

SOME DEMOCRACIES ARE MORE EQUAL THAN OTHERS: USING NEED

SATISFACTION TO EVALUATE DEMOCRATIC PERFORMANCE*

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ABSTRACT

Democracy is often justified as a political system which protects and increases the welfare of its citizens. The welfare of an individual may be tractable, but citizens are a group, and so there is a need to characterize aggregate welfare. This requires some way of comparing and aggregating the welfare of individuals into a measure of social welfare. This problem is notoriously difficult, yet there are some hopeful findings. A growing body of ethical reasoning and empirical data indicates that there is broad cross-national consensus on one central normative aspect of welfare: meeting the basic needs of the severely disadvantaged in society. All the developed liberal democracies have adequate resources to provide for these. This prompts us to propose a new metric for evaluating the performance of the developed liberal democracies: the extent to which they provide for their citizens' basic needs. This avoids the thorny problems of characterizing overall welfare. We provide some preliminary measures which demonstrate significant divergence across democracies in the OECD and examine some of the statistical patterns that emerge. Since the divergence in performance cannot simply be attributed to differences in values or disparities in resources this suggests further research into the role of political structures, in explaining the disparities.

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Joe Oppenheimer, Norman Frohlich, Maria Dimitriu & Cyrus Aghamolla

INTRODUCTION

In this paper we consider criteria that should be used to evaluate the performance of the political systems in developed democracies. We develop and operationalize indicators, report our findings and conclude with a discussion of the results and their implications.

The justification of governments has shifted over the millennia. From satisfying the demands of the gods, we have come down to caring for citizens' mundane needs. Not that our ancient forebears were concerned exclusively with the deities. Aristotle argued allegorically that diners were the best judges of the chef. After numerous revolutions and some considerable evolution, democracy has become the current front-runner as the system that is the best to insure that the political feast satisfies those at the table. For the economically developing states, some arguments persist for supporting other governmental structures but for the developed states, the debate is essentially over. However, like the ancient gods, there are many forms that democracy can take. Identifying the particular form which performs best is a difficult task: one for which no consensus exists.

How *are* we to judge governmental performance among the 'old-line,' stable democratic states? How are we to develop a metric for the satisfaction of the citizens? Of course, political performance has many different aspects: physical security, economic performance, delivery of social welfare, stability, durability, etc. The initial problem we face, then, is the selection of basic performance criteria that can, somehow, be tied into a coherent and justifiable bundle. Only after that does it make sense to move on to the tasks of measurement and evaluation. In this essay, we explore the difficulties of constructing such a metric, propose a relatively simple solution, and develop some implications of such a metric for comparing the political performance of the advanced democracies.

In this paper we argue that the considerable differences in how citizens (and especially needy citizens) fare in the developed democracies can serve as a basic marker of social welfare. The

normative importance of the satisfaction of *basic* needs¹ makes performance on that dimension a worthy candidate for a metric of democratic performance. By focusing on “needs”, this paper casts a new light on some of the normative and theoretical chestnuts in the literature of social justice and social welfare. It allows us to develop some implications for the evaluation of constitutions and for institutional reform proposals.

The empirical impetus for the project was a simple and uncomfortable observation: although the established, economically developed, liberal democracies do not vary enormously in the rights they afford citizens, per capita incomes, and long term economic growth rates, they *do* vary considerably in the physical, social, and economic safety they afford their citizens. The latter is partially reflected in the diversity of income and wealth distributions, incarceration and murder rates, availability of medical care, educational levels, employment expectations, etc. Before going into the specifics of our proposed solution, we sketch some of the problems of identifying a metric for the performance of political systems.

THE PROBLEM OF A SOCIAL WELFARE METRIC

The difficulties (indeed, the impossibility) of developing a social welfare function has been the subject of a mountain of scholarship which we needn’t review in detail here. But we do need to bring in some threads of that discussion to place our contribution in perspective.

In this day and age, the criticism of any notion of welfare as a metric comes from a general consensus of economists resting on two axioms (Hausman, 2008):

- 1) We can not compare the happiness of one individual with that of another;
- 2) Each individual is sufficiently unique that we must give up seeking a substantive definition of welfare, and revert, instead, to preference satisfaction.

The two premises, together, move us from the standard utilitarian conclusion that we should maximize the total happiness in society to choosing an outcome which is Pareto optimal: one that cannot be improved for someone without hurting someone else. Thus, we are not to judge whether the satisfaction of one person’s preference is more desirable than that of another. At most, economists tack on a presumption of decreasing marginal utility of money to their assumption of insatiability. That only adds the notion that increasing income always generates more happiness, but it increases by less and less as money mounts up. It stops well short of providing an interpersonal comparison.

In virtually all modern theories of democracy, the extent to which any outcome is deemed good rests at least in part on the relationship between that outcome and some notion of social welfare² plus some properties of what might be considered legitimate group choice procedures. To some extent, quite magically, it is assumed that these legitimate group choice procedures can (usually) deliver good results regarding social welfare. The link was made by noting the relation between group choice procedures, individual choice, and preferences via a presumption that “welfare is very

¹ There is quite a literature on this. For examples see Braybrooke (1987); Brock (2005, 2005 & 2006); Copp (1998); Doyle and Gough (1991); Frohlich, Norman and Joe A. Oppenheimer (1990, 1992, & 2006); Matania and Yaniv (2006); Rawls (1971 & 1996).

² Sen (1977, 1979, 1993, and 1999: especially chapter 3) has made telling arguments against the simple utilization of income or welfare as a metric. But capabilities, which is his elaborate improvement on welfarism, does not fundamentally change our argument: indeed, it reinforces it.

strongly related to the satisfaction of preferences.” This nexus of causality comes from basic presumptions in economic theory. But economists are deeply vulnerable here. For preference satisfaction to be an interesting metric of welfare, it must be that individuals have relatively stable and well defined preferences. The fragility of preference stability in the face of framing and other contextual effects is well known. Studies showing precisely this are now legion. Preferences appear to be probabilistic³, and subject to manipulation by framing effects.⁴ Given that these difficulties undermine the epistemic and ontological basis for a preference satisfaction based notion of social welfare, we must look elsewhere for a metric.

Most philosophers who have thought about this, including the founders of Utilitarianism, have argued that we do have some ability to compare welfare across individuals. The quintessential example of how that can be done is a comparison between an individual who is better off and another who is seriously deprived. But most have stopped short of claiming that this rough measure can be refined into a numerical metric.

For example, both Harsanyi (1953) and Rawls (1971) are concerned about citizens’ welfare. But for Harsanyi maximizing the expected value of welfare is the objective, while for Rawls, it is maximizing the welfare of the poorest. The difference is one of total, or average, welfare (presuming sufficient comparability to make sense of such a concept) versus a particular pattern of distribution of welfare.

We propose building on the insights of Harsanyi (1953) and Rawls (1971), that social justice must be understood through a lens of *impartial reasoning*. Adopting an impartial point of view seems to get around some of the problems of framing (Frohlich and Oppenheimer, 1992) and leads one to regard citizens’ rights and basic welfare as a predominant concern. Our own empirical work on impartial reasoning and social justice (Frohlich and Oppenheimer, 1990, 1992, 1994, 2001; Frohlich, Oppenheimer and Eavey, 1987a & b and Frohlich, Godard, Oppenheimer and Starke), led to a focus on a sustainable minimum or floor. Reasoning from an impartial point of view, individuals have no difficulty developing a consensus and agreeing to a floor of welfare that they must be able to count on from society (see also Bond and Park, 1991; Frohlich and Oppenheimer, 1990, 1990, 1992, 1994, 2001; Frohlich, Oppenheimer and Eavey, 1987a & b; Frohlich, Godard, Oppenheimer and Starke, 1998; Jackson, and Hill, 1995; Konow, 1996 & 2000; Lissowski, Tyszka and Okrasa, 1991; Oleson, 2001; Saijo, Takahashi, and Turnbull, 1996). Reasoning impartially, individuals desire a social contract that insures all individuals a minimal welfare or a social safety net: a floor.

Gillian Brock (2005) has recently reinterpreted this in terms of needs. We follow her lead. By focusing on needs satisfaction as a foundational aspect of social welfare, we argue (along with Braybrooke, 1987) that two of the biggest conundrums of the social choice literature can be partially avoided. One need not have direct interpersonal comparability of individuals’ welfare writ large, nor does one need to confront directly Arrow’s (1963) famous impossibility result .

In what follows we explore the definition and justification of needs satisfaction as a metric for the evaluation of democracies and then develop an operationalization of the concepts.

³ See Regenwetter et al, 2008 for a convincing discussion of the nature of preference and the methodology required to identify it.

⁴ See Quattrone and Tversky, 1988 for a fine if somewhat dated, review of the findings here

NEEDS SATISFACTION AS A METRIC OF DEMOCRATIC PERFORMANCE

CONSTRAINTS AND OTHER CONSIDERATIONS BEARING ON A PERFORMANCE METRIC

First, it is important to note that constraints must be placed on any welfare metric for it to make sense as an indicator of the quality of democratic *performance*. The premises of democracy include the equality of each individual's weight in voting in elections. They also include equal protection of citizens' rights by the government. These act as basic constraints on any evaluation of the performance of democratic governments (Nozick, 1974).

For groups of people to meet their needs over time, they must have the freedom to organize themselves politically. If nothing else, this gives a solid justification for liberal political orders. Without such freedoms, even the identity of the shared interests will often remain unknown (Oppenheimer and Frohlich, 2007, p. 90).

And of course there are other notions of performance that must be considered as side-constraints including those required for social stability and a state's ability to muster an appropriate defense of itself in the face of threats encountered. But aside from these constraints, our argument falls within the venerable tradition of characterizing social welfare as some function of the aggregate welfare of the citizens with the implication that social welfare should be a major measure of political performance

Beginning with needs, or a sustainable floor, allows us to circumvent some of the measurement limitations of 'welfarism' or utilitarianism. The latter characterizes social welfare as some form of aggregate: in its simplest form as the sum of the individual welfare values. All such approaches leave out considerations of distribution and social justice (Sen, 1973, chapter 1). While often downplayed, the role of government in providing distributive justice has a long pedigree. For example, Madison wrote in Federalist 51: "Justice is the end of government. It is the end of civil society. It ever has been and ever will be pursued until it be obtained, or until liberty be lost in the pursuit."

Fulfilling basic needs can easily be argued to be an important consequential implication of distributive justice and an important element in the normative justification of democracy (Frajman, Frohlich, and Oppenheimer, 2003). Thus, needs satisfaction can be used as a foundational criterion for evaluating the performance of liberal democratic institutions and regimes.

To operationalize a metric, one requires a scale of basic need satisfaction for evaluating democratic systems. Moreover, if the metric of social welfare is to be useful, there must be considerable variability in need satisfaction among the world's developed democracies. This would indicate differences in the normative performance of different states and gives a basis for examining the positive links between proposals for constitutional changes and the design of democratic systems. A preliminary examination of the data yields a *prima facie* case for differential performance.

Operationalizing the Metric

In linking political performance to social welfare we must ask what properties of individual welfare are to be counted in the measurement of social welfare. Clearly the *content* of the welfare

measure we choose must be justified. We do not have to claim that all political systems, or even all democratic political systems, can be compared with one another using the same scale: the performance criteria for a developing democracy (e.g. India) might be quite different from those of a developed one such as Norway. Extraordinary differences in economic circumstances, security situations, ethnic rivalries, and so on, may lead one to require a fundamentally different weighting of the importance of constraints as opposed to other elements of social welfare. We do not propose one size fits all.

Since the traditional economic approach characterizing social welfare as preference satisfaction has foundered for lack of interpersonal comparisons, a focus on needs may be able to get us partially around this. For example, were there two citizens with similar cancers and only one is unable to get medical attention, the other would be experiencing a basic need going unmet. Armed with a substantive set of concerns and minima that are to be satisfied, we are able to make some comparisons then between individuals. Of course, this does not completely solve the problem. How is one to aggregate across concerns, and differentially weight the number of individuals deprived and their unequal deprivations?

To level the playing field and eliminate disturbing factors, we restrict our comparisons to the set of established, developed democracies. All of them have a continuous record of meeting the sorts of side constraints mentioned above over a number of decades. Moreover, these relatively rich democracies have the resources to meet the basic needs of their citizens, and so any failure to do so can be more easily attributed to political decisions, rather than economic contingencies.

SEPARATE WELFARE METRICS

There is a surprising overlap in the needs of all people, and we can take those things like food, shelter, clothing, etc. as included in basic needs. But to complete the list we must be more specific and take into account what a person requires given their social context. Braybrooke (1987, p. 37) identifies two categories of needs: those associated with physical functioning (to which we have alluded) and those needed for social functioning. So, for example, in the latter category, democracies require that citizens participate in the political life of the society. And literacy and numeracy are prerequisites for considered participation. To identify these as basic needs of citizens in democracies is to be more inclusive and go beyond the most basic needs that we have as animals. Indeed, it acknowledges the social context of human existence. By specifying the essential roles of citizens of modern developed democracies we can understand the sorts of social functioning needs that will have to be identified. These social roles would certainly include membership in a market economy, a democratic polity, and a family structure.

But just enumerating the needs can't get us around all of the difficulties of developing a notion of social welfare based on needs.⁵ It may, however, help us generate a more interpretable mapping from the welfare of the single individuals to an aggregate conception of social welfare. But in moving to

⁵ To do that, needs would have to be weighed heavily in our preference functions. We show how this might generate a Condorcet winner in Frohlich and Oppenheimer (2007). Braybrooke also conjectures that a concept of needs instead of preferences could get one around some of the paradoxes of social choice theory (pp. 27, 184-6).

social welfare we will have to make additional assumptions. After all, once we note that a society has not met the basic needs of all its citizenry along several dimensions we will still have the problems of comparing the different dimensions, and considering the differing numbers of individuals for whom the state fails. So, we may wish to add an assumption about the relative value of failure across different dimensions and regarding the percentage of the population left without basic needs being met. These would be strong assumptions, but even without such strong assumptions we can develop a partial ordering of social welfare and get some distance beyond the Pareto criteria that has hobbled previous efforts to adequately characterize social welfare.

So we should not give up merely because we can't develop a full ordering. To develop a more complete metric one must specify tradeoffs between the numbers of people who are needy and the depth of their deprivation. And the metric for the depth of deprivation is also not going to be unambiguous. There will be various statistical measures of this that may need consideration including minima, and measures of dispersion (Sen, 1973). And since need is clearly multi-dimensional, we put off the notion of a consolidated single metric. To begin, we consider separate metrics.

A PRELIMINARY INVENTORY OF NEEDS

We still need some detail in order to approach an empirical task of evaluation. What, for example, constitute the specific needs that are under consideration? Although Braybrooke himself proposes a list of needs (and so do others, including the UN: UN, 2005) based on the functioning of the individual, the list is quite sparse and intuitive. For physical functioning he sets out (p. 39), a life supporting relation to the environment, food and water, excretion, exercise, rest, sleep, preservation of the intact body. Similarly, he identifies, for social functioning: companionship, education, social acceptance, sexual activity, freedom from both harassment and constant fear, and recreation. Not all of these are state responsibilities, although the state might be said to be required to insure that others (e.g. violent gangs or mobsters) don't deprive individuals of these basic needs.

Gillian Brock (2006) is a bit more abstract in her approach when she says: "a need is basic if satisfying it is a necessary condition for human agency." Brock notes that by linking inclusion on the list to agency one "can circumvent concerns about how an account of such needs could be sufficiently 'objective' . . . [to] . . . enjoy widespread cross-cultural support. . . . For instance, by definition, to be an agent one must be able to deliberate and choose. In order to deliberate and choose one will need at least (1) a certain amount of physical and mental health, (2) sufficient security to be able to act, (3) a sufficient level of understanding of what one is choosing between, and (4) a certain amount of autonomy. Because of its important role in developing (1)-(4), I also add a fifth basic need that underlines the importance of our social needs; namely, (5) decent social relations with at least some others" (chapter 3).

So we can see, enumeration is possible, and given that each society is a bit different, there may be slight variations in what are the actual instantiations of basic needs: so they would require quite different details in Brisbane than in Banda Ache. But food, shelter, health, education, work or other economic support when work is impossible, all come into play. Since there is far less variation in the structure of these items among the developed democracies than between them and members of the less developed and non-democratic countries, we will be able to make comparisons regarding shortcomings quite readily. Accordingly we propose that a first level evaluative criterion of democracies should be the extent to which they meet the basic needs of their citizens. This is in keeping with the formulation by Braybrooke, that we fulfill needs lexicographically but with satiation.

However, this argument brings us back to the observation with which we started. The differences in distributions of income and wealth within different developed democracies clearly reflect differences in the way and extent to which democracies meet (or do not meet) the basic needs of their citizens. Even in the most developed democracies, where societal wealth is ample to take care of the basic needs of all citizens, there are some individuals who don't get the minimal support they need. In some fundamental sense, then, the justification for these democracies is undercut. If "life" is interpreted as the requisites of fulfilling the roles of a "parent, householder, worker and citizen", then clearly, in virtually all developed democracies, variable numbers of citizens are denied "life". Moreover, they have liberty only to function in a limited fashion, and are handicapped in their pursuit of happiness. It is for these reasons that we argue that "satisfying basic needs" is a way of empirically evaluating democratic performance.

DEVELOPING AND OPERATIONALIZING OUR INDICATORS

Given that our concern is the performance of democratic political systems, our sample of countries is restricted to the democracies. Further, since development levels certainly affect the ability of any political system to take care of its population's basic needs, we have restricted our sample to twenty long established, democratic, wealthy countries. The set of countries is: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and the United States.⁶

SPECIFIC DIMENSIONS AND THEIR MEASURES

Our measurement of need satisfaction focuses on a number of specific dimensions including poverty, health, education, employment, and physical freedom that were chosen because of their centrality to individual welfare, and because of their cross national comparability and availability. We also include a measure of post tax and transfer of income inequality that reflects the political effort to redistribute the outcomes of market transactions. Because different societies may have chosen different paths to satisfy the basic needs of their populations, we deem it important not to use governmental effort (or expenditures) as a measure of meeting these needs. After all, some societies may use private sources to solve these problems. Thus, we try to use indicators that are a more direct indicator of needs-satisfaction. For example, instead of using government expenses on medical expenses as a measurement for satisfying basic health needs, we will look at direct health outcomes such as life expectancy and deaths from various causes.

Based on our philosophical understanding of the nature of needs and of the performance of democracies, we start from a set of normative premises that furnish the analytic structure of our argument for using need satisfaction as a measure of democratic performance.

Premise 1: The more individual basic needs are satisfied, the greater the level of individual welfare.

⁶ The restriction to these twenty countries stems from our desire to have a longer period of stable democracy: in this case at least a 25 year period to achieve the satisfaction of the needs of their citizens (many of our data points were from the year 2000). This seemed to us justified because programs to meet the needs of the populace take a while to enact. Details of our data structure, including sources, are contained in the appendix.

Premise 2: The greater the welfare of the individuals in a democracy the greater the social welfare.

Premise 3 Given that the wealth of the developed democracies are similar, those that meet more basic needs of its population produce greater social welfare.

Premise 4: The greater the social welfare in the democracy, the better the performance of the democracy.

Now we consider operationalizing five dimensions of need satisfaction: poverty, health, education, employment, and freedom.

The first dimension: POVERTY

Individual poverty is a fundamental indicator of a person's capacity to satisfy one's needs for food shelter etc. A society fails on the individual level when the poor have too little income to make do. The breadth of the problem is reflected in the proportion of the population that is impoverished. To develop an index, we started with a number of indicators of deprivation from the OEC data and performed a factor analysis to identify underlying dimensions of need satisfaction. Indicators such as Average income at Purchasing Power Parity available to the lowest decile of the income distribution, the income share of that decile and the ratio of the income share of the lowest decile to that of the highest furnished a measure of the depth of deprivation. The other dimension was comprised of the poverty rate in the population as a whole. It is conceptualized as a measure of the extent of poverty in a country. The eigenvalues of the two dimensions were 2.70 and 2.39, respectively. Testing for reliability with Cronbach's Alpha we found the first index to have an alpha of .93.

[FIGURE 1 ABOUT HERE]

For comparability across dimensions, we transform the data to standardized variables or z-scores.⁷ From Figure 1 we can see that these two dimensions are relatively independent although there is a small, but insignificant degree of correlation between them ($r = .171$, one-tailed $p = .235$) There is also substantial dispersion in the performance of the countries on these measures (Note that lower numbers indicate more poverty). Accordingly we adopt both dimensions in our measure of poverty as one of our indicators of need satisfaction.

The second dimension: HEALTH

Life expectancy is one of the most basic summary indicators of the extent to which basic health needs are met. As an indicator, it is imperfect, however, because fine health care for the better-off can coexist with considerable health deprivation for the worst-off and this would not necessarily be picked up by life expectancy. To get a more focused measure of how well the health needs of the worse off are met, we added deaths from various causes by gender, inasmuch as death rates are higher in all societies as one descends on the socioeconomic scale. Nevertheless, with our caveat, low

⁷ Thus, in Figure 1 the numbers on both axes signify standard deviations from the mean. The mean for z-scores is always zero. Hence, it becomes easier to compare the two dimensions because the explanation is done in a relative number of standard deviations from the mean.

performance on this indicator provides a summary measure of lifelong health problems culminating in earlier death: a failure to sustain life.

We can get a glimpse at the degree to which the failure to provide basic health needs impacts the worst off by looking at one of the most vulnerable segments of the population: children. Two specific measures capture the death rates of children in specific age categories: infant mortality and deaths of children under 5. We refer to the indicator formed from these two measures as Child Deaths

A Factor analysis indicates that the two indicators are relatively independent and hence tap different aspects of failure to meet health needs. Child deaths accounts for 68.5% in the data and life expectancy (including deaths by gender from various causes) accounts for 23.8% of the variance. The eigenvalues are 3.427 and 1.190 respectively. Cronbach's alpha for both child deaths and life expectancy are above .93.

The performances of the countries with respect to the two indices are plotted in Figure 2.

[FIGURE 2 ABOUT HERE]

Here again, the indices are relatively independent although slightly but insignificantly correlated (r is .182), (p is .175) and performance of the countries is also quite dispersed. As in Figure 1, the indices in Figure 2 are constructed out of normalized scores and the variations of the values on the axes are specified as a number of standard deviations from the mean. Higher scores indicate better care of citizens' needs.

The third dimension: EDUCATION

Educational accomplishment and opportunity is another set of basic needs in a modern economy and democracy. Citizens can be deprived of their opportunity both for full political and economic full participation by a lack of numeracy and literacy. However, educational attainment, such as adult literacy is notoriously badly reported in many official statistical compilations (see *Education at a Glance* published by OECD) and more than simple literacy and numeracy is now required for reasonable much employment in developed economies. Accordingly, we raised the bar regarding what is considered a minimal need. We opted for secondary educational attainment. A factor analysis of a number of such indicators selected the level of low-secondary education attainment (i.e. the proportion of the 25-to-64-year-old population with secondary education as the highest level attained) and the distribution of the 20-to-24 years olds without upper secondary education. The index explained 64.7% of the variance, with an eigenvalue of 1.94, and a Cronbach Alpha of .86.⁸ As in the other figures, we used normalized values for this one too. We display the considerable dispersion of performance among the 20 countries in the bar graph in Figure 3.

[FIGURE 3 ABOUT HERE]

The fourth dimension: EMPLOYMENT

⁸ Given that the failure to meet needs is essentially a nominal variable, with this indicator, we have only a measure of the breadth of the failure to meet educational needs, rather than a fully quantifiable variable.

We have a similar story to tell regarding employment. We considered several indicators, such as long-term unemployment rates, the rate of long-term unemployment as a percentage of the labor force, the total unemployment as a percentage of the labor force, the unemployment rate by level of educational attainment (below upper secondary education) for 25 to 64-year-olds.

We wanted to see whether these indicators tapped into a common factor: “unemployment”. Two of these long-term unemployment rates as a percentage of the labor force and total unemployment as a percentage of the labor force yielded a factor with an Eigenvalue of 1.83 and a Cronbach’s alpha of .86. We use it as a summary measure of the severity of the employment problem (see Figure 4, in which the scores are based on the normalized scores of the variables).

[FIGURE 4 ABOUT HERE]

The fifth dimension: FREEDOM

As was pointed out earlier, our selection of the very well established and economically developed democracies meant that the states do not vary greatly in their delivery of the standard liberties associated with modern democracies. All perform well in terms of freedom of assembly, speech, etc. But there is at least one aspect to the basic freedoms of citizens in which they differ. One of the most fundamental freedoms is the ability to move freely in society and to live out one’s life plans. Incarceration makes that impossible. We decided to use the number of prisoners per 100,000 people, which we refer to as “Incarceration” as a measure of this.

Incarceration rates vary widely among the 20 countries, as shown in Figure 5.

[FIGURE 5 ABOUT HERE]

The United States is way out of line, but as we shall discover, the main relations that we will discuss are not dependent upon the United States as an outlier.

A Performance Index

As a possible summary measure of performance we have summed all of the normalized indices described above into a single aggregated summary index of performance. As it turns out, (see the bar graph in Figure 6) there is a degree of consistency of performance within countries across the indices that results in rather wide dispersion in scores on the Performance Index.⁹

[FIGURE 6 ABOUT HERE]

The twenty countries fall into roughly three groups on this aggregate index of performance. The USA, Ireland, and Italy, fall well below the average (although they are not too much below the scores of Australia, New Zealand and the United Kingdom) while Norway, Sweden, Japan, Switzerland, and Iceland are well above average in meeting needs according to this index. The remaining countries are distributed across the mid range with a fair degree of dispersion.

⁹ In developing the aggregate measure we assigned the very few country missing values on indicators the mean of all other countries’ values.

Of course, one of the questions to be considered is the validity of any single aggregate index of performance. A factor analysis of the composite of our dimensions reveals that the index is composed of 3 factors (See Table 1). The first factor explains 42.5% of the variance, the second 27.2% and the third 14.1%: which means the 3 account for approximately 75% of the variance. The Cronbach alpha is .63 and the Eigenvalues of the dimensions are 2.976, 1.906, and 0.986 respectively. Table

But before we can begin thinking of attributing this poor performance to the political system we must address some other possible explanations. Perhaps meeting basic needs poses a costly tradeoff with economic performance and the differences are a political choice to emphasize growth rather than meeting basic needs. Or perhaps political policies are just not capable of dealing effectively with the needs of those at the bottom of society. Fortunately we have some data that allows us to give a negative, although not definitive, answer to those possible objections.

EVALUATING DEMOCRACIES

TRADEOFFS BETWEEN ECONOMIC PERFORMANCE AND WELFARE ACHIEVEMENT AMONG THE DEVELOPED DEMOCRACIES?

First, let us consider the possibility that the moral hazards created by a safety net can conflict with economic performance. Perhaps increasing support for the poor just decreases productivity of the society as a whole by sapping incentives in the system. Consider the work of Goodin, et al. (1999), who looked at a long panel study (circa 1984-1994) dealing with various aspects of the political economy of Germany, Holland, and the United States. They examined the growth in median incomes in relation to the performance of the economy. They discovered that the United States' lack of social welfare spending, reflected in miniscule growth in median incomes, (see Table 2) but that the accompanying growth in income in the USA was no greater than that in Germany and Holland, which had considerable growth in median incomes as a result of their redistributive policies.

Another test of the hypothesis that meeting basic needs inhibits economic growth can be gleaned from a comparison of the relationship between our Performance index of need satisfaction and GDP per capita. In all of the advanced industrial democracies the market economy delivers about the same results prior to tax, transfer, or income policies (Goodin, et al, 1999). Figure 7 shows that there appears to be no significant relationship between the two in our data set. A regression produces an insignificant equation with an adjusted explained variance of one percent. Removal of the outliers Luxembourg, New Zealand, Norway and the USA produces almost identical results. There appears to be no tradeoff between meeting basic needs and economic performance.

[FIGURE 7 ABOUT HERE]

The other possible threat to our ability to link needs satisfaction to political performance is that it may simply not be possible to dealing with unfulfilled basic needs via political policy. Were that true we could not fault the political system and could not therefore use unmet needs as a measure of democratic performance. One test of the political efficacy of social welfare policy might be the poverty rate as a correlate of social welfare spending. The findings of the OECD, using a definition of poverty as 50% of the median income, is that among the OECD members, there is a very high

correlation (r is .824) between spending on social welfare programs for working aged people (excluding health) and ending poverty (see Figure 8). Apparently effective policies do exist.

[FIGURE 8 ABOUT HERE]

Another somewhat more indirect measure of the effort made by governments to provide support for the needs of the worst off is our measure of the ratio of percent of national income of the lowest decile to the income of the highest decile. After all, any social programs benefiting the needy must be funded by transfers, and given progressive taxation, that should be reflected in that ratio. Figure 9 shows the relationship between The Performance Index and that measure of effort to redistribute. The plot reveals a strong relationship and the corresponding regression explains 73% of the adjusted variance and is significant at less than .001 level. So our aggregate index of needs satisfaction appears to be sensitive to governmental redistributive policies.

[FIGURE 9 ABOUT HERE]

These observations argue for three main points: There are major differences among developed democracies regarding how they meet basic needs; social policies to meet basic needs can make a difference, and those policies need not impact overall economic performance. Although we have not developed definitive measures, nor presented definitive arguments, they are clearly suggestive, and indicate the potential usefulness of using a political system's success in meeting basic needs as an evaluative criterion, developing indicators of that criterion, and analyzing democratic performance in that light.

UNEXPECTED FINDINGS

Before proceeding with our general argument for, and analysis of, a needs satisfaction index as a basis for evaluating democratic performance, let us take a little detour. In the course of analyzing the various indicators we discovered a number of strong relationships among a few of them. They are interesting, not only in their own right, but as indirect indicators of the validity of the measures as reflecting basic needs.

During our earliest years we humans must rely on the fiduciary obligations of parents, guardians, and society for our nurturing and, indeed, our survival. . Failure of a primary care giver to a child to have his or her basic needs satisfied can spill over into devastating consequences for the child. Indeed, it can threaten the child's very survival. And survival is arguably the most important normative dimension of basic need. Freedom of a child from premature death is a prerequisite for the satisfaction of any other needs, and conversely, failure to meet basic needs may have a profound impact on mortality.

We examined the relation between some of other dimensions of need satisfaction and the mortality of children. A stepwise regression analysis showed that two variables together, prison rate and poverty income accounted for 71.2% of the variance in early child deaths (see Table 3).

In other words, these two policy variables, which are subject to political control, appear to have an enormous impact on the premature deaths of children in the advanced developed democracies. One can conjecture regarding the causal relationship underlying this strong relationship. An increase in the prison population takes parents away from children leaving single parents with fewer resources to cope with their children's needs. Regarding the other explanatory variable, the (post tax and

transfer) level of income available to the poor, it is apparent how this can reduce the availability of the requisites for a supportive environment and affect child health. Thus, the regression not only suggests some possible causal links, but also appears to validate the income index as a measure of the resources available to children in need. It also points to the potential for saving the lives of children by the redirection of resources to social programs.

And the prison rate, itself, may be somewhat explicable in terms of poverty indicators. Table 4 provides the test for this hypothesis. Of course, the outsized prison population in the USA displayed in Figure 5 leads one to wonder what role the United States plays in these results. It was a very disruptive outlier and, along with three other outliers was removed from the regression. But even without the United States and the others, the regression leaves us with an R-squared of 0.783. Poverty income explains 78.3 in the variance of the prison rate. Countries whose poor populations are poorer than others have imprisonment rates that are higher. One can easily conjecture possible causal relationships: perhaps more severe deprivation leads to more crime. One element which may drive this is severe need; the other is possible resentment at the unfairness of income distributions or even envy.

This relationship together with the previous one portrays a slightly pessimistic picture in which issues of poverty and imprisonment seem to lead to an increase in child deaths. Persistent problems such as poverty and imprisonment increase the risk of child mortality and should be tackled with long-term social welfare programs. This important argument is underlined in the next section as well.

EVALUATING DEMOCRACIES

Sen's early arguments about economic inequality (1973, 1992) that started him on his pathbreaking work on famines (1981) led him to ask what can we expect from democracy and why. Those questions led him to note the great discrepancies in the delivery of support for the basic needs of citizens in the developed states (1999a). As argued above, if governments are to be measured by performance, and in our secular age, *there is no other legitimate alternative*, satisfying the fundamental needs of people in distress must enter as a measure of evaluation. That any such metric will be complex, messy, and difficult to validate is beside the point. The metric is needed to get us beyond the propagandistic simplicity that the end of government is to be democratic: which left by itself, implies that government has no inherent function by which its performance can be measured.

Obviously, we have not developed sufficient fabric in the discussion of needs to give us a full template for evaluating democratic performance. For example, although our measures touch upon both the prevalence of need deprivation and its depth, we have not fully addressed the problem of integrating these two measures of the proportion of the citizenry 'in need' with the depth of the deprivation. Nor have we even considered the duration of any deprivation. These concerns indicate that there is more analytic work on the metric of needs to be done, but we can reach some tentative conclusions.

We can answer the question of whether the promises of democracy are kept equally well by all the governments of the democratic industrialized world. The answer, as portrayed above in summary fashions in Figure 6 and Table 2, is "No"! There are considerable differences among the leading democracies in their performance.

It is precisely the existence of the differences that make the study important. The difference in

child mortality rates among developed societies, for example, is very substantial. If similar levels of unnecessary child deaths could be attributed to faulty car seats, or tainted food, or unsafe toys, one would expect a flurry of political indignation and corrective legislation. But the deaths seem to be related to more passive social policies. The United Nations in a recent report (2007) identifies significant variances in the welfare of children in developed countries that parallel some of our measures, but it did not use child deaths as an indicator. On the cover of the report they state: “The true measure of a nation’s standing is how well it attends to its children ...” It appears to us that it is an issue that may need to be given more prominence.

Given the large differences in the governments’ performances it becomes important to understand not only their human costs but also their causes. Although no country is a abysmal across all indicators, the US and a few of the other inheritors of the English democratic system are clearly doing substantially worse than their continental neighbors (Lijphart, 1999 also noted this). Others, such as the Scandinavian countries and Iceland, do well across all of the indicators. The trick then is to discover whether these variable results can be causally linked to the designs of the government or government and the structure of the economy. On this issue, Lijphart (1999) and Boix (2003) argue “yes,” while Alesina (2004), Tsebelis (2002), and others have argued “no.” Thus, intellectually, we are in a situation where the original concern with performance of government is facing a need to move on, establish some measures, evaluate performance according to the measures, and explain the variations.

EXPLAINING DIFFERENCES WITH POLITICAL STRUCTURES AND SOCIAL CONSTRAINTS

Explaining the differences which we have identified, and others which remain to be revealed, is clearly another step in the process. But, we must leave that for another day. We do, however, offer a conjecture. We believe that the checks and balances built into democracy to prevent undesirable outcomes (such as tyranny) also generally protect the status quo. That protection makes it harder to pass redistributive programs that could improve the status of the worst off in society. Such structural safeguards may hinder some democracies from delivering social welfare to its citizenry (see Tsebelis, 2002). For example, the United States constitution thwarts majority decisions via institutionally structured veto points. This inhibits many decisions which could change the status quo. It has, in fact, by design, generated a government with less responsiveness, and one which takes less responsibility for social outcomes.¹⁰

Of course it is well known that letting preferences alone in a democratic decision structure is not likely to generate equilibria outcomes on matters of distribution (see Shubik, 1982; Luce and Raiffa, 1957). Even when they do, some institutional factors may well alter the outcomes. We can list some of the intermediate factors that we believe should be considered in trying to develop an understanding of the political causes of poor performance.

These would have to include the attributes of the political system that restrict and affect turnout and suffrage, the financing of political competitions, attributes of the media affecting the information available to voters, how political institutions (such as federalism, bicameralism and division of powers) relate to the establishment of equilibria via veto points, the framing of political decisions to induce voters to make their decisions employing a sense of justice, the degree to which parties are

¹⁰ Oppenheimer and Frohlich (2007) discuss this in some depth. But note that responsiveness can lead to instability and a lack of ‘resolute’ decision making regarding public policy (Rogowski, 1999) especially when there are voting cycles.

disciplined and centralized, the mobility of capital, and the methods for the protection of private property rights. Consideration of all of these would be required for a nuanced discussion of the issue.

In the absence of a detailed discussion of all of these factors, it is, perhaps, premature to discuss how one might change poorly performing governmental structures to obtain better outcomes. We can, however sketch some rough guidelines.

At the deepest level, we are saying that constitutional proposals should be evaluated in terms of a measuring rod of basic objectives. Without a careful assessment of objectives, one does not have a solid foundation for evaluating proposals.

Second, we have argued that in a democracy the measuring rod of concern should be related directly with the welfare of the citizenry: call it social welfare. Any notion of social welfare that is totally inclusive is not useful unless one can establish a basis for interpersonal comparability. Here, the element upon which agreement can be reached, we have argued, is the satisfaction of the basic needs of citizens.

Third, we would like to draw attention on the neglected aspect of child mortality in the assessment of democratic performance. The important relationship between the monetary poverty, the prison rate, and child deaths is substantively an important one. It underscores the opportunity cost of not having sufficient programs to address the needs satisfaction of the worst off. The opportunity cost of redirecting funds to other programs is not only undertaken by the poor, but also possibly by their children. Furthermore, the relationship between poverty and imprisonment is a salient one as well.

In the end, we can only say that proposals for political reform must be justified in terms of their facilitating the goals of democracy, which is to be understood as more than a mechanical plowing through of voting. Reforms should be targeting those aspects of the system that unduly privilege the status quo points that leave the needy with impossible and debilitating burdens, and hamper, rather than improve our liberties and freedoms. The most striking challenge, perhaps, is presented by the United States. There reforms may need to strike at the heart of the many checks and balances that were proudly and deliberately put in place by its founding elites to hem in democracy as a bulwark against tyranny. The costs of that protection may have been greater than anticipated.

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TABLES AND FIGURES

Table 1: A Factor Analysis of the Index of Taking Care of Basic Needs

Variables loading on factors	1	2	3
Child deaths	0.952*	-0.138	-0.036
Education Index	0.089	0.856*	0.162
Employment Index	0.002	0.872*	0.285
Life Expectancy	0.328	-0.340	0.857*
Monetary Poverty	0.770*	0.344	-0.371
Poverty Rate	0.872*	0.196	0.064
Prisoners	0.775*	-0.349	-0.042

**Table 2: Growth in income - post tax/transfer
1984-95**

<u><i>per cap income growth</i></u>	
Germany	17%
Holland	18%
USA	16%
<u><i>median household income growth</i></u>	
Germany	14%
Holland	16%
USA	1%

Table 3: Explaining Early Child Deaths by Poverty Incomes and Prison Rates

Independent variables	Coefficients
Poverty income (index)	.408*** (.093)
Prison rate (index)	.823*** (.262)
Constant	0 (.232)
(N)	20
Adjusted R-squared	.712

Source: Our dataset of compiled indices based on World Bank and OECD indicators.

Note: Entries are unstandardized ordinary least squares regression coefficients. Standard errors are written in parentheses. The dependent variable is the index of child deaths (see above section on the second dimension, health). The constant is zero because all the indices are standardized and, thus, we have a regression through the origin. We have also tested the regression for heteroskedasticity with the White Test and the results were negative.

*** p<.001; ** p<.01; * p<.05 (two-tail tests)

Table 4: Explaining Prison Rates by the Poverty Income Level

Independent variables	Coefficients
Poverty Income Level	.048*** (.048)
Constant	.252*** (.026)
(N)	16
R-squared	.783

Source: Our dataset of compiled indices based on World Bank and OECD indicators.

Note: Entries are unstandardized ordinary least squares regression coefficients. Standard errors are written in parentheses. The dependent variable is the prison rate index. We have also tested the regression for heteroskedasticity with the White Test and the results were negative.

*** p<.001; ** p<.01; * p<.05 (two-tail tests)

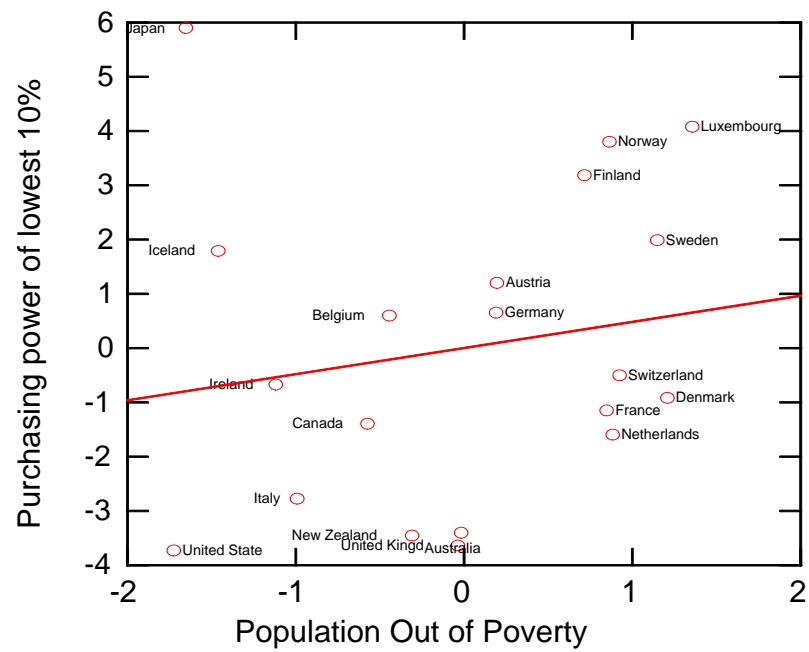


Figure 1: Country Scores on the Two Poverty Indices

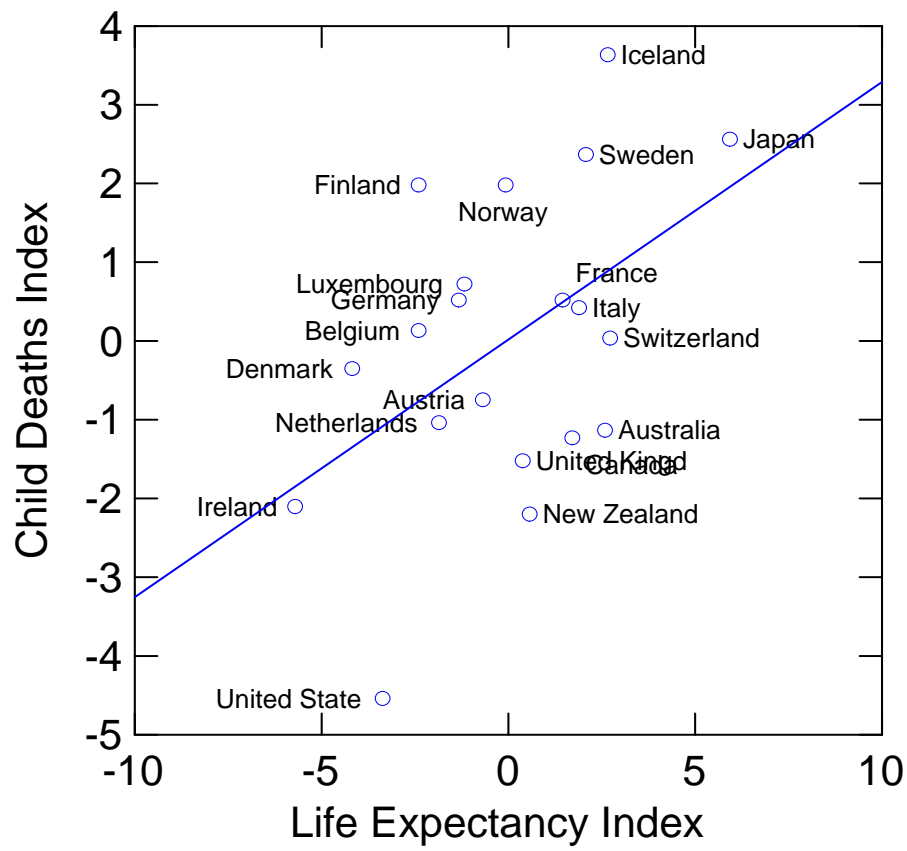


Figure 2: Country Scores on Two Health Indices

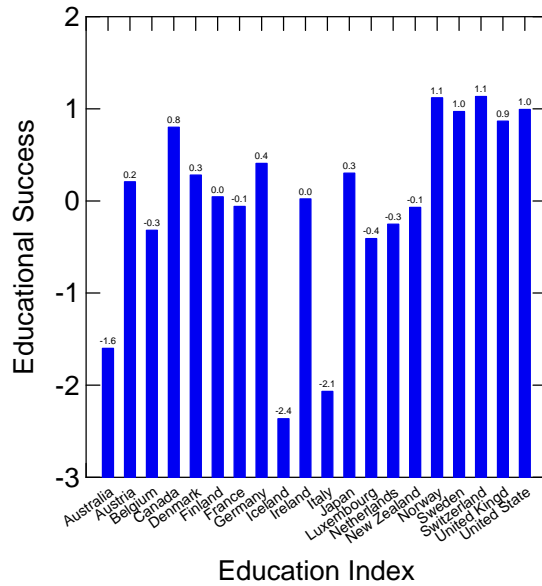


Figure 3 Education Index

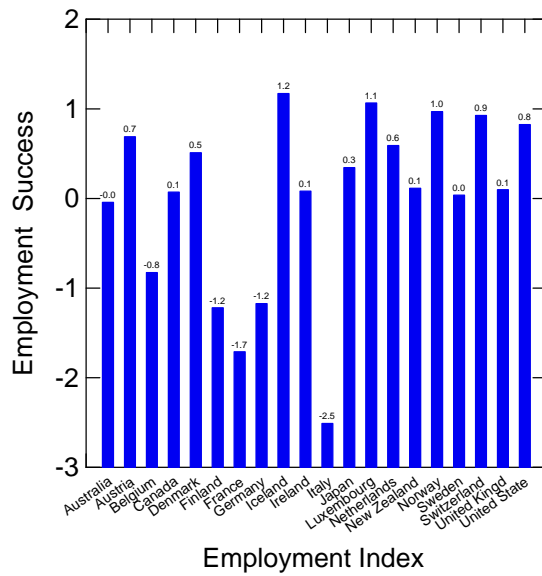


Figure 4: Employment Index

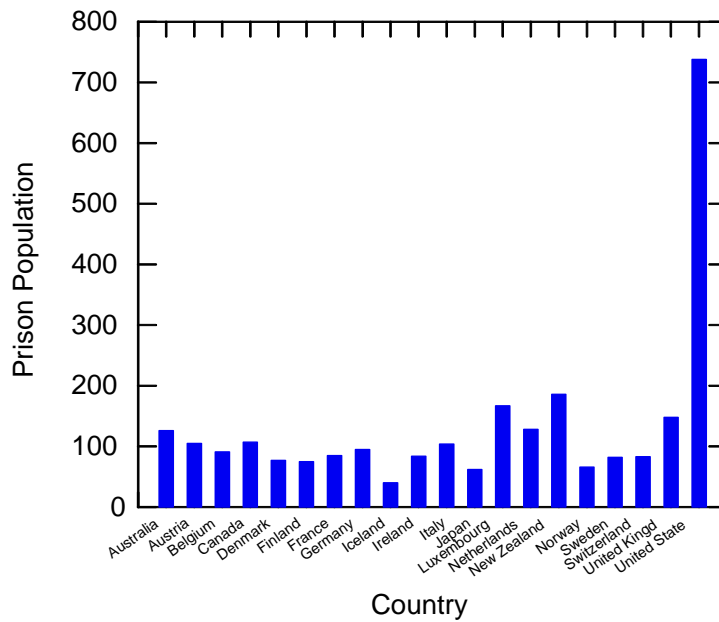


Figure 5: Prison population per 100,000

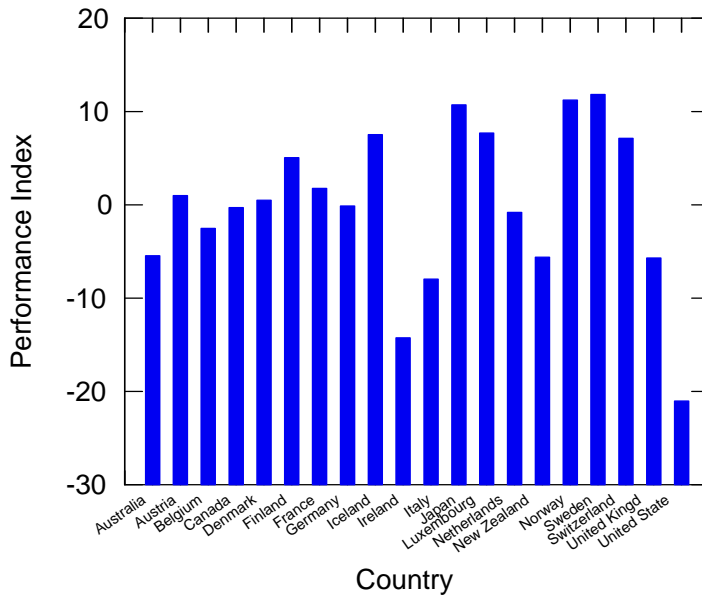


Figure 6: Performance Index

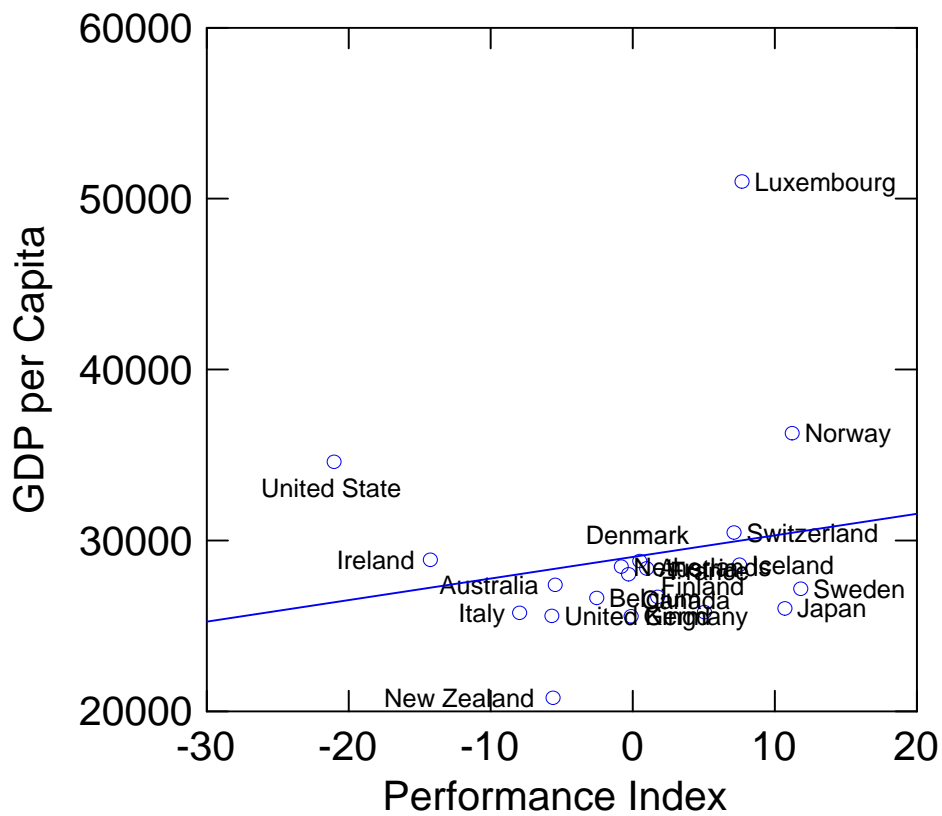


Figure 7: GDP per capita versus Performance Index

Regression not significant.

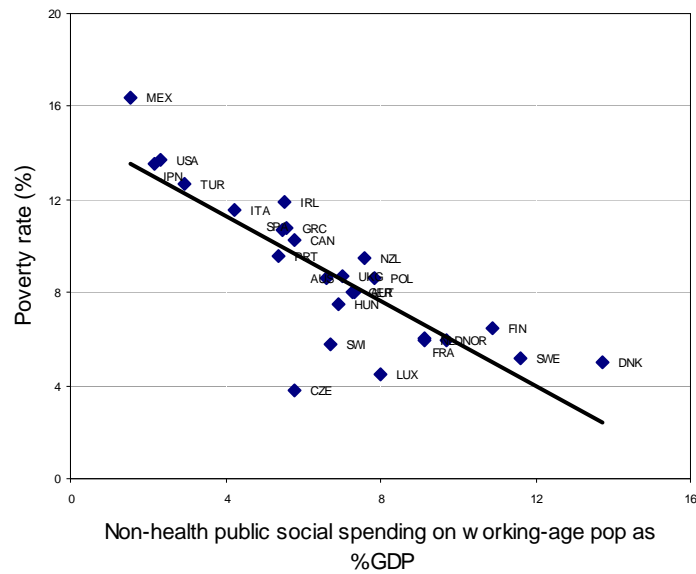


Figure 8: OECD relation between poverty rates and social welfare spending on working aged population (excluding health care) [Förster and d'Ercole (2005)].

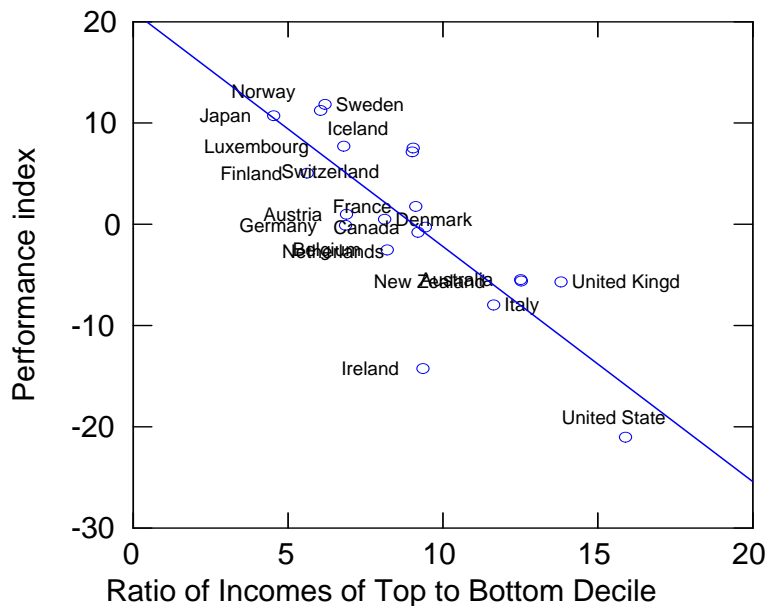


Figure 9: Performance Index versus Ratio of Income of Top to Bottom Income Decile

APPENDIX: DATA STRUCTURES AND SOURCES

Appendix: Variables¹¹

Education index: Dsed1nz + Lwsednz

1. Dsed1: Distribution of 20-to-24-year olds by educational situation. People not in education, without upper secondary education. Source: OECD, Education at a Glance 2005. Reference year: 2002 (except for Norway where the data refer to 2003 and the United States where they refer to 2001).
2. Lwsed: Low Secondary education. Distribution of the 25-to-64-year-old population, by highest level of education attained. Source: OECD (EAG), for the year 2001. The variable corresponds to the ISCED 2 level (ISCED-97 standard levels).

Employment index: Uemtotnz + Lteumzz

1. Uemtot: Total unemployment as a percentage of the total labor force. Source: World Bank
2. Itunemp(LTUEM): Long-term unemployment as % of labor force. Based on LTUEMP00: (LTUEM0) Long-term unemployment as a percentage of total unemployment (. Data collected from the OECD Factbook 2006. Reference year: 2000. The data represent people unemployed for 12 months or more as a percentage of total unemployed) multiplied by Uemtot /100 (above).

Health indices:

lifeexpct = lifeexp0z + dthalfnz + dthalm2nz

1. Lifeexp0: Life expectancy for both sexes for the year 2000. Source: OECD Health Data engine 2006.
2. Dthalf: Number of deaths for all causes of illness. Number of deaths per 100,000 females. Source: OECD Health Data engine 2006. Reference year: 2000.
3. Dthalm2: Number of deaths for all causes of illness. Number of deaths per 100,000 males. Source: OECD Health Data engine 2006. Reference year: 2000.

chlddth = Infmor0NZ + un5mor

1. Infmor0: Infant mortality per 1,000 live births. Source: OECD Health Data engine 2006. Reference year: 2000.
2. Un5mor: Under-five mortality rate per 1,000 live births, both sexes. Source: World Health Organization. Reference year: 2003.

Poverty indices:

¹¹ We estimate missing values for non-normalized values using (rank/20)avg; for normalized use (range*rank)+min, where rank comes from rank sheet. All normalized versions of these variables have the same name but with a Z at the end. If they end in NZ the normalized scores have been multiplied by -1 in order to have all the normalized scores to be “worse” if they are more negative.

povmon = vincl10z + lohiz + incl10z

1. incl10: Income share (IN %) held by the lowest 10% of a country's income-earning citizens. Source: World Bank. Years of reference are the following: 1993 for Japan. 1994 for Australia. 1995 for France. 1997 for Denmark, New Zealand. 1999 for the Netherlands, United Kingdom. 2000 for Austria, Belgium, Canada, Finland, Germany, Ireland, Italy, Luxembourg, Norway, Sweden, Switzerland, United States.
2. vincl10: (GDP per capita at current prices and at the purchasing power parity. Source: OECD (National Accounts of OECD countries, Main aggregates, Volume 1; February 2006). Reference year: 2004. The data for France include the over-seas territories. The data for Turkey are based on the accounting standards SNA 68. US dollars) x (incl10) / 100
3. lohi: (incl10) / (Income share held by the top 10% of a country's wealthiest citizens. Source: World Bank data. Years of reference are the following: 1993 for Japan. 1994 for Australia. 1995 for France. 1997 for Denmark, New Zealand. 1999 for the Netherlands, United Kingdom. 2000 for Austria, Belgium, Canada, Finland, Germany, Ireland, Italy, Luxembourg, Norway, Sweden, Switzerland, United States. Imputed Iceland with mean of other countries.)

povrt0

1. povrt0: Poverty rate. The poverty rate is measured with respect to a threshold set at half of the median equivalised household disposable income. Source: OECD Social, Employment and Migration Working Paper No. 22, final version – December 2005. Reference year: 2000.

Freedom index: Prisnz

1. Prisnz: the negative of the z score for the number of prisoners per 100,000 people in 2006. Source: International Centre for Prison Studies (King's College, University of London).