author's calculations from the Luxembourg Income Study.

Notes:

[1] Gini coefficients are based on incomes which are bottom coded at 1 percent of disposable income and top coded at 10 times the median disposable income.

[2] Japanese Gini coefficent as calculated in Gottschalk and Smeeding (2000) from 1993 Japanese Survey of Income Redistribution.

[3] Simple average.

property, from private pension schemes, from alimony, or child support. To reach disposable income, governments add public transfer payments (retirement, family allowances, unemployment compensation, and welfare benefits) and deduct income tax and social security contributions from market income. We top and bottom code all values in order to reduce the influence of anomalous income values and exclude all records with zero MIs—which is important in cross-national comparative work, especially when dealing with the elderly.

The cross-national comparable definition of income we use comes from the Luxembourg Income Study (LIS), and while it is a broad definition of income, it is hardly comprehensive, typically excluding much of capital gains, imputed rents, home production, and in-kind income. In fact, were we to include realized capital gains income, the distribution would be much more unequal in most nations, including especially the United States (Smeeding 2005). On the other hand, were we to take account of indirect taxes and the benefits from public spending on such social goods as health care and education, the distribution of income might become more equal in all nations, depending on how health and education are valued in each nation (Garfinkel, Rainwater, and Smeeding 2004).

The answer to the question "distribution among whom?" is "among individuals." Some surveys focus on the individual as the unit of analysis, some on the household as the unit of income sharing. The most common unit of analysis is the household, defined as all persons sharing the same housing unit, regardless of any familial relationship. We, therefore, aggregate the income of all household members and use an equivalence scale to adjust for differences in household size, and then attribute this equivalent income to each person in the household. In comparative trend analysis we do not have the luxury of more complete data, and the measures used there reflect those available in national sources, usually, but not always, household incomes.

The Evidence on Levels of Inequality across Nations

We begin with the widest cross-national comparison of normalized economic inequality that we can present, which comes from LIS. Figure 1 compares the distribution of disposable income in 31 nations for various years around the turn of the century (2000) or for the most recent year available from the LIS data (see www.lisproject.org/keyfigures for more). For completeness we include nations which are more "middle income" countries than rich nations (e.g., Romania, Mexico, and Russia). Within each country we focus on the relative differences between those at the bottom and those at the top of the income distribution. To do so we first measure, in each country, the ratio of the income of a household at the 10th percentile (P10 or "Low Income", in Figure 1) and a household at the 90th

percentile (P90 or "High Income") to median income (P50). This gives us some indication of how far below or above the middle of the distribution the poor and the rich are on the continuum of income. Second, we measure the ratio between the incomes of those at the 90th and of those at the 10th percentiles (the "decile ratio"). This gives us the size of the gap between the richest and the poorest in each country. These measures of socio-economic distance are easy to understand but focus on only a few points in the distribution of income. And so we also include an alternative measure of inequality across the entire distribution, the Gini coefficient, much used by economists and political scientists in studies of inequality, as well as by statistical offices in their official publications.

Figure 1 shows us that there is a wide range of economic inequality among rich and middle income nations. The United States is indeed an outlier among rich nations. Only Russia and Mexico have higher levels of inequality and these "middle income" nations are thought of as still "developing" by most analysts. Among the richest OECD nations (all but Eastern Europe and Mexico in Figure 1), Americans have the highest level of inequality by far. A low-income American at the 10th percentile in 2000 had an income that is only 39% of median income, whereas a high-income American in the 90th percentile had an income that is 210% of the median. The income of the high-income American is roughly five and a half times the income of the low-income American, even after we have adjusted for taxes, transfers, and family size (the decile ratio is 5.45). In contrast, across the other countries in Figure 1 (excluding the United States), the income of the poor averages 50% of the income of middle-income persons; that of high-income person averages 194% of the median income. The average rich person has only about four times the income of the average poor person.

The countries in Figure 1 fall into some distinctive clusters. Inequality at the bottom of the distribution is least in Luxembourg and then the Czech Republic, with P10 of 60 or more. Then comes the Nordic countries plus the Netherlands and Slovakia, where the income of those at the 10th percentile is 56–57% of the median. Central Europe (Austria, Switzerland, Hungary, Germany, and France) and Denmark come next at 54–55%, closely followed by some Eastern European countries (Slovenia, Romania, Poland). These precede an eclectic mix. The large Anglo-Saxon nations, Canada, Australia, and the United Kingdom, are roughly at the same level, less equal than Europe, but still more equal than the United States. Ireland and Mediterranean countries (Italy, Spain, Greece, and Israel) have the highest levels of inequality outside the United States.

In some rich countries, for example, Luxembourg, Israel, Spain, and the United Kingdom, the incomes of the richest (those at the 90th percentile) are all more than 200% of median income—not so very different from the United States in relative terms. In poorer countries the 90th percentile can also be high in relative terms—e.g., Mexico, Russia, and Estonia. But it seems clear that the United States differs, above all, in the relative disadvantage of its poorest residents. There, the poorest residents have incomes only 39% of the median—in other rich nations they are much higher.

What Difference does the Inequality Measure Make?

The astute reader may have noticed that the countries in Figure 1 are arranged by P10 from lowest to highest. They might also have noted that the P90, P90/P10, and Gini do not all consistently follow the same country rank order. As Figure 1 suggests, rankings and measures can differ widely by the inequality measure selected for cross national comparisons. Thus different measures of inequality, even when based on the world's most

consistent dataset, can produce different results, depending on which measure is taken. The P10 and P90 are differently ranked; the P90/P10 can be easily moved up or down, and is especially sensitive to the value of P10; and the Gini may not reflect any of these. For instance the lowest Gini is for Denmark—which is ranked 9th by its P10 ratio.

While the Gini coefficient gives a one digit measure of inequality, as do the Atkinson or Theil indices (each with different properties and group weights, we may add; see Atkinson, Rainwater, and Smeeding 1995), its interpretation should be made with some caution. One clear problem with the Gini index or any other synthetic measure is the sensitivity to top and bottom values and the treatment of zero or missing incomes. Unless these are consistent across datasets, the values of the indices may not be comparable (Smeeding 2005; Atkinson and Brandolini 2001). Using measures such as the income shares of the top and bottom quintiles are also problematic for this same reason (Volscho 2004). Also the Gini may sometimes hide as much as it reveals, especially when the P10 and P90 rankings differ greatly. Testing hypotheses about inequality and growth (Voitchovsky 2003), or inequality and social spending (Schwabish, Smeeding, and Osberg 2006) can produce very different results: in some cases, the Gini measure shows up as insignificant in regression models, while the P10 and P90 are both significant, but with opposite signs—a finding which is entirely consistent with an insignificant Gini. The lesson is that different summary measures of inequality may produce different results if the top and bottom of the distribution move in opposite directions, or if the issue in question (growth, social spending) reacts differently to the two ends of the distribution. Still the basic patterns of international inequality are clear regardless of the measure of inequality employed.

Redistribution

Every nation's tax and benefit system reduces market income inequality, but not all are equally effective in doing so. And the efficiency with which nations accomplish this redistribution may vary over time as well as space. Here we present the level of redistribution from LIS, and below the trends using national data series. Figure 2 uses the Luxembourg Income Study to demonstrate both market income (MI) inequality and disposable income (DPI) inequality among a set of 16 nations using the Gini coefficient (rounded to two digits and multiplied by 100).

In all nations disposable income inequality is less than market income inequality, suggesting that the tax and benefit system reduces overall inequality. On average, redistribution reduces inequality from a Gini of 44 to one of 30, a full 32% reduction. We see that the market generates similar patterns of income inequality in all rich Western nations. The Gini for market incomes varies from 38 to 50 across these 16 nations, averaging 44, and the United States at 47 is on the high side but not far from the middle of these nations. Yet after tax and transfer disposable income inequality measures range from 25 to 37 and the United States has the most remaining inequality at 37, consistent with Figure 1. The percentage reduction in before-tax-and-benefit inequality in the United States is only 22%. Only Switzerland shows a similarly low reduction, but the Swiss start from a much more equal distribution and end with a DPI Gini close to the average of 30. (The difference between values in Figures 1 and 2 for the DPI Gini index reflects the exclusion of households with zero market income.)

These percentage reductions are very consistent with the patterns of aggregate non-elderly public spending observed in other studies (Smeeding 2005). High-spending Northern and Central European nations have the highest degree of inequality reduction, from 34 to 47%; the Anglo Saxon (excluding the United

Figure 2
Inequality of Market Income and Disposable Income in 16 OECD Countries: Gini Coefficients before and after Taxes and Benefits
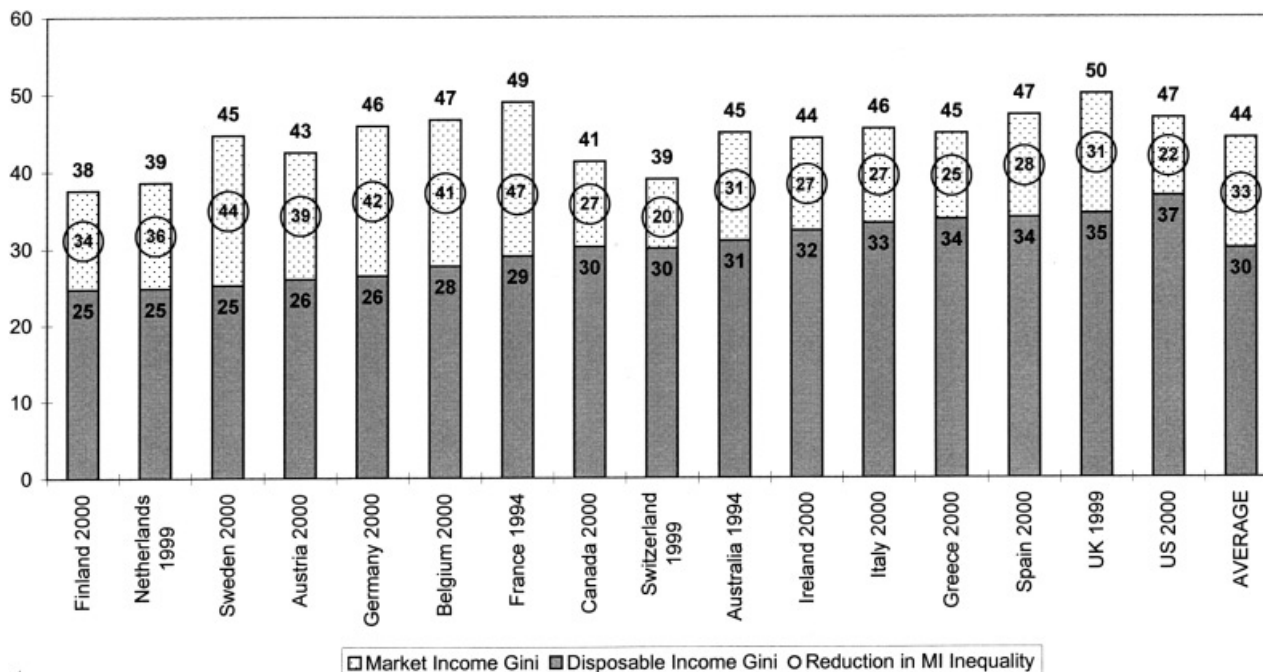
Source: Author's calculations from the Luxembourg Income Study.

States) and Southern European nations are next with 25 to 31% reductions; the United States is with Switzerland, as we have seen, at the bottom of the scale.

A second point to note is that the highest spending nations do not have the highest levels of market income inequality. In fact, before-tax-and-benefit inequality in Finland, the Netherlands, and Canada (as well as Switzerland) is far less than that found in the United States. These figures suggest that those nations which redistribute the most are not the ones who have indirectly created the greatest degree of market income inequality via their tax and benefit systems. In fact, Schwabish, Smeeding, and Osberg (2006) suggest that there is almost no correlation between the MI P10/P50 ratio and the level of social spending.

## Post-War Inequality Trends in Industrialized Countries

It is well known that in the last decade income inequality increased considerably in the United States, the United Kingdom, and other countries (Gottschalk and Smeeding 2000). This recent experience suggests we thoroughly consider the evidence on long-run patterns of inequality which has emerged in several rich countries. In this section we shall focus only on a summary of the evidence available for the period from the mid-1970s (see Atkinson and Brandolini 2001; Brandolini and Smeeding 2005, for greater detail) for eight industrialized countries: three Anglo-Saxon nations (the United States, the United Kingdom, and Canada), two Nordic states (Sweden and Finland), and three Continental European countries (the Federal Republic of Germany, France, and the Netherlands). Our main concern will be to examine series which are internally consistent over time, but which are not externally comparable. The reported statistics are a selection of those available, as we have dropped series that in our view were not sufficiently reliable. As most series are not mutually comparable, any inference on the ranking of countries

in any given year is unsound. Thus, one should not combine these measures into an unbalanced panel approach (e.g., when combined with other data sources), even when country fixed effects are controlled for.

We concentrate on the dynamics of the Gini coefficient because it is the single measure most readily available in international statistics and is often the only one available from country data sources, especially over longer periods of time. However, we should keep in mind throughout, first, that not only the levels but also the movements of inequality could have been different had we used an alternative measure—although the conclusions on trends over the long run are unlikely to be seriously affected—and, second, that inequality measures reflect the underlying methodological assumptions discussed above.

Patterns of DPI inequality differ markedly across nations in Figure 3. The United States, which has the highest level of inequality amongst nations, also has the most persistent trend toward greater inequality through 2000. Inequality in the United Kingdom rose by a larger amount until the early 1990s and has since been relatively flat. The Netherlands shows a similar pattern. Both Finland and Sweden, two of the most equal nations, have experienced a fall and then a modest rise in inequality over this period. Inequality also rose moderately in Canada and Germany as we moved into the 1990s, but with both showing a moderating pattern at the turn of the century. In France, inequality has decreased through the 1980s and the 1990s, until 1997, the last value shown in the Figure. Thus, patterns differ across nations in interesting ways. Most nations experienced a modest increase in the inequality of disposable incomes in the latter 1980s through the 1990s, but then showed a flattening trend as they approached the end of the century. Adding more nations (e.g., Belgium and Norway) would not change this pattern. At the turn of the century, the outliers are two: the United States and France, each exhibiting a different pattern from the others.

Figure 3
## Visual Representation of Inequality Trends in a Selection of OECD Countries
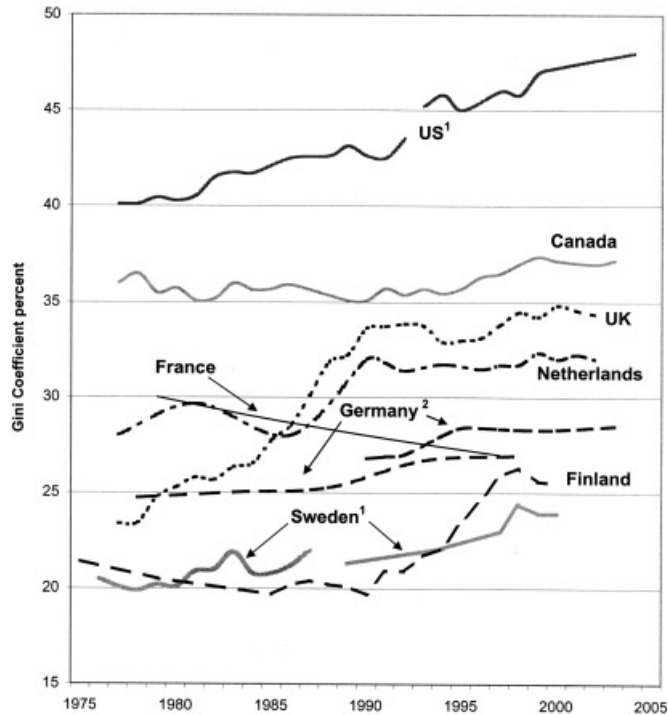
General Sources: Brandolini and Smeeding (2005); Smeeding (2005); Atkinson (2003) and LIS; Canada - Statistics Canada (2004); Sweden - Statistics Sweden (2004); Finland - Statistics Finland (2004); United States - US Department of Commerce (2004: Table H-2); Germany - Hauser and Wagner (2002) and Becker, et al. (2003); France - Hourriez and Roux (2001); United Kingdom - Goodman and Shephard (2002).

Notes: [1] major revisions in series for US (2003) and Sweden (1990).

[2] German trends come from two time series. The government income and expenditure series until 1998 and the German Socio Economic Panel from 1990. The latter series include the Eastern Länder. See Becker et al. (2003).

Time Series for Redistribution

There are many factors that drive inequality changes. Great attention has been paid in the recent literature to changes in the labor markets brought about by the rapidly grown integration of world markets or by (skilled-biased) technological change (Atkinson and Brandolini 2006). However, as we have seen, the redistributive role of the state is substantial, and focusing on market forces alone provides a very incomplete picture of the way resources are available to members of society. In Figure 4, we show the changes in the redistributive impact of the tax and transfer systems over time in six countries, again by looking at the absolute difference between the Gini coefficient for market income and that for disposable income.

Figure 4 confirms that the effect of public redistribution varies considerably across countries as well as over time, but we should bear in mind that these data are not as comparable as the LIS figures across nations. What emerges here, however, is the variability over time. In most countries the redistributive impact of public policies initially increased and then stabilized or dropped, the only exception being the United States where it remained rather stable over time (with the series starting only in 1979 due to data limitations before then). The United Kingdom stands out for the most dramatic switch of regime, as in the early 1980s it apparently shifted from a situation not too different from the two Nordic countries to a model closer to that of the two North American countries. It is not possible to infer from this simple measure if changes in redistribution are the

Figure 4
Trends in Redistribution by Tax and Transfers (%)
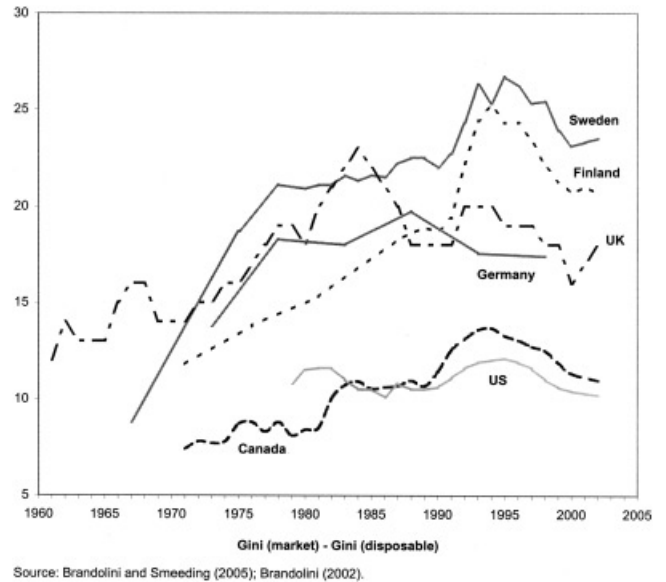
Source: Brandolini and Smeeding (2005); Brandolini (2002).

automatic response of a progressive tax-and-benefit system to changes in the distribution of market incomes, or are instead the product of explicit policy choices (Atkinson 1997). Nevertheless, they confirm that a widening of the market income distribution (with some cyclicality) need not result in a drastic increase in the inequality of disposable incomes. Rising levels of redistribution in Finland, Sweden, and to a lesser extent in Canada—where they have become increasingly targeted to the poor—have done a better job at muting rising levels of market income inequality than have stable but low levels of redistribution in the United States. Still the periods over which redistribution is observed do matter (see also Mahler and Jesuit 2005, on this topic).

Conclusions

In this paper, we have documented the methodological differences underlying the diverse pattern of income inequality across rich countries. This diversity is, of course, imbedded in social and political institutions, customs, and differing degrees of reliance on market economies across the rich tapestry of the modern world—and so caution must be used in using comparable data. While we economists have much to learn about these aspects of comparative social life, political scientists in return can benefit from greater attention to detail in the types of measures they use and the arguments they bring to bear about the importance of "income inequality" as precursor of, and response to, the welfare state. Of course, this is not to claim that political scientists or sociologists are unaware of the importance of technicalities (see, for instance, Allison 1978).

On a substantive level, we have first observed that the United States had the highest level of inequality of disposable incomes among rich nations at the turn of the century, using almost any measure of overall economic inequality. Second, we found no overall common pattern in the movements of disposable income inequality over the last three decades. A significant rise is observed in the United Kingdom in the 1980s, but the upward trend has flattened thereafter. The rise in the United States in the 1980s and 1990s was large and is continuing though at a somewhat slower pace of late. Modest increases in inequality

were noted in the Netherlands, Sweden, and Finland in the 1990s; even more modest increases are found in Canada and Germany, but not in France. Outside the United States, increases in disposable income inequality in all other nations moderated or remained relatively small in the late 1990s and early 2000s. Thus, we confirm some of the conclusions already reached in other comparative studies (e.g., Atkinson 1997; 1998; 2003; Gottschalk and Smeeding 1997; 2000; Atkinson and Brandolini 2001; Smeeding 2005; Brandolini and Smeeding 2005).

Third, changes in inequality do not exhibit clear trajectories, but rather irregular movements, with more substantial changes often concentrated in rather short lapses of time. This suggests the joint working of a multiplicity of factors which sometimes balance out or sometimes reinforce each other. Thus, identifying and characterizing episodes and turning points in the dynamics of inequality may be more fruitful than searching for general tendencies.

Finally we have shown that welfare state tax-and-transfer redistribution matters to both the levels and trends of inequality, often muting the effects of both cyclical and structural changes in MI inequality. Thus it appears that national policies and institutions can and do make a difference. Countries with lower levels of redistribution are more prone to reflect the changes exhibited in market income inequality than are the nations with expansive or well-targeted welfare states. Again the United States appears an outlier with the least effective redistributive policies either at a point in time or over the past 25 years.

References

Allison, P. D. 1978. "Measures of Inequality." *American Sociological Review* 43: 865–880.

APSA Task Force on Inequality and American Democracy. 2004. *American Democracy in an Age of Rising Inequality*. Available at: www.apsanet.org/imgtest/taskforcereport.pdf.

Atkinson, A. B. 1997. "Bringing Income Distribution in From the Cold." *Economic Journal* 107: 297–321.

———. 1998. "The Distribution of Income in Industrialized Countries." In *Income Inequality: Issues and Policy Options*, ed. Federal Reserve Bank. Kansas City: Federal Reserve Bank, 11–32.

———. 2003. "Income Inequality in OECD Countries: Data and Explanations." *CESifo Economic Studies* 49 (4): 479–513.

Atkinson, A. B., and A. Brandolini. 2001. "Promises and Pitfalls in the Use of Secondary Data-Sets: Income Inequality in OECD Countries as a Case Study." *Journal of Economic Literature* 39 (3): 771–800.

———. 2006. "The Panel-of-Countries Approach to Explaining Income Inequality: An Interdisciplinary Research Agenda." In *Mobility and Inequality: Frontiers of Research from Sociology and Economics*, eds. S. L. Morgan, D. B. Grusky and G. S. Fields. Stanford, CA: Stanford University Press, 400–448.

Atkinson, A. B., L. Rainwater, and T. M. Smeeding. 1995. *Income Distribution in OECD Countries: The Evidence from the Luxembourg Income Study (LIS)*. Paris: Organization for Economic Cooperation and Development (OECD), October.

Becker, I., J. R. Frick, M. M. Grabka, R. Hauser, P. Krause, and G. G. Wagner. 2003. "A Comparison of the Main Household Income Surveys for Germany: EVS and SOEP." In *Reporting on Income Distribution and Poverty*, eds. R. Hauser and I. Becker. Berlin: Springer, 55–90.

Brandolini, A., and T. M. Smeeding. 2005. "Inequality Patterns in Western Democracies: Cross Country Differences and Time Changes." Mimeo. Maxwell School of Syracuse University and Banca d'Italia. May.

Garfinkel, I., L. Rainwater, and T. M. Smeeding. 2004. "Welfare State Expenditures and the Redistribution of Well-Being: Children, Elders, and Others in Comparative Perspective." Mimeo. Maxwell School of Syracuse University. June.

Goodman, A., and A. Shephard. 2002. "Inequality and Living Standards in Great Britain: Some Facts." *IFS Briefing Notes*, No. BN19. London: Institute for Fiscal Studies.

Gottschalk, P., and T. M. Smeeding. 1997. "Cross-National Comparisons of Earnings and Income Inequality." *Journal of Economic Literature* 35 (2): 633–687.

———. 2000. "Empirical Evidence on Income Inequality in Industrialized Countries." In *Handbook of Income Distribution*, eds. A. B. Atkinson and F. Bourguignon. Amsterdam-North Holland, 261–308.

Hauser, R., and G. G. Wagner. 2002. "Economics of the Personal Distribution of Income." In *Frontiers in Economics*, ed. K. F. Zimmermann. Berlin: Springer. 311–370.

Hourriez, J.-M., and V. Roux. 2001. "Vue d'ensemble des inégalités de revenu et de patrimoine." In Conseil D'Analyse Économique, *Inégalités Économiques*. Paris: La Documentation Française, 269–284.

Mahler, V. A., and D. K. Jesuit. 2005. "Fiscal Redistribution in the Developed Countries. New Insights from the Luxembourg Income Study." Luxembourg Income Study Working Paper No. 392. Center for Policy Research, Syracuse University. September.

Kuznets, S. 1955. "Economic Growth and Income Inequality." *American Economic Review* 45 (1): 1–28.

Schwabish, J., T. M. Smeeding, and L. Osberg. 2006, in press. "Income Distribution and Social Expenditures: A Cross-National Perspective." In *The Distributional Effects of Government Spending and Taxation*, ed. D.B. Papadimitriou. New York: Palgrave Macmillan.

Smeeding, T. M. 2005. "Public Policy, Economic Inequality, and Poverty: The United States in Comparative Perspective." *Social Science Quarterly* 86(5): 955–983.

Statistics Canada. 2004. *Income in Canada: 2002*. Catalogue No. 75-202.xIE Ottawa: Minister of Industry. Available: www.statcan.ca/english/freepub/75-202.x1E/75-202-x1E2002000.pdf.

Statistics Finland. 2004. *Tuloerojen kehitys Suomessa 1971–2002 (Distribution of Equivalent Household Disposable Income in Finland 1971–2002)*. Previously available at: www.stat.fi/tk/el/tulo/tulonjako_modoecd_desiilit.html.

Statistics Sweden. 2004. *Inkomstfördelningsundersökningen 2002 (Income Distribution Survey 2002)*. Previously available at: www.scb.se/templates/Publikation____90903.asp

U.S. Department of Commerce. 2004. "Historical Income Tables–Households–Table H-2." Available at www.census.gov/hhes/income/histinc/h02ar.html.

Voitchovsky, S. 2003. "Does the Profile of Income Inequality Matter for Economic Growth?" Luxembourg Income Study Working Paper No. 354, Center for Policy Research, Syracuse University. August.

Volscho, T. W. 2004. "Income Distribution in 14 OECD Nations: 1967–2000: Evidence from the Luxembourg Income Study." Luxembourg Income Study Working Paper No. 386. Center for Policy Research, Syracuse University. August.