The impact of income inequality on values and attitudes☆

Frederic L. Pryor *

Department of Economics, Swarthmore College, Swarthmore, PA 19081, USA

ARTICLE INFO

ABSTRACT

Scholars in several social science disciplines scholars have argued from their respective disciplinary perspectives that income inequality has a considerable impact on economic and social performance of a nation. This essay investigates the possible impact of income inequality on 290 values and attitudes in forty industrial nations from an economic perspective. The results show that inequality has a significant impact on values and attitudes especially concerning religion and the family.

© 2012 Elsevier Inc. All rights reserved.

Current opinions about the impact of income inequality on economic and social values and attitudes in industrial nations differ widely. On the one side, Tyler (2011), an economist, argues that this impact is minuscule because the present standard of living in these nations is so far from the poverty level that people have almost every good and service that they really need. Furthermore, "envy is usually local...most economic resentment is not directed toward billionaires or high-roller financiers...It's directed at the guy down the hall who got a bigger raise...the husband of your wife's sister, because the brand of beer he stocks costs $3 a case more than yours." Increasing inequality may also not necessarily have a significant impact. For instance, as Gordon (2009) has shown for the U.S., among those in the lowest 90 percent of the income distribution, inequality has not greatly changed: it is the fast increasing incomes of those at the top of the income distribution that has been driving income inequality indicators ever higher in that nation.

On the other side, a number of studies in recent years have shown how the income inequality in a nation may affect certain social and economic performance values that have an impact on performance of the economy. For instance, in a wide-ranging book two epidemiologists, Wilkinson and Pickett (2009), look at the relation between inequality and various measures of health in industrialized nations and also in U.S. states; they show that inequality is inversely related to life expectancy and directly related to infant mortality and obesity. This is, however, a controversial conclusion. Lynch et al. (2004) review 98 studies and conclude "overall, there seems to be little support for the idea that income inequality is a major determinant of population health differences within or between rich countries. Casting wider afield Wilkinson and Pickett also show that the low status of women, ill-treatment of children, mental illness, drug use, teenage births, homicides, and rates of imprisonment are directly related to income inequality in the country or state under examination, while the reading and math scores of international tests, rates of recycling, social mobility, and other behaviors are inversely related.

Even if certain empirical generalizations hold between income inequality and economic or social outcomes hold, the mechanisms linking income inequality to particular social behaviors and outcomes are, unfortunately, difficult to demonstrate in a convincing fashion; and the arguments rest on a variety of sociological and psychological factors that resist easy quantification.

In this essay I explore whether income inequality in industrialized nations is related to values and attitudes that in turn might influence particular behaviors. The data used in this essay come from a sample of the results of the World Value Survey (WVS) [www.worldvaluesurvey.org] and if a broad survey of 290 representative values and attitudes. While I do not look in detail at each particular value or attitude, the results provide an overall view of a topic that is only touched in a partial manner by others. Primary attention is focused on the fourth wave (1995–2002) of the WVS, but in particular cases it is necessary to use results from the third wave. The data covers the adult populations of forty industrial nations, using a cross-section approach. Then I look briefly at comparisons of these results and those from the first wave (around 1981) with a time-series approach. Although the

deeper mechanism linking income inequality to these values and attitudes still awaits exploration, this essay presents a basket of stylized facts to assist in such a task.

In Section 1, I outline some tentative hypotheses to be examined and the data necessary to test them. The following section presents the empirical results of the correlation between income inequality and different types of values and attitudes from both a cross-section and time-series perspective. The third section ends with a brief summary of the overall results of this investigation.

1. Income inequality as a causal factor of behavior, values, and attitudes

1.1. Conjectures

Currently there is no generally accepted theory on the most important factors underlying the values and attitudes of a nation. Analysis of such issues is often vague, despite attempts to link values and attitudes to such causal factors as income inequality, per capita income, urbanization, population density, population size, linguistic (or ethnic or religious) heterogeneity, dominant religion, "history," and so on.

What kinds of values and attitudes might be influenced by income inequality? For instance, if people in more unequal societies tend to distrust their fellow citizens (as shown in Table 1), we might also expect that they would have a greater distrust of government and other types of collective action groups. In another area, to compensate for this lack of trust in other people, it seems likely that religious values and attitudes should be stronger in more unequal societies. That is, there might be a tradeoff between reliance on one's fellow humans and reliance on God. This very controversial conjecture receives surprising support in the empirical analysis below.

As for other issues covered in the World Value Survey, it seems unlikely that most attitudes and values about marriage and child raising, or general ideas about living should be greatly influenced by economic inequality. Attitudes about asocial behavior might be strongly negative (to preserve the existing social order) or somewhat positive (if Robin Hood effects are present). Similarly, values and attitudes about work might be either positively or negatively influenced by economic inequality.[1] In any case, these conjectures deserve empirically testing.

Finally, it is worth noting that respondents living in countries with greater income inequality generally do not explicitly seem to know it. More specifically, the WVS results show no statistically significant relationship in their tendency to believe that class divisions are sharper and the income distribution is more uneven in their own country than elsewhere. This issue, therefore, should not influence their answers to the various other questions about values and attitudes.

After experimenting with the different causal variables specified above as possible determinants of attitudes and values, I determined that five variables seemed generally capable of significantly explaining variation in many of the values and attitudes: (a) the Gini coefficient of income inequality; (b) the logarithm of per capita GDP, which takes into account the common but seldom verified belief that behavior, values, and attitudes vary by the level of economic development; (c) the degree of urbanization, which influences a number of attitudes, especially religious; (d) the population density, which has, for instance, a significant (and

negative) impact on trust; and (e) a dummy variable indicating whether the nation had a communist government in 1980 (although this variable had a significant influence on a number of values and attitudes in 2000, it will probably become increasingly less important over time).

Since it can be argued, however, that all sorts of interaction effects are not caught by the dummy variable, I have also recalculated all regressions separately for the 22 countries without a previous communist or Marxist government and also for the 18 nations with such a government in 1980, so that the analysis covers the whole sample and two subsamples.[2] Although the results of the three sets of regression calculations have many similarities, there are also important differences that are noted in the text. More details on these variables are provided in Appendix B.

For particular values and attitudes, other variables are likely to have a significant influence. Since in this study I am trying to provide a broad overview of economic inequality and values, I will stick with these five possible explanatory variables; examining each of the 290 values and attitudes in the same depth as the following case study of trust would extend the manuscript to book size.

1.2. A case study of trust

As an example of how the empirical analysis is carried out in the rest of this essay, I report in Table 1 the replies to the question: generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? For the sample as a whole and also for the countries without a communist past, the regression results show that such trust decreases as income inequality and population density increase. For the whole sample, but not for either of the subsamples, trust also decreases if the country previously had a communist government and increases with a rise in urbanization. For the sample as a whole, the beta coefficient shows that the percentage of those answering "yes" decreases by 0.530 standard deviations for every one percentage increase in the Gini coefficient of income inequality; for the sample of nations without a previous communist or Marxist government, 0.731 standard deviations.[3] These results accord with our expectations. For the countries with communist or Marxist governments in 1980, the average degree of trust is lower when inequality is higher, but the beta coefficient is not statistically significant at the 0.05 level. It seems likely that because the average degree of trust is lower in these formerly communist nations, inequality of income does not have such a great impact.

Exactly how does income inequality influence trust? It might be argued that more homogeneous populations have more trust because people know that others are like themselves; in this case, income inequality introduces a heterogeneous element into the population and decreases trust, especially if people with different incomes have little personal contact with each other. However, measures of ethnic, linguistic, and religious heterogeneity, when introduced singly into the regression (with or without the Gini coefficient included in the calculation) show no significant relation to the degree of trust, so another mechanism must underlie the results in Table 1.

---

[1] Economic inequality can, of course, also influence some behaviors in other ways without having much impact on values and attitudes. For instance, in a recent book Raghuram Rajan (2010) argues that economic inequality encourages governments to facilitate credit growth to aid low income families, a response contributing to the U.S. financial crisis starting in 2007/2008.

[2] Unfortunately, the samples are not symmetric. Although they have roughly the same Gini coefficients, the countries with a communist past have, on average, lower per capita GDPs, lower urbanization, and lower population densities.

[3] Adding singly the other variables specified above does not greatly alter these results. The one exception is a dummy variable representing designating whether the percent of Roman Catholics in the population is over 50 percent. Trust levels decrease significantly in nations where the majority of the population is Catholic, other things equal.