February 1, 2006

"Fair" Inequality? Attitudes to Pay Differentials: The United States in Comparative Perspective

Lars Osberg
Department of Economics
Dalhousie University
6214 University Avenue
Halifax, Nova Scotia
CANADA
Lars.Osberg@dal.ca

Timothy Smeeding
Center for Policy Research
Maxwell School, Syracuse University
426 Eggers Hall
Syracuse, NY 13244
tmsmeed@maxwell.syr.edu

We would like to thank the Russell Sage Foundation for its financial support. The comments of the editor and referees, the participants at the Russell Sage Workshops on Inequality March 21, 2003 and May 21, 2004; seminars at Yale, Harvard and Syracuse Universities; and Christopher Jencks, Stephen Jenkins, Leslie McCall, John Myles, Shelley Phipps, Jeff Racine, and John Roemer have notably improved the article. We also emphasize our gratitude to Kim Desmond, Lihui Zhang, Zhouran Zhou, Laura Turner, Kim Tran, Andrea Johnson, Nan Geng, Mary Santy, Kati Foley and Lynn Lethbridge for their excellent work with the data and manuscript. An earlier, and considerably larger, version of this paper circulated under the title "An International Comparison of Preferences for Leveling". All remaining errors are our own.

"Fair" Inequality? Attitudes to Pay Differentials: The United States in Comparative Perspective

Abstract

Are American attitudes to economic inequality different from those in other countries? One tradition in sociology suggests American 'exceptionalism,' while another argues for convergence across nations in social norms, such as attitudes toward inequality. This paper uses ISSP (International Social Survey Program) micro-data to compare attitudes in different countries to what individuals in specific occupations "do earn" and what they "should earn" and to distinguish value preferences for more egalitarian outcomes from other confounding attitudes and perceptions. We suggest a methodology for summarizing individual preferences for the leveling of earnings and use kernel density estimates to describe and compare the distribution of individual preferences over time and cross-nationally. We find that subjective estimates of inequality in pay diverge substantially from actual data, and that although Americans do not on average have different preferences for aggregate (in) equality, there is evidence for:

- (1) <u>Less awareness</u> of the extent of inequality at the top of the income distribution in America;
- (2) more polarization in attitudes among Americans;
- (3) <u>similar</u> preferences for "levelling down" at the top of the earnings distribution in the United States, but also;
- (4) <u>less</u> concern for reducing differentials at the bottom of the distribution.

11,688 Words

Keywords: Inequality, Fairness, Equity, Distribution, Cross-National Comparisons

Are American attitudes to economic inequality different – and if so, in what ways? It is widely recognized that economic inequality in the United States is greater than in other affluent industrialized nations and that government in the United States does less to reduce the inequality of economic outcomes than do the governments of other countries. One hypothesis is that this is what Americans want – i.e. that Americans have different attitudes to inequality and redistribution than do the citizens of other countries, and government (in) action therefore reflects the preferences of the electorate. However, Kerr (1983), Kelley and Evans (1993), Kluegel, Mason, and Wegener (1995) and Wilensky (2002) are among those who have argued the alternative hypothesis: that Americans are not particularly different from the citizens of other affluent industrialized nations in social preferences for economic equity and the reduction of economic inequality. If so, then the explanation for differences in economic, social, and policy outcomes may perhaps be found in American attitudes toward government as an agent of distributional change or in differences in the institutional structure of American politics. But the prior question is whether, or how, American attitudes to economic inequality differ from attitudes elsewhere.

An international comparison of American attitudes to economic inequality faces, however, three important challenges:

- (1) distinguishing attitudes to inequality of economic outcomes from beliefs about process equity or inequality of opportunity;
- (2) clarifying what respondents may understand the meaning of "economic inequality" to be, and
- (3) summarizing the distribution of attitudes toward economic inequality in the population.

¹ For a detailed discussion see Osberg, Smeeding, and Schwabish (2004), Smeeding (2005) and the references therein. Forster and d'Ercole (2005) provide recent international comparisons of inequality.

² In the economics literature, Benabou and Tirole (2006), Glaeser (2005), Alesina, Di Tella and MacCulloch (2004), Alesina and La Ferrara (2005), Alesina and Angeletos (2005, Benabou and Ok (1998), and Piketty (1995) have discussed possible differences in attitudes to inequality in the United States, often in the context of presumed differences in attitudes to economic mobility. Delhey (1999) and Suhrcke (2001) and Lokshin and Ravallion (2001) have examined the differences between attitudes to inequality in the former communist countries and western nations. This literature typically makes no reference to the International Social Justice Project or other sociological research which directly examines attitudes (for example, Kelley and Evans (1993) and Kluegel et al. (1995) cannot be found in the bibliography of any of the papers cited above).

Historically, discussion of "American Exceptionalism" (eg., Lipset (1996)) has often emphasized a presumed American belief in the ideology of mobility and opportunity – a refrain which has recently been reiterated by a number of authors in economics (e.g., Benabou and Tirole, 2006). This article starts by reviewing briefly some of the sociology literature on these topics and by examining simple summary statistics on American attitudes toward inequality of outcomes and the evidence for a presumed greater American belief in the prevalence of equality of opportunity. Using the International Social Survey Program (ISSP)³ surveys of public opinion, we find little evidence for American exceptionalism in average attitudes, as we document in detail below

However, "inequality" can be interpreted in terms of income *ratios* or income *shares*. Individuals' value-based attitudes toward inequality (i.e. how much inequality respondents think would be "fair") are also conditioned on their personal cognitive estimates of the extent of inequality (i.e. how much inequality individuals believe there actually is). Section 2, therefore, discusses the conceptualization of "inequality". It argues that the battery of ISSP questions on what individuals in specific occupations "do earn" and what they "should earn" offer a particularly focused way of distinguishing between individual value preferences for more egalitarian outcomes and other confounding attitudes and perceptions. On <u>average</u> attitudes to <u>aggregate inequality</u>, as summarized by the Gini index of "should earn" inequality, the ISSP data indicate that the United States is not particularly "different" from other nations. To find differences between the United States and other nations in attitudes toward inequality of pay one must, therefore, probe deeper, and examine both: (1) attitudes toward inequality in different parts of the income distribution and (2) the range of individuals' attitudes toward inequality.

Because a seemingly simple summary term like "inequality" melds together perceptions of income differences between the top and the middle of the income distribution, attitudes toward the gap between the middle classes and the poor and preferences for a general levelling of pay, Section 3 disaggregates inequality across the distribution. It examines average national perceptions of the maximum and minimum that people "should earn" and "do earn" and finds some evidence that American respondents are, on average, particularly likely to underestimate the extent of top end inequality.

-

³ The International Social Survey Program (ISSP) has, since 1983, co-ordinated the design of cross-national surveys covering a variety of social science topics. Full details are available at http://www.gesis.org/en/data_service/issp/

Further, people disagree – sometimes quite vehemently – about inequality. The ongoing political debates on inequality within countries provide direct evidence of heterogeneity in attitudes to inequality. However, these internal disagreements are obscured when international comparisons rely on average, or median, scores to summarize cross-national differences. Section 4, therefore, uses kernel density methods to describe graphically the distribution of individual preferences for equality in different countries – which reveal that an important difference between the United States and other countries is the bimodal distribution of American preferences for levelling.

Although it is hard to find support for the hypothesis of systematically different preferences *on average* for aggregate (in) equality in the United States, there is evidence for:

- (1) *greater underestimation* of the size of top end income differences in the United States:
- (2) *more polarization* in attitudes among Americans (which is consistent with recent United States voting behaviour and opinion polling);
- (3) <u>similar</u> preferences for "levelling down" at the top of the earnings distribution (as in other countries) but;
- (4) <u>less</u> concern for "levelling up" at the bottom of the distribution than in other nations.

These findings are consistent with American trends in political and social polarization, and may have significant practical implications. Glaeser, Ponzetto, and Shapiro (2004) are representative of a recent political economy literature which argues that "strategic extremism" by political actors (who must compete both in effective mobilization of their own base of support and in attracting support from their opponents) may produce polarization in policy positions and attitudes. Although the same median or average attitudinal score could be produced in a society with a tightly compacted uni-modal distribution of attitudes, or by a polarized or bi-modal distribution of attitudes, political dynamics are likely to be quite different in these two situations. Majority rule in a bi-modal society means that the polity will be governed by whichever extreme can (perhaps temporarily) tempt the median voter to their side (Iversen and Soskice, 2005). Section 5, therefore, discusses the implications of changing distribution of attitudes to economic inequality in the United States.

1. Exceptionalism or Convergence in Attitudes to Inequality?

The intellectual background for this paper is the long standing debate about the "exceptionalism" of the United States compared to other affluent, capitalist countries. Popular and scholarly writers have, for at least 125 years, wondered why the political process in every affluent capitalist nation – except the United States – has produced significant socialist or social democratic parties which have had the reduction of socio-economic inequalities as their major objective. Why has the United States been different? Authors such as Lipset (1996) and, earlier, Lipset and Bendix (1959) have argued that the difference lies in distinctively American beliefs about, and reality of, greater socio-economic mobility. Belief in the promise of future success (either for oneself or one's children) is said to dominate any discontent with present inequalities – to a uniquely American degree. Many political scientists concur (e.g., Iversen and Soskice, 2005) – and Esping-Andersen (1990) has documented the enduring differences in the welfare state regimes of advanced capitalist nations.

However, the United States is not alone in thinking of itself as "a special case". Comparative historians have noted that national myths, in essentially every country, are almost always based on some presumption of "uniqueness" (and they have also noted that presumed national virtues may bear little relation to statistical evidence)⁴. A functionalist perspective would argue that there are strong reasons to expect that affluent capitalist societies will have fundamentally similar attitudes to authority, inherited privilege and economic inequality, given the common structural imperatives of a market economy and a democratic polity, together with common pressures from technological change, increasing trade and the globalization of economic and cultural life. Wilensky (2002) Kerr (1983) and Inkeles (1998) argue from the sociology side that there is a convergence of welfare states, as well as attitudes and values, when comparative studies are made.

As well, there is general agreement that the United States is not, in fact, a particularly mobile society. Sociologists have a long history of comparative studies of social class and

_

⁴ See, for example, the review essays on "American Exceptionalism" in the June 1997 issue of the American Historical Review in which Nelles, Koschmann, and Nolan compare Lipset's claims for American exceptionalism to Canadian, Japanese and German assertions of cultural uniqueness.

occupational mobility (e.g., Grusky and Hauser, 1984; Erikson and Goldthorpe, 1985, 1992, 2002; Breen and Jonsson, 2005) which find that whether income or occupation are used as an index of social status, the United States is not an exceptionally fluid society compared to other nations (see Bjorklund and Jantti, 2000, for both economic and sociological perspectives). As Jantti et al (2005:2) have recently concluded: "The sociological approaches, such as that based on class mobility, suggest that the United States is fairly unexceptional" (Erikson & Goldthorpe 1992a,b, 2002). The economics literature, based on correlation or regression coefficients, suggests that the United States may, indeed, be exceptional, not in having *more* mobility, but in having less (Solon 2002), a finding our results [with respect to intergenerational earnings mobility] support." Miles Corak (2004:9) similarly states that: "The United States and Britain appear to stand out as the least mobile societies among those rich countries under study. The Nordic countries and Canada seem to be the most mobile societies. Germany resembles the United States and the United Kingdom more closely than it does the other countries". Finally, Entorf and Minoiu (2004); Erikson et al. (2005); and Woessmann (2004) examine educational opportunities for children from different family backgrounds in Western European countries, the United Kingdom and the United States – Woessman concludes (2004:22) that "The results of this paper are generally in line with the broad pattern of the existing cross country evidence on intergenerational earnings mobility, which found that the United States and the United Kingdom appear to be relatively immobile societies".

All this evidence on actual comparisons of intergenerational socio-economic mobility does not preclude the possibility that *beliefs* in future mobility might pre-empt discontent with present inequality (although it might seem to make it less likely) – but the crucial prior question is whether or not Americans actually differ from other nationalities in their attitudes to inequality.

A seemingly straightforward way to find out whether people in different countries have different attitudes to economic inequality is to ask them directly. Table 1 reports the responses in twenty seven countries to the ISSP 1999 survey module on Social Inequality when individuals were asked the seemingly simple question: "In (your country), are income differences too large?" It is noteworthy that clear majorities, in all countries either "agree" or "strongly agree" with this statement, with particularly strong agreement in the transition economies of the former Soviet Bloc. Although the United States had the highest percentage that "strongly disagreed" with the

statement, this represented only 3.2 percent of respondents. Indeed, in all countries, there are extremely few people who "strongly disagree" with this statement. One message of Table 1 is, therefore, the ubiquity of a generalized preference for "greater equality". Although respondents in some countries are notably more emphatic in saying they "strongly agree" that income differences are too large (e.g., France with 60.3 percent), there are several countries which had less emphatic preferences for equality than the United States (25 percent) — for example, Australia at 17.8 percent and Germany at 20.5 percent⁵.

<----> Table 1 about here ----->

Does the data support a distinction between an "old Europe" (which may emphasize greater equalization of outcomes because of a greater belief that there is inequality of opportunity) and a "new America" (which may believe that equality of opportunity exists, so equalization of outcomes is less imperative)? When respondents in different countries were asked which characteristics were necessary to "get ahead in life", their perceptions of "equality of opportunity" can perhaps be gauged partly by whether they think "knowing the right people" is important. Coded responses ranged from 1 (Essential) to 5 (Not important at all). On the this item, the United States' 1999 score (2.58) was at the "fairly necessary" end of the spectrum – "knowing the right people" was seen in the United States as slightly less essential than in Canada (2.55), similar to the Philipines (2.58) but slightly more essential than in France (2.62) or the UK (2.65). American attitudes in 1992 averaged 2.65 and in 1987 Americans averaged 2.61 – i.e. "knowing the right people" became seen as even more "essential"during this five year interval. Interestingly, in their subjective perception of greater barriers to mobility than in Western Europe, American respondents are in agreement with recent literature on intergenerational income mobility (see references in Section 1 above).⁶

Table 2 also probes rationalizations for inequality. Columns two and three report the population average responses on a scale ranging from 1 (strongly agree) to 5 (strongly disagree),

⁵ The 1992 and 1987 ISSP surveys cover fewer countries, but with the same conclusion – see Osberg and Smeeding (2006)

⁶ In responses to an item in the 1992 and 1987 ISSP asking whether "having well-educated parents" is important for getting ahead in life, the average score in the United States (2.72, 2.76) and Italy (2.78, 2.8) were similarly situated in the range between 2 (very important) and 3 (fairly important), ascribing somewhat more importance to well educated parents than in Germany (2.99,2.8) or Austria (2.95,2.69). In 1992, Canadians averaged 2.97 on this item while Swedes averaged 3.16 and Norwegians averaged 3.48 – i.e. significantly closer to "Not very important" (4). This item was not asked in 1999.

when respondents evaluated statements such as "Inequality continues to exist because it benefits the rich and the powerful" and "Large differences in income are necessary for [R's country's] prosperity". A cell value such as 2.5 on the "benefits the rich" question can be read as saying that, on average, a country's population is about evenly split between "agree" and "neither agree nor disagree". This particular question is a fairly strongly worded item which may tap into latent class antagonisms — in particular the perception of capitalism as a rigged game and "unfairness" as the underlying explanation for inequality. Apparently, a lot of people buy this idea — at least somewhat — in all the countries surveyed. In 1999, the average responses of Americans (2.64) are bracketed by those of Hungarians (2.58) and Filipinnos (2.67).

Objectively, as Burtless and Jencks (2003) and Osberg, Smeeding, and Schwabish (2004) note, there is no good evidence that more inequality produces more of any good thing, especially economic and social prosperity. However, political trends depend on the *subjective* assessment by citizens of the rationale for inequality. Presumably, even if greater inequality is undesirable in itself, one might accept it as a "necessary evil" — a price that must be paid if society as a whole desires prosperity. Do the citizens of modern capitalist nations, on average, buy into this rationale for inequality? Column 3 of Table 2 reports average responses to the item: "Large differences in income are necessary for (R's country's) prosperity". An average response such as 3.19 can be read as equivalent to about a fifth of Americans being on the "disagree" end of the range between "neither agree nor disagree" (3) and "disagree" (4). It is notable that in 1999 the differences between the United States (3.19) and West Germany (3.22) were minimal.⁸ (In both the United States and the United Kingdom there is a noticeable trend over time to greater percentages of the population disagreeing with this 'instrumental' rationale for inequality.)

As Osberg and Smeeding (2006) document in greater detail, the ISSP asks about attitudes to social inequality in a number of overlapping ways – the key point is that the United States is *not* a clear outlier when one compares mean responses across nations. [See also Kelley and Evans (1993); Kluegel et al. (1995); Svallfors (1997); or Suhrcke (2001:8)] When Americans and Europeans are asked whether a good education, ambition, natural ability, or hard work

⁷ The 1999 United States survey is an outlier, taken near the peak of the stock market and information technology bubbles, and at a time when unemployment was at its lowest level for a generation – the comparable 1992 value for the USA "benefits the rich" item was 2.51. It remains to be seen if 1999 is a blip or a true structural break.

⁸ With relatively large sample sizes, country differences in means generally pass a test of statistical significance, even if the empirical difference is not large – i.e. one can often be statistically sure of a socially insignificant difference.

enable an individual to "get ahead in life", evidence of an attitudinal difference between the average respondent in the United States and in other nations is hard to find. If it were true that Americans tolerate more inequality of outcomes because they believe that there is more equality of opportunity in the United States, then one would expect to find a tendency for Americans to ascribe more importance to personal characteristics for "getting ahead" than is the case elsewhere – but, on average, other countries are sometimes higher and sometimes lower than the United States in the importance their citizens ascribe, on average, to individual personal characteristics.

2. Conceptual Ambiguities in the Meaning of "Inequality"

However, although there may not be much difference in average responses to summative questions, what do survey respondents mean to say when they answer general questions about "inequality" or the fairness of "income differences"?

One way to fix ideas about attitudes to inequality of outcomes⁹ is to suppose, by contrast, that an individual believed that he or she lived in a just society. In this case, such a person would believe that the actual earnings (Y_i^A) of all persons (both themselves personally and all other individuals) are equal to what they should earn (Y_i^*) . Equation (1) summarizes the idea that people should earn what they do earn.

$$(1) Y_i * = Y_i^A$$

Some people may have an idea of minimum adequacy in a just society - i.e. a lower bound ($Y*_{min}$) on incomes, or what Smith (1776, 339) referred to as "those things which the established rules of decency have rendered necessary to the lowest rank of people". Equation (2) expresses this idea.

$$(2) Y_i^A > Y_{\min}^*$$

-

⁹ A huge and fascinating literature on procedural justice (e.g., Molm, Takahashi, and Peterson, 2003) invariably finds that "process matters" for fairness judgments – but in this paper we focus on the perceived equity of outcomes.

As well, some individuals may have the idea that it would be socially excessive if any individual's actual income exceeded some upper bound (Y^*_{max}) , as expressed in (3).

(3)
$$Y_i^A < Y_{max}^*$$
 Figure 1 about here ----->

A just society could, therefore, be summarized as one which satisfies equations (1) to (3) and which can, therefore, be described in graphical terms as having a distribution of earnings as in the 45 degree line in Figure 1. Up to this point, the vocabulary does not exclude any of the possible sets of beliefs about an ethically acceptable distribution of earnings. The beliefs of a complete egalitarian can, for example, be summarized as constraining (2) and (3) such that $Y^*_{max} = Y^*_{min}$ - in which case the line collapses to a single point, and there is a single answer to the twin questions "What should I receive?" and "What should other people get?". Alternatively, some people might believe that there should be no upper bound on ethically acceptable incomes — if so, Equation (3) loses any empirical content as Y^*_{max} is infinitely large. Alternatively, if one thinks that there should be no lower bound to earnings, that amounts to specifying (in the terms of Equation (2)) that $Y^*_{min} = 0$.

In the ISSP data, there are very few people who say they believe in completely equal earnings. Aside from such complete egalitarianism, all belief systems about ethically acceptable earnings inequality share the property that if a person believes that they live in a just society and if that person is asked to estimate the relationship between what other people "do earn" $[Y_i^A]$ and what they "should earn" $[Y_i^*]$, a regression of the form of equation (4) would yield the result that $b_0 = 0$ and $b_1 = 1$.

(4)
$$Y_i * = b_0 + b_1 Y_i^A$$

As it happens (see below), some people appear to believe — at least approximately — that the earnings distribution is fair (i.e. there is a fraction of the population whose personal estimates

¹⁰ The ratio of egalitarians to respondents in the 1987, 1992, and 1999 Social Inequality waves of the ISSP in the United States was 7/1165, 6/1132, and 2/988. Among the 35,656 respondents in all surveys in all countries, only 212 (0.59 percent) replied that all individuals should have the same wage.

11

imply $b_0 = 0$ and $b_1 = 1)^{11}$, and in Figure 1, the 45 degree line expresses this general idea that "should earn" equals "do earn" $[Y_i^A = Y_i^*]$. However, in all countries many people do not share this belief. An individual's belief that there is systematic inequity in earnings can be thought of as the belief that some people get "too much" $[Y_i^A > Y_i^*]$ while others get "too little" $[Y_i^A < Y_i^*]$. In graphical terms, such a perception of inequity can be represented as the line de in Figure 1 whose slope $[=b_1 < 1]$ can be taken as indicative of an individual's desire for "levelling" of the earnings distribution, within their view of the acceptable range of incomes.

In the remainder of this paper we will adopt the convention of referring to b_1 as an estimate of individual "preferences for levelling", which can be estimated, for any given person, across their responses identifying "should earn" pay $[Y_i^*]$ and "do earn" pay $[Y_i^A]$ in a set of occupations. However, equations (2) to (4) can also be read as indicating that three numbers are needed to express the degree of a person's egalitarian preferences:

- (1) the ethical floor to minimum earnings (i.e. Y^*_{min});
- (2) the ethical ceiling to maximum earnings (i.e. Y^*_{max});
- (3) the desired degree of levelling, relative to the current income distribution, among "acceptable" incomes (i.e. b₁).

A person with a belief system summarized graphically by line segment de would perceive that someone at income Y_1 "should earn" more than they "do earn" [i.e. $Y_1 * > Y_1^A$ — which implies a gap between actual and fair income, for people at the bottom of the distribution with an actual income such as Y_1^A]. Graphically, since "should earn" is more than "do earn", the line de is plotted as lying above the 45 degree line at that point.

.

¹¹ This could be either because individuals rationalize the current reality of their society ("what is, ought to be") or because reality fits their prior social justice values ("what ought to be, is"). For present purposes we do not need to distinguish between reasons why $b_1 = 1$. Note that this paper focuses on the individuals' evaluation of the fairness of the distribution of economic rewards *among others* and does not address the determinants of any personal dissatisfaction that individuals may have with their own rewards.

¹² Note that the line segment *de* is drawn with a positive intercept b_0 . If society is unjust in the sense that some get "too much" while others get "too little", one must expect $b_0 > 0$ and $b_1 < 1$. A number of researchers (e.g., Shepelak and Alwin (1986); Alwin (1987); Wegener and Steinmann, (1995:156) Younts and Mueller (2001) have used the *Jasso ratio* (see Jasso, 1978; 1980), which expresses the "Justice Evaluation (JE)" of an outcome as: JE = ln (actual earnings / just earnings). Jasso (1978:1414) argues that "The justice evaluation score associated with an individual who earns exactly his or her just earnings would be zero, which is the logarithm of the ratio one" − a formulation which implicitly assumes $b_0 = 0$, The combined assumptions that $b_0 = 0$ and $b_1 < 1$ underlying the Jasso ratio imply that "just" incomes are <u>always</u> less than actual incomes (i.e. $Y_1* < Y_1^A$ for all persons). In terms of the present discussion, the Jasso ratio is equal to the antilog of b_1 under the assumption that $b_0 = 0$.

In Figure 1, one can call income level Y_j the "just desserts" income, since "should earn" equals "do earn" income $(Y_j*=Y_j^A)$. Graphically, the line \emph{de} intersects the 45 degree line (which expresses the general idea that "should earn" equals "do earn") at income Y_j . If the relationship between "should earn" (Y_i*) and "do earn" (Y_i^A) is linear, as in equation 4, the point of intersection, or "just desserts" income, can be calculated as equal to $b_0 / (1 - b_1)$.

On the other hand, in Figure 1 an individual who is making more than Y_j^A . - i.e. at an earnings level such as Y_2^A - is someone who, according to belief system *de* earns "too much" income $[Y_2*< Y_2^A]$. Graphically, since "should earn" is less than "do earn" at income level Y_2^A , the line *de* lies below the 45 degree line. In practical terms, income level Y_2^A could also be seen as a social problem of excess that might possibly be solved by taxation.

However, the question of *how much* society should tax or spend, *in aggregate*, in equalizing net income transfers cannot be addressed by Figure 1 – because Figure 1 contains no information about the percentage of the population who are at each level of actual income. Without information as to the population density of Y_i^A , one cannot know what the income *shares* of rich and poor are, or what aggregate volume of taxes and transfers is required to give effect to a given belief system, or whether that set of taxes and transfers is feasible. ¹³

When survey respondents use the term "inequality" they might mean to describe the *income ratios* of individuals or they might mean the *income shares* of groups in a population. So far, this section of the paper has been examining "economic inequality" in the sense of "differences between individuals in economic outcomes".

The crucial issue for present purposes is the fact that if individuals are to evaluate inequality in the "distribution of income shares within a population" sense, they must estimate *how many* people have particular levels of income – i.e. they must estimate f(y), the relative frequency of different levels of income. There is a good deal of evidence that survey respondents do not accurately estimate the proportion of the population with particular incomes. For example, Kluegel et al. (1995:201) report that subjective estimates of the perceived frequency of 'middle class' incomes depend heavily on the respondent's own socio-economic position. Evans and Kelley (2004) also note that there is a tendency for survey respondents to place themselves "in the middle" of the income distribution.

-

 $^{^{13}}$ Note that the political and ethical attitudes of individuals are only in a very vague sense constrained by actual budgetary feasibility, and that a different belief system (as represented by different values of b_0 and b_1) may identify differing income levels as defining "deprivation" or excessively rewards. See Item 1 in Online Supplement.

However, asking people about their attitudes towards income shares implicitly requires respondents to estimate both income ratios and the relative size of population groups, while asking just about their attitudes to income ratios makes much smaller informational demands.¹⁴

In this regard, a fascinating series of questions were asked in the ISSP rounds of 1999, 1992, and 1987. In order to distinguish between subjective empirical estimates of inequality and the ethical evaluations that people may have of those perceptions, respondents were asked to estimate what salaries people in various jobs *do actually earn* and subsequently were asked what each occupation *should* earn. Hence, in contrast with the large literature that has analyzed the statistical data to examine whether income inequality is objectively increasing, this data enables examination of the issues which are actually more relevant to individual behaviour – the *subjective estimates* which individuals have of income inequality and on the *subjective evaluation* of this perceived degree of inequality relative to an individual's *own* norms of "fair" income differentials.

In the 1999 ISSP questions about specific jobs and what they should pay, the jobs considered included skilled factory worker, doctor in general practice, chairman of a large national company, lawyer, shop assistant, owner/manager of a large factory, judge in the country's highest court, unskilled worker, and federal cabinet minister. These classifications are similar to those contained in the sociological 'class' literature on occupations and SES (Socio-Economic Status), most recently from Erikson et al. (2005) and Erikson and Goldthorpe (2002), but earlier taken from Erikson and Goldethorpe (1985), Hauser and Warren (1997), and later Rose and Pelavin (2003). The occupations considered in 1992 also included owner of a small shop and farm worker while the 1987 questionnaire also asked for city bus driver, secretary, brick layer, and bank clerk (but not shop assistant or lawyer). Several countries have been in all three waves (notably the United States, United Kingdom, Germany, and Australia) but others are more episodic.

¹⁴ In general, if y_i is a person's income, while their characteristics are described by a vector X_i and the returns to those characteristics are summarized in the vector \mathcal{I} , with the unexplained component u_i , where $E(u_i) = 0$ then one can write individual income as $y_i = X_i$ $\mathcal{I} + u_i$. The frequency distribution f(y) and any inequality statistics calculated from it (e.g., the coefficient of variation or the Gini or Theil indices) depend on $f(X_i)$ and on \mathcal{I} , as well as on u_i - but inequality in the "average income ratio between types of persons" sense is only about \mathcal{I} .

¹⁵Respondents were also asked about their own occupation's income, but in this paper, we exclude this data, since we want to focus on attitudes to inequality in society, not perceived personal injustice. We experimented with using or not using the data on what judges and cabinet ministers "do earn" and "should earn", because we worried that these responses may mingle individual attitudes to government with preferences for levelling in occupational rewards – but in practice it makes no detectable difference.

General questions about inequality can mingle empirical beliefs regarding the magnitude of income ratios, the frequency density of incomes, and the processes that determine income levels – as well as ethical evaluations of both process and outcomes. In a general discussion of inequality, participants make implicit empirical estimates of the importance of capital income for "the rich" and the processes which generated market income (e.g., discrimination or the extent of inherited wealth), they implicitly guess the size and frequency of transfer payments, and they mingle those estimates with their attitudes toward inequality of outcome and opportunity. The subjective awareness of survey respondents of the size and distribution of income sources is subject to great empirical errors, and there is much controversy in the ethical evaluation of income generating processes.

A key advantage of using the "do earn / should earn" question format is that many of these confounding issues are held constant at the respondent level. In the ISSP data, attitudes to what specific occupations "should earn" can be conditioned on what the individual believes they "do earn" so that individual errors of estimation of actual earnings can be directly controlled for. Moreover, the "do earn / should earn" ISSP questions are clearly restricted to differences in labour market earnings of specific occupations - thereby avoiding the complex set of issues surrounding the importance and evaluation of different income sources. Respondents are not asked to consider any vignettes detailing complexities of household size or multiple earners, or other factors affecting household composition or "need" for income. The ISSP questions are phrased in terms of occupational earnings--the foundation of sociological 'class' measurement as seen in Erikson et al. (2005) and Rose and Pelavin (2003) – and there is little reason for respondents to systematically impute a different age, race, disability status, number of household members, or different aggregate earnings of other household members, to any of the occupations listed. Hence, the "do earn / should earn" questions are not confounded by concern with the adequacy or excess of household consumption possibilities that is driven by number of household members, disability status, age, race, etc. The implied context for each occupation is full time earnings, which abstracts from the differences in income produced by variations in labour supply or unemployment or the number of earners in a family. The ISSP data thus enables us to strip away many confounding variables, in order to see if we find evidence for "American exceptionalism" in attitudes to inequality, or evidence for a broadly similar value base in affluent industrialized market economies.

One approach to the "do earn" and "should earn" data is to use the Gini index to summarize each ISSP respondent's attitudes to inequality in pay. Specifically, in this paper we calculate both: [1] the respondent's estimate of the actual degree of inequality of pay among the listed occupations (as summarized below by the Gini index of inequality of the respondent's estimates of "do earn" income – GiniA) and [2] the respondent's perception of "fair" inequality in earnings (which is summarized by GiniE—the Gini index of inequality, across what occupations "should earn"). Because the occupations enumerated in the ISSP questions are a subset of all occupations, because we have no information on the respondent's estimate of the frequency of each occupation in the population, and because inequality of earnings within each occupation is not addressed, GiniA is *not* an estimate of actual inequality in the labor market as a whole. But GiniA is a summary estimate of perceived pay inequality among a broad range of internationally comparable occupations, so the ratio between GiniE and GiniA is, for each respondent, an indication of how much their own personal estimate of the actual degree of inequality in pay among a range of occupations diverges from their own estimate of "fair" inequality within this range of comparable occupations.

Table 3 presents the results for a variety of nations and Figure 2 plots the average values of GiniE and GiniA by country. Reading down the first column of Table 3, the average perception of earnings inequality in the United States was not very different from that of Australia, New Zealand, Canada, or Germany, despite very substantial real differences in earnings inequality in these nations (Gottschalk and Smeeding, 1997; 2000). Indeed, the average subjective perception of earnings inequality in the United States was *below* the average of all countries.

In Column 2, countries are compared in terms of the average subjective perception of inequality in what people "should earn". In all countries some level of inequality in earnings is

_

¹⁶ In doing this calculation, the implicit assumption is an equal number of people in each occupation – which is clearly not what any respondent actually believes is empirically true, but does standardize relative population weights for occupations across all respondents. Other summary indices (e.g., Coefficient of Variation, Theil) of both "should earn" and "do earn" inequality have also been calculated – with very much the same implications – but to conserve space are not reported here. Szirmai (1991) used Dutch data to calculate the percentage difference in the Theil index of should earn and do earn inequality as an index of "Tendency to Equalize".

accepted as ethically justifiable but there is a substantial range from the most egalitarian attitudes (Slovakia at 0.19 and Norway at 0.21) to the least egalitarian (Chile at 0.47 and Philippines at 0.46). The United States is right in the middle, with an average level of "should earn" inequality around of 0.35, very close to the European and all nations average of 0.34.

The third column of the table is the one that arguably has the most direct implications for the political process, since it presents the average discrepancy between perceived *actual* and perceived *fair* outcomes—i.e. the average (across persons) of the ratio between each person's estimates of "should earn" inequality (GiniE) and "do earn" inequality (GiniA). In every country, in every year, the average respondent thinks there should be less inequality than the respondent thinks there actually is — the "should earn" to "do earn" inequality ratio is always substantially less than one. As Column 3 notes, in 1999 the average "tension" between perceived fair earnings inequality — i.e. "should earn" inequality — and perceived actual "do earn" inequality was about 0.75. For the average American respondent, "should earn" inequality was a bit closer to "do earn" inequality than in most other nations (at 0.82), because "do earn" inequality was estimated to be lower than elsewhere.

< -----> Figure 2 about here ------>

Figure 2 looks at the data in another way, by plotting the relationship, across countries, between average perceptions of "fair inequality" in what occupations "should earn" and average perceptions of "actual inequality", in what occupations "do earn". As the regression line indicates, there is a strong correlation ($R^2 = 0.78$). At the margin, when average perceived actual inequality is higher, average "fair" inequality is higher by about two thirds (0.674) as much. Since a cross-sectional correlation cannot reveal causation, Figure 2 cannot reveal whether habituation to higher actual inequality produces higher norms of inequality, or whether less ethical aversion to inequality produces greater actual inequality. Nevertheless, Figure 2 does clearly indicate that the United States is not an outlier – at least in average responses. There is, therefore, little basis in the ISSP data for an argument that Americans are, <u>on average</u>, more or less tolerant of earnings inequality than the citizens of other countries. ¹⁷ However, Figure 2

-

¹⁷ This similarity in attitudes to earnings inequality occurs in the context of substantially differing levels of social transfers and public expenditures - see Osberg, Smeeding, and Schwabish (2004); Schwabish et al. (2006). If the

presents a highly aggregated picture of attitudes – in two senses: (1) the attitudes about inequality of all individuals within each country are averaged and (2) "inequality" is summarized by a single number – the Gini index.

3. Probing Deeper: Is it Inequality at the Top or at the Bottom Which Matters More?

Calculation of a single summary measure of inequality (such as the Gini index) does not directly reveal whether individuals are on average more accepting of inequalities at the top or the bottom of the distribution¹⁸. In the ISSP data there is a broad measure of concurrence across countries in which occupations "should earn" the most and which the least, ¹⁹ and the list of occupations contains an example from both the very top (chairman of a large national company) and the very bottom (unskilled worker) of the earnings distribution. But is it inequalities at the top or at the bottom that people care about the most? In Section 2 of this paper, equation 2 expressed the idea that individuals may believe in a minimum "should earn" income (Y*min) while equation 3 described the maximum "should earn" income (Y*max) estimated by each respondent.



To examine the full range of "fair inequality" in pay, the first panel of Table 4 presents data on the "Maximum/Minimum" "should earn" ratio in 1999 ISSP data for affluent, continuously capitalist countries. The second panel presents the "Maximum/Mean" ratio as an estimate of aversion to excess at the top .That is, for each respondent, it compares the

issue in evaluating inequality is "inequality in consumption possibilities" then a higher common "social wage" implies relatively less importance for market income as a source of effective consumption – an argument that would have predicted *less* emphasis on inequality of earnings in the Scandinavian countries.

¹⁸ Atkinson (1970) noted that comparisons of inequality using different indices of income inequality (such as the Gini ratio, Theil index or the coefficient of variation) often produce ambiguous international rankings when frequency distributions of income differ such that the Lorenz curves of the cumulative distribution cross – so it is essential to specify which part of the distribution is of primary concern. "Inequality" in this sense refers to the unequal shares of income in a population (and it is inequality in this sense which is the focus of much of the economics literature – in particular, that cited in Footnote 2).

¹⁹ We have compared across countries the "should earn" and "do earn" occupational rankings, which are essentially the same in the countries examined. See also Kelley and Evans (1993)

respondent's estimate of maximum 'should earn' income (Y^*_{max}) expressed as a ratio of the mean "do earn" income which they estimate. Panel three is an attempt to get at dislike of deprivation at the bottom — it presents the "Mean/Min" ratio (i.e. the ratio of each respondent's average estimate of "do earn" income to their estimate of minimum 'should earn' income (Y^*_{min})). As indicators of the central tendency of the distribution of attitudes to each issue, it presents both the mean and the median, calculated across all respondents in each country.²⁰

In the 1999 data, there were big differences between countries in the overall range of acceptable outcomes (e.g., the median French response for the Max/Min ratio was about three times the median Norwegian Max/Min ratio). However, these differences are driven largely by differing attitudes to inequality at the bottom. Indeed, it is remarkable how small cross-national differences are in ethically acceptable income ratios at the top (in 1999, the median Spaniard's Max/Mean ratio was lowest at 1.556 while the median German's was largest, at 2.166). Looking at median attitudes, cross-national differences were most apparent at the bottom of the distribution, where the range was from 3.487 in France to 1.667 in Norway.

Again, in these data on attitudes to the range of inequality, there is little support for the hypothesis of "American exceptionalism" in values. Looking at the median and mean "Max/Mean" should earn ratios — i.e. the "average person's" tolerance of inequality at the top end of the distribution — both 1992 and 1999 data put the United States almost exactly in the middle of the pack of nations surveyed. However, ethical values are conditioned on what individuals believe to be the actual inequality of earnings. Even if the average American is not exceptional in what the Max/Mean ratio *should be*, they differ from other nations in the degree to which they underestimate top end earnings.

Since the ISSP data identify specific occupations, one can compare respondents' subjective estimates of what occupations "do earn" with objective data on actual earnings. Although the objective data reveal a much larger, and widening, gap between average earnings and executive compensation in the United States than is characteristic of other countries, subjective (mis)perceptions of "do-earn" inequality are greater in the United States – a fact which is likely to mute pressure for distributional change.

19

 $^{^{20}}$ In Item 2 in the Online Supplement, Table A1 presents the comparable 1992 results and Table A2 presents 1987 data.

< Table 5 about here >

Table 5 indicates that the actual earnings ratio between production workers and Chief Executive Officers (CEO) varies between approximately 20:1 and 50:1 – a ratio far greater than the subjective "do earn" estimates. In all countries the average "do earn" estimate for manufacturing workers is remarkably close to actual data. However, the subjective estimates of CEO compensation are well below objective data. The degree of mis-estimate of CEO compensation varies widely across countries – with the average American respondent being particularly likely to underestimate CEO pay.

How much do respondents think income differences should be compressed? The ISSP data reveal a general consensus of opinion — both within and across nations — on the rank hierarchy of occupations, in both "do earn" and "should earn" income. However, although individuals generally agree that, for example, a doctor does make more money than a skilled worker, and should make more money, there is a lot of disagreement about how much more. The differences between individuals in their assessment of the desirable degree of "levelling" can be estimated from the ISSP micro data. Since each individual respondent reported their personal estimate of "should earn" (Y_i*) and "do earn" (Y_i^A) income for a number of occupations, these data can be used to estimate, for each respondent, a simple linear regression following the specification of Equation 4 in Section 1 [i.e. we estimate a regression of the form $Y_i^* = b_0 + b_1 Y_i^A$. The ratio between "should earn" (Y_i^*) and "do earn" (Y_i^A) income for occupation is, at the margin, captured by the b₁ coefficient, which is taken here as an individual's preferences for the levelling of pay. For most people, $b_1 < 1$, since most respondents think that some levelling is desirable. However, attitudes toward inequality are bounded, (i.e. when $b_1 = 1$) by the attitude that no levelling at all is desirable, since some respondents report that "should earn" = "do earn".

If one thought that there was less egalitarianism (in the sense of a desire for a levelling of earnings) in average American values than in other countries, then one might expect to observe a systematically higher average b_1 coefficient in the United States than elsewhere — but that is not

²¹ Some discrepancy might be expected since the BLS data is for "Production" workers in manufacturing while the ISSP asks about "Skilled" workers in manufacturing - both correspond to the 'working class' occupations found in the Erikson et al. (2005) and Rose and Pelavin (2003). In the Online Supplement, Figure A2 presents the distribution of subjective estimates of the objective CEO/worker "do earn" pay ratio in the US, UK, Canada and Germany.

the implication of comparing the mean and median "levelling" coefficient (b_1) estimated from the ISSP data . In 1987 and 1999 data for the countries listed in Table 4, the median and mean b_1 coefficient in the United States was above the mean for all country years but in 1992 it was below. The average rank of the United States (over all three surveys) was 16^{th} for the median b_1 coefficient and 13^{th} for the mean b_1 coefficient – which are very close to the middle of our set of 33 national surveys.

4. The Distribution of Disagreements about Equality

Up to this point, national preferences and attitudes to inequality have been summarized in terms of a measure of the central tendency of the distribution of attitudes within each nation – e.g., in terms of the attitudes of the "average American" or the "median Norwegian." Still, in every country (including these two), there is an ongoing political debate about income distribution and poverty. These debates are fairly direct evidence that people do <u>not</u> all agree, within nations, about inequality, and that the "median/average national attitude" can be a somewhat misleading concept – one which is particularly misleading if attitudes to inequality are highly polarized.

If a regression of the form $Y_i^* = b_0 + b_1 \ Y_i^A$ is estimated on each respondent's data, those people who think the existing distribution of earnings is fair will report $Y_j^* = Y_j^A$ (i.e. "should earn" = "do earn"), implying that for them $b_1 = 1$. To the extent that respondents support the status quo, there will therefore tend to be an accumulation at $b_1 = 1$ of the b_1 estimates of these "status quo" respondents. However, people who disagree with the fairness of current inequalities of pay, and who think that income differences are "too large", will report "should earn" pay rates which imply $b_1 < 1$. The more strongly that a respondent disagrees with the fairness of current income differences, the more levelling they will prefer, and the lower their implied value of b_1 . But all these disagreements among people are hidden if only the average or median attitude is considered.

To assess how the *distribution* of disagreement about levelling (i.e. b₁) varies across countries, a picture may be worth a thousand words. Figure 3a presents a graph of the distribution of preferences for levelling in the United States in 1987, 1992, and 1999. It portrays the percentage of the population at each value of b₁ coefficient, as drawn using kernel density methods, which offer a way of smoothing the histogram frequency of the population at each

value of the b₁ coefficient.²² Its value lies in presenting a picture of attitudes which conveys much more information than summary statistics.

< -----> Figures 3a and 3b about here ----->

In particular, Figure 3a indicates that a notable feature of American attitudes is their bimodality. In all three years there is clear spike at $b_1 = 1$, as well as a substantial number of respondents clustering around about $b_1 = 0.5 - i.e.$ the United States is a society with *both* a significantly large group in favour of substantially more equality than now exists *and* a large group who agree with the status quo. Over time, there appears to have been something of a migration of attitudes among Americans, with a somewhat increased tendency to respond that "what is, should be" (i.e. $b_1 = 1$) in the distribution of earnings.

Figure 3b puts the United States, United Kingdom, France, Norway, and Canada on the same graph. It is limited to a five-country comparison because additional countries are hard to distinguish visually, but its basic story can also be told with other nations' data. If one could paint a picture of "social cohesion" in attitudes to inequality, it would probably look like Figure 3b for Norway. Where the United States kernel density estimates paint a picture of polarized attitudes, the Norwegian picture is one of broad consensus. As other data has also indicated, Norwegians are on average in favour of reducing still further their already relatively small income gaps - Figure 3b indicates that there is a very strong convergence in attitudes around a value of about $b_1 = 0.66$.

The United States (with strong polarization) and Norway (with consensus) are poles of a continuum, with Canada (not entirely American in attitudes), the United Kingdom (not entirely European in values) and France (not as unanimously egalitarian as Scandinavia) being intermediate cases. In all five countries there are a large number of people who are "levellers". In all five countries there are some who believe "do earn" equals "should earn" – i. e. $b_1 = 1$. The "exceptional" aspect of the United States is that it contains a much larger group who are clearly satisfied with the status quo than in many other countries – the slight tendency to a bump at $b_1 = 1$ observed in France, the UK, Canada and Norway is replaced by a clearly bimodal distribution

²² See Greene (2002) or http://genstat.co.uk/doc/8doc/html/stats/KernelDensityEstimation.htm

²³ Norwegians stand out for social consensus and trust in the social capital literature, [see Helliwell (2003:25)] and for egalitarian and pro-welfare state attitudes - Svallfors (1997:295).

in the USA. This bimodality among Americans is apparent among both men and women — with some converging around an acceptance of the status quo with little or no levelling desired (0.9 < $b_1 < 1$) and another convergence of attitudes around substantial desired levelling ($b_1 =$ approximately 0.5)

< -----> Figures 4a and 4b about here ----->

Although the b_1 coefficient may capture an overall preference for levelling – within the range of 'acceptable' incomes – it does not directly address the issue of the ethically permissible range of earnings, or whether there is more concern with capping excessive rewards at the top of the distribution or limiting deprivation at the bottom. Figures 4a and 4b therefore present the distribution of attitudes in the United States and elsewhere to the Max / Mean²⁴ and Mean / Min "should earn" ratios.

In Figure 4a the modal value of the US Max / Mean ratio is lower and significantly more concentrated than in similar kernel density graphs for 1992 and 1987, but in whatever year one chooses to analyze, the modal value of ethical attitudes to fair "top end" inequality is at a level that is vastly different from the actual pay ratios reported in Table 5. In contrast, American attitudes to inequality at the bottom end have become more diffuse over time. However, in both figures, the relative unanimity of Norwegian opinion comes through very strongly — the modal value of the Max / Mean Ratio and Mean / Min Ratio of "should earn" incomes are both small, and the distribution is tightly compacted. Figure 4a indicates that Canadian and American attitudes to inequality at the top end are very similar, and there is a concentration of opinion that the "Max / Mean" ratio should be a little under 2:1. United Kingdom and French respondents have a somewhat greater dispersion in their acceptance of top end inequality. But in North America there is still a noticeable social consensus on the maximum level of income someone "should earn".

-

²⁴ One gets the same result if attitudes to wage differentials are examined between named occupations – such as a CEO and a skilled worker. In Item 4 in the Online Supplement, Figures A3 and A4 compare the distribution of US attitudes to the Mean/Min and Max/Mean ratio over time – in 1987, 1992 and 1999.

On the other hand, Figure 4b indicates that there was no consensus in the United Kingdom, Canada, France or the United States on relative minimum earnings in 1999.²⁵ By contrast, the consensus on a social minimum in Norway is quite striking – which presumably makes it significantly easier to mobilize political support for anti-poverty policies.

At this point, it is natural to ask why countries differ in the distribution of their attitudes. This paper has argued that people may have distinct attitudes towards an ethically acceptable social minimum, towards a 'fair' income maximum and towards the levelling of differentials within that range – and each set of attitudes may have a distinct explanation. In thinking about each specific issue (e.g. attitudes to income levelling, as portrayed in Figure 3b), many economists and sociologists have been trained to think 'in a regression perspective' – i.e. to examine the partial correlation of 'explanatory' variables with the dependent variable of interest, controlling for the influence of other variables. In this perspective, one possible reason why the distribution of individuals' attitudes differs across countries may be because there are crosscountry differences in the influence of personal characteristics (like gender, age or education) on attitudes. An alternative explanation for cross-country attitudinal differences may be differences across countries in the frequency of attributes (e.g. fundamentalist Protestantism²⁶). Moreover, a household characteristic (like income) may vary across countries in both distribution and in impact on attitudes and the structural form of estimating equations may differ across countries. As well, it is plausible to wonder whether some individual characteristics (like political party or subjective class identification) should be used as controls or are endogenously determined.

Explaining international differences in the distribution of attitudes is, therefore, a fascinating and complex area for further research. Initial analyses suggest, if one presumes a common estimating equation linking personal characteristics and attitudes to levelling, that the influence of standard variables like age, education, income or gender on levelling preferences (b₁) differs across countries. Although American women are significantly more egalitarian than American men, gender differences in the determinants of b₁ in other countries tend to be statistically insignificant. Similarly, in most countries (including the US) both age and education

²⁵ Kelley and Evans (1993) concluded, using 1987 ISSP data, that cross-national differences in attitudes were primarily about appropriate income differences at the top end, but opinions have clearly changed.

²⁶ The 1998 ISSP asked respondents whether they agreed "The Bible is the actual word of God and it is to be taken literally, word for word" – 30.1% of Americans agreed, as compared to 9.3% of West Germans, 6.1% of Australians, 9.6% of Canadians, 4.7% of Swedes and 5.1 % of UK residents. A further 49.2% of Americans believed the Bible to be "the inspired word of God".

are statistically insignificant as determinants of b_1 – but not in all. Although higher income households in several countries (e.g. Canada, France, Norway) prefer less levelling, family income is not statistically significant as a determinants of b_1 in either the US or UK. However, much more needs to be done to explain individuals' attitudes to inequality.

5. Conclusion

The United States has more income inequality than other developed countries, but government does less about it (Osberg, Smeeding and Schwabish, 2004; Smeeding, 2005). In partial response to the "missing redistribution" of American public policy, an influential literature has argued, at least since Lipset and Bendix (1959), that there is something "different" about American values, compared to European attitudes, and that less redistribution is, essentially, what Americans want.

We question the assertion that Americans *in general* are uniquely satisfied with economic inequality. *On average*, Americans do not stand out as being particularly different from other countries in general attitudes to inequality or in the "should earn / do earn" comparisons – but comparisons of medians or means hide an important part of the story. The United States appears to be a country with much more polarization of attitudes to income levelling than is common elsewhere – and increasingly so over time. The bimodality of American attitudes to income levelling is particularly striking.

Kluegel et al. (1995:206) have argued that it is common for individuals to have a "split-consciousness" about economic inequality, since the same person will often report support for egalitarian principles (such as distribution according to need) and inegalitarian attitudes (such as the moral depravity of the poor). They note that this "presents a fertile ground for framing effects as political actors compete to make salient either the social explanations of poverty and wealth in support of redistribution or the individual explanations to motivate opposition to the welfare state".

This paper has argued that there is a trend over time for American attitudes to inequality at the top end of the income distribution to become <u>less</u> tolerant of inequality, even as at the bottom end they have become more accepting of inequality. The United States is not very different from other countries in aversion to wide differences in income between the middle class and the very affluent. When it comes to differences between the middle and the bottom of the

income distribution, however, both France and the Anglo-American countries have a similarly diffuse set of attitudes which contrasts with a strong concern for a social minimum in Scandinavia (see Jäntti and Danziger, 2000).— and which may help to explain international differences in public policy and average poverty rates.

Our principle findings can be summarized as follows:

- (1) the empirical trend to widening actual earnings and income differentials at the top of the United States income distribution is not reflected in subjective estimates, which under-estimate top-end inequality more than is common in other countries;
- there appears to be less concern over time for a "social minimum" in the United States than in comparable nations;
- public attitudes against excessive wage differentials at the top end may have hardened in the United States (at least up to 1999) and;
- (4) there is a strong, and increasing, polarization of attitudes to income levelling in the United States.

Although it is hard to specify exactly the long-term implications for political economy of a polarization of attitudes and a widening discrepancy between public perceptions of actual and "fair" top-end inequality, this does not sound like a likely recipe for social or political stability. Under majority rule in a two party system, one mode of the distribution may control the levers of redistributive policy for a time, but the underlying polarization of attitudes implies that there is a substantial gulf in desired public policies – and that a relatively small migration of voters may suffice to tip the balance between two very different conceptions of "fair" inequality.

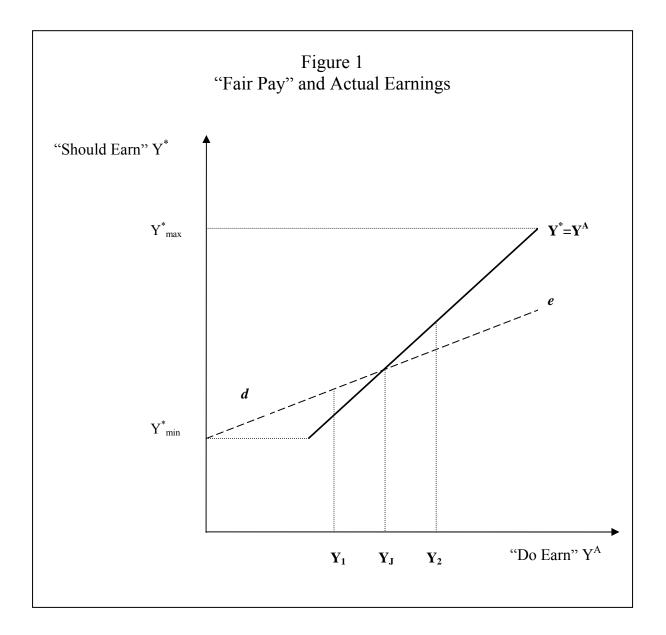


Table 1 Attitudes to Inequality: Are Income Differences Too Large?

			Attitudes to inequality. Are income differences				
Country	Year	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Bulgaria	1999	84	12.8	1.4	0.8	1	100
Portugal	1999	82.3	13.8	1.7	1.4	0.9	100
Russia	1999	79.5	16	2.2	1.2	1.1	100
Slovakia	1999	73.9	19.8	4.6	1.2	0.6	100
Hungary	1999	67.2	25.9	3.5	3.1	0.4	100
Czech Republic	1999	60.3	27.5	6	4.2	2.1	100
France	1999	60.3	27.2	7.4	4.5	0.7	100
Latvia	1999	57.2	39.5	1.8	1.3	0.2	100
Israel	1999	53.9	36	3.9	5.5	0.8	100
Slovenia	1999	49.7	41.3	4.8	3.6	0.6	100
Poland	1999	46.8	42.3	6.2	3.9	0.8	100
Germany East	1999	45	48.6	4.4	2	0	100
Chile	1999	42.8	49.4	3.4	4.4	0.1	100
Austria	1999	40.4	45.8	9.1	4.7	0	100
Japan	1999	38.6	30.5	18.3	7.5	5	100
Spain	1999	35.9	53.4	7.4	3.1	0.3	100
Great Britain	1999	31.7	50.6	11.6	5.4	0.6	100
New Zealand	1999	29.4	43.8	13.5	11.8	1.6	100
Sweden	1999	29.2	41.9	18.1	8.4	2.4	100
Canada	1999	28.1	42.5	15.7	11.2	2.6	100
USA	1999	25	41.2	21.5	9.2	3.2	100
Norway	1999	22.4	50.1	13.8	12	1.8	100
Philippines	1999	22.3	43.1	16.9	14.6	3.3	100
Germany West	1999	20.5	55.2	14.3	9.1	0.9	100
Australia	1999	17.8	53.1	17.1	11.6	0.4	100
North Ireland	1999	17.4	52.1	21.4	8.4	0.7	100
Cyprus	1999	12.2	53.4	21.8	12.5	0.1	100

Source: ISSP 1999

Table 2
Opinions about Inequality

Country	Year	Knowing the right people – how important is that for getting ahead in life?	Inequality continues to exist because it benefits the rich and powerful.	Large income differences are necessary for a country's prosperity.		
-		1 (essential) to 5 (not important at	1 (strongly agree) to	1 (strongly agree) to		
		all)	5 (strongly disagree)	5 (strongly disagree)		
Cyprus	1999	1.90	2.56	3.87		
Slovakia	1999	2.01	2.20	4.18		
Poland	1999	2.06	2.09	3.35		
Austria	1999	2.09	2.21	3.76		
Bulgaria	1999	2.16	2.01	4.12		
Israel	1999	2.18	2.40	3.34		
Germany East	1999	2.19	1.98	3.49		
Russia	1999	2.22	1.93	4.05		
Spain	1999	2.27	2.09	3.33		
Slovenia	1999	2.32	2.13	3.61		
Latvia	1999	2.34	2.03	3.76		
Chile	1999	2.41	2.12	2.91		
Germany West	1999	2.41	2.23	3.22		
Portugal	1999	2.41	1.83	3.59		
Sweden	1999	2.45	2.42	3.41		
Czech Republic	1999	2.46	2.36	3.70		
Canada	1999	2.55	2.38	3.65		
Philippines	1999	2.58	2.67	2.62		
USA	1999	2.58	2.64	3.19		
France	1999	2.62	1.91	3.74		
Great Britain	1999	2.65	2.42	3.48		
Hungary	1999	2.67	2.58	3.93		
Australia	1999	2.73	2.35	3.33		
New Zealand	1999	2.77	2.45	3.54		
North Ireland	1999	2.80	2.50	3.45		
Norway	1999	2.83	2.29	3.50		
Japan	1999	3.21	2.08	3.30		

Data source: The International Social Survey Programme

Table 3
Actual and Ethical Inequality - Gini 1999

Country	Year	Index of Salaries People "Do Earn" (GiniA)	Index of Salaries People "Should Earn" (GiniE)	Average Ratio of GiniE/ GiniA	
Russia	1999	0.66	0.39	0.61	
Chile	1999	0.6	0.47	0.79	
Poland	1999	0.58	0.44	0.77	
Latvia	1999	0.58	0.41	0.7	
Hungary	1999	0.56	0.37	0.67	
Czech Republic	1999	0.53	0.39	0.76	
France*	1999	0.52	0.38	0.74	
Philippines	1999	0.49	0.46	0.97	
Great Britain	1999	0.49	0.36	0.73	
Slovenia	1999	0.47	0.34	0.74	
Japan	1999	0.46	0.37	0.81	
Israel	1999	0.45	0.36	0.8	
Canada	1999	0.45	0.33	0.76	
Portugal	1999	0.45	0.33	0.73	
US	1999	0.43	0.35	0.82	
New Zealand	1999	0.43	0.32	0.76	
Germany East	1999	0.43	0.32	0.74	
North Ireland	1999	0.42	0.32	0.76	
Australia	1999	0.42	0.31	0.74	
Bulgaria	1999	0.42	0.28	0.68	
Germany West	1999	0.41	0.34	0.82	
Austria	1999	0.41	0.32	0.78	
Cyprus	1999	0.4	0.33	0.82	
Sweden	1999	0.35	0.22	0.65	
Spain*	1999	0.34	0.22	0.65	
Norway	1999	0.3	0.21	0.73	
Slovakia	1999	0.25	0.19	0.82	
Average – all nations		0.46	0.34	0.75	
Average of Europe		0.47	0.34	0.74	

Data Source: International Social Survey Programme

Note: Respondents were asked what salaries people in various jobs do actually make and what they should make. (Spain and France reported "net income" but other nations asked for "Before Tax" salary) Jobs considered included skilled factory worker, doctor in general practice, chairman of a large national company, lawyer, shop assistant, owner/manager of a large factory, judge in the country's highest court, unskilled worker and federal cabinet minister. Gini Indices were calculated for each respondent if they answered more than seven jobs in both the 'do earn' and 'should earn' categories, and if the jobs answered in the 'do earn' and the 'should earn' categories were the same.

Table 4: Mean and Median "Should-Earn" Ratios Across Countries: 1999

Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Cou Ran Mea Mea Max Ra	k by an & dian :Min	Mean MaxMean Ratio	Median MaxMean Ratio	Cou Rank i / Mean	n Max	Mean MeanMin Ratio	Median MeanMin Ratio	Cou Ran Mean Ra	ık in / Min
	40.0	0.5	Mean	Med	0.0	0.0	Mean	Med	4.5	0.4	Mean	Med
Japan	12.3	6.5	1	3	2.3	2.0	3	4	4.5	3.1	1	5
France	11.6	7.5	2	1	2.3	2.2	1	1	4.4	3.5	2	1
United Kingdom	10.9	6.7	3	2	2.3	2.1	2	2	4.1	3.3	4	2
Canada	10.2	6.7	4	2	2.2	2.0	5	6	4.1	3.2	3	3
USA 1999	9.7	6.7	5	2	2.1	2.0	6	7	4.0	3.2	5	4
North Ireland	8.1	5.6	6	5	2.0	1.9	10	11	3.6	3.0	6	6
Austria	8.1	5.3	7	7	2.0	1.9	8	9	3.5	2.9	7	9
New Zealand	8.0	5.6	8	6	2.0	1.9	9	10	3.5	2.9	8	10
Israel	7.8	6.0	9	4	2.2	2.1	4	3	3.3	2.9	11	8
Portugal	7.7	5.3	10	7	2.0	1.9	11	8	3.5	2.8	9	11
Germany	7.6	6.0	11	4	2.1	2.0	7	5	3.3	2.9	10	7
Australia	6.1	5.0	12	9	1.9	1.8	12	12	3.0	2.7	12	12
Sweden	4.0	2.9	13	10	1.7	1.6	13	13	2.1	1.8	13	14
Norway	3.2	2.6	14	12	1.6	1.6	14	14	1.9	1.7	14	15
Spain	3.1	2.8	15	11	1.6	1.6	15	15	1.8	1.9	15	13
·		<u></u>										
USA 1992	12.6	8.0			2.4	2.2			4.6	3.6		
USA 1987	11.1	6.7			3.0	2.7			3.1	2.4		

Table 5
The Actual and Estimated Earnings of Chief Executive Officers and Production Workers

	Actual CEO Con	mpensation and Po Workers	y of Production	Subjective Average "Do Earn" Estimates From ISSP, 1999 (US\$)				
	in Ma	nufacturing, 2001	(US\$)					
Country	CEO Compensation	Production Worker in Manufacturing (4)	Actual CEO/Worker Pay Ratio	Estimated CEO Compensation (5)	Estimated Skilled Worker in Manufacturing (6)	Estimated CEO/Worker Pay Ratio		
US (1)	1,305,012	29,391	44	218601	30161	8.3		
Australia (3)	649,137	19,582	33	141987	20556	7.3		
France (3)	542,622	16,699	32	259313	15307	17.5		
UK (1)	711,403	22,654	31	292715	24383	12.2		
Sweden (3)	442,188	21,192	21	116439	24202	4.8		
Canada (2)	481,651	23,436	21	250422	27695	9.4		
Germany (1)	461,738	26,465	17	158165	24408	6.6		

Notes:

- 1) Average of Total CEO Compensation from The Galt Global Review (1999) and from BBC News (2001)
- 2) The National Post Business Magazine's annual CEO Scorecard: average CEO compensation of Canada's 150 biggest companies by their firms' three-year share-price return.
- 3) CEO compensation data for Australia, France & Sweden from BBC

The Galt Review: www.galtglobalreview.com/world/world ceo salaries.html

BBC News: http://news.bbc.co.uk/1/hi/business/1456723.stm

www.national post.com/national postbusiness/archives/20021105/story.html?id=C47FA126-D194-42F1-BDD4-247D44F89560

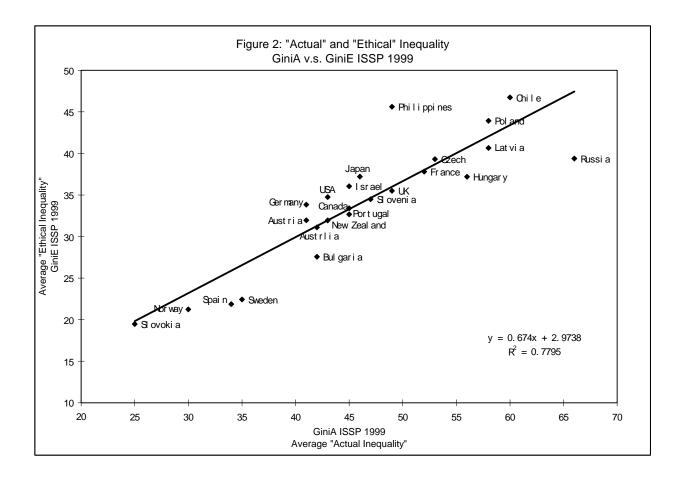
(4) Manufacturing Pay:

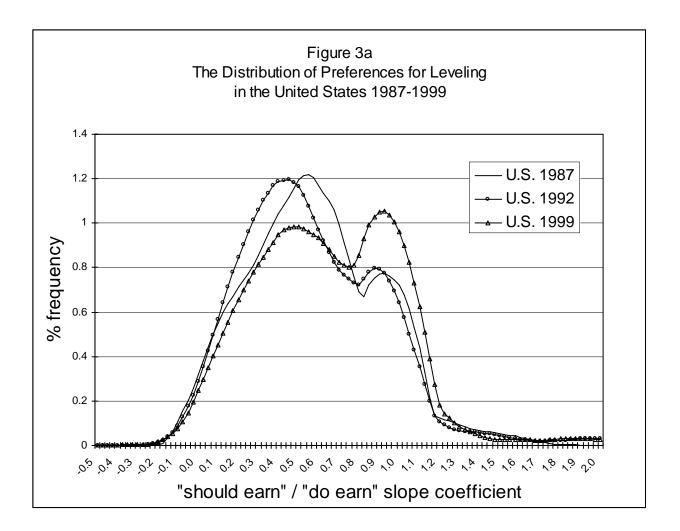
Source: ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/supptab.txt (Table 5)

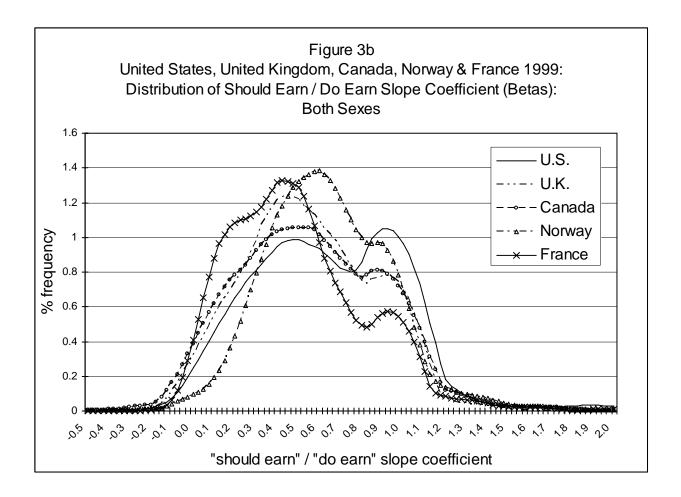
Annual Hours worked per person: www.dol.gov/ILAB/media/reports/oiea/chartbook/chart19.htm

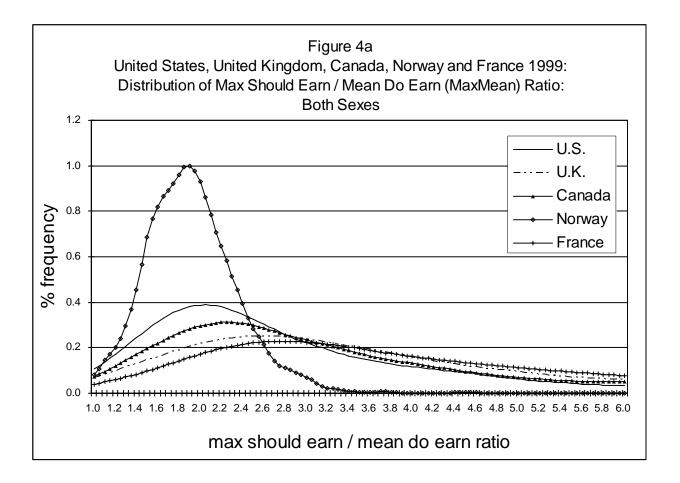
Annual Hours worked per person in Canada: www.pbs.org/now/politics/workhours.html

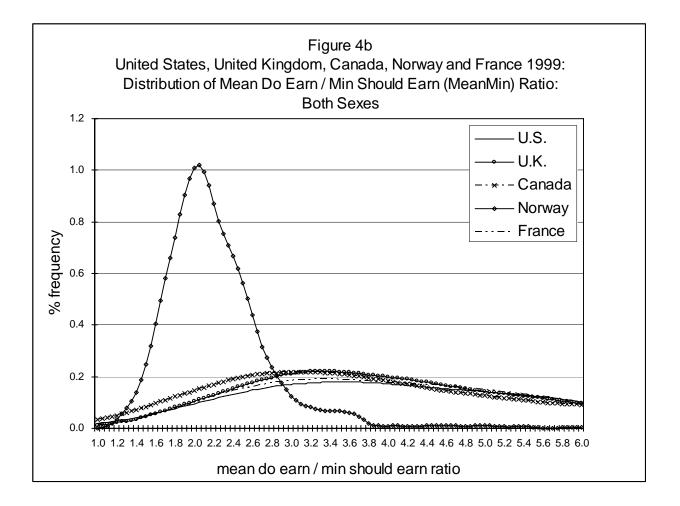
- (5) In ISSP, earnings of "the chairman of a large national corporation".
- (6) In ISSP, earnings of a "skilled worker in a factory".











References

- Alesina, Alberto, and Angeletos, George-Marios. 2005. "Fairness and Redistribution: US vs. Europe." *American Economic Review* 95 (September): 913-935.
- Alesina, Alberto, and Eliana La Ferrara. 2005. "Preferences for Redistribution in the Land of Opportunities." NBER Working Paper No. 8267. Cambridge, MA: National Bureau of Economic Research.
- Alesina Alberto, Rafael Di Tella, and Robert MacCulloch. 2004. "Inequality and Happiness: are Europeans and Americans Different?" NBER Working Paper No. 8198. Cambridge, MA: National Bureau of Economic Research.
- Alwin, Duane F. 1987. "Distributive Justice and Satisfaction with Material Well-Being." *American Sociological Review* 52(1) (February):83-95.
- Atkinson, Anthony B. 1970. "On the Measurement of Inequality." *Journal of Economic Theory* 2(3): 244-263.
- Banks, James, Richard F. Disney, Alan Duncan, and John Van Reene. 2005. "The Internationalisation of Public Welfare." *The Economic Journal* 115 (502) (March):C62-C81
- Bénabou, Roland, and Efe A. Ok. 2001. "Social Mobility and the Demand for Redistribution: The POUM Hypothesis." *Quarterly Journal of Economics* 116(2): 447-487 (also circulated as NBER Working Paper No. 6795).
- Bénabou, Roland, and Efe A. Ok. 2001. "Social Mobility and the Demand for Redistribution: The Poum Hypothesis." *The Quarterly Journal of Economics* 116(2): 447-487.
- Bénabou, Roland, and Jean Tirole. 2006. "Belief in a Just World and Redistributive Politics." *Quarterly Journal of Economics* 121(2) (May) (forthcoming).
- Bjorklund, Anders, and Markus Jantti. 2000. "Intergenerational Mobility of Socio-economic Status in Comparative Perspective." *Nordic Journal of Political Economy* 26(1):3-32.
- R. Breen and J.O. Jonsson (2005) "Inequality of Opportunity in Comparative Perspective" *Annual Review of Sociology* 31.
- Burtless, Gary, and Christopher Jencks. 2003. "American Inequality and Its Consequences." In H. Aaron, J.M. Lindsay, and P. Nivola (eds.), *Agenda for the Nation*. Washington, DC: Brookings Institute, pp. 61-108.
- Corak, Miles (2004) (ed) GENERATIONAL INCOME MOBILITY IN NORTH AMERICA AND EUROPE: Cambridge University Press, Cambridge, 2004

- Delhey, Jan. 1999. "Inequality and Attitudes: Post-Communism, Western Capitalism and Beyond." Discussion Paper, Wissenschaftszentrum Berlin FS III, pp. 99-403.
- Entorf, Horst, and Nicoleta Manoiu. 2004. "PISA Results: What a Difference Immigration Law Makes." *IZA* Discussion Paper No. 1021 (February).
- Erikson, Robert, John H. Goldthorpe, Michelle Jackson, Meir Yaish, and D. R. Cox. 2005. "On Class Differentials in Educational Attainment." *Proceedings of the National Academy of Sciences* 102(27) (July):9730-9733.
- Erikson, Robert, and John H. Goldthorpe. 2002. "Intergenerational Inequality: A Sociological Perspective." *Journal of Economic Perspectives* 16(3) (Summer):31-44.
- Erikson, Robert, and John H. Goldthorpe. 1985. "Are American Rates of Social Mobility Exceptionally High? New Evidence on an Old Question." *European Sociological Review* 1:1-22.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Cambridge, UK: Polity Press.
- Evans, Mariah D.R., and Jonathan Kelley. 2004. "Subjective Social Location: Data From 21 Nations." *International Journal of Public Opinion Research* 16: 3-38.
- Förster, Michael, and Marco Mira d'Ercole. 2005. "Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s." *OECD Social, Employment and Migration Working Papers No.* 22 (February 18).
- Glaeser, Edward L. 2005. "Inequality." NBER Working Paper No. 11511. Cambridge, MA: National Bureau of Economic Research. (August).
- Glaeser, Edward L., Giacomo A. M. Ponzetto, and Jesse M. Shapiro. 2004. "Strategic Extremism: Why Republicans and Democrats Divide on Religious Values." NBER Working Paper No. 10835. Cambridge, MA: National Bureau of Economic Research. (October).
- Gottschalk, Peter, and Timothy M. Smeeding. 2000. "Empirical Evidence on Income Inequality in Industrialized Countries." In A.B. Atkinson and F. Bourguignon (eds.), *Handbook of Income Distribution*, Volume 1. Amsterdam: North-Holland, pp. 261-308.
- Gottschalk, Peter, and Timothy M. Smeeding. 1997. "Cross-National Comparisons of Earnings and Income Inequality." *Journal of Economic Literature* 35(2) (June): 633-687.
- Greene, William. 2002. Econometric Analysis. Upper Saddle River, NJ: Prentice-Hall, Inc.

- Grusky David B., and Robert M. Hauser. 1984. "Comparative Social Mobility Revisited: Models of Convergence and Divergence in 16 Countries." *American Sociological Review* 49(4):19-38.
- Hauser, Robert M., and John R. Warren. 1997. "Socioeconomic Indexes for Occupations: A Review, Update and Critique." *Sociological Methodology* 27(1):177-298.
- Helliwell, John F. 2003. "Do Borders Matter for Social Capital? Economic Growth and Civic Culture in U.S. States and Canadian Provinces." In L. Osberg (ed.), *The Economic Implications of Social Cohesion*. University of Toronto Press, Toronto, pp. 19-42.
- Inkeles, Alex. 1998. *One World Emerging? Convergence and Divergence in Industrial Societies*. Boulder, CO: Westview Press.
- Iversen, Torben, and David Soskice. 2005. "Electoral Institutions, Parties, and the Politics of Class: Why Some Democracies Redistribute More Than Others." Presented at the "Democracy, Inequality and Representation: Europe in Comparative Perspective" Conference, European Union Center, Maxwell School of Syracuse University. (May 7).
- Jäntti, Markus, and Sheldon H. Danziger. 2000. "Income Poverty in Advanced Countries." In A. B. Atikinson and F. Bourguignon (eds.), *Handbook of Income Distribution*. New York: Elsevier Science, p.p. 309-378.
- Jantti, Markus, Bratsberg, Bernt, Roed, Knut, Raaum, Oddbjorn, Naylor, Robin, Osterbacka, Eva, Bjorklund, Anders, and Tor Eriksson. 2005. "American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic countries, the United Kingdom, and the United States." MEMORANDUM **No 34/2005,** Department of Economics University of Oslo December. 2005
- Jasso, Guillermina. 1978. "On the Justice of Earnings: A New Specification of the Justice Evaluation Function." *The American Journal of Sociology* 83(6) (May):1398-1419.
- Jasso, Guillermina. 1980. "A New Theory of Distributive Justice." *American Sociological Review* 45(1) (February):3-32.
- Kelley, Jonathan, and Mariah D. R. Evans. 1993. "The Legitimation of Inequality: Occupational Earnings in Nine Nations." *The American Journal of Sociology* 99(1): 75-125.
- Kerr, V. Clark. 1983. *The Future of Industrial Societies: Convergence or Continuing Diversity?* Cambridge, MA: Harvard University Press.
- Kluegel, James R., David S. Mason, and Bernd Wegener (eds.). 1995. Social Justice and Political Change: Public Opinion in Capitalist and Post-Communist States. Berlin and New York: De Gruyter.

- Kluegel, James R., Gyorgy Csepeli, Tamas Kolosi, Antal Orkeny, and Maria Nemenyi. 1995. "Accounting for the Rich and the Poor: Existential Justice in Comparative Perspective." In J.R. Kluegel, D.S. Mason, and B. Wegener (eds.), *Social Justice and Political Change, Public Opinion in Capitalist and Post-Communist States.* Berlin and New York: De Gruyter, pp. 179-207.
- Lipset, S. Martin. 1996. American Exceptionalism: A Double Edged Sword. New York: W.W. Norton.
- Lipset, S. Martin, and Reinhard Bendix. 1959. *Social Mobility in Industrial Society*. Berkeley: University of California Press.
- Lokshin, Michael, and Martin Ravallion. 2004. "Gainers and Losers from Trade Reform in Morocco." Policy Research Working Paper Series 3368, The World Bank.
- Molm, Linda D., Nobuyuki Takahashi, and Gretchen Peterson. 2003. "In the Eye of the Beholder: Procedural Justice in Social Exchange." *American Sociological Review* 68(1) (February):128-152.
- Osberg, Lars. 2001. "Needs and Wants: What Is Social Progress and How Should It Be Measured?" *The Review of Economic Performance and Social Progress*, Institute for Research on Public Policy and the Centre for the Study of Living Standards, Ottawa, (June):23-42.
- Osberg, Lars, and Timothy M. Smeeding (2006) "Social values for equality and preferences for state intervention in the USA and Europe" forthcoming in Christian Toft and Joseph Cordes (ed) Welfare State Reform In The United States And The European Union Policy Choices And The Constitution Of The New Welfare Society, Cambridge University Press
- Osberg, Lars, Timothy M. Smeeding, and Jonthan Schwabish. 2004. "Income Distribution and Public Social Expenditure: Theories, Effects and Evidence." In K. Neckerman (ed.), *Social Inequality*. New York: Russell Sage Foundation.
- Parsons, Talcott. 1960. *Structure and Process in Modern Societies*. Glencoe, IL: The Free Press.
- Piketty, Thomas. 1995. "Social Mobility and Redistributive Politics." *Quarterly Journal of Economics* 110(3):551-584.
- Rose, David, and David J. Pelavin. 2003. A Researcher's Guide to the National Statistics Socio-Economic Classification. London: Sage Publications, Ltd.
- Schwabish, J., L. Osberg, T.M. Smeeding, M. Eriksen, and J. Marchand. 2006. "Income Distribution and Social Expenditures: A Cross-National Perspective." Forthcoming from

- paper [resented to the Jerome Levy Economic Institute Conference on Economic Inequality, Bard College, Annandale-on-Hudson, NY. October 15, 2004.
- Shepelak, Norma J., and Duane F. Alwin. 1986. "Beliefs about Inequality and Perceptions of Distributive Justice." *American Sociological Review* 51(1) (February):30-46.
- Smeeding, Timothy M. 2005. "Public Policy and Economic Inequality: the United States in Comparative Perspective." *Social Science Quarterly* 86(5):955-983.
- Smith, Adam. 1776; 1961. *The Wealth of Nations*. (1904 edition by Edwin Cannan).London: Methuen and Company.
- Solon, G. (2002) "Cross Country Differences in Intergenerational Earnings Mobility" *Journal of Economic Perspectives* 16(3) Pages 59-
- Suhrcke, Marc. 2001. "Preferences for Inequality: East vs. West." Innocenti Working Paper No. 89. Florence: UNICEF Innocenti Research Centre.
- Svallfors, Stefan. 1997. "Worlds of Welfare and Attitudes to Redistribution: A Comparison of Eight Western Nations." *European Sociological Review* 13(3) (December):283-304.
- Szirmai, Adam. 1991. "Explaining Variation in Attitudes toward Income Inequality" In H. Steensma and R. Vermunt (eds.), *Social Justice in Human Relations*. New York and London: Plenum Press, pp. 229-268.
- Wegener, Bernd, and Susanne Steinmann. 1995. "Justice Psychophysics in the Real World: Comparing Income Justice and Income Satisfaction in East and West Germany." In J.R. Kluegel, D.S. Mason, and B. Wegener (eds.), *Social Justice and Political Change, Public Opinion in Capitalist and Post-Communist States*. Berlin and New York: De Gruyter, pp. 151-175.
- Wilensky, Harold L. 2002. *Rich Democracies: Political Economy, Public Policy, and Performance*. Berkeley, CA: University of California Press.
- Woessmann, Ludger. 2004. "How Equal Are Educational Opportunities? Family Background and Student Achievement in Europe and the United States." IZA Discussion Paper No. 1284. (September).
- Younts, C. Wesley, and Charles W. Mueller. 2001. "Justice Processes: Specifying the Mediating Role of Perceptions of Distributive Justice." *American Sociological Review* 66(1) (February):125-145.

[1]. The discussion in Section 2 of the text is fairly straightforward, but some of the potential pitfalls in conceptualizing "inequality" can be represented in Figure A1, in which the line labelled A can be thought of as one particular set of attitudes towards the inequality of individual earnings (which could be the attitudes of a person, or a group of people, or a nation), while the line labelled B represents another set of attitudes.

<-----> Figure A1 about here ------>

In the set of attitudes labelled B, all incomes less than Y_2 are thought to be "too low" while in the set of attitudes labelled A, all incomes less than Y_j are thought to be "too low" — which implies that more people are potentially deserving of higher income under B than under A. Indeed, those people with earnings in the interval $[Y_j \text{ to } Y_2]$ are seen in attitude set A as being overpaid but in attitude set B are seen as underpaid, since all incomes less than Y_2 are thought to be "too low" — if the remedy for unfair incomes lies in the tax/transfer system, they potentially shift from taxpaying to transfer receiving status. Those in the income range $[Y_1 \text{ to } Y_j]$ are seen as underpaid under A, but under B are now seen as even more deprived. However, the income gap under belief system B for the least well off is less than under A — for those at the very bottom of the income distribution, $Y^*(B) < Y^*(A)$. One way of summarizing, if one compares these two sets of attitudes, is that the main sympathy in attitude set B is for the "middle class", but there is less concern for the deprivation of the very poorest.

The Jasso ratio (see Jasso:1978, 1980) expresses the "Justice Evaluation (JE)" of an outcome as: $JE = \ln$ (actual earnings / just earnings). (Jasso 1978:1414) argues that "The justice evaluation score associated with an individual who earns exactly his or her just earnings would be zero, which is the logarithm of the ratio one". Because this formulation implicitly assumes $b_0 = 0$, discussion of inequality of outcomes within this framework cannot consider the possibility of the sort of value divergence portrayed in

In a just society, $Y_i^* = Y_i^A$ and JE = 0, in Jasso's terminology. But $JE = \ln(Y_i^* / Y_i^A) = 0$, implies $\ln(Y_i^*) - \ln(Y_i^A) = 0$, which implies $\ln(Y_i^*) = \ln(Y_i^A)$ which can only be true if $b_0 = 0$ and $b_1 = 1$ in Equation 4 above. Note that $b_0 > 0$ can be interpreted as the idea that individuals unable to earn any income should, even if $Y_i^A = 0$, still receive some basic level of subsistence – which can be seen as basic economic

the comparison of attitude set A and B in Figure A1. However, it is easy to imagine that individuals might differ in this way, which implies a significant ambiguity in interpreting their responses to summary questions about inequality comparisons.

Would someone with belief set A be more or less likely to report there is "too much" inequality than someone with belief set B? Under belief set B, more people are seen as "under paid", but the perceived degree of deprivation for the least well off is greater under belief set A. Is attitude set B more favourable to "redistribution" than attitude set A (because more people, further up the distribution of earnings, are seen as potentially deserving of transfers) or less favourable (because those at the very bottom of the hierarchy are seen as deserving smaller transfers)? In the terms used in this paper, belief system A exhibits greater preferences for "levelling" than belief system B ($b_{1A} < b_{1B}$), but it is not necessarily clear if someone were asked whether they were in favour of "reducing income differences between the rich and the poor" that it would be a person with beliefs A or B who would be more in favour, since each would identify a different set of persons as "the poor". Further, it is entirely unclear whether a society with attitude set A would want to spend more in equalizing net income transfers than a society with attitude set B, or less, since Figures A1 contains no information about the percentage of the population who are at each level of actual income.

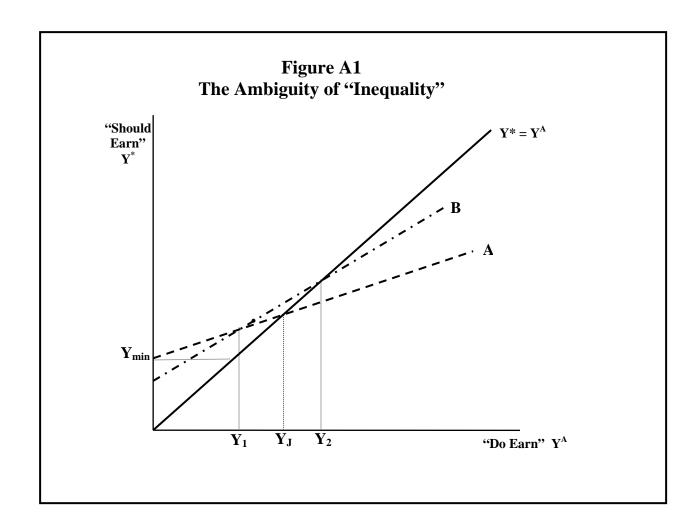
- [2]. < ----- > Tables A1 and A2 about here
- [3] Table 5 presents the *average* subjective estimates of CEO and skilled worker earnings by respondents in different countries. Examination of the distribution of subjective estimates produces the same conclusion. Figure A2 presents a kernel density plot of the estimated CEO and skilled worker "do earn" ratio. It is notable that the modal value of Americans' estimates is clearly lower than those of Britons, Germans or Canadians despite the fact that, as Table 5 indicates, objective Bureau of Labor Statistics data indicate a considerably larger CEO/worker pay ratio.

[&]quot;human rights" (such as those codified in Article 25 of the UN Universal Declaration of Human Rights, and elsewhere – see Osberg (2001). The basic guarantee in the "Guaranteed Annual Income" idea also implies $b_0 > 0$.

	<	Figure A2 about here	>		
[4.]					
	<	Figures A3 and A4 about here	>		

Figures A3 and A4 present the evolution over time of the distribution of American attitudes to "top end" pay differentials (the Max / Mean² "should earn" ratio) and "bottom-end" pay inequality (the Mean / Min "should earn" ratio). Notably, attitudes to inequality at the bottom end have become more diffuse over time. Figure A3 indicates that in 1987 data there was a noticeable community norm of an ethically permissible deviation of minimum earnings from the average, with a clear modal opinion that minimum earnings should be about half the level of actual earnings, but this has eroded, and in 1992 and 1999 many people were willing to accept much more bottom end inequality. In contrast, as Figure A4 shows, there appears to have been a hardening of American attitudes towards excess earnings at the top — the modal value of the Maximum "Should Earn" / Mean "Do Earn" ratio declines over time and becomes significantly more concentrated — at a level that is vastly different from the actual pay ratios reported in Table 5 in the text.

² One gets the same result if attitudes to wage differentials are examined between named occupations such as a CEO and a skilled worker.



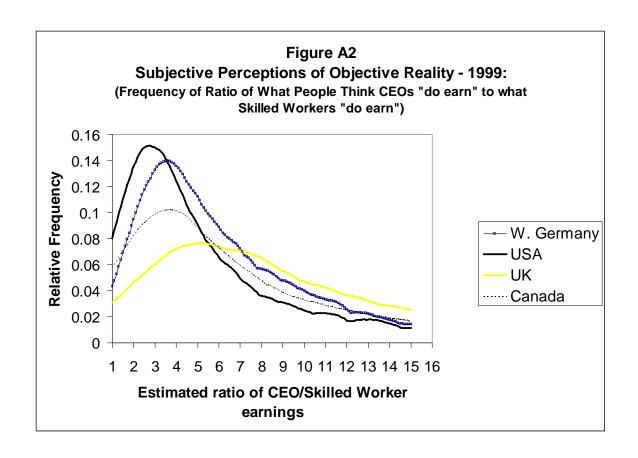


Figure A3 United States Social Inequalities ISSP Years 1987-1999: Mean / Min Ratio Over Time, Both Sexes

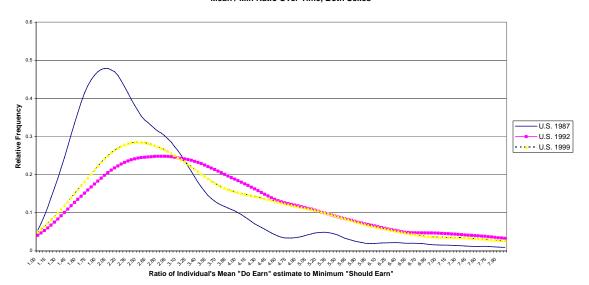
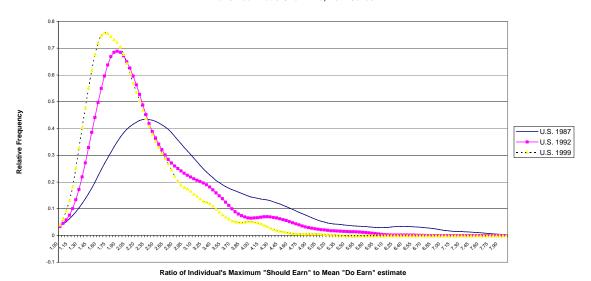


Figure A4 United States Social Inequalities ISSP Years 1987-1999: Max / Mean Ratio Over Time, Both Sexes



Distributions of Should-Earn Ratios Across Countries: 1992

Table A1: Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Country by Me Mec MaxMir	ean & dian	Mean MaxMean Ratio	Median MaxMean Ratio	Country by Me Me MaxN Ra	ean & ed ⁄/lean	Mean MeanMin Ratio	Median MeanMin Ratio	Country Rar Med Mea	nk by Mean & nMin Ratio
			Mean	Med			Mean	Med			Mean	Med
United States	12.65	8.00	1	1	2.43	2.16	3	4	4.58	3.57	1	1
United Kingdom	11.58	7.50	2	2	2.57	2.37	1	1	3.87	3.04	2	2
Canada	4.83	4.57	7	9	1.93	1.87	7	6	2.41	2.24	7	7
Australia	5.51	5.00	5	7	2.07	1.89	5	5	2.48	2.28	6	6
New Zealand	5.48	4.44	6	5	1.96	1.86	6	7	2.56	2.33	5	5
Germany (West)	8.15	6.00	3	4	2.38	2.22	4	3	3.09	2.67	3	3
Italy	7.85	5.53	4	3	2.55	2.29	2	2	2.72	2.39	4	4
Norway	3.14	2.67	8	8	1.63	1.58	8	8	1.86	1.64	8	8
Sweden	2.76	2.14	9	6	1.56	1.50	9	9	1.67	1.44	9	9

Distributions of Should-Earn Ratios Across Countries: 1987

Table A2: Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Cou Ranl Mea Mec Max Ra	k by in & dian :Min	Mean MaxMean Ratio	Median MaxMean Ratio	Cou Ran Mean MaxN Ra	k by & Med ⁄lean	Mean MeanMin Ratio	Median MeanMin Ratio	Country Rank by Mean & Med MeanMin Ratio	
	0.00	0.75	Mean	Med	0.40	0.44	Mean	Med	4.70	4.00	Mean	Med
Australia	3.83	3.75	7	7	2.10	2.11	7	6	1.78	1.69	7	7
United Kingdom	8.02	5.56	2	3	3.03	2.73	1	1	2.27	2.02	4	3
Germany	6.82	4.80	4	4	2.62	2.38	4	4	2.28	1.93	3	4
Austria	7.86	5.83	3	2	2.78	2.63	3	3	2.57	2.17	2	2
Netherlands	5.84	4.37	6	5	2.49	2.24	5	5	2.12	1.90	6	5
Switzerland	6.44	4.00	5	6	2.40	2.12	6	6	2.19	1.80	5	6
United States	11.12	6.67	1	1	2.97	2.66	2	2	3.12	2.43	1	1