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“An International Comparison of Preferences for Leveling”

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

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

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Abstract

This paper examines attitudes to economic inequality in the International Social Survey Program (ISSP) surveys of public opinion. It argues that questions on what individuals in specific occupations “do earn” and what they “should earn” offer a particularly focused way of distinguishing between individual value preferences for more egalitarian outcomes and other confounding attitudes and perceptions such as preferences for process or subjective estimates of the actual degree of inequality. Summary data on attitudes to aggregate inequality and national perceptions on the maximum and minimum that people “should earn” and “do earn” are compared. The ISSP micro-data is used to estimate individual preferences for the leveling of earnings and kernel density methods are used to describe the distribution of individual preferences in different countries. Although there is no support for the hypothesis of systematically different preferences on average for aggregate (in) equality in the United States, there is evidence for:

- (1) more polarization in attitudes among Americans;
- (2) similar preferences for “leveling down” at the top of the earnings distribution;
- (3) less concern for “leveling up” at the bottom of the distribution than in other nations.

Are American attitudes to inequality different?

It is widely recognized that economic inequality in the United States is higher than in other affluent industrialized nations and that government in the United States does less to reduce the inequality of economic outcomes than the governments of other countries do¹. One hypothesis is that this is, essentially, what Americans want that government (in) action reflects the preferences of the electorate and that Americans have different attitudes to inequality and redistribution than the citizens of other countries². 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 (see Kluegel, Mason and Wegener (1995) or Kelly and Evans (1993)³).

This paper begins by examining directly the responses in different countries to questions on attitudes to economic inequality in the International Social Survey Program (ISSP) surveys of public opinion. Section 1.1 then discusses the problematic nature of seemingly simple summary terms like “inequality,” “redistribution” or “public preferences.” Section 2 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

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 United States, 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).

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

of the actual degree of inequality. We present summary data on aggregate attitudes to “do earn” and “should earn” inequality, and compare national attitudes and perceptions on the maximum and minimum that people “should earn” and “do earn”. In Section 3 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. Section 4 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 United States, there is evidence for:

- (4) more polarization in attitudes among Americans (which is consistent with recent United States voting behavior and opinion polling);
- (5) similar preferences for “leveling down” at the top of the earnings distribution (as in other countries);
- (6) less concern for “leveling up” at the bottom of the distribution than in other nations.

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.

1 Attitudes to Inequality

A seemingly straightforward way to find out whether people in different countries have different attitudes to inequality is to ask them directly. Table 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 United States had the highest percentage that “strongly disagreed” with the statement, this represented only 3.3 percent (in 1987) and 3.2 percent (in 1999) of respondents, and diverged notably from the 1992 survey (1.7 percent). Indeed, in all countries there are extremely few people who “strongly disagree.”

One message of Table 1 is therefore, the ubiquity of a generalized preference for “greater equality”. Although respondents in some countries are notably more emphatic in saying they “strongly agree” that income differences are too large (e.g., France in 1999 with 60.3 percent), there are several countries which had less emphatic preferences for equality than the United States (25 percent in 1999) for example, Australia at 17.8 percent and Germany at 20.5 percent in 1999. As Osberg and Smeeding (2004) note, the ISSP asks about attitudes to redistribution and inequality in a number of overlapping ways – the key point is that the United States is *not* a clear outlier when one compares mean responses across nations.⁵

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

⁵ See also Kelly and Evans (1993), Kluegel et al (1995), Svallfors (1997)

1.1 Conceptual Problems in the Identification of “Public Attitudes” to “Inequality” and “Redistribution”

What 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.

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

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.

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

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 socially excessive if any individual’s actual income exceeded some upper bound (Y_{\max}^*), as expressed in (3).

$$(3) \quad Y_i^A < Y_{\max}^*$$

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 earnings⁶. Aside from such complete egalitarianism, all belief systems about ethically acceptable earnings inequality share the property that if a person believes that they live in a just society and if that person is asked to estimate the relationship between what other people do earn 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 $b_1 = 1$.

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

As it happens (see below), some people appear to believe at least approximately that the earnings distribution is fair (i.e. there is a fraction of the population whose personal estimate of $b_1 = 1$)⁷, 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

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

⁷ 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.

their view of the acceptable range of incomes.⁸ In the remainder of this paper we will adopt the convention of referring to b_1 as an estimate of individual “preferences for leveling”, which 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. $Y_1^* - Y_1^A = Y_1 > 0$] 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 the “just desserts” income, since $Y_j^* = Y_j^A$. If the relationship between Y_i^* and Y_i^A is linear, as in equation 4, the “just desserts” income can be calculated as equal to $b_0 / (1 - b_1)$. 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” [$Y_2^* - Y_2^A = Y_2 < 0$] 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

⁸ 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 $b_0 = 0$.

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 higher income. 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 if the remedy for unfair incomes lies in the tax/transfer system, they potentially shift from taxpaying to transfer receiving status. Those in the income range $[Y_1$ 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 poorest⁹.

Would someone with belief set A be more or less likely to report there is “too much” inequality than someone with belief set B? Under belief set B, more people are seen as “under paid”, but the perceived degree of deprivation for the least well off is greater under belief set A.

Is attitude set B more 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 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_1^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 feasible¹⁰.

Inequality: A Ratio between Individuals or a Distribution within a Population?

What do survey respondents understand by the term “inequality”? Is it the ratio of incomes of individuals or the distribution of incomes in a population? So far, this section of the paper has been examining “economic inequality” in the sense of “differences between individuals in economic outcomes”. The term “inequality” is often used in this sense for example, in the discussion of wage inequality between production workers and corporate executives, or when the average earnings of racial, ethnic or educational groups are being compared. 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 number of people with similar economic outcomes is not necessary information for the calculation of such income (or earnings) ratios.

However, the income ratio between types of persons is only part of “inequality” in the distribution of income in a population. To calculate a statistical index of income inequality (such as the Gini ratio, Theil index or the coefficient of variation) one needs to know the population density of particular incomes. When Atkinson wrote his fundamental article on comparisons of

⁹ Note that calculations of the *Jasso ratio* (see Jasso, 1980) implicitly assume $b_0 = 0$, which rules out the possibility of the sort of value divergence portrayed in the comparison of attitude set A and B in Figure 2.

inequality measurement in 1970, he started with the basic idea of “comparing two 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 economics literature cited in Footnote 2).

Since this paper is about public attitudes to “Inequality”, the crucial issue for present purposes is the fact that if individuals are to evaluate inequality in the “distribution within a population” sense, they must estimate $f(y)$ the relative frequency of different levels of income. There is a good deal of evidence that people are much more accurate in estimating the wage ratios of particular occupations than in estimating the proportions of the population with those incomes. For example, Kluegel et al (1995:201) report that subjective estimates of the perceived frequency of ‘middle class’ incomes depend heavily on the respondent’s own socio-economic position¹¹. Evans and Kelley (2003) also note that there is a systematic tendency for survey respondents to place themselves “in the middle” of the income distribution, *whatever their actual income*.

Although it is true that equal incomes for all persons would mean zero inequality in both the “differences between individuals” and “distribution within a population” senses, in general these two meanings of “inequality” 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

¹⁰ Note also that the political attitudes of individuals are only in a very vague sense constrained by actual budgetary feasibility.

¹¹ Academics can easily check this proposition by surveying the students in their classes..

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.¹²

Polarization

What is the best way of summarizing attitudes to inequality? Much of the international comparisons literature relies on the mean or median score (e.g. Table 1). Regression based models (such as those reported in Kluegel et al (1995) similarly report the central tendency of a conditional distribution. However, Figure III is included as a cautionary (extreme) example of two distributions of attitudes which both have the same median voter (and the same average attitudinal score¹³) – 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 polarized or 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. In such cases, instability in policies and continual conflict are the more likely scenarios and understanding why differences in preferences arise, and how attributes influence attitudes, is particularly important.

¹² 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, but 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. In general, if $y_i = X_i \mathbf{S} + u_i$ (where y_i is a person’s income and their characteristics are described by a vector X_i and the returns to those characteristics are summarized in the vector \mathbf{S} , with the unexplained component u_i) then the frequency distribution $f(y)$ and any inequality statistics calculated from it depends on $f(X_i)$ and on \mathbf{S} , as well as on u_i . But inequality in the “between persons” sense is only about \mathbf{S} .

¹³ 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.

2. What People “Do Earn” and “Should Earn”

Although a large literature has analyzed the statistical data to examine whether income inequality is objectively increasing, political attitudes and behaviour depend on the *subjective estimates* which individuals have of income inequality and on the *subjective evaluation* of this perceived degree of inequality relative to an individual’s own norms of “fair” income differentials. Since attitudes to inequality are conditioned on the perception of “facts” it is desirable to distinguish between subjective empirical estimates of inequality and the ethical evaluations that people may have of those perceptions. 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 minister¹⁴. [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 United States, United Kingdom, Germany and Australia) but others are more episodic.¹⁵

¹⁴ 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. Similarly, we exclude the respondent’s own occupation, since we want to focus on attitudes to inequality in society, not perceived personal injustice.

¹⁵ For a more complete discussion see Appendix A of Osberg and Smeeding (2004)

Attitudes to inequality mingle 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 actual earnings can be directly controlled for.)

In a general discussion of inequality, empirical estimates of the importance of capital income for “the rich”, the extent of inherited wealth, and the size and frequency of transfer payments is mingled with attitudes to earnings inequality. All these income sources are 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.

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 variation¹⁶ 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. This assumption is clearly not what any respondent actually believes to be empirically true, but it does standardize estimated 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.

¹⁶ 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”.

Table 2 presents the results for some major OECD nations¹⁷. 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), 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,

¹⁷ 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.

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.¹⁸

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,¹⁹ and the list of occupations contains an example from both the very top (chairman of a large national company) and the very bottom (unskilled worker) of the earnings distribution. Although respondents are undoubtedly aware that

18. This similarity in attitudes to earnings inequality occurs in the context of substantially 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 important as a source of effective consumption – an argument that would have predicted *less* emphasis on inequality of earnings in the Scandinavian countries.

there are also some people (like soccer 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 3 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 presents the comparable 1992 results and Table 5 presents 1987 data.

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

¹⁹ We have compared across countries the “should earn” and “do earn” occupational rankings, which are essentially

at the bottom of the distribution, where the range was from 3.487 in France to 1.667 in Norway.

Can one say 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. As Table 6 indicates, the data that is available indicates that the earnings ratio between production workers and Chief Executive Officers varies between approximately 20:1 and 50:1. Actual pay gaps are much larger than both the “do earn” estimates and “should earn” ratios.

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).

American Exceptionalism Revisited

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 United States is almost exactly in the middle of the pack of nations surveyed. In 1987 data, the United Kingdom appears as most tolerant of a wide range of incomes at the top end, with the United States in second place but the difference between countries is

the same in the countries examined.

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 average²⁰ was thought to be in 1987. It is also notable that there was, in 1992 and 1999, a *downward* trend in mean and median United States 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 United States, compared to other countries, is consistent with some uniquely American set of inequality-tolerant values.

Differences between the United States 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 United States 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 United States 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 United States, it is possible that the data indicate the emergence of a “North American” perspective on low end inequality which is relatively tolerant of poverty.

3. 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.²¹ However, although individuals generally agree that, for example, a doctor does make more money than a skilled worker, and should make more money, there is a lot of disagreement about how much

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

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 following the specification of Equation 4 in Section 3 i.e. we estimate a regression of the form $Y_i^* = b_0 + b_1 Y_i^A$. The ratio between “should earn” (Y_i^*) and “do earn” (Y_i^A) income is, at the margin, captured by the b_1 coefficient, which is taken here as an individual’s preferences for the leveling of pay. For most people, $b_1 < 1$, since most respondents think that some leveling is desirable. However, attitudes to inequality are bounded, (i.e. when $b_1 = 1$) by the attitude that no leveling at all is desirable, since for some respondents “should earn” = “do earn”.

Table 7 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 United States than elsewhere but that is not the implication of Table 7. In 1987 and 1999 data, the median and mean b_1 coefficient in the United States was above the mean for all country years but in 1992 it was below. The average rank of the United States (over all three surveys) was 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 7 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 7 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 United Kingdom, however, all three survey waves concur in the conclusion that mean

and median preferences for leveling in the United Kingdom are relatively high by international standards the average United Kingdom 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).

Table 7 provides a caution against assuming there is 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 United Kingdom and the United States, 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.

Polarization vs. Single Peaked Distributions

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 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 7 indicates, there is a substantial variation of individual attitudes to levelling more so

in the United States than in most other countries. In particular, 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,²² there will tend to be an accumulation of b_1 estimates at $b_1 = 1$. To assess how the distribution of leveling tendencies varies across countries we turn to kernel density methods, which offer a picture of attitudes which may not “be worth a thousand words” but does convey much more information than summary statistics. Figure 5.1 presents kernel density estimates of the distribution of preferences for leveling in the United States 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 substantial 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 / Mean²³ 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 3 to 5) – at a level that is vastly different from the actual pay ratios reported in Table 6. In contrast, attitudes to inequality at the bottom end have become more diffuse over time. Figure

²² Although it is possible 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, very few.

²³ One gets the same essential results if attitudes to wage differentials between named occupations – such as CEO and skilled worker – are examined.

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 – 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. In Figure 5.6 for the United Kingdom, the gender gap is 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 Norway²⁴. Where the United States kernel density estimates paint a picture of polarized attitudes, the Norwegian picture is one of broad consensus. As other data has also indicated, Norwegians are on average in favor 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).

Figure 5.8 puts the US, United Kingdom, 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 United States (with strong polarization) and Norway (with consensus) are poles of a continuum, with Canada (not entirely American in attitudes) and the United Kingdom (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 United States, is that it also contains a group who are clearly satisfied with the status quo. As a result, the contrast between the United States 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. United Kingdom 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 United Kingdom, Canada or the United States on relative minimum earnings in 1999²⁵.

4. Conclusion.

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).

²⁵ Kelly and Evans (1993) concluded, using 1987 ISSP data, that cross-national differences in attitudes were primarily about appropriate income differences at the top end – but that was then and this is now.

This paper started with the observation that the US has more income inequality than other developed countries, but government does less about it. In partial response to the “missing redistribution” of American public 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? On average, Americans do not stand out as being particularly different from other countries in general attitudes to inequality or in the “should earn / do earn” comparisons – but 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 et al (1995:206) note that this “presents a fertile ground for framing effects as political actors compete to make salient either the social explanations of poverty and wealth in support of redistribution or the individual explanations to motivate opposition to the welfare state.”

This paper has argued that there is a trend over time for American attitudes to inequality at the top end of the income distribution to become less 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).

The long-term implications of the combination of a latent bi-causal perspective highly vulnerable to “framing effects” and:

- (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.

Table 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

Figure I
Equity in Earnings

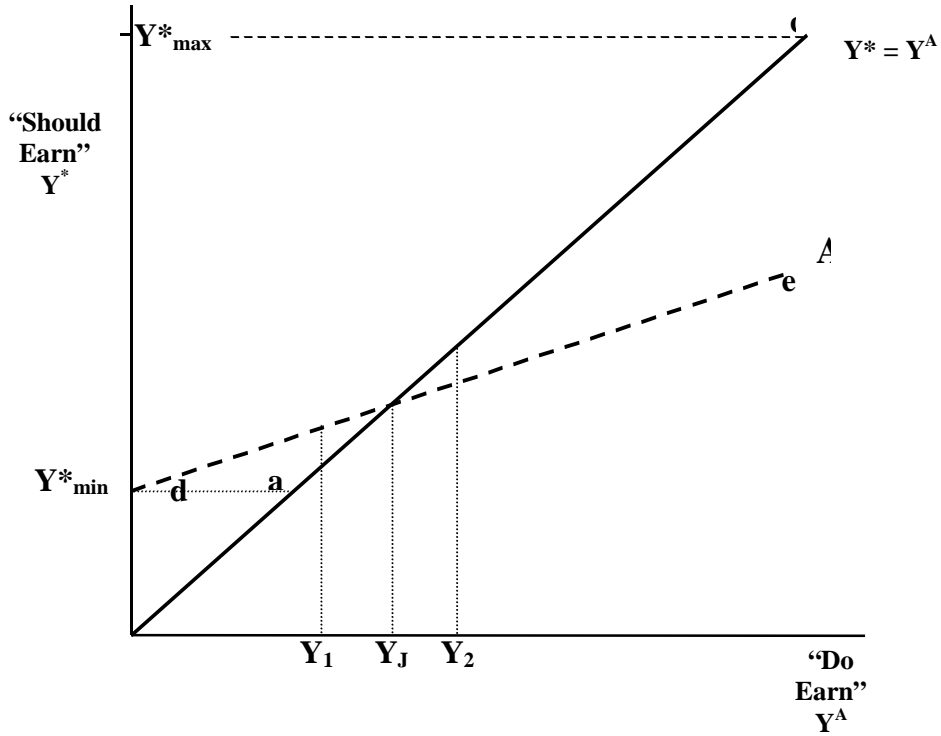


Figure II
The Ambiguity of “Redistribution”

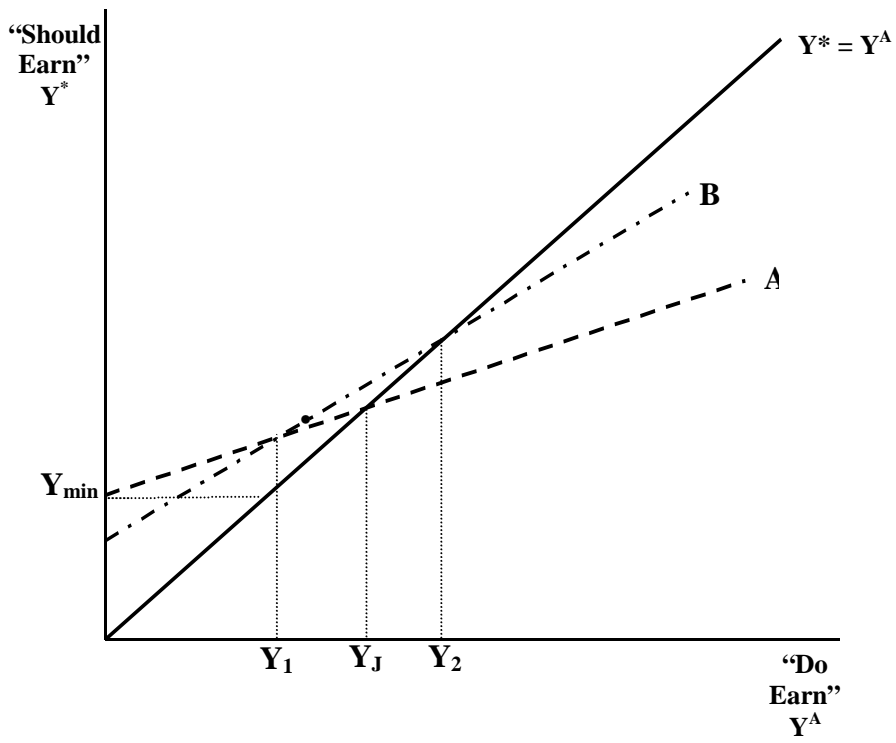


Figure III
Same “Median Voter” – But Different Dynamics

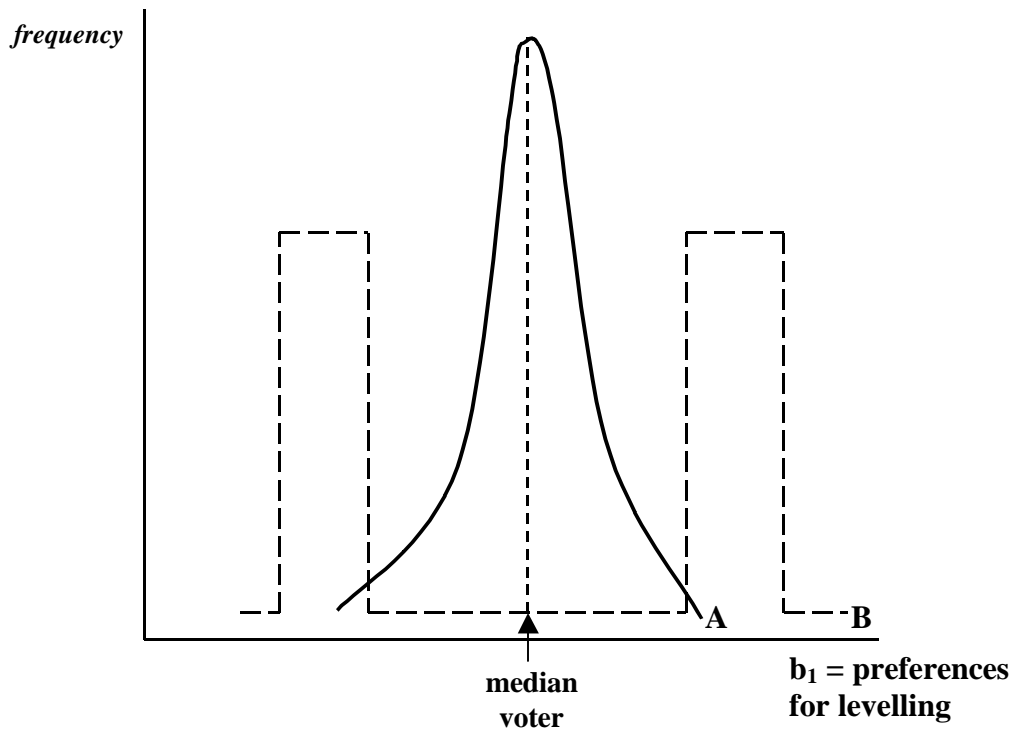


Table 2. Actual and Ethical Inequality

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 3: Means, Medians and Rankings: All Individuals

Country	Mean MaxMin Ratio	Median MaxMin Ratio	Country Rank by Mean & Median		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 MaxMin Ratio	Med MaxMin Ratio			Mean Max / Mean Ratio	Med Max / Mean Ratio			Mean Mean / Min Ratio	Med Mean / Min Ratio
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: Means, Medians and Rankings: All Individuals

Country	Country Rank by Mean & Median				Country Rank by Mean & Med				Country Rank by Mean & Med			
	Mean MaxMin Ratio	Median MaxMin Ratio	Mean MaxMin Ratio	Med MaxMin Ratio	Mean MaxMean Ratio	Median MaxMean Ratio	Mean MaxMean Ratio	Med MaxMean Ratio	Mean MeanMin Ratio	Median MeanMin Ratio	Mean MeanMin Ratio	Med MeanMin Ratio
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 5: Means, Medians and Rankings: All Individuals

Country	Mean	Median	Country Rank		Mean	Median	Country Rank		Mean	Median	Country Rank	
	MaxMin Ratio	MaxMin Ratio	by Mean & Median MaxMin Ratio	by Mean & Median MaxMin Ratio	MaxMean Ratio	MaxMean Ratio	by Mean & Med MaxMean Ratio	by Mean & Med MaxMean Ratio	MeanMin Ratio	MeanMin Ratio	by Mean & Med MeanMin Ratio	by Mean & Med MeanMin Ratio
Australia	3.829	3.750	Mean	Med	2.103	2.114	Mean	Med	1.782	1.694	Mean	Med
			7	7			7	6			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 6
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/suptab.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 7
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

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

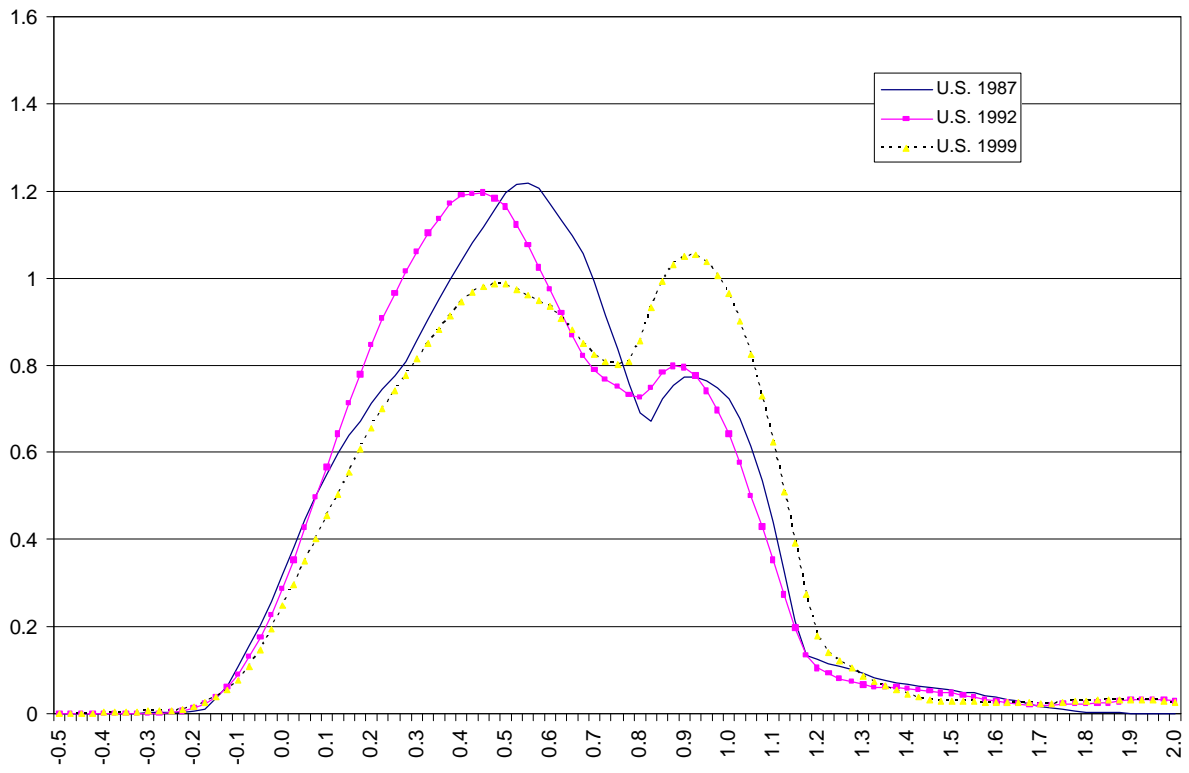


Table 5.2
United States Social Inequalities ISSP Years 1987-1999:
MaxMean Ratio Over Time, Both Sexes

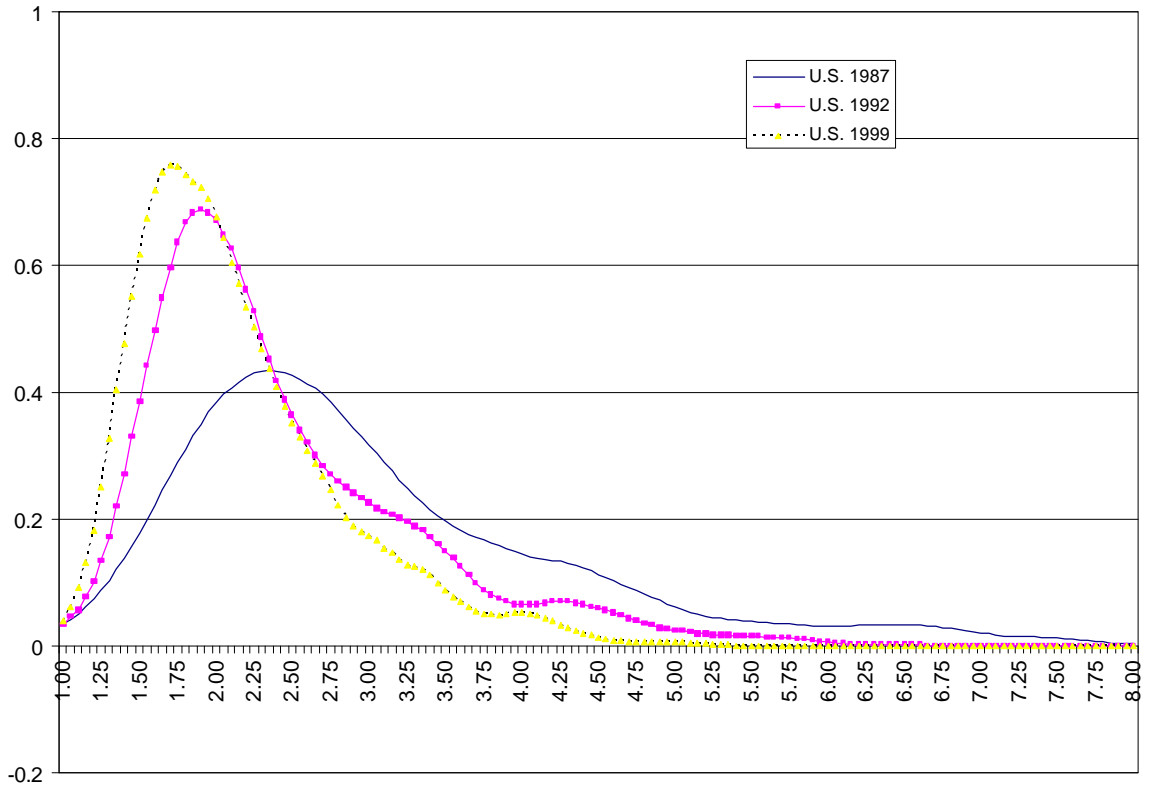


Figure 5.3
United States Social Inequalities ISSP Years 1987-1999:
MeanMin Ratio Over Time, Both Sexes

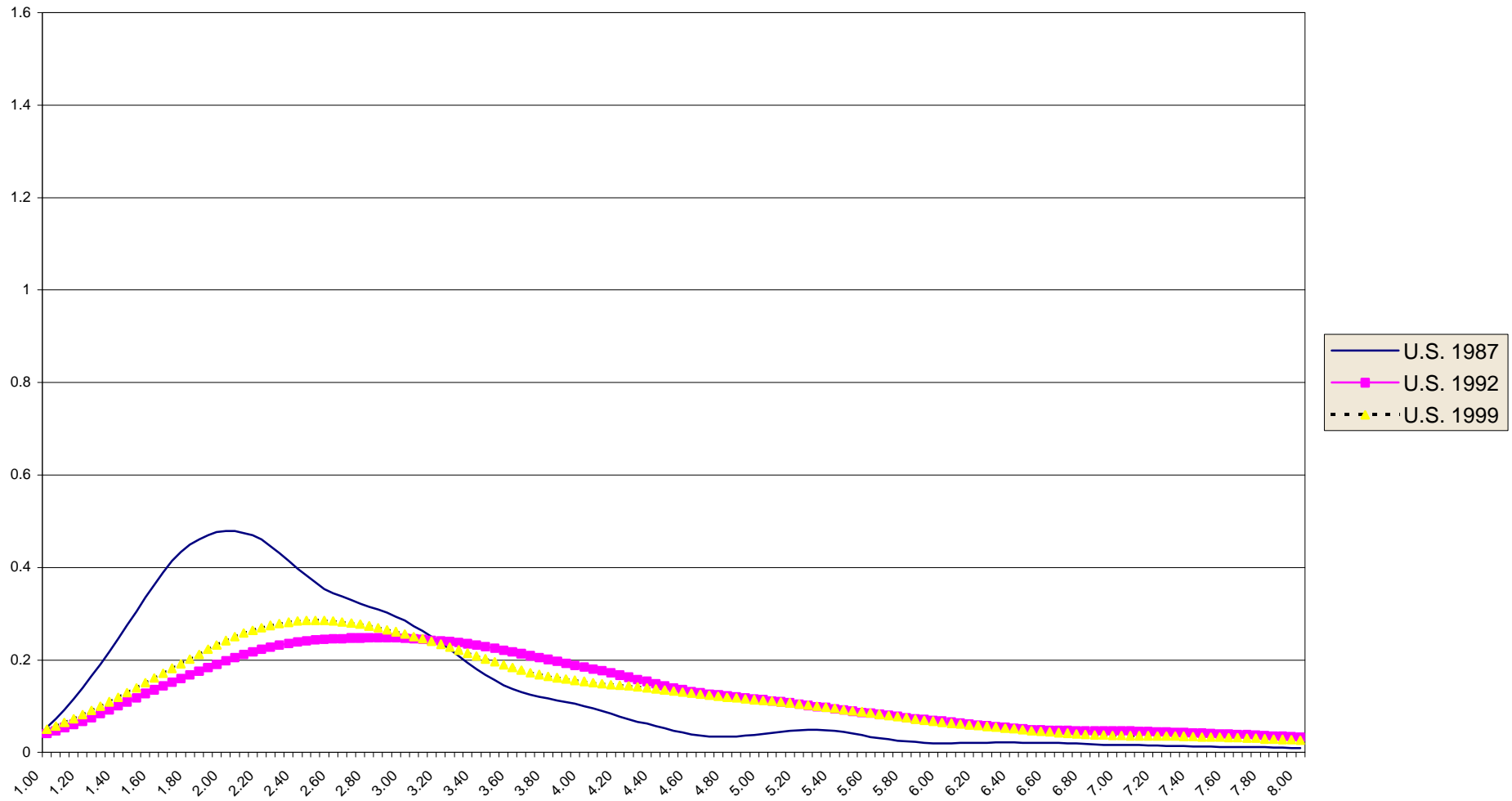


Figure 5.4
United States 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex

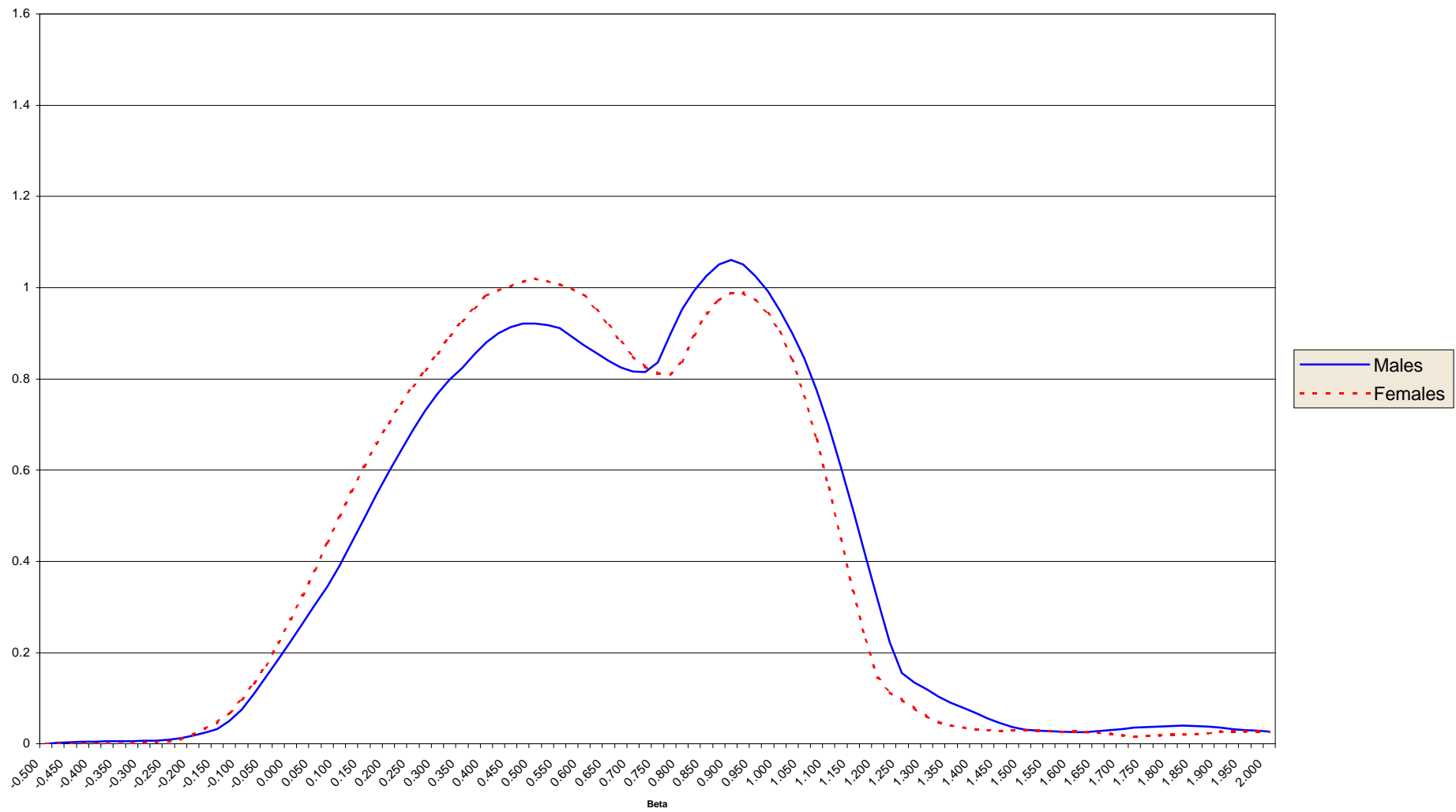


Figure 5.5
Canada 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex

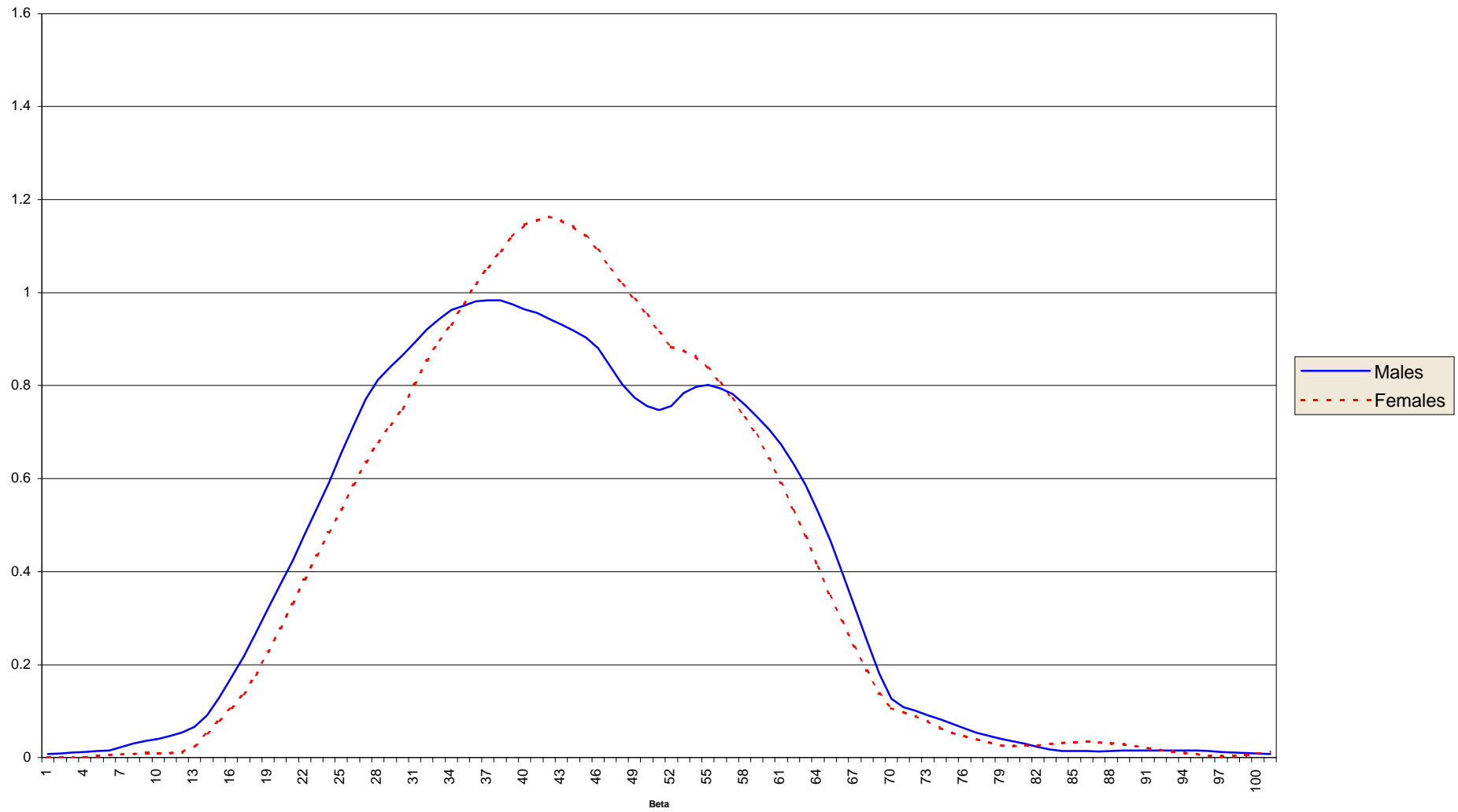


Figure 5.6
United Kingdom 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex

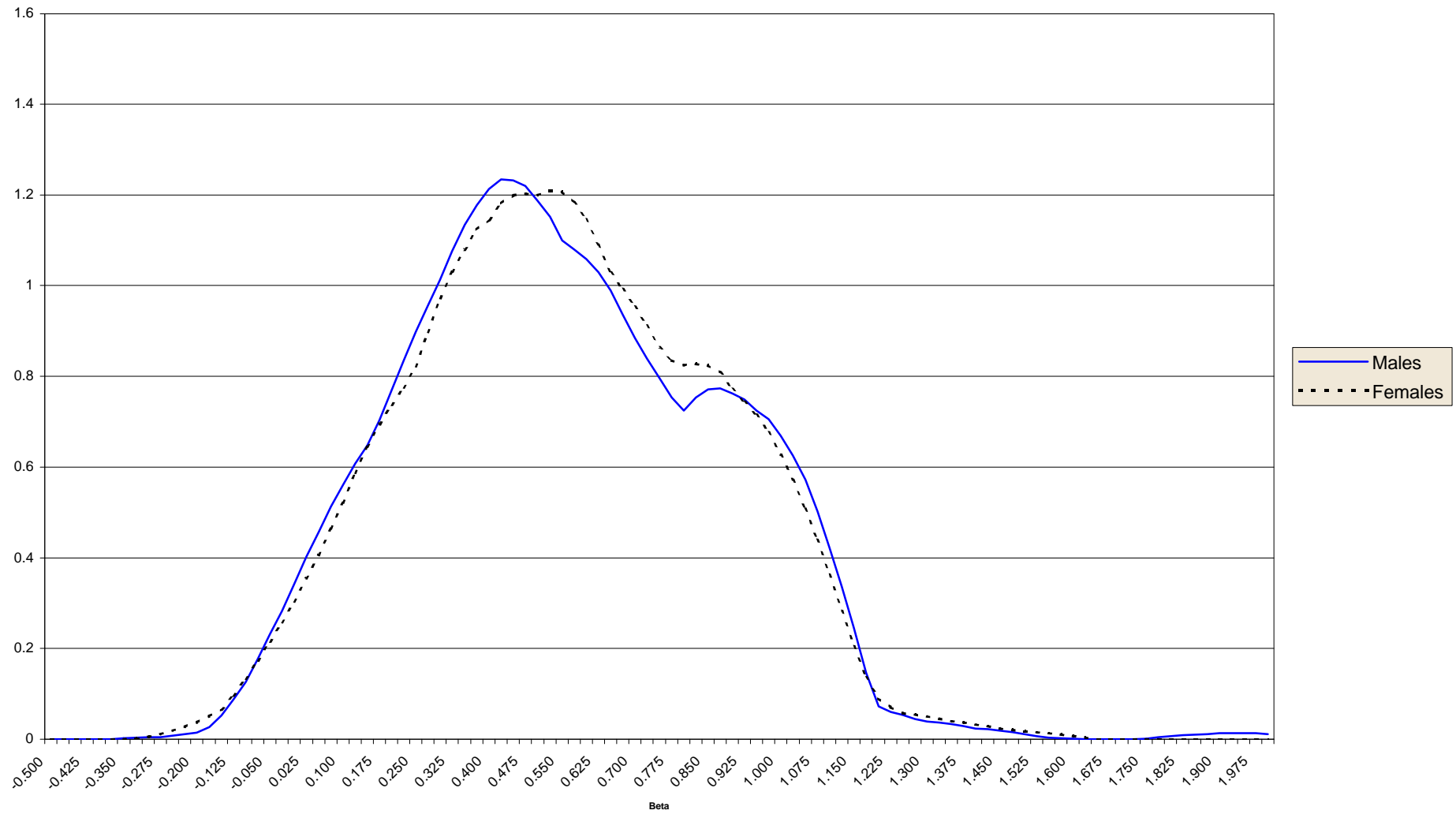


Figure 5.7
Norway 1999: Distribution of Do Earn / Should Earn Slope Coefficients (Betas) by Sex

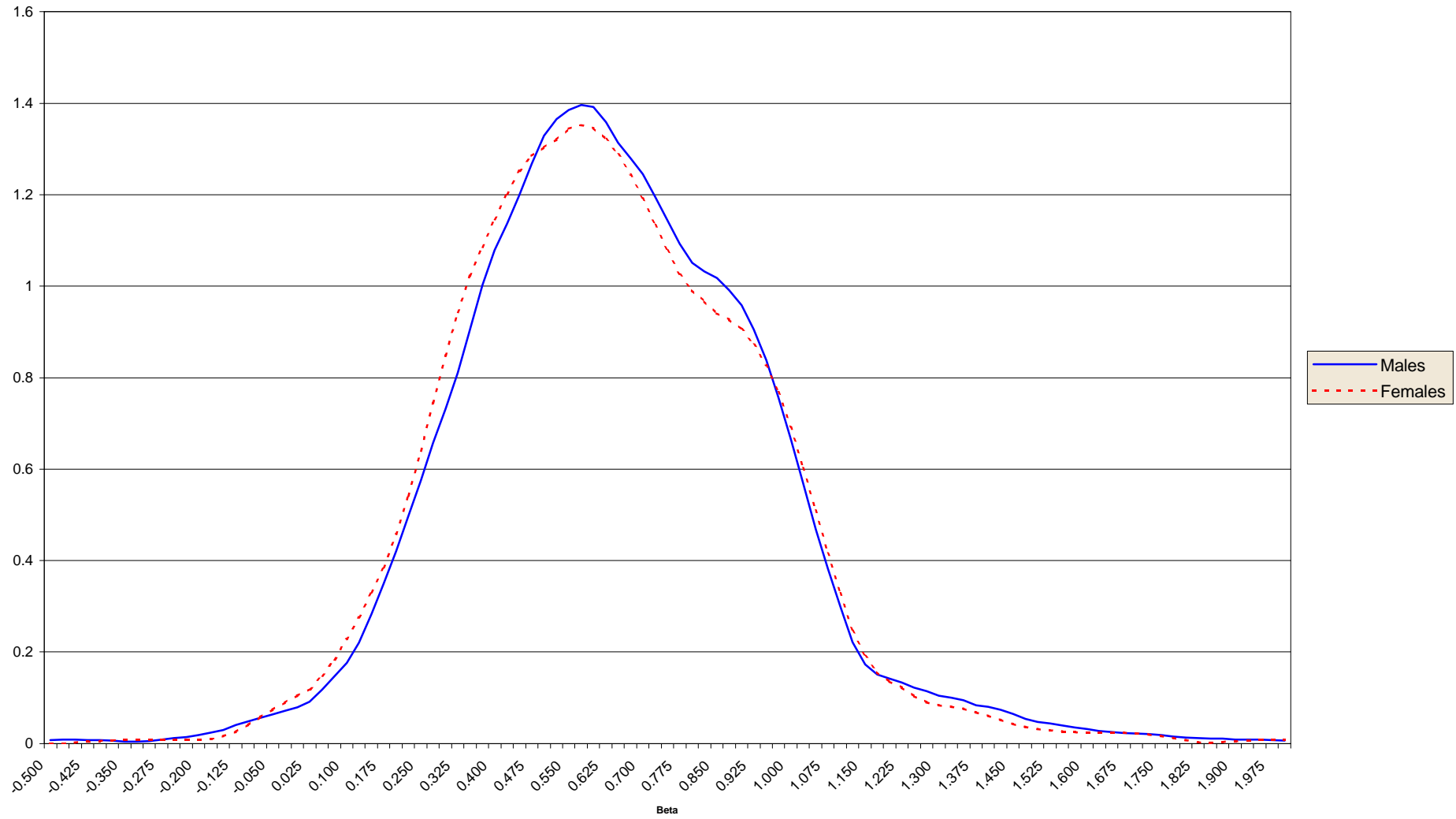


Figure 5.8
United States, United Kingdom, Canada & Norway 1999: Distribution of Do-Earn / Should Earn Slope Coefficient (Betas): Both Sexes

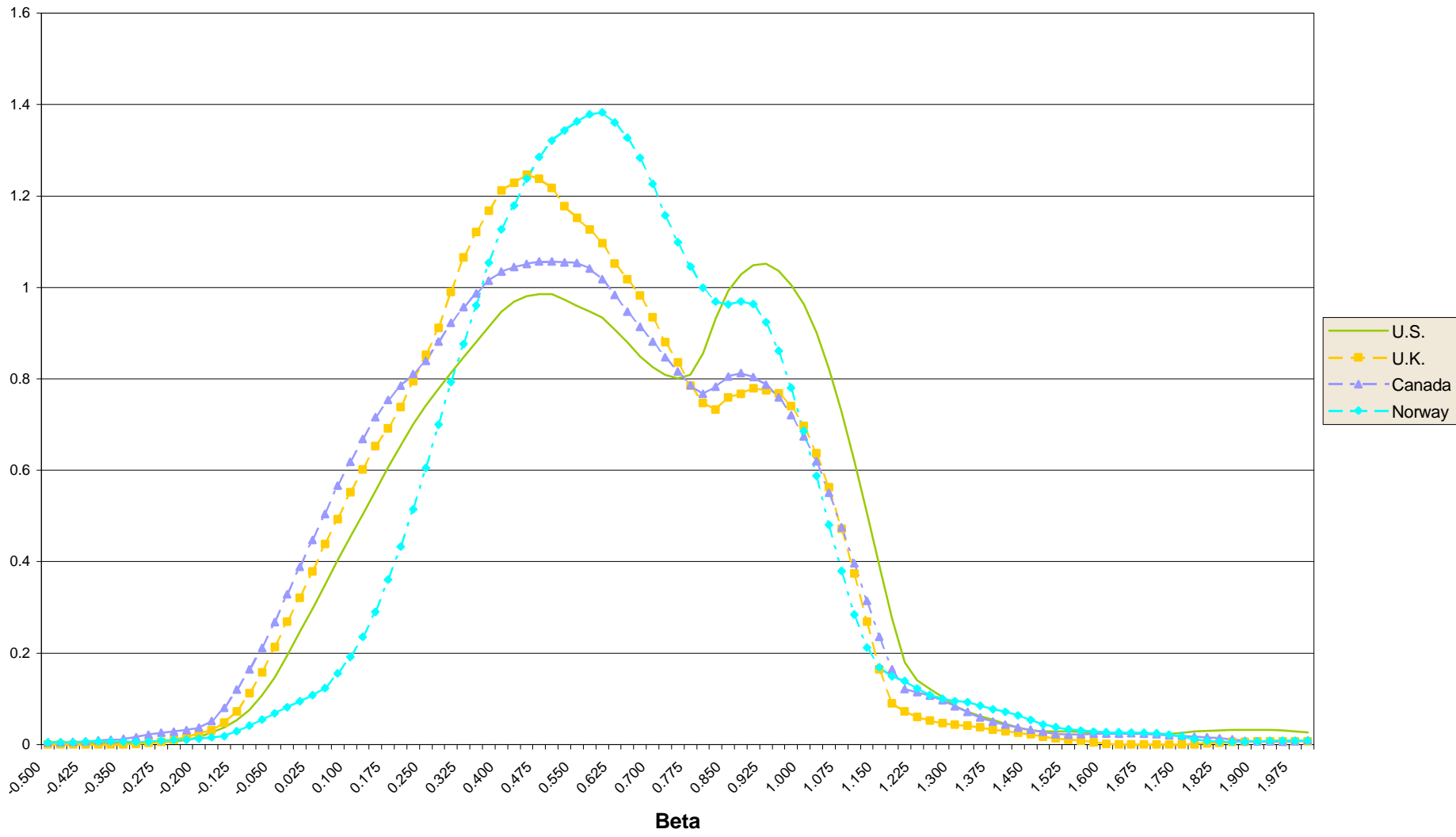


Figure 5.9
United States, United Kingdom, Canada & Norway 1999: Distribution of Max Should Earn / Mean Should Earn
(MaxMean) Ratio: Both Sexes

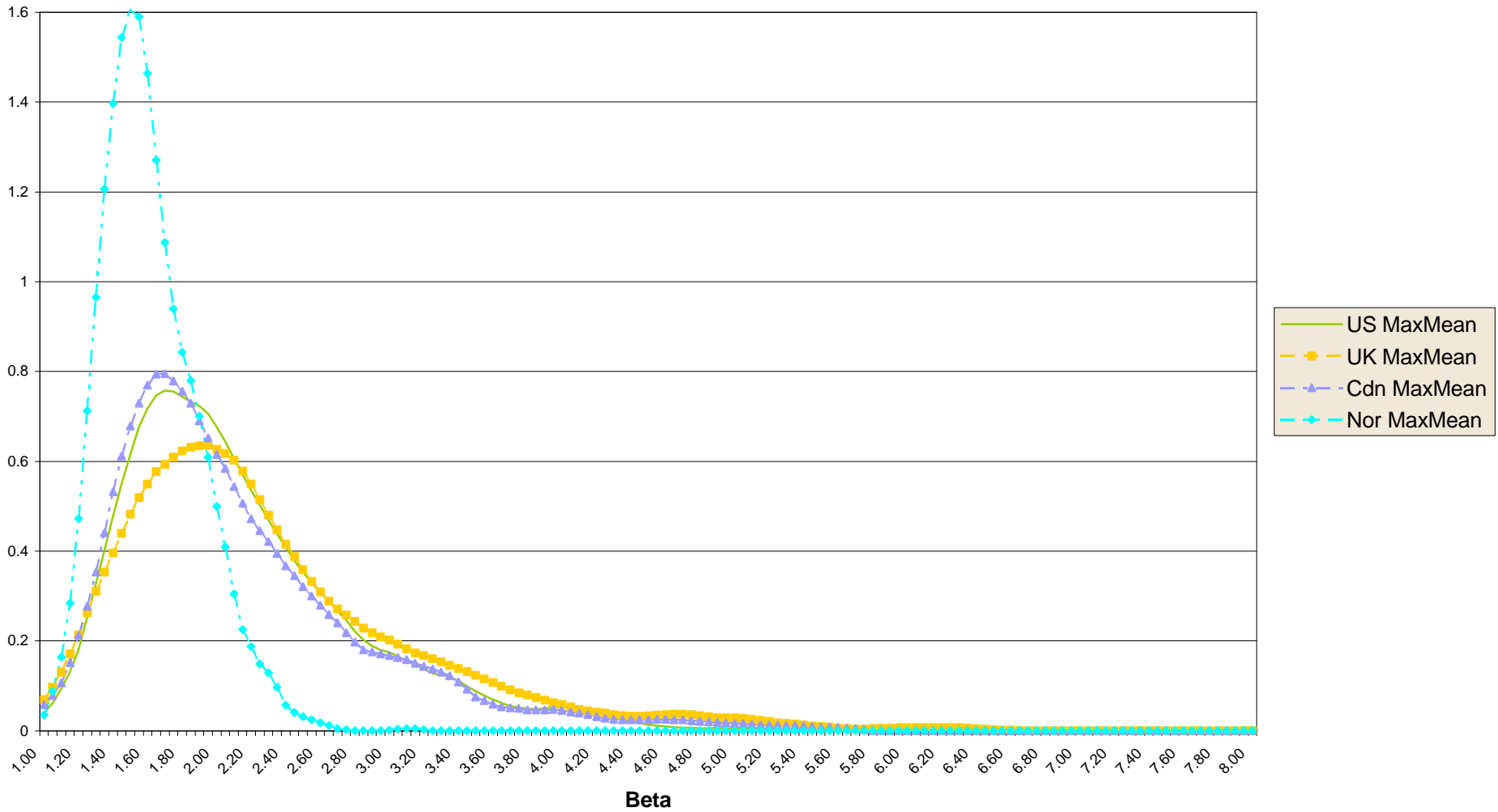


Figure 5.10
United States, United Kingdom, Canada & Norway 1999: Distribution of Mean Should Earn / Min Should Earn
(MeanMin) Ratio: Both Sexes

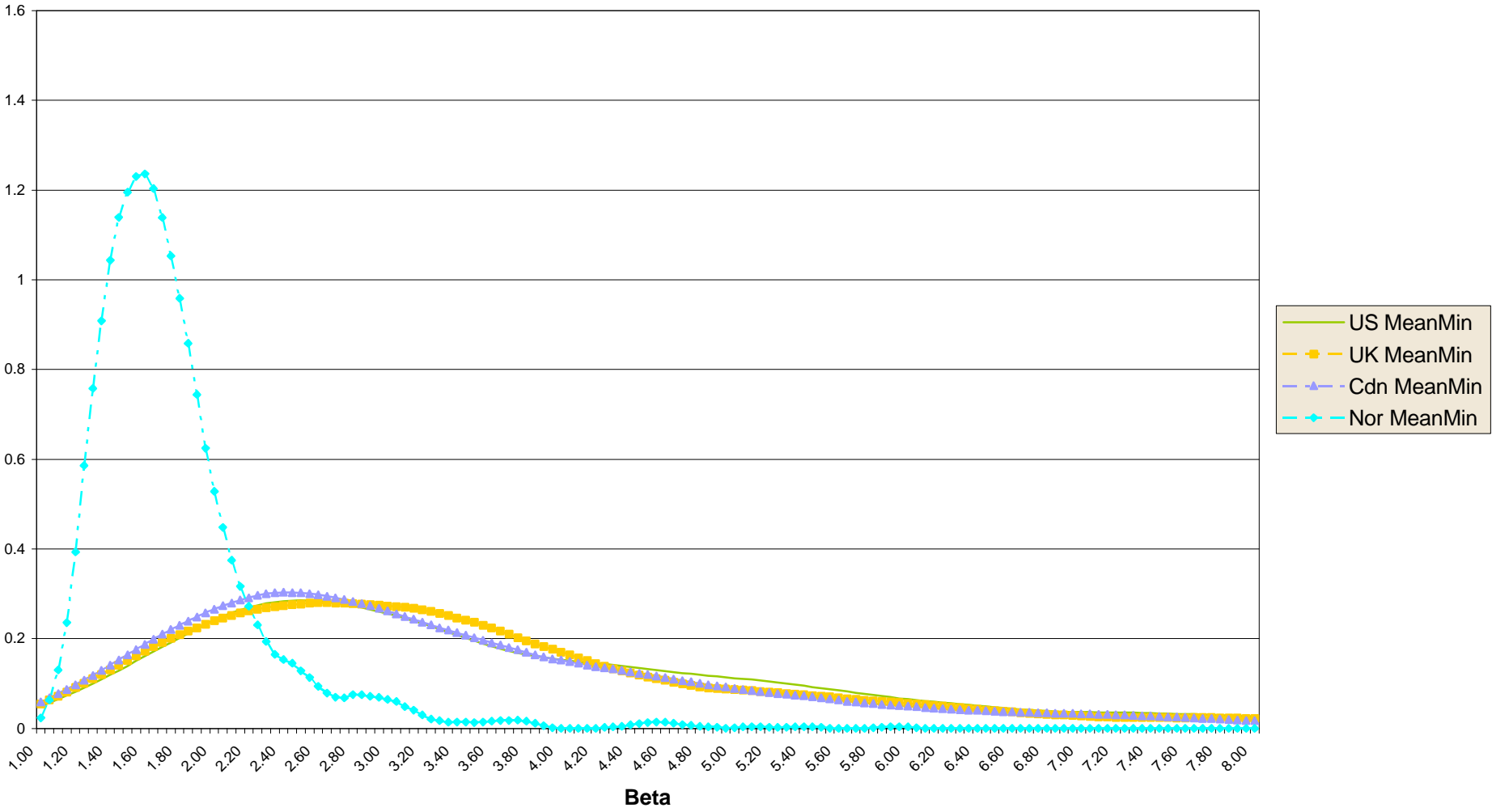
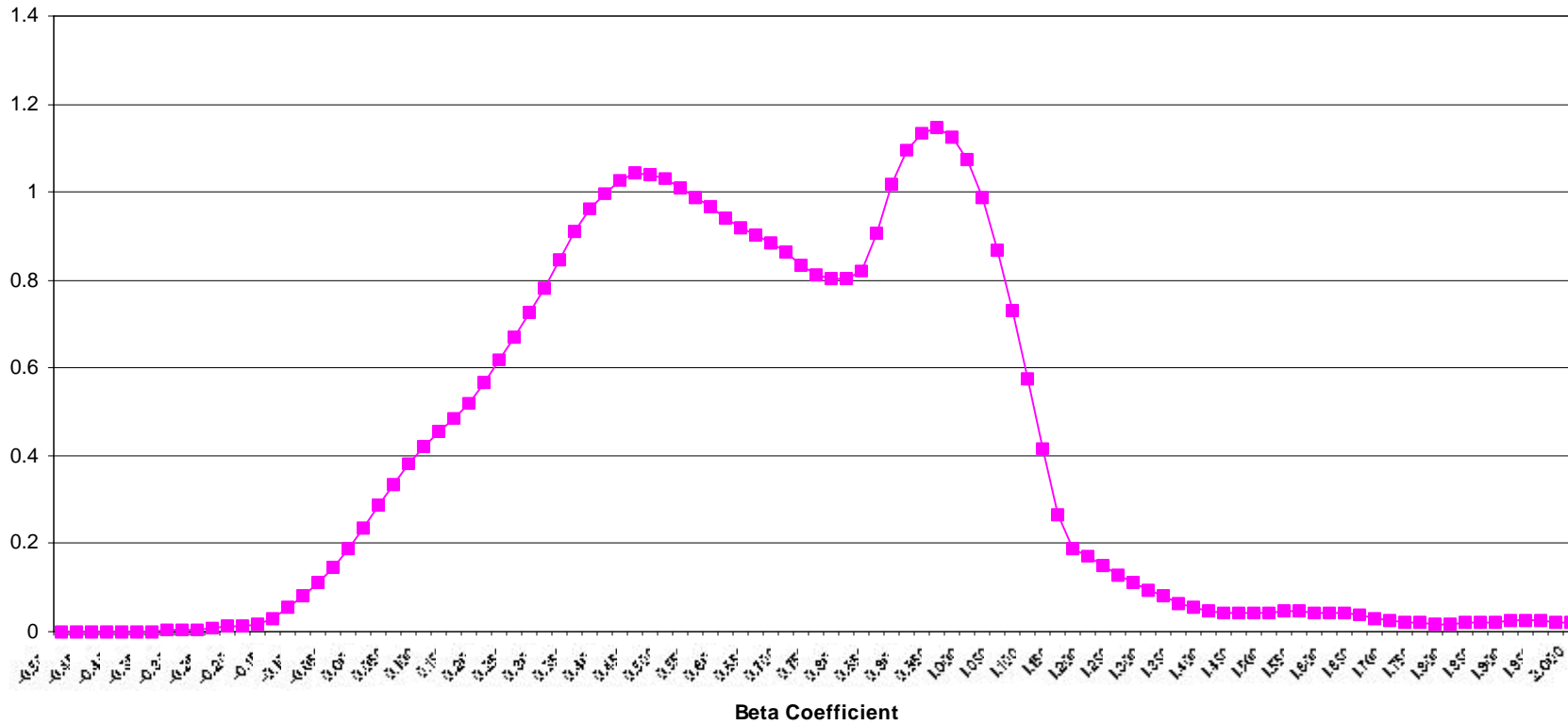
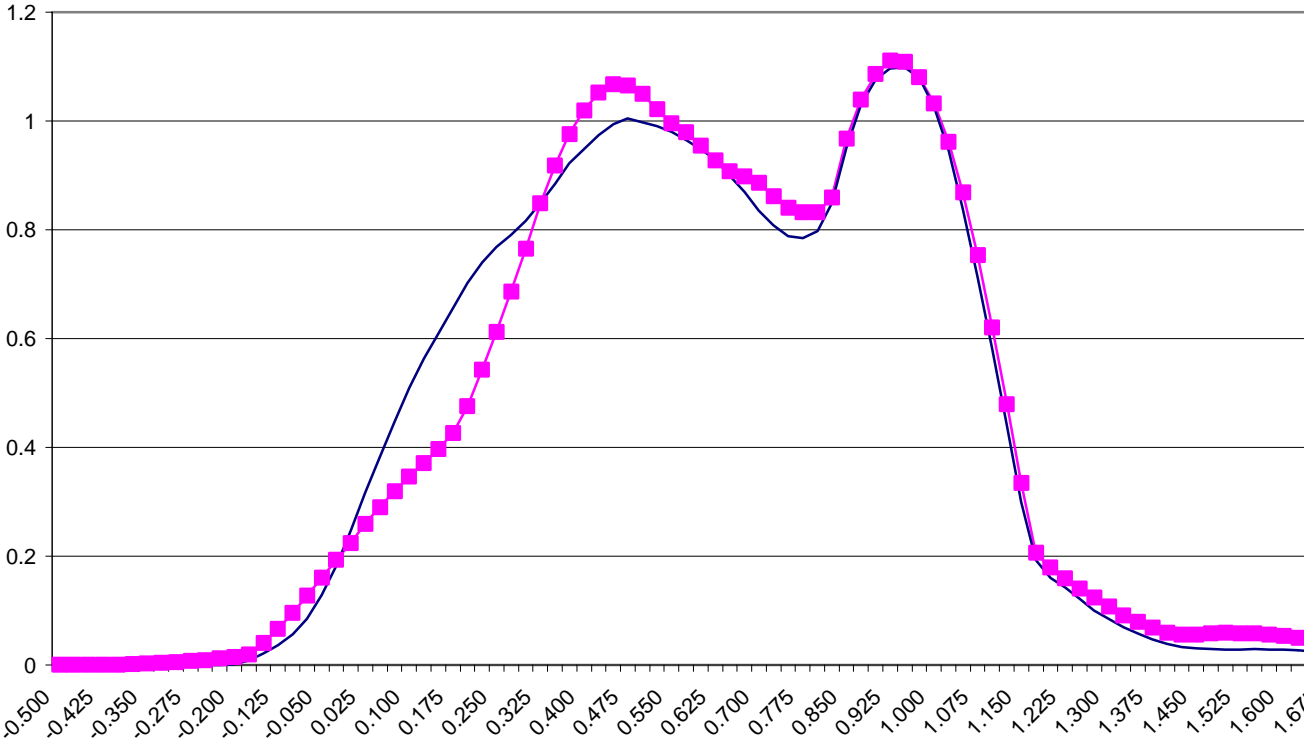


Figure 6.1
United States 1987,2000 Combined
Should Earn/Do Earn ratio (b_1)



Source: Author's calculations using the General Social Survey.

Figure 6.2
United States 1987 and 2000
Should Earn/Do Earn ratio (b_1)



Source: Author's calculations using the General Social Survey.

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