An International Comparison of Preferences for Leveling
Version 5

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1. **Introduction**

It is widely recognized that economic inequality in the USA has risen over the past two decades, is continuing to rise, and is now at a substantially higher level than in other affluent industrialized nations. Furthermore, there is considerable evidence that government in the USA does less to reduce the inequality of economic outcomes than the governments of other countries do[1].

So what?

One hypothesis is that this is, essentially, what Americans want – that government (in) action reflects the preferences of the electorate. If the reason why the social policies, taxation and expenditure decisions of governments have differed in the US, compared to other nations, is that Americans have different attitudes to inequality and redistribution than the citizens of other countries there is no particular reason for concern at the recent rise in US inequality *in itself* (although there may be a case for reducing inequality if it can be proved to play a causal role in determining something else that society values – such as health outcomes)[2].

The alternative hypothesis is that Americans are not all that different from the citizens of other affluent industrialized nations in social preferences for economic equity and the reduction of inequality– albeit with some national differences in interpretation and context. When, for example, the contributors to Kluegel, Mason and Wegener (1995) summarized the survey results of the International Social Justice Project, they concluded that public attitudes to social justice are complex, sensitive to both process and outcome and sometimes quasi-contradictory – but they do not suggest that the USA is fundamentally different from other affluent capitalist nations. Similarly, Kelly and Evans (1993:114) placed US attitudes to

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[1] For a detailed discussion see Osberg, Smeeding and Schwabisch (2003) and the references therein.
[2] In the recent economics literature, Alesina, di Tella and MacCulloch (2001), Alesina and la Ferrara (2001), Alesina and Angeletos (2003), Benabou and Ok (1998) and Piketty (1995) have discussed possible differences in attitudes to inequality in the USA, often in the context of differences in economic mobility. Delhey (1999) and Suhrcke (2001) and Ravallion and Lokshin (2001) have examined the differences between attitudes to inequality in the former communist countries and western nations. Wilkinson (1994, 1995) has suggested there is a causal connection between the level of inequality in a society and mortality – but the issue is debated (e.g. by Deaton and Lubotsky 2001).

legitimate income inequality, controlling for differences in social structure, in the middle of their sample of nine countries[3].

However, policy outcomes depend jointly on the preferences of the populace and the social and political institutions that may (or may not) give expression and legitimization to those preferences. If preferences are not particularly different across countries, the reason for a different public policy role must be found in different institutions. If so, then the rise in US inequality, and the inaction of the state, indicates a failure of US political institutions to reflect the preferences of the population – which raises the question of whether, and to what degree, such institutions can continue not to reflect popular opinion, and what changes might come out of a pressure for reform.

The "preferences" of the public for specific policy outcomes mingle the influences of:
(1) public perceptions of what social outcomes actually are;
(2) public perceptions of the feasible possibility of their change and
(3) the values about desirable social outcomes that individuals may have.

If "the public" perceives that there really isn't much inequality, or perceives that no feasible policy could effectively reduce inequality, or believes that inequality should not be reduced, there will be no pressure for policy change. Perceptions about "facts", such as the state of society or the feasibility of policy choices, may or may not be correct – but they will still influence policy formation. But since perceptions of "facts" can (at least potentially) be revised in the light of better information, their change over time is likely to be driven by different determinants than those influencing the evolution of values. Hence, it seems important to distinguish between the perceptions and the values underlying public preferences, if we are to understand why public policy outcomes differ across nations.

A natural way to start is to ask whether people in different countries *say* different things about their perceptions and values. In Section 2, this paper begins by examining directly the responses in different countries to a battery of questions on attitudes to economic inequality in the International Social Survey Program (ISSP) surveys of public opinion.

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[3] Interestingly, the economics literature typically makes no reference to the International Social Justice Project or other sociological research (for example, neither Kelly and Evans (1993) or the Kluegel et al (1995) volume can be found in the bibliography of any of the papers cited in footnote 2) or to the journal *Social Justice Research,* which has been published since 1987.

Section 3 then discusses the problematic nature of seemingly simple summary terms like "inequality", "redistribution" or "public preferences".

Section 4.1 argues that the battery of International Social Survey Program (ISSP) questions on what individuals in specific occupations "do earn" and what they "should earn" offers a particularly focused way of distinguishing between individual value preferences for more egalitarian outcomes and other confounding attitudes and perceptions – such as preferences for process or subjective estimates of the actual degree of inequality. Section 4.2 presents summary data on aggregate attitudes to "do earn" and "should earn" inequality, while Section 4.3 compares national attitudes on the maximum and minimum that people "should earn". In Section 5 the ISSP micro-data is used to estimate individual preferences for the leveling of earnings. Kernel density and regression methods are used to describe the distribution of individual preferences in different countries and their determinants. Section 6 sums up, and discusses possible implications .

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

(1) more polarization in attitudes among Americans;

(2) similar preferences for "leveling down" at the top of the earnings distribution as in other countries;

(3) less concern for "leveling up" at the bottom of the distribution.

(2) Attitudes Compared – What do people *say*?

A seemingly straightforward way to find out whether people in different countries have different attitudes to inequality is to ask them directly. Table 2.1 reports the responses in a sample of OECD countries to the ISSP 1999, 1992, and 1987 survey modules on Social Inequality when individuals were asked the seemingly simple question: "In (your country) are income differences too large?"[4] It is noteworthy that clear majorities, in all countries either "agree" or "strongly agree" with this statement. Although the US had the highest percentage that "strongly disagreed" with the statement, this represented only 3.3% (in 1987) and 3.2% (in 1999) of respondents, and diverged notably from the 1992 survey (1.7%). Indeed, in all countries there are extremely few people who "strongly disagree".

One message of Table 2.1 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 in 1999 with 60.3%), there are several countries which had less emphatic preferences for equality than the US (25% in 1999) – for example, Australia at 17.8% and Germany at 20.5% in 1999.

In the ISSP, a number of questions also probe deeper on attitudes to inequality. Table 2.2 reports some of the population average responses when respondents were asked to agree or disagree with 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." Since possible responses ranged from 1 (strongly agree) to 5 (strongly disagree), and the cell values in Table 1 are the weighted average responses, 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." One can see this question as a fairly strongly worded item which is attempting to tap into latent class antagonisms—in particular the perception of capitalism as a rigged game and "unfairness" as the underlying popular explanation for inequality. Apparently, a lot of people buy this idea— at least somewhat—in all the countries surveyed. With one exception (United States 1999) all

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[4] Suhrcke (2001:8) presents a similar table (which actually omits the USA) in trying to explain why the nations of the former Soviet Bloc have significantly stronger preferences for greater equality than those of Western Europe.

the countries surveyed have an average response roughly in the middle of the range between "agree" and "neither agree nor disagree" on the item "Inequality continues to exist because it benefits the rich and the powerful." In 1992, for example, the average responses of Swedes (2.54), Australians (2.43), and Americans (2.51) are notably similar.

However, the 1999, responses for Americans differ. This survey was 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.   If the 1999 responses of Americans represent a real break from the 1992 and 1987 United States responses, one could say that American attitudes to this explanation are now different (both from other nations and from previous American responses)—but the trend to greater inequality in the United States long preceded the 1999 survey and it remains to be seen if this is a blip or a true divergence. Responses after the bubble burst in 2001 should help us to tell the story more clearly.

Presumably, even if greater inequality is undesirable in itself, one might accept it as a "regrettable necessity" or "necessary evil"—a price that must be paid if society as a whole desires prosperity. Do the citizens of modern capitalist nations, on average, accept this rationale for inequality[5]? Column two of Table 1 reports average responses to the item: "Large differences in income are necessary for (R's country's) prosperity." An average response such as 3.68 (United States 1999) can be read as equivalent to about two thirds of Americans being on the "disagree" end of the range between "neither agree nor disagree" (3) and "disagree" (4). Note that with one exception (Austria, 1999) all countries, in all years, are in this range. It is also notable that in 1999 the differences between the United States (3.68), United Kingdom (3.71), Norway (3.71), Sweden (3.67), Spain (3.68) and Germany (3.66) were minimal[6]. (In both the United States and the United Kingdom there is a noticeable trend to greater percentages of the population disagreeing with this instrumental rationale for inequality.)

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[5] Objectively, Burtless and Jencks (2002) report that there is no good evidence that wider inequality produces more of any good thing, especially prosperity. Indeed there is equal evidence that equality is good for growth (Pearson, et al, 2001). There is no credible objective evidence that we know of which shows societies are happier, healthier or more productive because they are more unequal. Indeed the evidence runs the other way(Jencks,2001; Burtless and Jencks, 2002). –However, the issue addressed by ISSP data is the *subjective* assessment of these rationales for inequality.

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

The ISSP also asks a battery of questions which try to get at the dimensions of popular perceptions of inequality of opportunity. Since some issues (e.g., race) are not always salient in all countries, they are not always asked. (In general, the ISSP coverage is uneven in items and over time.) However, when respondents were asked which characteristics were necessary to get ahead in life, "well educated parents" and "knowing the right people" were two items which are particularly relevant for the intergenerational transmission of human capital. The coded responses ranged from 1 (Essential) to 5 (Not important at all), and in fact most countries had average scores in the range between 2 (very necessary) and 3 (fairly necessary). On the "knowing the right people" item the United States 1999 score (2.94) was nearly identical to Norway (2.92) or Australia (2.91). The "well educated parents" item was not asked in the United States in 1999, but when it was asked in 1987 and 1992, there was certainly no tendency for Americans to report a greater perception of "equality of opportunity." In fact, there was a noticeably greater tendency for Americans to perceive well-educated parents as "fairly" to "very" necessary for getting ahead in life. By contrast, respondents in Australia, Netherlands, Norway, and Sweden on average put well-educated parents into the "fairly" to "not very" necessary range.

Another way of looking at it is to ask how countries compare in the importance that their citizens ascribe to personal characteristics—whether a good education, ambition, natural ability or hard work enables an individual to "get ahead in life." Table 2.3 presents the average responses from 1987, 1992, and 1999—although one must caution that wording changes in 1999 imply that one cannot directly compare the scores from 1999 and those of 1992 or 1987. Again, if one is looking for evidence of an attitudinal difference between the United States and other nations that might explain the difference in inequality outcomes, it is hard to find. If it were true that Americans tolerate more inequality of outcome 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 in "getting ahead" than is the case elsewhere – but this is not the case.

Table 2.3 can be read as indicating that, on average, other countries are "sometimes higher and sometimes lower" than the United States in the importance their citizens ascribe to individual personal characteristics. In the responses of 1992 and 1987 to whether "good education" is important, the United States (1.8; 1.82), Germany (1.79; 1.78), Austria (1.64;

1.63), Italy (1.92; 1.97), and Canada (1.84) all had an average score in the range between 1 (essential) and 2 (very important). On average, Americans seem to ascribe a bit more importance to "ambition" and "hard work" than the average respondent in other countries, but less importance to "natural ability."

However, interpretation of the data from cross-national attitudinal surveys has to be conscious of the different implicit frame of reference respondents bring to answering questionnaire items. For example, Norway and the United States differ substantially in their current levels of income tax and social transfers. If asked whether government should make "more effort" or "less effort" to redistribute income, with the implication of higher or lower income taxation, both Norwegians and Americans would likely respond in the context of their personal experience. A Norwegian and an American who both agreed on the desirable level of taxes and social transfers would therefore disagree in their answers to a "direction of change" question asking whether they favored "less redistribution and lower taxes." A Norwegian "right-winger" could plausibly respond that there should be less redistribution and an American "left-winger" could say that there should be more, even though they both might actually want the same level of taxes and redistribution.

As an example of the implicit "frame of reference" problem, one can cite the 1996 module of the ISSP on Role of Government, which asked respondents: "If the government had a choice between reducing taxes or spending more on social services, which do you think it should do? 1) Reduce taxes, even if this means spending less on social services or 2) Spend more on social services, even if this means higher taxes." The percentage of Americans and Norwegians who were in favor of "more" spending on social services in 1996 was almost exactly the same (i.e., about 60 percent in the United States and 59 percent in Norway). Other countries generally had fewer people in favour of more social spending (with higher taxes) — Australia (39%); Canada (43%); France (24%); Germany (40%); Italy (38%); Spain (56%); Sweden (43%); United Kingdom (71%). [Notably it was the United Kingdom and United States—two countries with substantial recent growth in inequality—where respondents were most willing to say they were in favor of higher taxes and more social spending.]

Since the level of social spending from which "more" spending would start is so much higher in France and Germany than in the US, these responses may be consistent with *similar* attitudes to the appropriate *level* of social spending, even if there is *different* attitude to

the *desired direction of change* from where these countries are now. However, because the starting point for change is so different in the Norway – USA comparison, the similarity of percentages wanting "more" social spending can be read as evidence of a different attitude to the desired level of social transfers.

All the same, if one is trying to explain why the US has the lowest level of taxes and transfers, the key point is that when one compares mean responses across nations to questions about inequality values or respondents' perceptions of the causes of or rationales for income inequality, Tables 2.1 to 2.3 illustrate what other researchers have also found[7] - the United States is *not* a clear outlier. Data on "average responses" from the US can be summarized as being "higher than some and lower than others" throughout – which leaves the conundrum of explaining why US policy outcomes are so different.

However, citizens may still make different demands on their political systems if they have:

(1) different perceptions of the actual extent of inequality;

(2) different perceptions of the feasibility of change in inequality;

(3) different attitudes about whether government should be the agent of change.

Opinions or "values" about desirable social outcomes are only latent demands on the political system. Citizens have to believe both that something is desirable *and that it does not now exist, and is possible*, *and should be produced by government action* if they are to demand it from the political system. Institutions (political parties, labor unions, civic dialogue) thus play a crucial role in either translating values into policies—or impeding their implementation.

The ISSP asks about attitudes to redistribution in a number of overlapping ways—but international differences in responses about redistribution policy seem to be particularly sensitive to how exactly the role and responsibility of government is framed[8]. On average, American respondents are least likely to agree that is the responsibility of government to

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[7] See Kelly and Evans (1993), Kluegel et al (1995), Svallfors (1997)

[8] See Wegener and Liebig (1995), Svallfors (1997) or Osberg, Schwabisch and Smeeding (2002). Note that on the general question whether one can "trust in government to do what is right" US respondents show *more* trust than in many other countries (Mason, 1995:69) – reluctance to rely on government is quite specific to redistributional policy.

reduce income differences, and by a margin that is especially impressive given that respondents in the U S are starting from a considerably higher base level of inequality in income.

To sum up, international public opinion polling data mingle a number of conceptually distinguishable issues and are answered within a different implicit context. Although there is some evidence for differences in attitudes to the role government might play in reducing inequality, there is much less strong evidence for American exceptionalism in average attitudes to income inequality, in itself.

(3) Conceptual Problems in the Identification of "Public Attitudes" to "Inequality" and "Redistribution"

What, however, do survey respondents mean to say when they answer questions about inequality or the fairness of the income distribution? To fix ideas about attitudes to inequality, suppose 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) $$Y_i^* = Y_i^A$$

Implicit in this person's attitudes may be some idea of minimum adequacy – that actual incomes, in a just society, should always exceed some lower bound (Y^*_{min} - 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) $$Y_i^A > Y^*_{min}$$

As well, some individuals may have the idea that a just society would have an ethically acceptable range of incomes – or, equivalently, that it would be social excessive if any individual's actual income exceeded some upper bound ($Y*_{max}$), as expressed in (3).

(3) $Y_i^A < Y*_{max}$

[Figure I about here]

A just society could, therefore, be summarized as one which satisfies equations (1) to (3) and which can be described in graphical terms as having a distribution of earnings as in line segment *ac* in Figure I. 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 be summarized as constraining (2) and (3) such that $Y*_{max} = Y*_{min}$. In this case the line segment *ac* 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?".

In general, however, 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. 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[9]. 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 <u>other people</u> do earn and what they should earn [i.e. the relationship between Y_i* and Y_i^A], a regression of the form of equation (4) would yield the result that $b_0 = 0$ and $b_1 = 1$.

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

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

As it happens (see Section 5 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 estimate of $b_1 = 1$)[10], but 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" $[Y_i^* < Y_i^A]$ while others get "too little" $[Y_i^* > Y_i^A]$. 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 "leveling" of the earnings distribution, within their view of the acceptable range of incomes.[11] In the remainder of this paper we will adopt the convention of referring to b_1 as an estimate of individual "preferences for leveling" – and Section 5 will discuss how it can be estimated, for any given person, across their responses identifying Y_i^* and 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 leveling, relative to the current income distribution, among "acceptable" incomes (i.e. b_1).

A person with a belief system summarized graphically by **de** would perceive a gap between actual and fair income for someone at income Y_1 [i.e. $Y_1^* - Y_1^A = \Delta Y_1 > 0$] for people at the bottom of the distribution with actual income Y_1^A . Presumably this income gap is something that could be filled by redistribution. In Figure I, one can call income level Y_j

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[10] 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.

[11] Note that the line segment **de** is drawn with a positive intercept b_0. Logically, a belief that $b_1 = 1$ and the constraint that the just distribution be feasible implies that $b_0 = 0$. However, in an unjust society [$b_1 < 1$] there is no reason to expect $b_0 = 0$, indeed the combined assumptions that $b_0 = 0$ and $b_1 < 1$ would imply that $Y_i^* < Y_i^A$ ("just" incomes are less than actual incomes) for all persons. The "justice psychophysics" literature (see, for example, Wegener and Steinmann, 1995:156) often refers to the *Jasso ratio* [= ln (Y_i^A / Y_i^*) – see Jasso (1980)]. In terms of the present discussion, the Jasso ratio is equal to the antilog of b_1 under the assumption that $b_0 = 0$.

the "just desserts" income, since $Y_j{}^* = Y_j{}^A$. On the other hand, in Figure 1 an individual at an earnings level such as $Y_2{}^A$, who is making more than $Y_j{}^A$, is someone who, according to belief system *de* has "too much" $[Y_2{}^* - Y_2{}^A = \Delta Y_2 < 0]$ – a social problem of excess that could presumably be solved by taxation.

Thus far, the discussion is fairly straightforward, but it can be used to illustrate some of the ambiguities in the idea of "redistribution" and the potential pitfalls in asking whether people are in favor of it, without further clarification. In Figure II, the line labeled A is reproduced from Figure I, and can be thought of as a particular set of attitudes towards inequality of individual earnings (this could be the attitudes of a person, or a group of people, or a nation).

However, in Figure II another set of attitudes is also portrayed [labeled B]. In this set of attitudes, all incomes less than Y_2 are thought to be "too low" – which clearly implies that more people are potentially deserving of social transfers. Indeed, those people with earnings in the interval $[Y_j$ to $Y_2]$ were seen in the first set of attitudes as being overpaid and are now seen as underpaid – potentially shifting from taxpaying to transfer receiving status. Those in the income range $[Y_1$ to $Y_j]$ were previously seen as underpaid, but 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 putting it, 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 very poorest[12].

[Figure II about here]

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.

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[12] Note that calculations of the *Jasso ratio*, by implicitly assuming $b_0 = 0$, rule out the possibility of the sort of value divergence portrayed in attitude set A and B in Figure 2.

Is attitude set B more favorable to "redistribution" than attitude set A (because more people, further up the distribution of earnings, are seen as potentially deserving of transfers) or less favorable (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 "leveling" than belief system B ($b_{1A} < b_{1B}$), but it is not necessarily clear if someone were asked (as in the ISSP) whether they were in favor 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 favor, since each would identify a different set of persons as "the poor".

As well, it is entirely unclear whether a society with attitude set A would want to spend more in transfers than a society with attitude set B, or less. Figures I and II contain 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 whether the aggregate volume of taxes and transfers required to give effect to belief system A or to B is larger, or whether either set of transfers is feasible[13].

So far, this section of the paper has been examining "economic inequality" in the sense of "differences between individuals in economic outcomes". The term "inequality" is often used in this sense – for example, in the discussion of wage inequality for different types of workers, or in terms of inequality between racial, ethnic or educational groups. Indeed, the question underlying Table 2.1 arguably interprets inequality in exactly this way. When the term "inequality" is used to mean "individual differences", it is enough to know the relative income (or wealth or earnings) of each type of person – the question being asked is often whether such differences are justifiable, or efficient or (un)desirable on other grounds. The number of people with similar economic outcomes is not necessary information for the calculation of such income (or earnings) ratios.

However, one cannot calculate a statistical index of income inequality (such as the Gini ratio, Theil index or the coefficient of variation) without knowledge of the population density of particular incomes. When Atkinson wrote his fundamental article on comparisons of inequality measurement in 1970, he started with the basic idea of "comparing two

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[13] Note also that the political attitudes of individuals are only in a very vague sense constrained by actual budgetary feasibility.

frequency distributions *f(y)*" – and his contribution was to note the potential ambiguity in international rankings of inequality when frequency distributions differ such that the Lorenz curves of the cumulative distribution cross (Atkinson, 1970). "Inequality" in this sense refers to the dispersion of incomes in a population (and it is inequality in this sense which is the focus of the literature cited in Footnote 2 of Section 1). [One can note that if individuals are to evaluate inequality in this sense, they must know *f(y)* – although Kluegel et al (1995:201) report that subjective estimates of *f(y)* (in particular, the perceived frequency of 'middle class' incomes) vary systematically with respondent income.]

These two usages of the term "inequality" have one point in common – that equal incomes for all persons would mean zero inequality in both the "differences between individuals" and "distribution within a population" senses. However, in general they are not at all the same. Indeed, any given set of income ratios between groups can generate widely varying estimates of aggregate income inequality (in the statistical sense of a Gini or Theil index), depending on the relative number of people in each group.

Economists are used to using measures of "inequality" in the statistical sense, – but it is not all clear that this is what the public understands when they are asked, for example, whether "Inequality continues to exist because it benefits the rich and the powerful". It is often not clear whether an aversion to greater inequality (in the statistical sense) is an aversion to the numbers of people who earn incomes at particular ratios or to changes in relative income gaps between particular groups.[14]

The last couple of paragraphs have also, like much of the literature, also shifted casually between discussion of earnings differentials and broader concepts like income and wealth. In practice, the distinction matters – empirically, analytically and ethically. Labor market earnings, income and wealth have quite different distributions and levels of inequality. Income includes labor earnings, capital income and transfers from government, while wealth

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[14] Imagine a society composed of lawyers earning $100,000 and carpenters earning $25,000. These income ratios are all that one needs to know if the focus of enquiry is inequality in the "differences between individuals" sense – and all the information that a respondent would need to answer all the ISSP questions discussed in section 2. However, to discuss inequality in the "distribution within a population" sense, one needs to know the relative numbers of lawyers and carpenters. Moreover, a statistical measure (like the Gini index) can change either because relative income ratios change with constant numbers of carpenters and lawyers or because relative incomes remain constant but lawyers'/carpenters' percentage of the population changes. For example, inequality in a statistical sense increases both if there are more carpenters (at the same wage) or lower wages for the same number of carpenters – but it is plausible that an observer may judge these two situations differently.

is derived both from own savings and inheritances – each is driven by a different type of process, and people clearly have opinions about the ethical status of these processes. Understanding the perceived social justice status of particular types of transactions is central to the research agenda reported in Kluegel, Mason and Wegener (1995). Indeed, the many questions in the ISSP (e.g. those regarding the importance of "well educated parents" and "knowing the right people") are, in themselves, evidence of the concern about inequality is not limited to outcomes, but also includes the processes by which individuals gain access to preferred economic positions. The fact that these types of question produce a complex mix of responses that are not perfectly correlated also indicates that differences in the method of acquiring economic advantage are in practice judged quite differently on ethical grounds.

As well, one may care about inequality in economic outcomes because it implies inequality in consumption or because it represents inequality in income rewards. In a market economy, wages (like other prices) have the dual, linked functions of signaling economic agents and transferring resources. Labor market earnings are a signal to individuals which may provide an incentive to behavior, an estimate of individual market worth and a source of relative status – but this signaling and individual reward function would only map uniquely into personal consumption if all households had only one earner, the same capital income and the same number of household members - and if there were no taxes or transfers. However, in fact individual personal consumption depends on the number of household members who share a given income and on the taxes that are deducted from income, as well as on the presence of other income earners in the household and the value of any transfers or services received from government. The link between the labor earnings of individuals and the economic well being of households (i.e. the deprivation of the poor and the excess of the rich) is thus a complex one, mediated by the ownership pattern of wealth, the tax / transfer policies of government, and by the demographic trends which drive household composition, formation / dissolution and economic activity – and by the interactions of all the above.

For example, part of inequality in consumption stems from the low transfer income of jobless single parents and part comes from the distribution of dividend income from inherited wealth – estimates of the objective importance of each issue to total inequality and ethical

evaluations of the processes by which those outcomes were produced both differ substantially among observers.

If (as seems plain) attitudes to inequality differ within the population, what is the best way of summarizing the distribution of such attitudes? Much of the literature relies on comparisons of the mean or median score (i.e. measures of the central tendency of the distribution of attitudes) - the cross tabulations presented in Tables 2.2 and 2.3 are fairly typical of the reporting methodology of much of the literature. Regression based models (such as those reported in Kluegel et al (1995) similarly report the central tendency of a conditional distribution. However, it can be highly misleading to summarize the distribution of "public attitudes" by the central tendency of that distribution. Figure 3 is included as a cautionary (extreme) example of two distributions of attitudes to "leveling" of the income distribution which both have the same median voter (and the same average attitudinal score[15])– but which are likely to exhibit very different political dynamics. In Society A, the median/average voter is at the center of a tightly compacted distribution of attitudes – one imagines that such a society would be cohesive in its attitudes and quite stable in its policies. However, if the same median is drawn from a bi-modal distribution of attitudes, as in example B, a majority rule polity will be governed by whichever extreme can (perhaps temporarily) tempt the median voter to their side – instability in policies and continual conflict are the more likely scenarios.

[Figure III about here]

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[15] In a multivariate linear regression context, the mean/median attitude in Figure 3 should be thought of as the conditional mean, given personal characteristics, but the point remains.

4. What People "Do Earn" and "Should Earn"

4.1

A large literature has analyzed the statistical data to examine whether, in an objective sense, income inequality is increasing or not. However, the political attitudes and behavior of individuals depend on the *subjective estimates* which individuals have of income inequality - although it may be convenient to assume that individuals have a correct subjective perception of the "facts" about inequality, it is clear from the dispersion of survey responses that many individuals have very different perceptions of what the "facts" about inequality actually are. Political attitudes also depend on the *subjective evaluation* of this perceived degree of inequality relative to an individual's own norms of "fair" income differentials. Since attitudes to inequality are conditioned on the perception of "facts" it is desirable, in trying to untangle attitudes to inequality, to distinguish between subjective empirical estimates of inequality and the ethical evaluations that people may have of it. A fascinating series of questions, which enables such distinctions to be drawn, were asked in the ISSP of 1999, 1992 and 1987.

Respondents were asked to estimate what salaries people in various jobs do actually earn and subsequently were asked what should earn. In the 1999 ISSP, 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[16]. [Respondents were also asked about their own occupation's income.] 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 US, UK, Germany and Australia) but others are more episodic. (A more complete discussion of the data is contained in Appendix A.)

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[16] In this paper, we do not use the data on what judges and cabinet ministers "do earn" and "should earn", because we worry that these may mingle individual attitudes to government with preferences for leveling in occupational rewards.

As section 3 has discussed, a person's "attitude to inequality" mingles empirical beliefs as to the size 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. The 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. As well, in the ISSP data attitudes to what specific occupations "should earn" can be conditioned on what the individual believes they "do earn" – i.e. errors of estimation of the actual earnings can be directly controlled for, for individual respondents.

In a general discussion of inequality, empirical estimates of the importance of capital income for "the rich", as well as empirical estimates (and ethical evaluations) of the importance of inherited wealth, are hard to avoid. Similarly, the size and frequency of receipt of transfer payments is subject to great empirical errors in estimation, and much controversy in evaluation. However, since respondents are asked about the earnings of specific occupations, the "do earn / should earn" ISSP questions are clearly restricted to differences in labor market earnings – thereby avoiding the complex set of issues surrounding the importance and evaluation of different income sources.

Since ISSP respondents are not asked to estimate the empirical frequency of occupational types, their judgments (both empirical and ethical) about the frequency density of income levels cannot be known. This paper therefore focuses on preferences for leveling- i.e. reducing economic inequality in the sense of lessening differences between individuals in economic outcomes.

Since the ISSP questions are phrased in terms of occupational earnings, respondents are not asked to consider the complexities of household size, composition or "need" for income. There is little reason for respondents to systematically impute a different age, 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, etc. As well, the implied context for each occupation is full time earnings, which

abstracts from the differences in income produced by variations in labor supply or unemployment.

The ISSP "should earn / do earn" data therefore offer the opportunity for a very focused analysis of attitudes to the leveling of individual rewards. There are both advantages and disadvantages in this clarity – the elimination of confounding variables is analytically useful, but one must also recognize that the complexity of attitudes to inequality is pretty fundamental. If inequality were a simple concept, or a simple policy issue, it might have been "solved" long ago – but it isn't.

4.2   Preferences for "Aggregate Inequality" across countries

One way to summarize each ISSP respondent's attitudes to inequality is to calculate for each respondent both the individual's perceived actual degree of "aggregate inequality" (as summarized below by the coefficient of variation[17] of estimated actual earnings—CVA) and their perceived equitable degree of inequality (as summarized by CVE—the coefficient of variation of what each occupation "should earn"). This calculation implicitly assumes a uniform density across occupations – which is clearly not what any respondent actually believes is empirically true, but does standardize relative population weights for occupations across all respondents. The ratio between CVA and CVE is, for each respondent, an indication of how much their own estimate of the actual degree of inequality in income ratios diverges from their own estimate of "equitable" inequality.

Table 4.2.1 presents the results for some major OECD nations[18]. Reading down the first column, it is clear that, on average, Norwegians and Swedes perceive a substantially lower level of inequality in earnings than respondents in other countries (a perception that fits with objective data). However, for other countries the substantial differences in actual inequality of earnings is not reflected in similarly substantial differences in subjective estimates of those differences. In 1999, for example, the average perception of earnings inequality in the United States (.798) was not hugely different from that of Australia (.79),

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[17] Other summary indices (e.g. Gini, 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) uses Dutch data and calculates the percentage difference in the Theil index of should earn and do earn inequality as an index of "Tendency to Equalize".

[18] A fascinating literature (e.g. Mason (1995), Suhrcke (2001)) examines the evolution of distributive justice norms in the transition economies – with the general conclusion that a strong influence of egalitarianism remains – but we concentrate here on societies with a continuously capitalist mode of production.

Austria (.852), Canada (.78), or Germany (.756) despite huge differences in reality (Gottschalk and Smeeding, 1997; 2001). In the United Kingdom there was a higher perception of earnings inequality (CVA = .944) than in the United States, although actual data shows less earnings inequality.

In Column two 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 accepted as ethically justifiable – but Norway and Sweden are again clearly different—the average CVE is about 0.4 in both countries - in how much inequality should be tolerated. Other countries have an average level of "should earn" inequality in the region of 0.6 to 0.7—it is notable that the United States responses show a strong trend to a lower level of perceived "fair" inequality over time, and by 1999 are not particularly different from average responses in any of the other (non-Scandinavian) countries.

The third column of the table is the one that arguably has the most 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 "do earn" inequality (CVA) and "should earn" inequality (CVE). In every country, in every year, the average respondent perceives there to be more actual inequality than there should be—the "do earn" to "should earn" inequality ratio is always substantially greater than one. Again, the Scandinavians stand out as perceiving there to be much more inequality in earnings than there should be—but this arises not because their estimates of actual inequality are higher (as noted, Swedes and Norwegians think actual inequality to be lower), but because their targets for fair, "should earn" inequality are so very much lower than in other countries. Other countries (including the United States) are broadly similar in the average "tension" between perceived actual and perceived fair earnings inequality—the "do earn" / "should earn" ratio [CVA/CVE] outside Scandinavia in 1999 was typically in the range 1.4 to 1.5. There is, therefore, little basis in this ISSP data for an argument that on average Americans are more or less tolerant of earnings inequality than the citizens of other (non-Scandinavian) countries.[19]

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19. This similarity in attitudes to earnings inequality occurs in the context of differing levels of common social expenditures. If the issue in evaluating inequality is "inequality in consumption possibilities" then a relatively high common "social wage" implies that market income is less

4.3   International Differences in the Ethically Acceptable Range – the "Should Earn"
        Minimum and Maximum

Calculation of a summary index of inequality (such as the coefficient of variation) does not directly reveal the extent of the ethically acceptable range of earnings – or whether individuals are on average more accepting of inequalities at the top or the bottom of the distribution. In the ISSP data there is a broad measure of concurrence across countries in which occupations "should earn" the most and the least, 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. Although respondents are undoubtedly aware that there are also some people (like rock superstars) with incomes that may be as high or higher than the chairman of a large national company, such people are extremely scarce, and have a special celebrity status that may remove them from "normal" earnings comparisons. This paper therefore takes the range of occupations identified in the ISSP as spanning the range of pay, and compares the maximum and minimum "should earn" incomes of each respondent, as proxies for Y^*_{max} and $Y^*_{min.}$.

Table 4.3.1 presents data on the "Maximum/Minimum" "should earn" ratio in 1999 ISSP data as an indicator of the full range of ethically acceptable incomes, but it is also of interest to know whether differences across countries are primarily in terms of an aversion to excess at the top, or a dislike of deprivation at the bottom – hence it also presents the "Maximum/Mean" and "Mean/Minimum" "should earn" ratios (i.e. the "Max/Mean" is calculated, for each respondent, as their estimate of maximum 'should earn' income (Y^*_{max}) expressed as a ratio of the mean "do earn" income which they estimate, and the "Mean/Min" is the respondent's mean estimate of "do earn" income expressed as a ratio of 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. Table 4.3.2 presents the comparable 1992 results and Table 4.3.3 presents 1987 data.

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important as a source of effective consumption – an argument that would predict less emphasis on inequality of earnings in the Scandinavian countries.

Some generalizations are fairly clear. In the 1990s, there are big differences between countries in the overall range of acceptable outcomes (e.g. in 1999, the largest median Max/Min ratio was in France (7.5) which was nearly three times the smallest median Max/Min ratio (Norway – at 2.6)). However, there are relatively small cross-national differences in ethically acceptable income ratios at the top (in 1999, the lowest Max/Mean median ratio was Spain at 1.556 while the largest was Germany, at 2.166). 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. One way this can be summarized is as saying that nations are more similar in envy than they are in compassion.

Notably, the "should earn" ratio at the top is always of the same order of magnitude as the "should earn" ratio at the bottom – despite the fact that in the real world the earnings ratio at the top is likely to be an order of magnitude greater than the ratio between average incomes and those of the least skilled. It makes little difference whether earnings ratios are calculated in terms of "maximum", "minimum" and "mean" or in terms of specifically named occupational categories (corporate CEO, skilled worker and unskilled worker), but doing it the latter way enables a cross check with actual earnings ratios. There are many practical difficulties in comparing the earnings of production workers and the total compensation packages of Chief Executive Officers across countries, but as Table 4.3.4 indicates, the data that is available indicates that the earnings ratio varies between approximately 20:1 and 50:1. A remarkable feature of the data is how much larger actual pay gaps are than both the "do earn" estimates and "should earn" ratios revealed in Table 4.3.3.

Norway and Sweden are pretty consistently the countries with the smallest range of ethically acceptable incomes, particularly at the bottom end, when it comes to the desired range between the mean and the minimum earnings. In rank terms, Australia is next in minimum range (although there is a considerable quantitative jump between Scandinavia and Australia).

Is there any support for the hypothesis of "American exceptionalism" in this data on attitudes to the range of inequality? Can one find a clear difference in attitudes, of a magnitude that might help explain the difference in public policy to inequality?

Looking at the median and mean "Max/Mean" ratios – i.e. the "average person's" tolerance of inequality at the top end of the distribution - such a difference is hard to find in

1992 and 1999 data, since the US is almost exactly in the middle of the pack of nations surveyed. In 1987 data, the UK appears as most tolerant of a wide range of incomes at the top end, with the US in second place – but the difference between countries is not large. Furthermore, it is remarkable how small (approximately 3:1) the ethically acceptable ratio between the salary of the chairman of a large national company and the average[20] was thought to be in 1987. It is also notable that there was, in 1992 and 1999, a <u>downward</u> trend in mean and median US perceptions of the acceptable Max/Mean ratio. It is therefore not easy to argue that the much larger, and widening, gap between average earnings and executive compensation in the USA, compared to other countries, is consistent with some uniquely American set of inequality-tolerant values.

Differences between the US and other countries are easier to find in attitudes to the acceptable range of inequality at the bottom of the income distribution. In both 1987 and 1992 data, the US was the country with largest median and mean estimates of the acceptable "Mean/Min" ratio. Tolerance of income gaps between the poor and the middle class was considerably larger in the US than in other countries and grew consistently from 1987 to 1992 and from 1992 to 1999. Since the median and mean Canadian estimates of the acceptable Mean/Min ratio grew from being substantially less, to slightly more, than in the US, it is possible that the data indicate the emergence of a "North American" perspective on low end inequality which is relatively tolerant of poverty.[21]

5. Preferences for Leveling – Differences, Distribution and Determinants

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.[22] 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

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[20] Note that this is the average across occupations, not weighted for population frequency, and therefore does not correspond exactly to average earnings as reported by national statistical agencies.

[21] Japan and France also show high levels of tolerance for low-end inequality in 1999 data, but no have no data from earlier periods to which this can be compared.

[22] See Kelley and Evans (1993) Tables documenting this assertion are also available on request from the authors but are omitted here for space reasons.

much more. Individuals differ in that assessment, and the degree of "leveling" that they desire can be estimated from the micro data. In the ISSP, each individual respondent identified the "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 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 is, at the margin, captured by the b_1 coefficient, which is taken here as an individual's preferences for the leveling.

Table 5.1 reports the mean and median b_1 or "leveling" coefficient estimated from the 33 ISSP surveys. If one thought that there was less egalitarianism (in the sense of a desire for a leveling of earnings) in American values than in other countries, then one might expect to observe a systematically higher b_1 coefficient in the USA than elsewhere – but that is not the implication of Table 5.1. In 1987 and 1999 data, the median and mean b_1 coefficient in the US was above the mean for all country years but in 1992 it was below. The average rank of the US (over all three surveys) was 16th for the median b_1 coefficient and 13th for the mean b_1 coefficient – which is pretty close to the middle of a pack of 33.

Table 5.1 is consistent with much other data reported in this paper in reporting that in Norway and Sweden average preferences for leveling are stronger than is typical elsewhere. The average and median estimate for Australia in 1987 is inconsistent with the other years data for Australia in Table 5.1 and with other data - this indicator that a rogue result is possible lends some caution to the interpretation of results for countries for which only one year of data is available. For the UK, however, all three survey waves concur in the conclusion that mean and median preferences for leveling in the UK are relatively high by international standards – the average UK rank was 26th for the median b_1 coefficient and 29th for the mean b_1 coefficient (where 33 would be the rank of the country with greatest preference for leveling).

Although there may currently be a "gender gap" in voting intentions in the US, with males more likely to vote for the "right wing" than females, Table 5.1 provides a caution against interpreting this as a general female proclivity to greater egalitarianism. Columns 5 and 6 report the difference between male and female responses – where a positive difference indicates that the median (or mean) male respondent has less preference for leveling (indicated by a higher b_1 coefficient) than the median (or mean) female, and a negative

differential indicates men to be more inclined to level earnings. Interestingly, male-female differences are often quite small in size and fluctuate in sign. Although Canada, Australia and the Scandinavians show a tendency for the median (average) female to be more leveling than the median (average) male, in the UK and the USA, the gender differential fluctuates – in two of three years, the median (average) American woman is more leveling than the median (average) American man, while in two of three years, British men are more leveling than British women.

Up to this point, national preferences have been summarized in terms of a measure of the central tendency of the distribution of attitudes - the median or mean individual. However, the point of including Figure 3 above was to provide a caution that the distribution of attitudes to inequality may be poorly summarized by measures of central tendency. If attitudes to inequality are highly polarized, the analysis of political trends in terms of the median or mean voter, or the characterization of societies as more or less egalitarian in preferences, may be highly misleading. As Table 5.1 indicates, there is a substantial variation of individual attitudes to leveling – more so in the US than in most other countries. Furthermore, although it is possible to imagine that a respondent would want to accentuate income differences and would prefer an even greater spread of earnings than that now observed (i.e. $b_1 > 1$), in practice there are very few. Those people who think the existing distribution of earnings is fair will report $Y_j^* = Y_j^A$ which implies that for them $b_1 = 1$. To the extent that respondents support the status quo, there will tend to be an accumulation of b_1 estimates at $b_1 = 1$.

To assess how the distribution leveling tendencies varies across countries we turn to kernel density methods[23], which offer a picture of attitudes which may not "be worth a thousand words" but does convey much more information than summary statistics, like moments of the distribution. Figure 5.1 presents kernel density estimates of the distribution of preferences for leveling in the USA in 1987, 1992 and 1999. 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

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[23] The benefit of kernel density methods is that they enable a smooth function to be drawn, from discrete actual observations, to reflect the underlying distribution from which specific data points were drawn. The cost is that the implicit assumption of a continuous distribution may not fit well at discrete breaks in the data – in this case where a significant number of observations pile up at exactly $b_1 = 1$ – and may over smooth highly skewed or multimodal distributions. When comparing distributions which evidently have different characteristics, it seems advisable to use a common kernel density bandwidth, but as the STATA manual (pg 146, H-O) states: the "optimal" bandwidth used here is the "width that would minimize the mean integrated square error if the data were Gaussian and a Gaussian kernel were used and so is not optimal in any global sense".

substantial number clustering around a leveling preference of about $b_1 = 0.5$. Over time, there appears to have been something of a migration of attitudes among Americans, with an increased tendency to respond that "what is, should be" (i.e. $b_1 = 1$) in the distribution of earnings.

However, the preference for leveling captured in the b_1 coefficient does not directly address the issue of the ethically permissible range of earnings, and whether there is more concern with capping excessive rewards at the top of the distribution or limiting deprivation at the bottom. Figures 5.2 and 5.3 present the distribution of American attitudes to the Max / Mean and Mean / Min "should earn ratios. Notably, as Figure 5.2 shows, there appears to have been a hardening of American attitudes towards excess earnings at the top – the modal value of the Max / Mean ratio declines over time and becomes significantly more concentrated (see also Tables 4.3.1 to 4.3.3) – at a level that is vastly different from the actual pay ratios reported in Table 4.3.4. In contrast, attitudes to inequality at the bottom end have become more diffuse over time. Figure 5.3 indicates that in 1987 data there was a noticeable community norm of an ethically permissible deviation of minimum earnings from the average, but this has eroded.

Figure 5.4 compares male and female preferences for leveling in 1999 US data, as a prelude to international comparisons. The "gender gap" in preferences for greater leveling is clearly apparent, but both American males and females have a bimodal distribution of preferences. In Figure 5.5, Canadian men and women are compared – the tendency to bimodality among men is very slight, and among women is non-existent. As Figure 5.6 then does the same for the UK – and one can note that the gender gap is now very small, with men (if anything) more likely than women to prefer leveling. The convergence of attitudes around a quite high preference for leveling (a modal value of approximately $b_1 = 0.45$) is striking, compared to the more diffuse distribution of preferences to be found in North America.

However, if one could paint a picture of "social cohesion" in attitudes to inequality, it would probably look like Figure 5.7 for Norway[24]. Where the US kernel density estimates paint a picture of polarized attitudes, the Norwegian picture is one of broad consensus. As other data in this paper has also indicated, Norwegians are on average in favor

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[24] 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).

of reducing still further the already relatively small income gaps in Norway, and Figure 5.7 indicates that there is a very strong convergence in attitudes around a value of about $b_1 = 0.66$ (which is actually noticeably *less* leveling, relative to current differentials, than modal values in the other three countries).

To make the inter-country comparisons more explicit, Figure 5.8 puts the US, UK, Norway and Canada on the same graph. It is limited to a four country comparison because additional countries are hard to distinguish visually, but its basic story can also be told with other countries' data. The US (with strong polarization) and Norway (with consensus) are poles of a continuum, with Canada (not entirely American in attitudes) and the UK (not entirely European in values) as intermediate cases. One way to summarize Figure 5.8 is to note that in all four countries there are a large number of people who are "levelers" – what is different about North America, and especially the USA, is that it also contains a group who are satisfied with the status quo. As a result, the contrast between the US and Norway is particularly striking. The bimodal distribution of Americans – with approximately equal frequencies converging around an acceptance of the status quo with little or no leveling desired $(0.9 < b_1 < 1)$ and a convergence at attitudes around substantial desired leveling $(b_1 = $ approx. $0.5)$ - is apparent among both men and women, although with different peaks.

However, Figure 5.8 does not indicate the distribution of preferences for leveling at different ends of the earnings distribution. Figures 5.9 and 5.10 therefore compare the distribution of the Max / Mean Ratio and Mean / Min Ratio of "should earn" incomes across countries. 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 5.9 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. UK respondents have a somewhat greater acceptance of top end inequality, but in all three countries there is still a noticeable social consensus on the maximum level of income

someone "should earn". However, Figure 5.10 indicates that there is no such consensus in the UK, Canada or the USA on relative minimum earnings in 1999 [25].

When attitudes differ so markedly among individuals, it is natural to ask whether they can be explained by personal characteristics, like income or education or other indicators of values, such as subjective self-identification of social class or political tendency. A natural way to try to answer this is by using multiple regression techniques, where income, education, self-identified social class and other variables are used to explain each respondents leveling (b_1) coefficient. However, the bimodality of the American distribution of leveling tendencies may also indicate that a simple linear model which attempts to explain the central tendency of the distribution of b_1 may not capture the polarization process.

Table 5.2 is included as an illustration of the results obtained when one uses OLS, within countries, to explain the individual variation in leveling preferences (i.e. b_1 is the dependent variable). A number of other tables could be presented which make the same basic point – that very little of the variation across individuals in leveling preferences can be explained by standard variables such as own family income, age, education, gender, or even subjective social class or political tendency. The statistically significant results that are obtained, within countries, are reasonable in sign, but typically small in magnitude. Clearly, Much remains to be explained, at the micro level.

6. Conclusion

This paper started with the observation that the US has more income inequality than other developed countries, but government does less about it. This poses a problem for those "political economy" models which start from the premise that individuals will be more likely to vote for income redistribution policies when their income falls below the mean, because if so one should observe more, rather than less, income redistribution in the US than in other affluent countries. In partial response to the "missing redistribution" of American public

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[25] Note that this differs from the conclusion of Kelly and Evans (1993) using 1987 ISSP data that cross-national differences in attitudes were primarily about appropriate income differences at the top end – but that was then and this is now.

policy, a recent literature has argued that there is something different about American values, compared to European attitudes, and that less redistribution is, essentially, what Americans want.

But is this true? Are American attitudes to inequality different from those elsewhere – and if so, how? Section 2 presented average responses in the ISSP, across countries, to an array of questions about economic inequality that provide no real support for the hypothesis of American exceptionalism. Section 3 then discussed the many issues that are bundled together in the responses to summative questions on "inequality", and noted the importance of distinguishing between individuals' estimates of the empirical size, prevalence and type of economic differentials and their value based attitudes to economic processes and outcomes. It advocated comparison of the "should earn" and "do earn" as a useful way of getting a clean answer to the question of whether Americans have different values about inequality.

On average, Americans do not stand out as being particularly different from other countries in the "should earn / do earn" comparisons – but comparison of medians or means hides an important part of the story. The US appears to be a country with much more polarization of attitudes to income leveling than is common elsewhere – and increasingly so over time. The bimodality of American attitudes to leveling is particularly striking.

It should be noted that sociologists 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). Kluegel at al (1995:206) summarize the results of a cross-national comparison of attitudes as indicating that:

> "The split-consciousness pattern supports Mann's (1973) assertion that the stability of the stratification order results more from self-canceling beliefs among the working class than from uncritical beliefs in its legitimacy….the bicausal view of the causes of poverty and wealth is strongest among lower status persons, i.e. among the working class. The presence of a bicausal view of poverty and wealth has implications for the politics of welfare state redistribution. It 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."

It is but a short step from a latent bicausal model of inequality (at the individual level) to a manifestly bimodal distribution in society of attitudes to income leveling – a step that may be encouraged if political actors focus on "wedge issues" to herd their constituency of support into line[26]. However, the context 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. In international comparisons, the US 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, the Anglo-American countries as a group have a similarly diffuse set of attitudes (which contrasts with a strong concern for a social minimum in Europe).

This paper started with the "so what" question. The long-term implications of the combination of:

(1)   an empirical trend to widening actual differentials at the top of the US income distribution;

(2)   public attitudes that have hardened in the US against excessive wage differentials at the top end and

(3)   increasing polarization of attitudes to income leveling

 are hard to specify exactly – but this does not sound like a likely recipe for political stability.

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[26] Note that the dynamics of wedge politics in a political system with three or more parties plays out very differently than in a two party system – and among the OECD nations the US is the only real two party electoral system.

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Table 2.1
Attitudes to Inequality: Are Income Differences Too Large?

Country	Year	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Australia	1999	17.8	53.1	17.1	11.6	0.4	100
	1992	18.3	44.8	19.2	15.8	1.9	100
	1987	13.8	46.9	18.9	18.1	2.3	100
Austria	1999	40.4	45.8	9.1	4.7	0	100
	1992	35.4	46.7	10.4	6.1	1.4	100
	1987	46.9	43	5.4	4	0.7	100
Canada	1999	28.1	42.5	15.7	11.2	2.6	100
	1992	25.3	45.3	16.2	11.2	1.9	100
France	1999	60.3	27.2	7.4	4.5	0.7	100
Germany	1999	20.5	55.2	14.3	9.1	0.9	100
	1992	30.5	53.4	9	6.4	0.6	100
	1987	25.2	50.8	13	9.4	1.7	100
Italy	1992	53.2	36.3	6.3	4	0.2	100
	1987	43.6	43.5	6.9	5.4	0.7	100
Netherlands	1987	19	47.4	13	17.6	3	100
Norway	1999	22.4	50.1	13.8	12	1.8	100
	1992	22.3	48.5	14.4	12	2.8	100
Spain	1999	35.9	53.4	7.4	3.1	0.2	100
Sweden	1999	29.2	41.9	18.1	8.4	2.4	100
	1992	24.4	35.1	21.9	13.6	5	100
Switzerland	1987	19.1	48.5	20.7	10.4	1.4	100
UK	1999	31.7	50.6	11.6	5.4	0.6	100
	1992	36.3	44.9	10.7	7.1	1.1	100
	1987	26.8	48.9	12.7	10	1.4	100
US	1999	25	41.2	21.5	9.2	3.2	100
	1992	27.7	49.4	11.4	9.7	1.7	100
	1987	14.9	43.1	22.4	16.3	3.3	100

Source: ISSP 1999, 1992, 1987

Table 2.2 – Explanations for Inequality

Country	Year	Inequality continues to exist because it benefits the rich and powerful. 1 (strongly agree) to 5 (strongly disagree)		Large income differences are necessary for a country's prosperity. 1 (strongly agree) to 5 (strongly disagree)		Knowing the right people – how important is that for getting ahead in life? 1 (essential) to 5 (not important at all)		Well-educated parents – how important is that for getting ahead in life? 1 (essential) to 5 (not important at all)
Australia	1999	2.53		3.45		2.91		
	1992	2.43		3.24		2.62		3.03
	1987	2.50		3.10		2.89		3.28
Austria	1999	2.65		4.10		2.17		
	1992	2.28		3.69		2.18		2.94
	1987	2.22		3.40		2.12		2.74
Canada	1999	2.67		3.90		2.57		
	1992	2.29		3.65		2.74		2.93
France	1999	2.01		3.92		2.71		
Germany	1999	2.45		3.66		2.50		
	1992	2.03		3.60		2.45		2.94
	1987	2.26		3.31		2.35		2.80
Italy	1992	2.07		3.24		2.14		2.78
	1987	2.13		3.66		2.00		2.79
Netherlands	1987					2.68		3.11
Norway	1999	2.46		3.71		2.92		
	1992	2.22		3.60		3.46		3.46
Spain	1999	2.25		3.68		2.35		
Sweden	1999	2.66		3.67		2.62		
	1992	2.54		3.16		2.80		3.16
Switzerland	1987	2.42		3.52		2.55		2.96
UK	1999	2.74		3.71		2.81		
	1992	2.32		3.49		2.78		2.99
	1987	2.36		3.26		2.70		3.04
US	1999	3.26		3.68		2.94		
	1992	2.51		3.31		2.65		2.72
	1987	2.65		3.05		2.67		2.80
		2.42	##	3.53	##	2.60	##	2.97

Data source: The International Social Survey Programme

USA average		2.81	##	3.35	##	2.75	##	2.76

Table 2.3 – Importance of Personal Characteristics to "Getting Ahead"

Country	Year	How important are the following personal characteristics to get ahead in life?			
		1 (essential); 2 (very important); 3 (fairly); 4 (not very); 5 (not important at all)			
		Good Education[1]	Ambition	Natural Ability	Hard Work[2]
Australia	1999	2.57			2.68
	1992	2.07	1.85	2.19	1.89
	1987	2.09	1.73	2.16	1.86
Austria	1999	2.96			3.2
	1992	1.64	1.85	2.07	2.15
	1987	1.63	1.98	2.14	2.2
Canada	1999	2.88			2.85
	1992	1.84	1.78	2.54	1.92
France	1999	3.24			3.46
Germany	1999	2.74			3.06
	1992	1.79	2.23	2.51	2.38
	1987	1.78	2.2	2.34	2.31
Italy	1992	1.92	2.42	2.12	2.48
	1987	1.97	2.66	2.06	2.49
Netherlands	1987	2.14	2.18	2.55	2.2
Norway	1999	3.12			3.23
	1992	2.32	1.83	2.46	2.12
Spain	1999	3.08			3.24
Sweden	1999	3.14			3.21
	1992	2.24	2	2.54	2.26
Switzerland	1987	1.87	2.19	2.32	2.19
UK	1999	2.92			3.19
	1992	2.05	1.95	2.39	1.84
	1987	2.08	1.85	2.33	1.83
US	1999	2.59			2.77
	1992	1.8	1.72	2.44	1.76
	1987	1.82	1.7	2.32	1.75
Average	1999	2.92			3.09
	1992	1.96	1.96	2.36	2.09
	1987	1.92	2.06	2.28	2.1
Average	Overall	2.31	2.01	2.32	2.46

Data source: International Social Survey Programme
Note: Cell values are the weighted average responses for each country.
[1]The wording in 1999 was: do you agree… in [country], people get rewarded for their intelligence and skills? Responses ranged from 1 (Agree strongly) to 5 (Disagree strongly).

[2]The wording in 1999 was: do you agree… in [country], people get rewarded for their effort? Responses ranged from 1 (Agree strongly) to 5 (Disagree strongly).

Table 2.4 Inequality and The Role of Government

Country	A1 Is it the responsibility of government to reduce income differences? 1 (definitely) to 4 (definitely not)		A2 It is the responsibility of government to reduce income differences? 1 (strongly agree) to 5 (strongly disagree)			A3 Those with high incomes should pay: 1 (much more) to 5 (much less) tax than those with low incomes		
	Male	Female		Male	Female		Male	Female
Australia[1]	2.57	2.50		2.94	2.88		2.12	2.18
Austria[2]	1.99	1.93		2.20	2.14		1.86	1.86
Canada[3]	2.60	2.34		2.99	2.89		2.10	2.17
Denmark[4]	2.73	2.54						
France[5]	1.80	1.74		2.22	2.04		2.15	2.02
Germany[6]	2.14	2.01		2.48	2.36		1.80	1.79
Italy[7]	1.92	1.81		2.25	2.19		1.83	1.85
Netherlands[8]	2.24	2.05		2.81	2.56			
Norway[9]	2.10	1.83		2.67	2.39		2.14	2.04
Spain[10]	1.66	1.58		2.14	2.08		1.90	1.93
Sweden[11]	2.36	2.01		2.57	2.23		2.10	2.08
Switzerland[12]	2.55	2.33						
UK[13]	2.14	1.99		2.51	2.44		1.94	2.01
US[14]	2.90	2.69		3.29	3.04		2.23	2.18
Average=	2.26	2.10	##	2.59	2.44	##	2.02	2.01

Notes:

[1]Years averaged for Australia: A1: 1998, 1996, 1992, 1991, 1990, 1987, 1985; A2: 1999, 1996, 1993, 1990, 1985; A3: 1999, 1990, 1985

[2]Years averaged for Austria: A1: 1998, 1992, 1991, 1987, 1985; A2: 1999, 1985; A3: 1999

[3]Years averaged for Canada: A1: 1998, 1996, 1992; A2: 1999, 1996, 1993; A3: 1999

[4]Years averaged for Denmark: A1: 1998

[5]Years averaged for France: A1: 1998, 1996; A2: 1999, 1996; A3: 1999

[6]Years averaged for Germany: A1: 1998, 1996, 1992, 1991, 1990, 1987, 1985; A2: 1999, 1996, 1993, 1990, 1985; A3: 1999, 1990, 1985

[7]Years averaged for Italy: A1: 1998, 1996, 1992, 1991, 1990, 1987, 1985; A2: 1996, 1993, 1990, 1985; A3: 1990, 1985

[8]Years averaged for the Netherlands: A1: 1998, 1991, 1987; A2: 1993

[9]Years averaged for Norway: A1: 1998, 1996, 1992, 1991, 1990; A2: 1999, 1996, 1993, 1990; A3: 1999, 1990

[10]Years averaged for Spain: A1: 1998, 1996; A2: 1999, 1996, 1993; A3: 1999

[11]Years averaged for Sweden: A1: 1998, 1996, 1992; A2: 1999, 1996; A3: 1999

[12]Years averaged for Switzerland: A1: 1998, 1987

[13] Years averaged for the UK: A1: 1998, 1996, 1992, 1991, 1990, 1987, 1985; A2: 1999, 1996, 1993, 1990, 1985; A3: 1999, 1990, 1985

[14]Years averaged for the US: A1: 1998, 1996, 1992, 1991, 1990, 1987, 1985; A2: 1999, 1996, 1993, 1990, 1985;A3: 1999, 1990, 1985

Figure I
Equity in Earnings

"Should Earn" Y^*

Y^*_{max}

$Y^* = Y^A$

A

e

Y^*_{min}

d · · · · · a

Y_1 Y_J Y_2
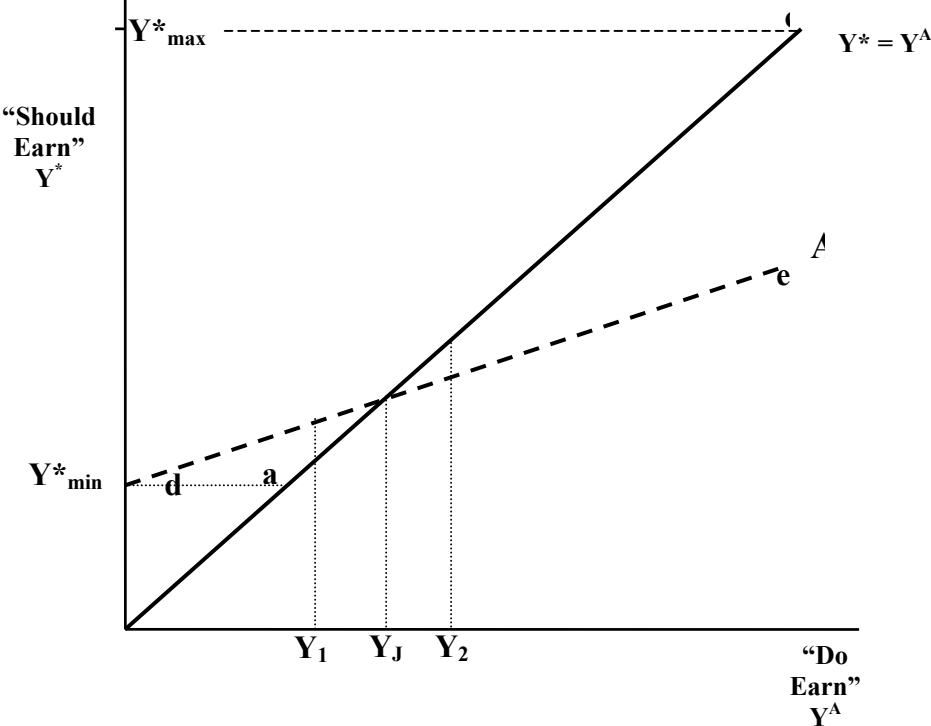
"Do Earn" Y^A

Figure II
The Ambiguity of "Redistribution"

Figure III
Same "Median Voter" – But Different Dynamics

Table 4.2–1. Actual and Ethical Inequality
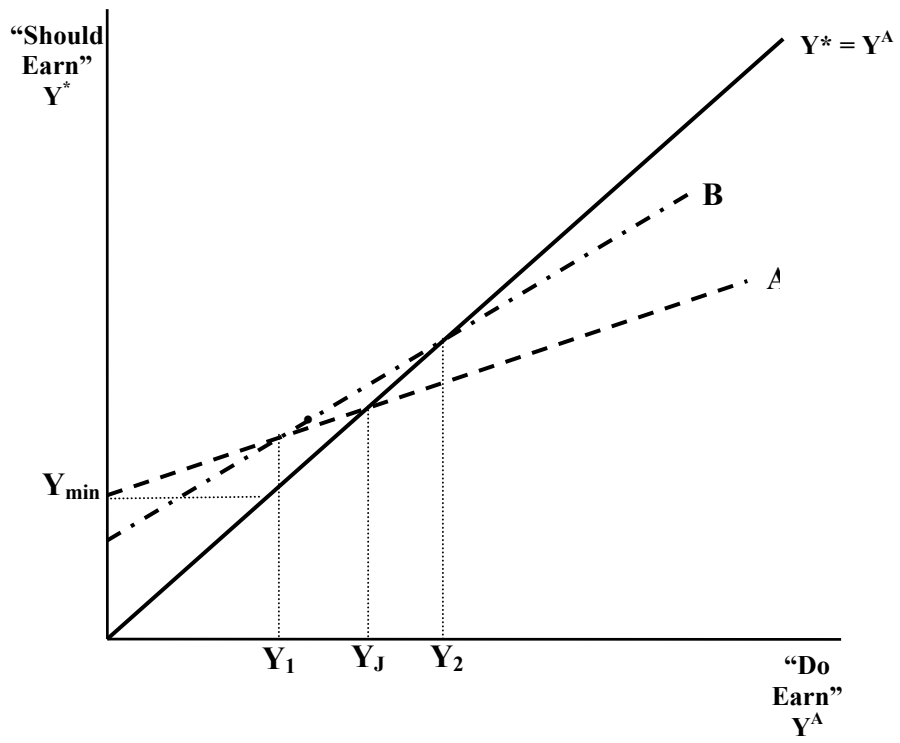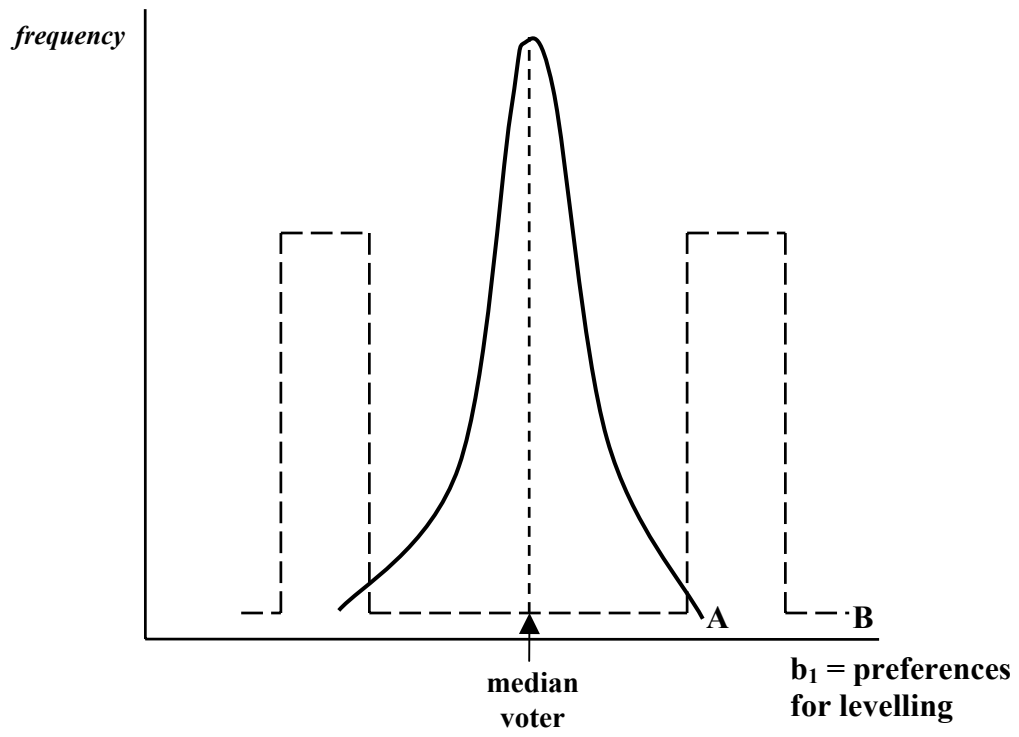
Country	Year	Average coefficient of variation of salaries people do earn (CVA)	Average coefficient of variation of salaries people should earn (CVE)	Average ratio of CVA/CVE
Australia	1999	0.79	0.59	1.46
	1992	0.86	0.62	1.53
	1987	0.65	0.52	1.37
Austria	1999	0.85	0.68	1.37
	1987	1.16	0.78	1.71
Canada	1999	0.78	0.61	1.44
	1992	0.71	0.58	1.33
France	1999	1.00	0.74	1.52
Germany	1999	0.76	0.62	1.38
	1992	0.99	0.74	1.55
	1987	1.07	0.75	1.67
Italy	1992	0.89	0.74	1.36
Netherlands	1987	0.91	0.67	1.65
Norway	1999	0.48	0.39	3.66
	1992	0.59	0.40	1.69
Spain	1999	0.58	0.41	1.63
Sweden	1999	0.66	0.44	1.80
	1992	0.60	0.39	1.82
Switzerland	1987	0.91	0.69	1.51
UK	1999	0.94	0.70	1.48
	1992	1.04	0.72	1.59
	1987	1.16	0.77	1.83
US	1999	0.80	0.66	1.38
	1992	1.09	0.80	1.56
	1987	1.17	0.87	1.51

Data source: International Social Survey Programme
Note: Respondents were asked what salaries people in various jobs do actually make and what they should make. 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. Coefficients of variation were calculated for each respondent if they answered more than seven jobs in both the 'do make' and 'should make' categories. Furthermore, the jobs answered in the 'do make' and the 'should make' categories needed to be the same to be included in the analysis.

Distributions of Should-Earn Ratios Across Countries: 1999

Table 4.3.I: Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Country Rank by Mean & Median MaxMin Ratio		Mean MaxMean Ratio	Median MaxMean Ratio	Country Rank in Max / Mean Ratio		Mean MeanMin Ratio	Median MeanMin Ratio	Country Rank in Mean / Min Ratio	
			Mean	Med			Mean	Med			Mean	Med
United States	9.680	6.667	5	2	2.131	1.978	6	7	4.037	3.236	5	4
Canada	10.156	6.667	4	2	2.179	1.981	5	6	4.073	3.240	3	3
Australia	6.110	5.000	12	9	1.935	1.791	12	12	2.975	2.686	12	12
New Zealand	7.982	5.555	8	6	2.024	1.875	9	10	3.515	2.857	8	10
United Kingdom	10.945	6.667	3	2	2.295	2.090	2	2	4.051	3.267	4	2
North Ireland	8.097	5.646	6	5	2.019	1.873	10	11	3.554	3.000	6	6
Spain	3.138	2.800	15	11	1.606	1.556	15	15	1.773	1.874	15	13
Portugal	7.722	5.333	10	7	1.993	1.892	11	8	3.491	2.829	9	11
France	11.615	7.500	2	1	2.335	2.166	1	1	4.370	3.487	2	1
Germany	7.553	6.000	11	4	2.112	2.000	7	5	3.306	2.880	10	7
Austria	8.050	5.333	7	7	2.030	1.883	8	9	3.542	2.869	7	9
Norway	3.206	2.609	14	12	1.610	1.564	14	14	1.906	1.667	14	15
Sweden	4.018	2.941	13	10	1.718	1.591	13	13	2.079	1.791	13	14
Israel	7.750	6.000	9	4	2.212	2.083	4	3	3.277	2.879	11	8
Japan	12.347	6.515	1	3	2.258	2.027	3	4	4.488	3.053	1	5

Distributions of Should-Earn Ratios Across Countries: 1992

Table 4.3.2: Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Country Rank by Mean & Median MaxMin Ratio		Mean MaxMean Ratio	Median MaxMean Ratio	Country Rank by Mean & Med MaxMean Ratio		Mean MeanMin Ratio	Median MeanMin Ratio	Country Rank by Mean & Med MeanMin Ratio	
			Mean	Med			Mean	Med			Mean	Med
United States	12.648	8.000	1	1	2.429	2.163	3	4	4.578	3.565	1	1
United Kingdom	11.576	7.500	2	2	2.573	2.368	1	1	3.866	3.037	2	2
Canada	4.832	4.571	7	9	1.933	1.874	7	6	2.407	2.238	7	7
Australia	5.510	5.000	5	7	2.073	1.891	5	5	2.476	2.278	6	6
New Zealand	5.481	4.444	6	5	1.957	1.858	6	7	2.564	2.331	5	5
Germany (West)	8.150	6.000	3	4	2.383	2.222	4	3	3.088	2.672	3	3
Italy	7.851	5.525	4	3	2.548	2.294	2	2	2.722	2.387	4	4
Norway	3.138	2.667	8	8	1.633	1.583	8	8	1.863	1.639	8	8
Sweden	2.758	2.143	9	6	1.563	1.500	9	9	1.665	1.438	9	9

Distributions of Should-Earn Ratios Across Countries: 1987

Table 4.3.3: Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Country Rank by Mean & Median MaxMin Ratio		Mean MaxMean Ratio	Median MaxMean Ratio	Country Rank by Mean & Med MaxMean Ratio		Mean MeanMin Ratio	Median MeanMin Ratio	Country Rank by Mean & Med MeanMin Ratio	
			Mean	Med			Mean	Med			Mean	Med
Australia	3.829	3.750	7	7	2.103	2.114	7	6	1.782	1.694	7	7
United Kingdom	8.019	5.555	2	3	3.029	2.727	1	1	2.265	2.023	4	3
Germany	6.821	4.800	4	4	2.622	2.375	4	4	2.281	1.933	3	4
Austria	7.862	5.833	3	2	2.775	2.632	3	3	2.567	2.167	2	2
Netherlands	5.835	4.369	6	5	2.487	2.244	5	5	2.122	1.903	6	5
Switzerland	6.435	4.000	5	6	2.396	2.116	6	6	2.191	1.804	5	6
United States	11.119	6.667	1	1	2.965	2.660	2	2	3.115	2.427	1	1
Australia '92	5.428	4.500	*	*	2.467	2.273	*	*	2.031	1.944	*	*
Sweden '92	2.877	2.170	*	*	1.719	1.620	*	*	1.610	1.355	*	*

Table 4.3.4

CEO Compensation and Pay of Production Workers in Manufacturing, 2001 (US $)

		CEO Compensation	*Production Worker in Manufacturing (4)*	*CEO/Worker Pay Ratio*	*Country Rank by Ratio*
UK *(1)*		711,403	22,654	31	4
Australia (3)		649,137	19,582	33	2
Japan*(1)*		485,941	29,974	16	8
France*(3)*		542,622	16,699	32	3
Sweden*(3)*		442,188	21,192	21	5
Germany*(1)*		461,738	26,465	17	7
US*(1)*		1,305,012	29,391	44	1
Canada*(2)*		481,651	23,436	21	6

Notes:

1) Average of Total CEO Compensation from The Galt Global Review (1999)

and from BBC News(2001):UK- Galt = $US 700,000; BBC = £509,019

Japan - Galt = $US 425,000; BBC = £385,128

Germany - Galt = $US 500,000; BBC = £298,223

USA - Galt = $US 1,200,000; BBC = £992,974

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.nationalpost.com/nationalpostbusiness/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

Table 5.1

Preferences for Leveling Across Country-Year Surveys

Country &Year		Beta		Rank		Male Beta Subtract Female Beta		Standard Deviation of Beta: Males & Females
		Median	Mean	Median	Mean	Median	Mean	
United States	1987	0.657	0.689	8	7	-0.050	-0.025	0.527
	1992	0.524	0.600	28	21	0.001	0.018	0.532
	1999	0.630	0.659	12	11	0.077	0.075	0.408
Canada	1992	0.677	0.697	6	6	0.013	0.019	0.342
	1999	0.545	0.585	25	27	0.010	0.017	0.417
Australia	1987	0.801	0.757	1	2	0.001	0.016	0.270
	1992	0.583	0.600	19	22	0.027	0.031	0.322
	1992*	0.645	0.646	11	12	-0.010	0.006	0.341
	1999	0.567	0.609	23	17	0.023	0.061	0.357
New Zealand	1992	0.616	0.623	16	14	0.072	0.072	0.276
	1999	0.587	0.613	18	16	-0.016	0.004	0.316
United Kingdom	1987	0.571	0.607	22	19	-0.022	-0.019	0.441
	1992	0.508	0.544	30	30	0.021	0.015	0.434
	1999	0.544	0.577	26	28	-0.021	-0.029	0.372
North Ireland	1999	0.655	0.677	9	9	-0.057	-0.069	0.425
Italy	1992	0.697	0.681	4	8	0.001	0.001	0.287
Spain	1999	0.621	0.599	14	23	-0.046	-0.012	0.406
Portugal	1999	0.544	0.597	27	24	-0.007	0.032	0.383
France	1999	0.459	0.519	33	33	0.025	0.064	0.531
Netherlands	1987	0.694	0.699	5	4	0.013	0.046	0.452
Switzerland	1987	0.620	0.614	15	15	-0.027	0.012	0.287
Germany (W)	1987	0.579	0.604	20	20	-0.033	0.000	0.373
	1992	0.596	0.608	17	18	0.059	0.035	0.468
	1999	0.755	0.714	2	3	0.007	0.010	0.311
Austria	1987	0.490	0.549	31	29	0.011	0.027	0.351
	1999	0.654	0.661	10	10	-0.002	0.013	0.315
Norway	1992	0.516	0.538	29	31	0.035	0.035	0.290
	1999	0.622	0.646	13	13	0.029	-0.003	0.325
Sweden	1992	0.560	0.587	24	26	0.056	0.061	0.368
	1992*	0.577	0.597	21	25	0.065	0.055	0.355
	1999	0.483	0.520	32	32	0.029	0.031	0.387
Israel	1999	0.668	0.697	7	5	0.038	0.065	0.530
Japan	1999	0.730	0.793	3	1	0.130	0.109	0.647
Average		0.599	0.620			0.009	0.019	0.376

Notes:

1992* indicates that the sample of occupations for which beta is calculated is identical to that from the 1987 file.

Table 5.2
# Determinants of Attitudes to Leveling:1999

OLS Coefficients, p-values, F-statistics and total observations from Regression of Should Earn/Do Earn Slope Coefficient (beta) on demographic and subjective data, by country

Demographics + Subjective Social Class + Political Orientation

Country		United States	Canada^	Australia	New Zealand	United Kingdom	North Ireland	Spain^	Portugal^	France^
Age										
	Coefficient	0.0001	-0.0003	0.0010	-0.0007	**0.0026**	-0.0008	**0.0022**	**0.0023**	0.0008
	p-value	*0.88*	*0.79*	*0.21*	*0.52*	***0.02***	*0.54*	***0.06***	***0.01***	*0.45*
Gender: Female = 1										
	Coefficient	**-0.0754**	0.0028	**-0.0543**	-0.0205	0.0141	0.0485	-0.0222	-0.0303	**-0.0693**
	p-value	***0.01***	*0.93*	***0.02***	*0.45*	*0.66*	*0.27*	*0.53*	*0.22*	***0.01***
Family Income										
	Coefficient	0.0048	0.0062	**0.0472**	-0.0180	-0.0096	-0.0124	0.0094	-0.0197	**0.0275**
	p-value	*0.80*	*0.40*	***0.00***	*0.46*	*0.68*	*0.66*	*0.45*	*0.11*	***0.00***
Education Category										
	Coefficient	-0.0052	-0.0227	-0.0007	-0.0010	0.0124	*	0.0205	**0.0262**	0.0197
	p-value	*0.72*	*0.14*	*0.94*	*0.93*	*0.43*		*0.17*	***0.03***	***0.08***
Lower Class										
	Coefficient	-0.0604	-0.1066	-0.0321	0.0082	*	*	0.0004	-0.0111	**0.4085**
	p-value	*0.42*	*0.27*	*0.66*	*0.92*			*1.00*	*0.83*	***0.03***
Working Class										
	Coefficient	0.0277	**-0.0817**	**-0.0850**	**-0.1042**	*	*	*	-0.0180	0.0430
	p-value	*0.38*	***0.07***	***0.00***	***0.01***				*0.59*	*0.38*
Upper Working Class										
	Coefficient	*	**-0.0781**	*	0.0010	*	*	0.0140	-0.0109	0.0389
	p-value		***0.09***		*0.98*			*0.74*	*0.78*	*0.41*
Upper Middle Class										
	Coefficient	*	0.0304	*	**0.0989**	*	*	0.0005	**0.1814**	-0.0184
	p-value		*0.52*		***0.01***			*1.00*	***0.04***	*0.62*
Upper Class										
	Coefficient	0.0467	0.3829	-0.0793	0.1905	*	*	-0.2821	-0.4470	0.1054
	p-value	*0.65*	*0.14*	*0.38*	*0.10*			*0.35*	*0.24*	*0.21*
Far Left										
	Coefficient	*	*	-0.0911	**-0.1412**	*	*	**-0.3708**	0.1420	**-0.2164**
	p-value			*0.31*	***0.05***			***0.09***	*0.18*	***0.00***
Left										
	Coefficient	0.0425	**-0.1113**	0.0415	-0.0899	-0.0135	*	-0.0239	-0.0167	**-0.1210**
	p-value	*0.22*	***0.04***	*0.40*	*0.13*	*0.78*		*0.56*	*0.60*	***0.00***
Right										
	Coefficient	0.0420	0.0381	0.0952	-0.0426	**0.1313**	*	0.0359	0.0730	**0.1007**
	p-value	*0.25*	*0.44*	*0.05*	*0.43*	***0.01***		*0.46*	*0.37*	***0.02***
Far Right										
	Coefficient	*	*	0.0104	*	*	*	*	*	0.0910
	p-value			*0.91*						*0.17*
No Party										
	Coefficient	*	*	0.0692	-0.0928	0.0011	*	*	-0.0202	*
	p-value			*0.21*	*0.19*	*0.99*			*0.56*	
Constant										
	Coefficient	**0.7024**	**0.7269**	0.1318	**0.9424**	0.4339	0.7623	**0.4200**	**0.5341**	0.3170
	p-value	***0.00***	***0.00***	*0.47*	***0.00***	*0.09*	*0.02*	***0.00***	***0.00***	***0.01***

F-Statistic	1.31	**1.81**	**4.93**	**2.38**	**4.03**	0.63	1.03	**1.93**	**7.15**
R-Square	0.0144	**0.0375**	0.0538	0.0509	0.0513	0.0042	0.0187	**0.0263**	0.0721
Observations	819	524	1054	590	529	452	609	941	1210

Figure 5.1
United States Social Inequalities ISSP Years 1987-1999: Should Earn / Do Earn Slope Coefficient (Beta) Over Time, Both Sexes
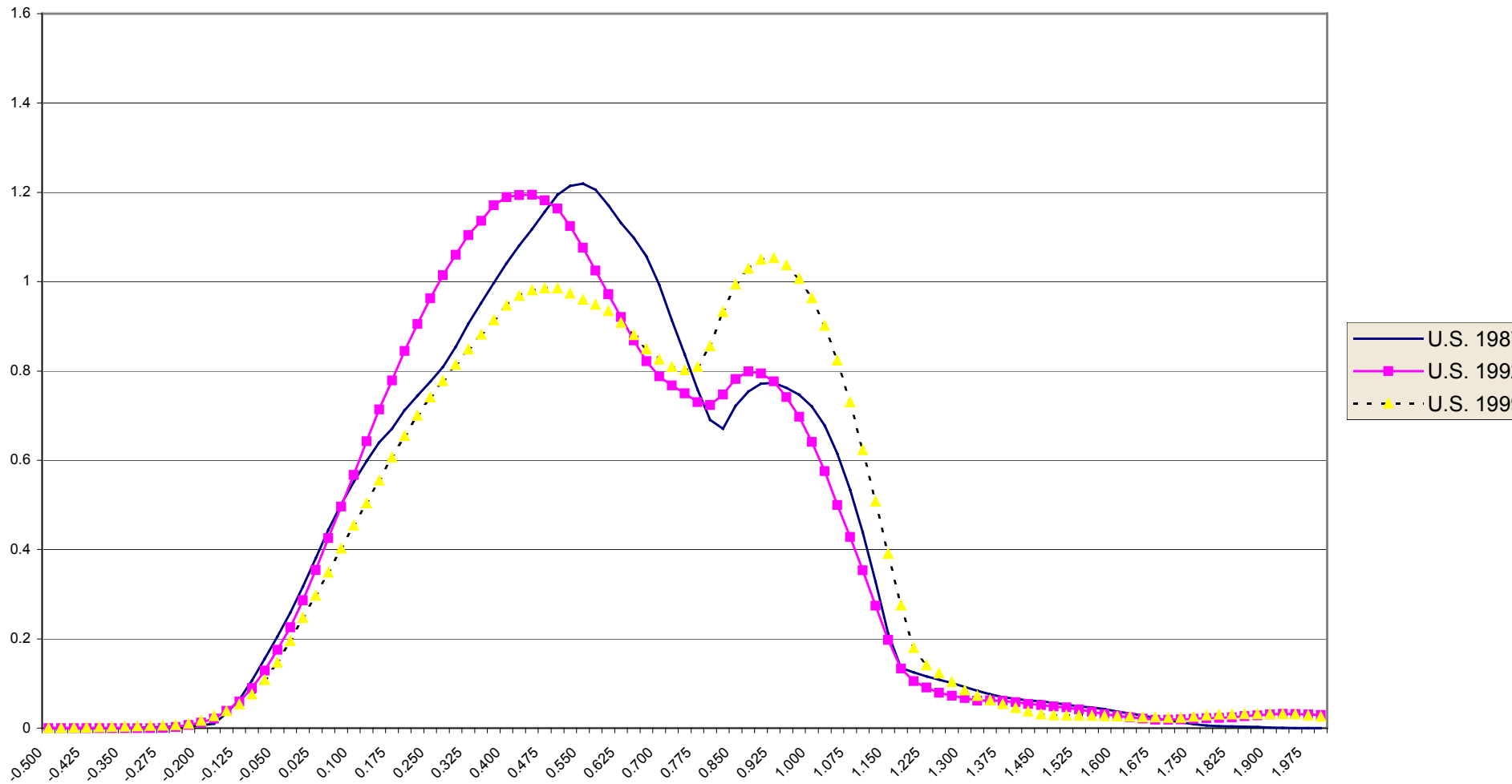
Table 5.2
United States Social Inequalities ISSP Years 1987-1999:
MaxMean Ratio Over Time, Both Sexes
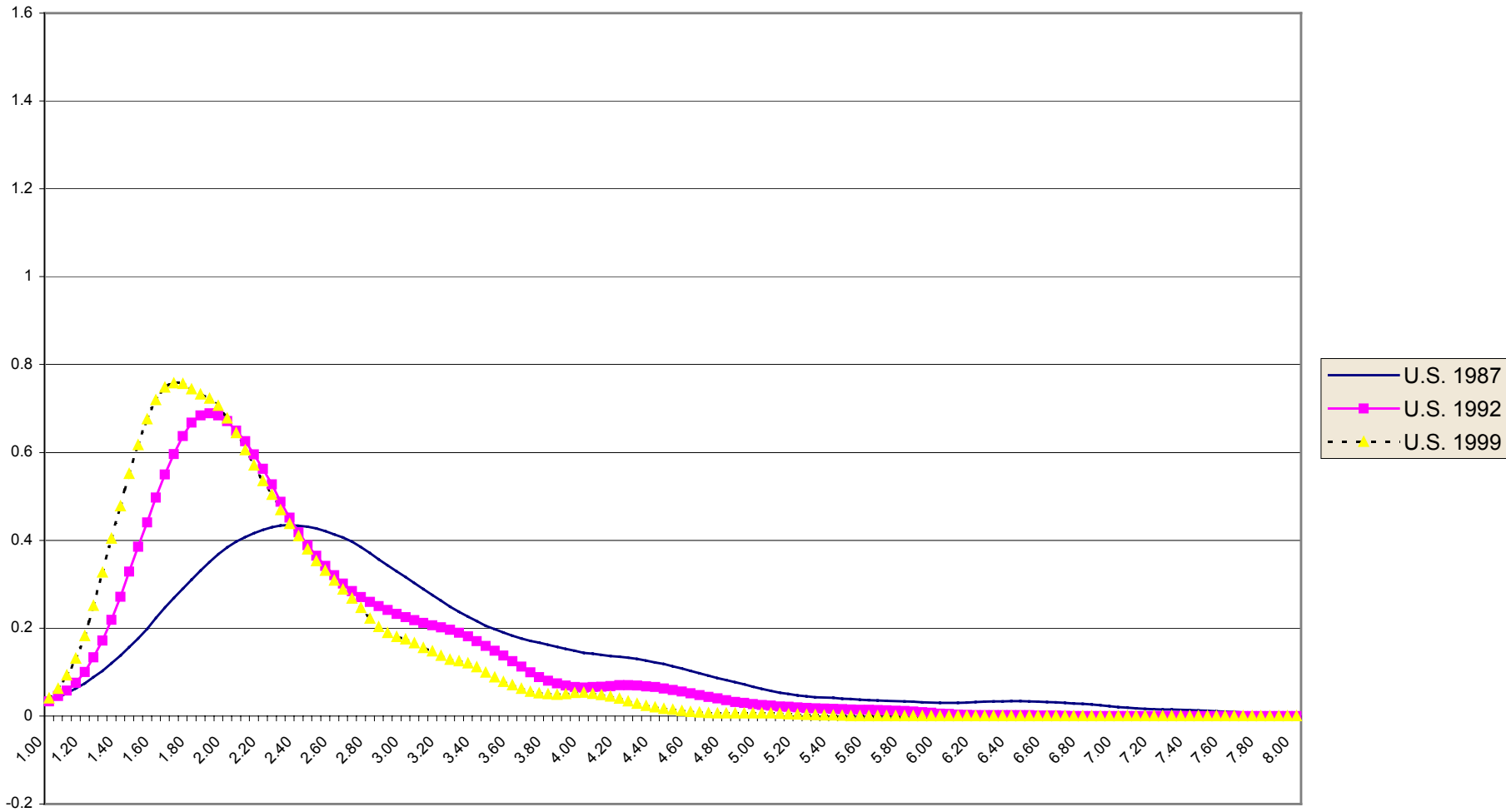
Figure 5.3
United States Social Inequalities ISSP Years 1987-1999:
MeanMin Ratio Over Time, Both Sexes

Legend:
- U.S. 1987
- U.S. 1992
- U.S. 1999
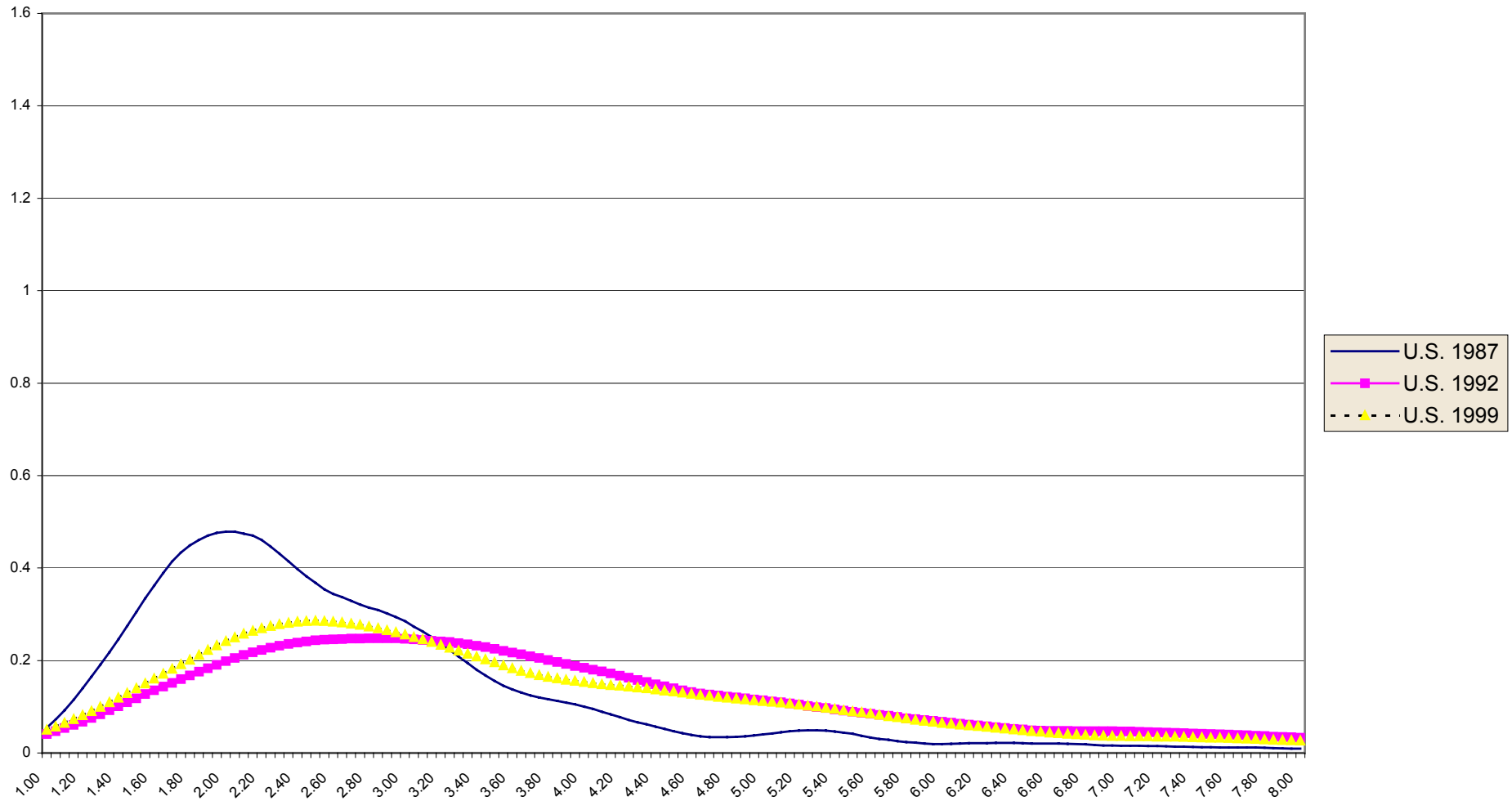
Figure 5.4
United States 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex

55
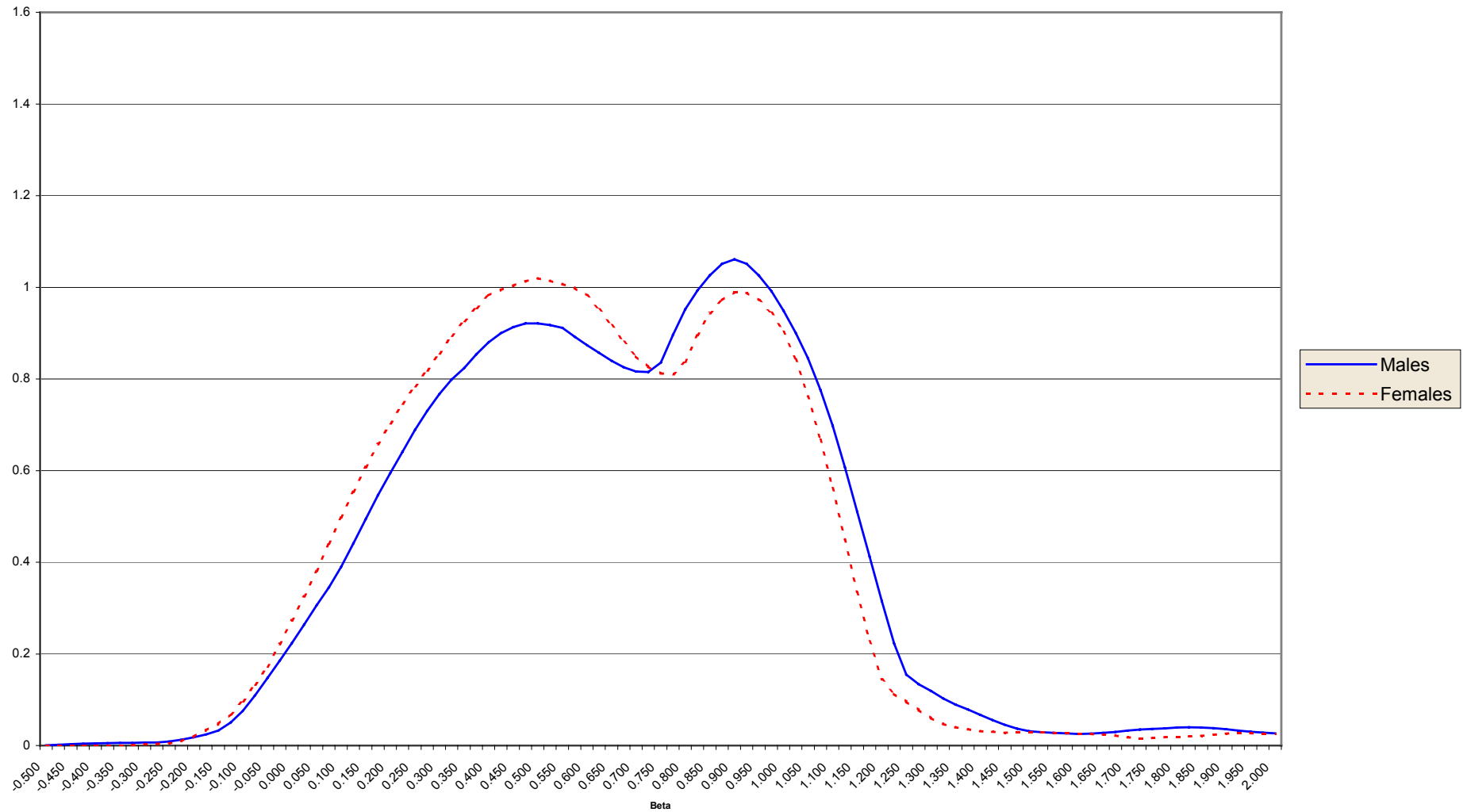
Figure 5.5
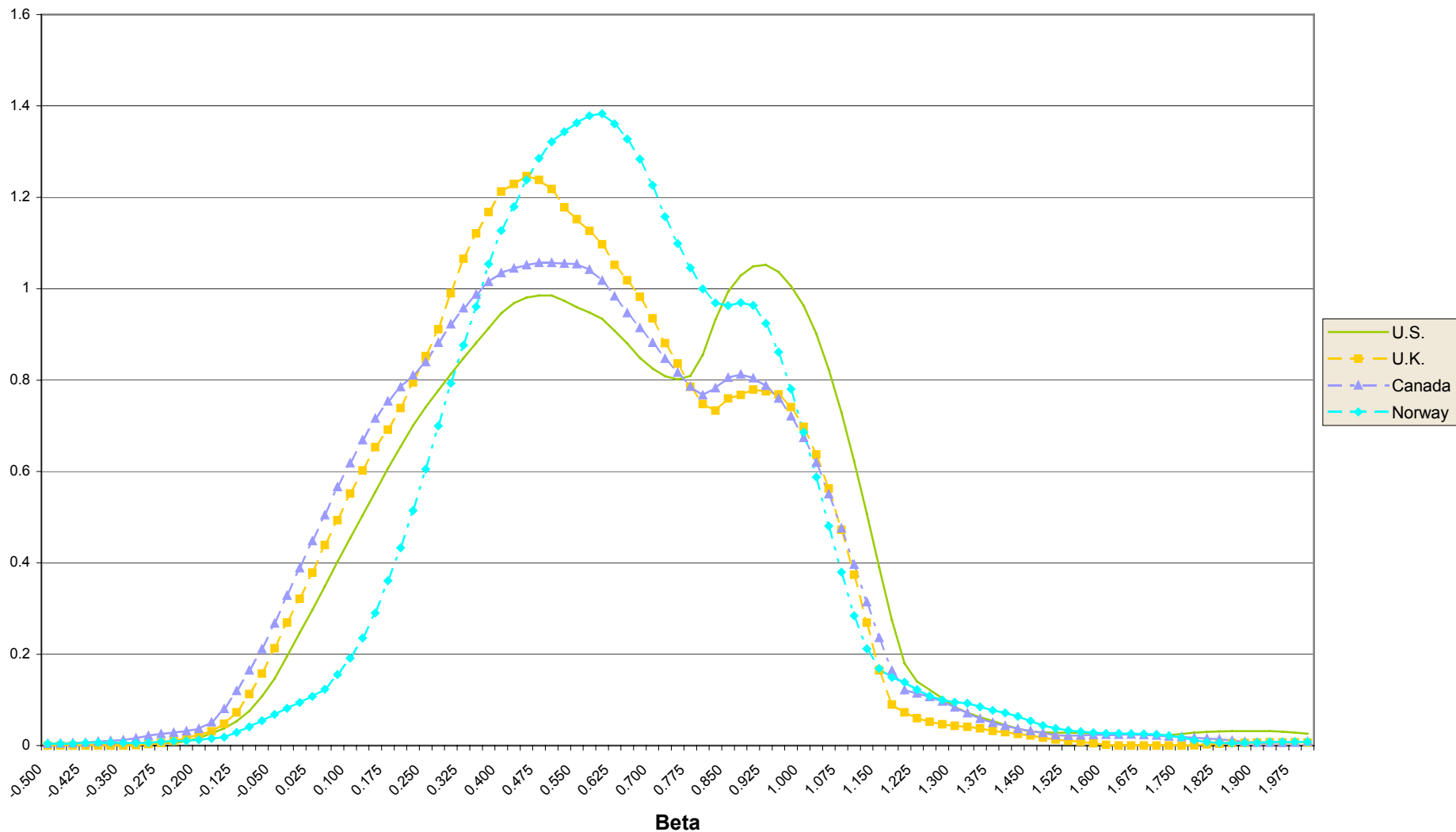**Canada 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex**
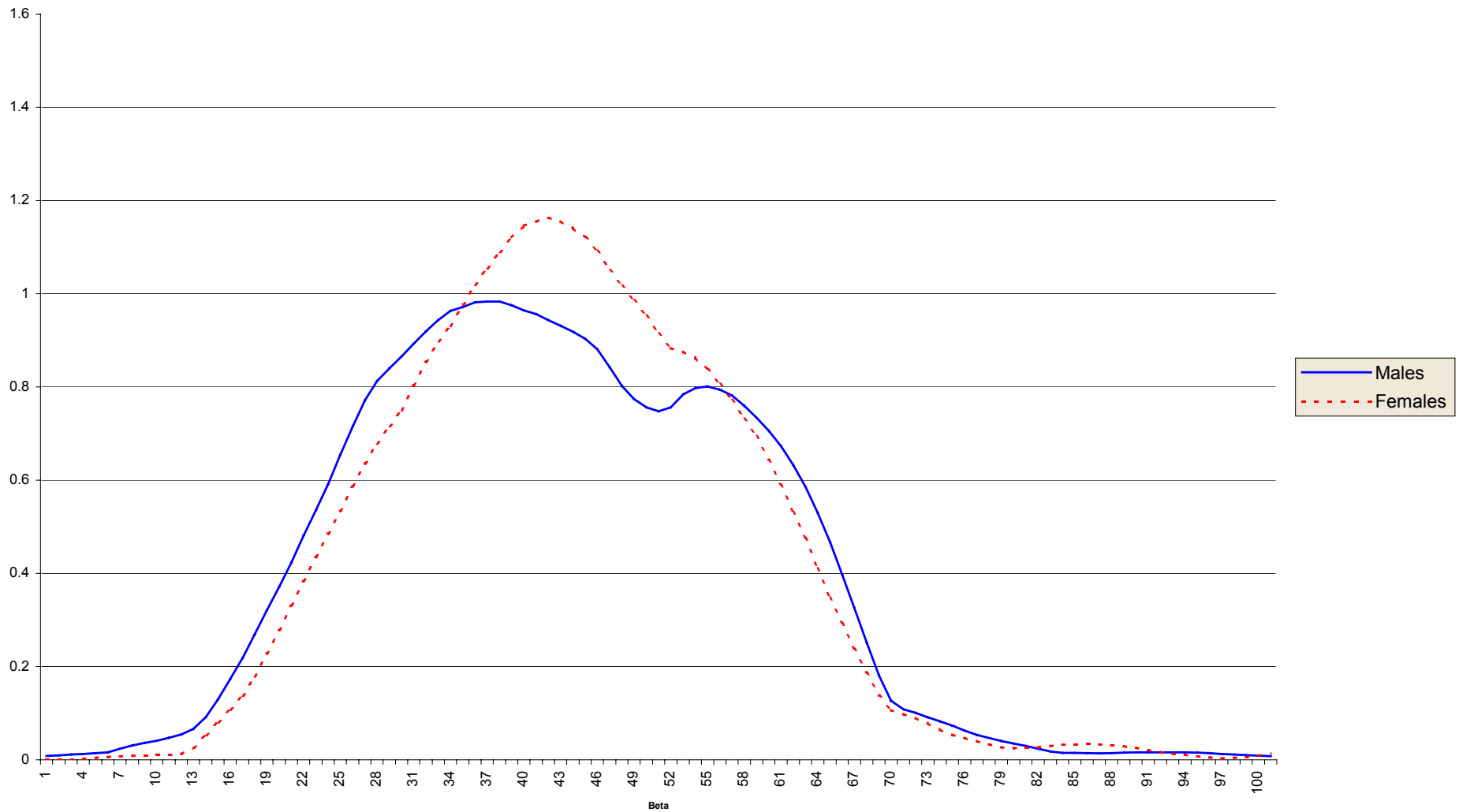
Figure 5.6
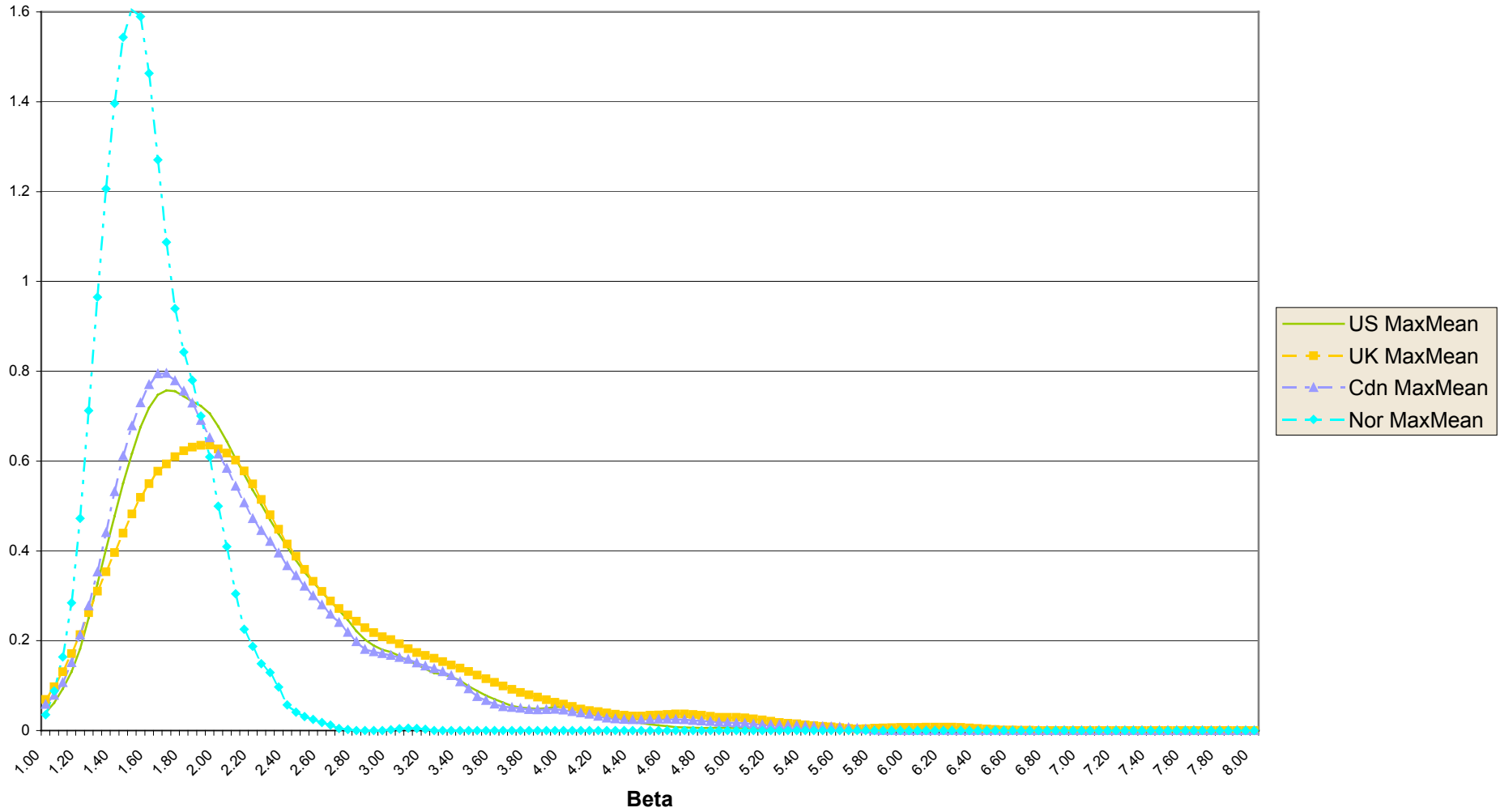**United Kingdom 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex**
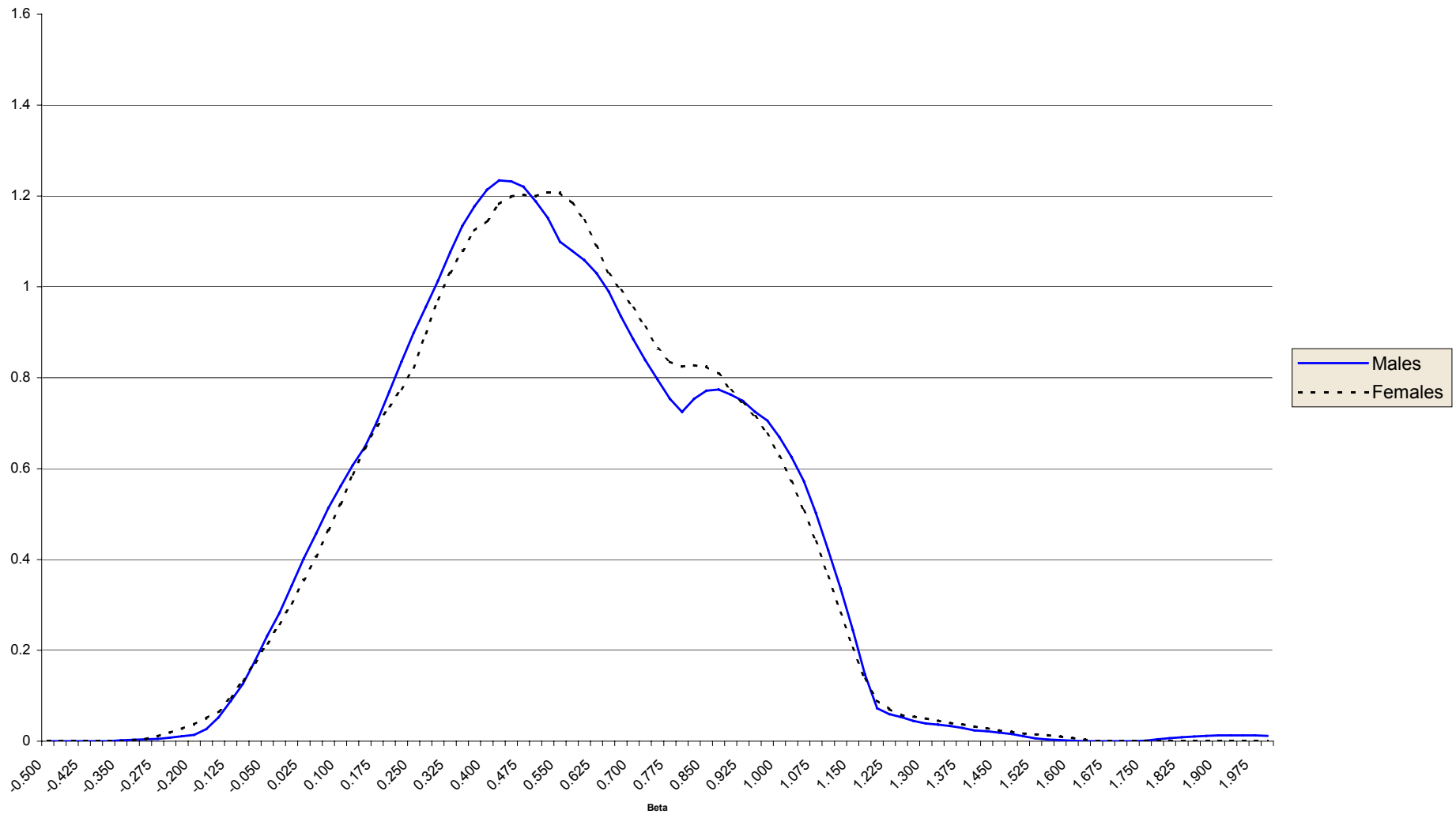
Figure 5.7
Norway 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex
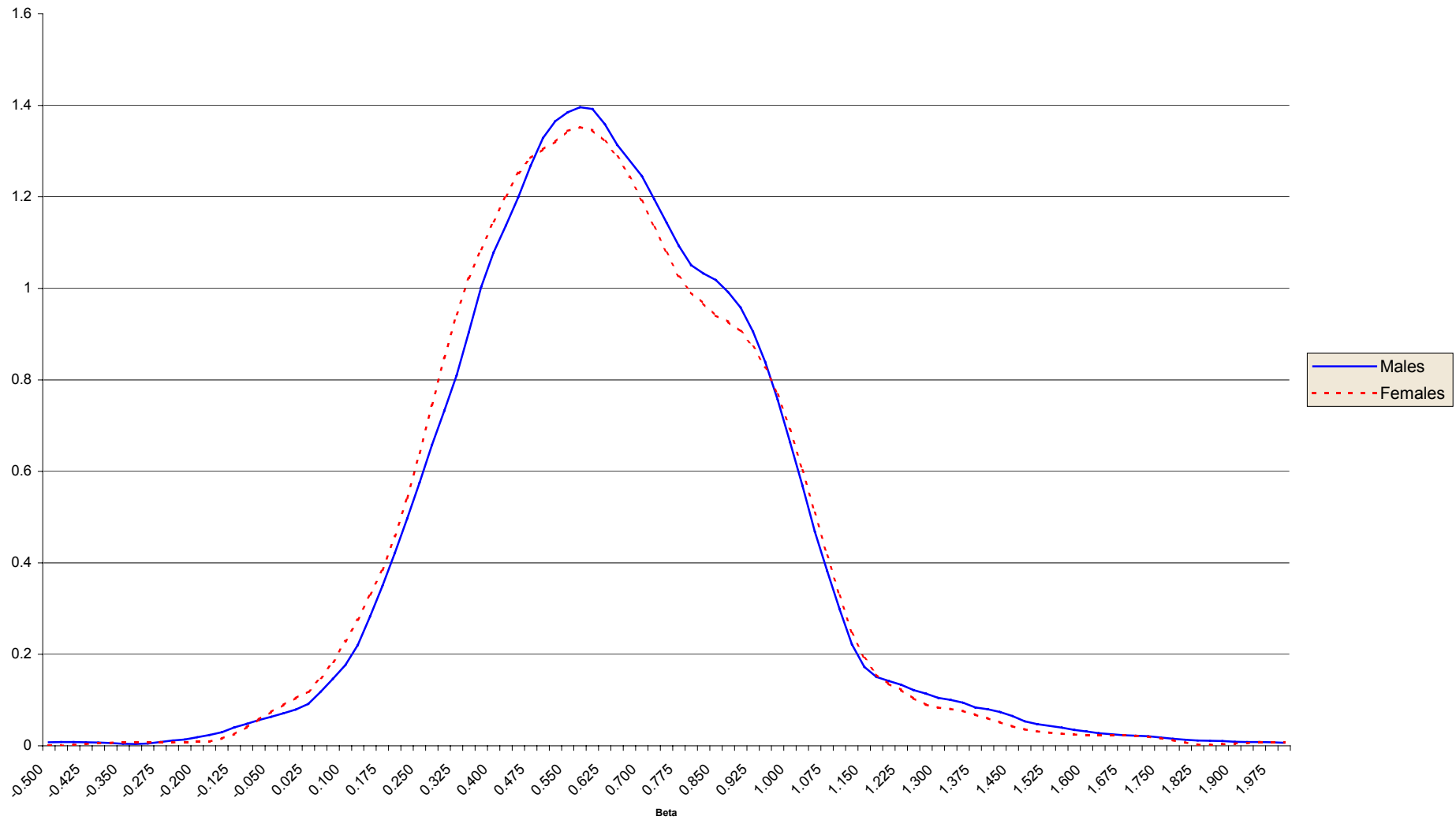
Figure 5.8
United States, United Kingdom, Canada & Norway 1999: Distribution of Do-Earn / Should Earn Slope Coefficient
(Betas): Both Sexes

Figure 5.9
United States, United Kingdom, Canada & Norway 1999: Distribution of Max Should Earn / Mean Should Earn
(MaxMean) Ratio: Both Sexes

Figure 5.10
United States, United Kingdom, Canada & Norway 1999: Distribution of Mean Should Earn / Min Should Earn
(MeanMin) Ratio: Both Sexes
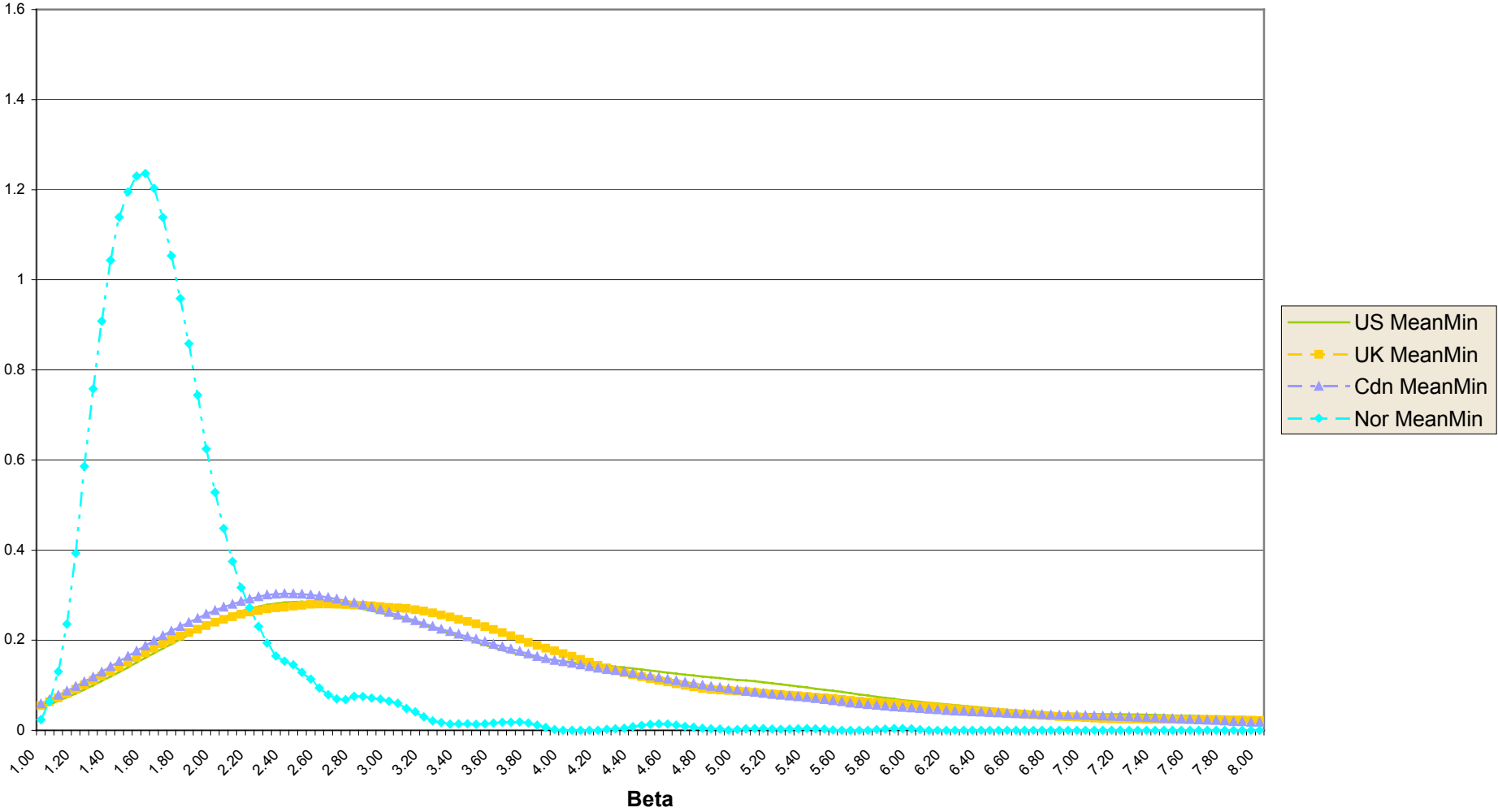
Data Appendix:

I) *The International Social Survey Programme*

The preceding analysis is based on data from the 1987, 1992 and 1999 International Social Survey Programmes (ISSP): Social Inequality I, II & III. The ISSP is an annual international social survey designed to gage individual attitudes towards many major social issues including the role of government (1985, 1990, 1996), social networks (1986), family and sex roles (1989, 1994), environmental issues (1993), national identity (1995), and religion (1992, 1998), . The questions in the 1987, 1992 and 1999 ISSP deal with the existence, extent, and valuation of market-based social inequality. Respondents from various countries are asked to provide information on their personal awareness and experience of inequality—including its perceived sources, solutions, beneficiaries and value or detriment to society – as well as fairly extensive personal and demographic information such as personal and family income, age, professional and educational profile, socioeconomic situation and family history, and lifetime experience of socioeconomic mobility.

The number of countries covered in the ISSP has grown since its inception in 1985 to include countries from across the OECD, the former soviet bloc and the developing world. The 1987 ISSP covers 10 countries (8 OECD, 2 USSR); 1992 covers 17 countries (10 OECD, 6 former USSR, 1 developing); 1999 covers 26 countries (15 OECD, 9 former USSR, 2 developing, 1 other).

II) *Countries and Extent of Data Available*

Only information gathered from OECD respondents are considered in the preceding analysis. For each of the three Social Inequality Surveys, these countries and their ISSP codes include:

1987

Australia (aus)
Austria (a)
West Germany (d)
Netherlands (nl)
Switzerland (ch)
United States (usa)
Great Britain (gb)
Italy (i) – *excluded in the analysis for lack of relevant information*

Total OECD observations; Uncleaned data; Including Italy = 10460
Total OECD observations; Cleaned data*; Excluding Italy = 8039

1992

Australia (aus)
Austria (a) – *excluded in the analysis for lack of relevant information*
Canada (cdn)
Great Britain (gb)
West Germany (d-w)
New Zealand (nz)
Norway (n)
Sweden (s)
United States (usa)

Total OECD observations; Uncleaned data; Including Austria = 11486
Total OECD observations; Cleaned data*; Excluding Austria = 10885

1997

Australia (aus)
Austria (a)
Canada (cdn)
France (f)
Great Britain (gb)
West Germany (d-w)
North Ireland (nirl)
Israel (ir)
Japan (j)
Portugal (p)
Spain (e)
Sweden (s)
United States (usa)

Total OECD observations; Uncleaned (raw) data = 17792
Total OECD observations; Cleaned data* = 14654

* Description and method of data cleaning follows in Section IV.

III) *Modeling Attitudes to Inequality: Occupational Do-Earn and Should- Earn Responses*

In the 1987, 1992 and 1997 ISSP, each respondent (R) is asked, for a series of public- and private sector occupations in the national economy, to name:

1) the amount, in national currency, R believes a person employed in that occupation "actually earns" in hourly, weekly or annual wages[27]

2) the amount, in national currency, that R believes the same person "ought to [or should] earn" in hourly weekly or annual wages

- *Gross vs. Net Income*

For 1992, all occupational should-earn and do-earn amounts for the OECD countries are specified as before-tax earnings. For 1987, the should-earn and do-earn amounts are specified as before-tax in the questionnaires for all countries except Switzerland, for which they are specified as after-tax earnings. For the 1999 dataset, whether the occupational should-earn and do-earn are before or after-tax earnings is not specified in the questionnaire.

- *Occupation Sample and Excluded Occupations by Year*

The occupations for about which the question is posed, and ISSP code variables containing them, change over years of the ISSP. In all cases, public-sector professions, including "Cabinet minister in the national government" (1987, 1992, 1999), "Appeal court judge" (1992) and "A judge in the country's highest court" (1999) were excluded from the analysis. The category "Your own (R's) occupation" from the 1999 dataset is also excluded from the analysis. The ISSP variables included in the preceding analysis are:

1987: Aus, A, D, Nl, Ch, GB; USA 1992: Aus, S	1992: Aus, Cdn, D-w, I, N, Nz, S, Gb, USA	1999: Aus, A, F, D-w, Nirl, Ir, J, NZ, N, P, E, S, USA
V26/*V37*: Do earn/*Should earn*:Bricklayer	V26/*V41*: Do earn/*Should earn*: Skilled factory worker	V14/*V24*: Do earn/*Should earn*: Skilled factory worker
V27/*V38*: Do earn/*Should earn*: Doctor in general practice	V27/*V42*: Do earn/*Should earn*: Doctor in general practice	V15/*V25*: Do earn/*Should earn*: Doctor in general practice
V28/*V39*: Do earn/*Should Earn*: Bank clerk	V29/*V44*: Do earn/*Should Earn*: Shop assistant in a department store	V16/*V26*: Do earn/*Should Earn*: Chairman of a large national company
V29/*V40*: Do earn/*Should Earn*: Owner of a small shop	V31/*V46*: Do earn/*Should Earn*: Chairman of a large national company	V17/*V27*: Do earn/*Should Earn*: Lawyer
V30/*V41*: Do earn/*Should Earn*: Chairman of large national company	V32/*V47*: Do earn/*Should Earn*: Solicitor	V18/*V28*: Do earn/*Should Earn*: Shop assistant in a department store
V31/*V42*: Do earn/*Should Earn*: Skilled factory	V35/*V50*: Do earn/*Should Earn*: Owner of a small	V19/*V29*: Do earn/*Should Earn*: Owner/manager of a

---

[27] Countries differ as to the time period over which earnings are specified (annual, monthly etc). However, in no case does this time period vary across occupations for a single country-year.

worker	shop	large factory
V32/*V43*: Do earn/*Should Earn*: Farm worker	V37/*V52*: Do earn/*Should Earn*: Farm worker	V21/*V31*: Do earn/*Should Earn*: Unskilled factory worker
V33/*V44*: Do earn/*Should Earn*: Secretary	V38/*V53*: Do earn/*Should Earn*: Owner/manager of a factory	
V34/*V45*: Do earn/*Should Earn*: City bus driver	V39/*V54*: Do earn/*Should Earn*: Unskilled factory worker	
V35/*V46*: Do earn/*Should Earn*: Unskilled factory worker		

For all years, responses of "don't know", "no answer", "refused" or similar, are coded as missing: i.e. excluded from the analysis. Responses of "zero" should-earn or do-earn income for different occupations are recoded as missing variables (i.e. excluded from the analysis). Responses of zero should-earn incomes were present only for selected countries in the 1999 dataset: Austria, Canada, France, Israel, and Japan..

IV) *Statistical Method: Random Coefficient Estimation Using Do-earn vs. Should-earn Values*

- *Eliminating Observations with too Little Information*

A random coefficient model was used to estimate a linear relationship between should-earn and do-earn earnings for each observation (R) for which adequate data is available. "Adequate information" is the condition that that $N_j >= 4$, and where N_j is the number of do earn/should earn occupation pairs for respondent j, after the data has been treated to decode invalid responses as described in Section IV above. *Respondents who do not report both do-earn and should-earn amounts for at least four do earn/should earn occupation pairs after the data is cleaned, are excluded from the cleaned data file and the following analysis.*

Total observations dropped due to lack of sample size (N<4):

1987*: 2147 observations dropped*
1992: *2506 observations dropped*
1999: *3132 observations dropped*

The remaining observations are the same as those reported in Section II.

- *Random Coefficient Estimation*

The following OLS regression estimates the intercept ("alpha") and slope ("beta") coefficients for each R:

(1)
$$shouldearn(occ_i) = b_0 + b_1 doearn(occ_i) + e_i$$

The estimated "alpha" and 'beta" are then stored for each respondent in the data file and used as dependent variables in regressions to capture attitudes toward inequality as functions of demographic and other subjective conditions of respondents. The independent variables for such analysis are taken from the demographic data reported in the ISSP (cleaned) files for 1987, 1992 and 1999.

V) Demographic Information

Data used to estimate demographic effects on the slope and intercept coefficients from the above analysis are as taken from the 1987, 1992 and 1999 ISSP and relabeled as follows:

1987: Aus, A, Ger (W), Net, Sw, US, UK & 1992: Aus, S	1992: Aus, A, Can, Fr, Ger (W), NZ, S, UK, US	1999: Aus, A, Fr, Ger (W), Ire (N.), Isr, Jap, NZ, Nor, Por, Sp, S, US, UK
V82 ('87), V100 ('92) (Relabeled "age")	V100 (Relabeled "age")	Age (Label unchanged)
V83 ('87), V99 ('92) (Relabeled "sex")	V99 (Relabeled "sex")	Sex (Label unchanged)
V92 ('87) (Relabeled "faminc")	V115 (Relabeled "faminc")	Income (Relabeled faminc)
V93 (Relabeled "faminccat")	V116 (Relabeled "faminccat")	Degree (Relabeled "educat")
V88 ('87), V103 ('92) (Relabeled "educat")	V103 (Relabeled "educat")	Class (Label unchanged)
V100 ('87), V125 ('92) (Relabeled "class")	V125 (Relabeled "class")	Party_lr (Relabeled "Politics")
V96 ('87) (Relabeled "politics")	V121 (Relabeled "politics"	
V106 ('87) (U.S. only: Relabeled "lastvote")		
AUS115: (1992 Austrialia-specific family income variable)		
AUS116 (1992 Australia-specific family income categorical variable)		

- *Variable Availability, Use and Treatment:*

A brief description of each of the demographic and subjective respondent variables is as follows (age - given in years except for Italy (1992) for which it is given in categories ranging 1 = "under 24" to 6 = "64 to 74 yrs" - and sex are self explanatory)

Faminc:
- Family Income, given in current units of national currency. For 1999, "faminc" for Canada, Spain, Portugal and France R's family income as a percentile in the national income distribution[28] rather than as a currency amount.

- Top-coded income amounts (999996 in 1999) or those coded as missing (999997, 999998, 999999 in 1999, 99997, 99998, 99999 in 1987) were removed from the dataset. No such values appear in the 1987 or 1992 datasets.

- *Faminc* is only for United States & Germany (1992) and Australia, Netherlands & Germany (1987), and all countries in the 1999 dataset (see caveat above).

Faminccat:
- Category of family income, for 1987 and 1992 only. Income categories are not provided in deciles and are country-specific, ranging anywhere from 1 through 6 to 1 through 14. *Faminc* is not present in the dataset for Sweden (1992).

Educat:
- Category of educational attainment. For 1987 and 1992, these categorical codes are country-specific and generally incomparable across countries. For 1999, the variable has been recoded to fit an internationally comparable measure, 1 = no education to 6 = "complete university".

- For the 1987 and 1992 datasets, Respondents whose answers indicate they may still be in school are excluded from the education regressions.

- *Educat* is missing in the datasets for North Ireland & Israel (1999).

Class:
- Categorical subjective social class. For all country-years for which this data is available, the categories range from 1 = "lower class" to 6 = "upper class".

---

[28] Another 1999 variable, *rincome* also gives decile rankings for all Respondents in each country (equivalent to *faminccat* for 1987 & 1992. However, the decile rankings do not match up between this variable and *income* in Canada, Spain, Portugal or France. As the amounts provided in the variable *income* look more likely, *rincome* is ignored in the analysis.

- Dummy variables are created in STATA corresponding to each of the 6 categories of subjective social class for use in the regressions.

- *Class* is missing in the datasets for Sweden (1992) and Great Britain & North Ireland (1999).

Politics:

- Categorical subjective political orientation. For all country-years for which this data is available, the categories range from 1 = "far left" to 5 = "far right" (minor adjustments in definitions occur for 1999; see 1987 codebook and 1999 data descriptions).

- Respondents can also choose 6 = "other, can't choose" or 7 = "no party, no preference". Respondents who choose 6 are excluded from the political orientations regressions.

- Dummy variables are created in STATA corresponding to each of the 6 categories of subjective social class for use in the regressions

- *Politics* is missing in the datasets for Canada, Italy, New Zealand & Sweden (1992) and Israel, North Ireland & Sweden (1999).