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Country Patterns of Behavior on Broader Dimensions of Human Development

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Abstract

This paper adopts a more expansive definition of Human Development than that encompassed by the Human Development Index in order to explore diverse country patterns of behavior in relation to these broadened dimensions. We proceed by first identifying the dimensions to be investigated and subsequently present the methodology adopted for clarifying country behavior with respect to these dimensions. Countries are shown to differ substantially in terms of their choices among the independent dimensions of well-being which may or may not be constrained by history or culture. We then group countries by level of per capita income, experience with internal conflict, region of the world, oil, wealth, distance from the equator, distance from the sea, in the search for identifiable differential behavior patterns by country typology. We find that choices do exist across the board. For example, even low income countries can achieve well in all categories while high income countries do poorly.

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I. Introduction

Human development (HD) has been defined as ‘a process of enlarging people’s choices’. Although often equated with the human development index (HDI), as a combined set of measures of education, health and (adjusted) incomes, it represents a basic and reductionist version of HD. As Amartya Sen has pointed out, Human Development encompasses much more than is included in the HDI. As Sen (2000) puts it:

“(I)t would be a great mistake to concentrate too much on the Human Development Index or on any such aggregative index... These are useful indicators in rough and ready work, but the real merit of the human development approach lies in the plural attention it brings to bear on developmental evaluation, not in the aggregative measures it presents as an aid to the digestion of diverse statistics” (p. 22)

In earlier work (Ranis et al. 2006), we extended the measurement of HD to 11 important categories of life and proposed plausible indicators within each category. We then eliminated the indicators highly correlated with others in the same category, leaving us with 39 relatively independent ones. We subsequently eliminated those highly correlated with the core HDI and were still left with 31. This suggests that a full assessment of human development requires us to move beyond the HDI. Moreover, it already implied

that different countries may perform differently on different dimensions of human development, i.e. that they may do well on some and poorly on others.

The central aim of this paper is to adopt a more expansive definition of HD than that encompassed by the HDI, in order to explore such alternative patterns of country behavior. We are interested in identifying countries which, for one reason or another, seem to do particularly well on one dimension and less well on others, or particularly badly on one dimension and better on others, as well as managing to do well on all, or failing to do well on any.

Countries may show different patterns of performance because – with limited resources and capacities – they choose to emphasize one dimension rather than another (e.g. choose to promote economic growth at the expense of social ties, or political freedoms); or because they face constraints which prevent success on one dimension but allow success elsewhere; or because their history or culture has led to particular patterns (e.g. a culture which involves strong social ties, or one, like e.g. Costa Rica, where the basic HDI elements have long been promoted). There are also causal connections across some dimensions (notably, for example, in the HDI and economic dimensions) that limit the range of possible behavior, particularly over time and in a sustained manner, which also help determine the pattern of choices observed.¹ This paper seeks to identify actual patterns of country behavior so that one can begin to consider how far the outcomes are a matter of choice, of constraints or of history and culture.

¹ We explored the connections between HDI and economic growth in Ranis et al. (2000) and Boozer et al. (2003). Much work has also been done exploring connections between political freedoms and economic growth, and political freedoms and HDI.

Our first task is to identify the dimensions of HD to be investigated. This is the subject of Section II. We subsequently present the methodology adopted for classifying country behavior according to the dimensions chosen (Section III). Section IV presents the main results, while Section V provides some interpretation of the results. In Section VI we conclude, considering some implications of our findings.

II. Dimensions of HD

Identification of a unique and ‘correct’ list of all the possible dimensions of HD is an impossible task. As is well known, Sen himself has always refused to identify an exhaustive ‘list’ of freedoms or capabilities, i.e. of those beings and doings that people have reason to value. However, many philosophers, from Aristotle onwards, and surely even before, have attempted to provide an answer to the question of what constitutes the good or full life, and have come up with numerous responses. Alkire (2002), for example, summarizes 39 attempts to produce lists of characteristics of a full life over the years 1938-2000, derived from a variety of philosophical justifications. Drawing on six recent approaches,² we found that a number of common categories could be identified: bodily well-being, material well being, mental development, work, security, social relations, spiritual well-being, empowerment, political freedom and respect for other species, the last appearing only in Nussbaum (2000). However, from our perspective, this list is excessive for two reasons: first, for some aspects (notably spiritual well being and respect

² These are Rawls (1972), Finnis et al (1987), Doyal and Gough (1993), Nussbaum (2000), Narayan-Parker (2000) and Camfield (2005).

for other species) data are not available; of even greater importance, adopting too many categories would make it difficult to classify countries' behavior sensibly.

Hence we decided to reduce our set of categories to four. Our objective in choosing these four was that, first, each should represent an important aspect of human choice and one that was broadly independent, at least conceptually if not causally, of the others; and, second, that each should encompass a large proportion of the categories identified by others as constituting essential aspects of a full human flourishing. In the light of these two considerations, we chose the following four categories:

1. *Basic HD*. Rather than use the HDI to measure this, we use the under five mortality rate, partly because we want to exclude income per capita, since it appears in the economic category (below), and partly because of the extensive availability of the under five mortality indicator. In fact, the under five mortality rate is highly correlated with the HDI (0.8789 for 113 countries in 2002) and with adult literacy (0.7393), so it can be taken as representative of these indicators.³
2. *The economic aspects*. In our interpretation, this encompasses income per capita and unemployment to represent economic performance at a point in time, and growth in per capita income and the GDP cycle to represent performance over a longer period. This aspect therefore broadly summarizes an economy's success in providing incomes, employment, growth and economic stability.

³ All correlations are based on the Spearman rank-order method.

3. *Social and community relations.* We include a quite large and disparate set of variables here to represent different facets of success in achieving a flourishing community and good social relations, including a measure of income distribution, the perceived importance of family and friends, tolerance of neighbors and gender empowerment, as well as (negatively) the male suicide rate. The crime rate would have been a good addition here, but was precluded by data limitations.
4. *Political freedoms and stability.* This category includes an index of political and civil liberties, a measure of the rule of law and one of collective political violence.

In shorthand, we term these four categories: basic HD, and economic, social and political dimensions of HD. Of the nine categories (listed above) which we identified as the main dimensions arising in some of the major philosophical efforts to identify conditions for human flourishing, only spiritual well-being and respect for other species are entirely excluded. In principle, mental development is included in basic HD (and education is highly correlated with it); aspects of work are included in the economic category; aspects of security are in the political category; bodily well-being is encompassed in basic HD; material well-being in the economic aspects category; social relations in the social aspects category; and empowerment and political freedom in the political category. An important dimension that is at this stage omitted is respect for the environment.⁴ We also

⁴ For a composite measure of environmental sustainability see Yale Center for Economic Law and Policy and CIESIN (2005). An index to represent this showed only a low correlation with the HDI over 90 developing countries (0.2553), so it is an important independent dimension which ought to be added at some stage.

acknowledge that there is a good deal of arbitrariness involved in the selection and assignment of variables. Table 1 presents a summary.

III. Method adopted for classifying countries

We start by acknowledging that an exercise of this kind unavoidably involves many arbitrary decisions. Thus our country classification system should be seen as suggestive rather than conclusive. In future work, it will be important to investigate how far the use of different indicators, aggregation procedures for each category, and classification procedures for each country's performance would alter the results.

A greater potential problem affecting the results relates to missing data for a large number of countries. We proceeded with our approach despite large gaps in data availability. We provide some indication of the extent to which these gaps appear to matter, but also point to the need for far better data coverage – particularly in the case of poorer countries – to arrive at a more robust set of conclusions.

The following methodology has four stages: first, we identify the countries of interest; second, we develop a procedure to identify a summary indicator to represent each category on the basis of the several indicators presented above; third, we develop a method to classify countries as high, medium or low for each of our four categories; and fourth, we adopt a classificatory system for countries when examining their overall performance on the indicators.

1. Choice of countries and analytical categories. Because the aim of the exercise is to capture variance among developing countries, we eliminated countries defined as ‘high income’ by the U.N. In addition, we excluded countries with 1 million or less inhabitants (based on UN estimates for 2002). We first considered regional or geographic characteristics, i.e. Sub-Saharan Africa, Latin America, Middle East, Southeast Asia, South Asia, Central Asia and Eastern Europe – as well as categorizing countries according to whether they are landlocked, and by their distance from the equator. Secondly, we classified countries according to various economic, political and social characteristics, including low-income and middle-income countries (using World Bank definitions); conflict and post-conflict economies; oil economies; transition economies; and subsequently we classified countries on the basis of average life satisfaction. The aim was to explore whether different country types behave differently with respect to our four categories, although clearly there is some overlap across the different categorizations.

2. Obtaining a single indicator for each category. Here we confront the normal problems of devising multidimensional indices. Simple averaging is not possible for indicators using different scales of measurement. The HDI solved this problem by the shortfall approach, giving each indicator a rank according to the percentage shortfall a country showed, compared with the best performers, with the total range being set by the difference between the low and high performers. This puts all indicators on a comparable scale but the averaging remains an

arbitrary process, both because there is no particular reason why every indicator should be valued equally, and (somewhat paradoxically) because the three HDI component indicators are not valued equally since the range may differ from indicator to indicator.

We have therefore adopted a different approach. We classified each country for each indicator relative to the median. The median and other order-based statistics were preferred over parametric measures because the distribution of countries for most indicators deviated sharply from normal. Countries were classified as ‘medium’ (M) if they fell within the interquartile range (IQR) for a particular indicator, as ‘high’ (H) if they were above the IQR (in the top 25 percent of countries), and as ‘low’ (L) if they were below the IQR (in the bottom 25 percent of countries).

One major issue was missing data. If we had omitted all countries with missing data we would have had a very small sample indeed. To avoid this, we ignored missing data, unless they were missing on *every* indicator in the category. This means that some countries are classified on the basis of fewer indicators than others. For example, Botswana has full data for the economic, political and basic HD categories, but is very deficient in the social category, with data for income distribution and the GEM but none on the importance of friends and family, male suicide and tolerance of neighbors. Accordingly, its social categorization rests on just the two indicators that are available.

Only 21 countries – all high and medium performers – had data on all the social indicators, rendering it important to consider further the implications of lacking data. The paucity of data presents particular problems because the indicators within each category were selected in part owing to their low correlation with other indicators in that category, so it is not the case that we could reliably infer a country's performance on indicators with missing data based on its performance on other indicators within that category.

To determine the extent to which the missing data affected the results in the 'social' category, we recategorized all of the countries in the absence of each indicator in turn. We found that removing any one indicator, apart from the Gini, changed the overall country designation in the social category for less than 10 percent of countries.⁵ However removing the Gini, for which far more data are available, changed the 'social' result in over one third of the cases (34 percent). This finding reinforces the need to treat these results with caution and, when referring to a country's social performance, to specify what the social category is depicting.

3. Classifying countries with respect to each category. Where, within a category, a country showed 'high' performance on all indicators, it was classified as 'high' on that category, and similarly for all 'medium' and all 'low'. More complex was the mixed performance. If countries were classified as a mixture of

⁵ The range was between 6 and 8 percent, depending on the indicator that was removed.

medium, high and low, they were classified as ‘medium’. Mixtures of only high and medium performance were labeled as ‘high’ and mixtures of only medium and low, as ‘low’. As already mentioned, missing data was an acute problem. We only gave a country *no* category when data was missing for *all* indicators in that category.

4. Classifying countries overall. With each country having been assigned a classification for each category, we followed a similar approach to categorizing a country’s overall performance in the economic, social, political and basic human development dimensions.

In 27 cases, it was not possible to classify countries on one or more dimensions because of a lack of data. This was true particularly of African countries – with 11 out of 42 lacking data on the social dimension. We still proceeded, even when there were only two or three categories classified, broadly following the same categorization.

Finally, we determined whether a country fared better (or worse) on one particular dimension compared to the other three – for instance, whether it performed better politically than on the other three dimensions, or was deficient in terms of its basic human development. It is these countries which appear to be emphasizing or neglecting some dimensions relative to others. We identified a country as being *superior* in one dimension if it was high in one dimension and medium in all the

others, or medium in one dimension and low in the others. Conversely, a country was classified as *deficient* in a particular dimension if it was low in one and medium in three, or medium in one and high in three. We defined a country as *imbalanced* if it was either superior or deficient in any dimension. Others were considered *balanced*.

Table 2 summarizes the aforementioned classification procedures.

The next section of the paper gives the results of this methodology.

IV. Main Results

Out of the entire sample of 130 countries, 66 fell in the medium category, 32 in the low category and 32 in the high category, following the procedures described above. Almost half (55) of the countries showed imbalance, being categorized as superior or deficient in one dimension, thus endorsing the view that not all good things always go together. The biggest imbalances were on political and social aspects. In the case of politics, 12 countries were superior on this element in relation to their overall performance, and 5 were deficient. We would expect parts of the political aspects to be related to other aspects of performance – notably to the extent of collective political violence and the rule of law – but others - in particular political and civil liberties – plausibly have only a loose causal connections with the other elements. In relation to social aspects, 8 countries showed superior performance and 8 were deficient relative to their overall performance. This variable is trying to capture the flourishing (or otherwise) of the community in which people live, although data problems mean that we have, at best,

done so only partially. But to the extent we were able to measure this, it again seems reasonable that, while it is an important aspect of HD in its own right, it will not necessarily be related to the other categories. Six countries showed superior performance in basic HD and 6 were deficient, while 5 countries showed superior performance in the economic category and 5 were deficient.

Geographic Performance

As can be seen from Table 3, by far the highest proportion and largest number (25) of low performances, on all categories, were in Sub-Saharan Africa. Outside Sub-Saharan Africa, two countries in the Middle East showed low performance – Algeria, and Yemen – as did the Democratic Republic of Korea in Southeast Asia, and Haiti in Latin America. The region with the most high performances was Eastern Europe with eleven or half of the countries, followed by Latin America with six – Chile, Costa Rica, Guatemala, Jamaica, Mexico and Uruguay. There were also two in Sub-Saharan Africa – Ghana and Mauritius, two in the Middle East – Libya and Oman, two in East and Southeast Asia – Malaysia and Thailand, three in Central and South Asia – Bhutan, India and Kazakhstan. Landlocked countries performed below average. Performance worsened as countries got closer to the equator, with 38% of countries furthest from the equator in the high category, and only 14% of the countries nearest the equator in that category.

As noted in the previous section, our methodology classified countries as ‘low’ or ‘high’ even if they did better or less well on one, or, occasionally, two categories. For countries with data for all four categories, only two countries in the world had a consistent high

record on all four – Costa Rica and Trinidad and Tobago. Five countries were consistently ‘medium’: Bolivia, Brazil, Nepal, Saudi Arabia and Turkey; and only one country, Sierra Leone, had consistently low performance, though Chad, Congo Dem. Rep., Iraq, Somalia and Zimbabwe were also consistently low performers, but were missing data on one or two categories.

Imbalanced performance leading to classification as superior or deficient in some dimension affected nearly 60% of Sub-Saharan African countries and about 40% of Latin American and Eastern European countries, with smaller proportions elsewhere. In terms of the nature of the imbalance, we find that a large number of Sub-Saharan African countries were superior in either social or political dimensions, much more so than elsewhere – indicating that poor basic HD and economic performance were accompanied by better performance on social or political categories. In Latin America, the imbalance came more from deficient performance on the social and economic sides. Put in another way, this indicates that in some Latin American countries, basic HD and political performance outpace economic and social aspects, while in Sub-Saharan Africa it is political and social performance that is outpacing economic and basic HD. In Eastern Europe, the imbalance came from a combination of social and political deficiency and basic HD superiority.

Performance by Country Type

Table 4 presents results according to country type.

To start with, we contrast low and middle income countries. As is to be expected, low income countries have more low overall classifications and fewer high ones than those in the middle income category. But there are still four high classifications in the low income category – Bhutan, Ghana, India and Mongolia. Similarly, five middle income countries were classified as low all around – Algeria, Angola, Cameroon, Congo Rep. and Swaziland. A very similar proportion of low and middle income countries was imbalanced in performance across categories (46% and 42%, respectively). The low income countries showed a combination of HD deficiency, and social and political superiority, following much the same pattern as Sub-Saharan African countries, which, of course, represent a large proportion of these low income countries. Middle income countries showed a very different pattern. A large number were social deficient or economic deficient, while the six countries that were politically superior just exceeded the four which were politically deficient. It thus appears that social performance is negatively associated with levels of per capita income, but there is no systematic relationship between political performance and income per capita. Doing better than on other categories in the politics dimension is quite common for both low and middle income countries, but middle income countries equally often do worse here than on other categories.

Country population size does not seem to have any systematic impact on performance. The countries in the smallest population category had a lower proportion of high performers but also a lower proportion of low performers than the countries with larger

populations. The middle size category showed a substantially higher proportion of low performances than either the largest or the smallest countries.

We subsequently explored the performance of countries which have had particular types of experience. It's already clear that conflict is associated with overall poor performance, judging by the countries listed so far that have performed poorly. Conflict tends to undermine economic and basic HD performance, is obviously associated with political breakdown, and might be expected also to show worsening in the social category (see Stewart, Fitzgerald and others, 2001). This is confirmed by the figures above. Seven out of thirteen conflict countries and five out of seven post- conflict countries are in the low category. Perhaps more surprising is that six of the conflict countries managed to be classified as medium performers. These were Colombia, Iraq, Nepal, Palestine, Sri Lanka and Sudan – in most of which conflicts have been confined to one isolated part of the country. Among the post-conflict countries, one country gained the medium classification (Bosnia and Herzegovina) and one the high category (Serbia and Montenegro). These are both countries in which conflict ended some time ago. In terms of imbalance, the conflict countries showed low levels (about 30 percent), but the post-conflict countries, high levels (in nearly three-quarters of the countries). The nature of the imbalance was rather mixed, showing no particular pattern.

Another category of country that might be expected to make peculiar choices is that of oil countries. This category of countries has been shown to be associated with unequal income distribution, and mostly poor growth and poor basic HD in relation to a country's

resources, possibly owing to various manifestations of the “Dutch Disease” (See Ranis and Mahmood 1992, also Auty 2001). This is indeed confirmed by the large numbers in the low category (four out of thirteen) with only two (Oman and Libya) in the high category. Countries in the low category include Algeria, Angola, Nigeria and Yemen. Although these countries show quite high levels of imbalance, no systematic pattern emerges.

Turning to the transition countries, there is generally good performance, with six showing high, thirteen medium, and no low performances. Only two of the nineteen show political deficiency.

It is interesting to explore the extent to which high performance according to our indicators is correlated with high levels of overall “satisfaction with life” on the basis of a 0-10 ladder scale (see Table 5).⁶ In fact, we find no evidence of a systematic relationship. In both the top and middle third of countries in terms of satisfaction with life, one quarter are classified as high, just over two thirds as medium, and just 6% fall in the low category. In the bottom third of countries 37.5% are in the high category, half in the medium category and 12.5% in the low category. The countries with the lowest life satisfaction have more representatives in the high category and more in the low category than the top two-thirds of countries. Nor does there appear to be anything systematic about the particular dimension on which countries perform well or poorly in relation to overall life satisfaction. This contrasts with our earlier work which showed a quite high

⁶ The data come from the World Database of Happiness and is primarily based on World Values Surveys from 1995 to 2005 in which respondents were asked to rate their satisfaction with ‘your life as a whole’.

and significant correlation across countries between life satisfaction and HDI ranking. Bringing in the broader dimensions of HD does not, as one might expect, increase this correlation but rather seems to reduce it.

V. What have we learned about choices?

The data do confirm what we had concluded from previous work, i.e. that not all good things always go together. Given that HD is made up of many types of freedom, capability or choice, some aspects may be promoted in some conditions and others at other times. In our classification, only seven out of 130 countries with data for all four categories were consistently categorized in the same way across categories, two as consistently high, five as consistently medium, and one as consistently low. About half the entire sample of countries showed particular deficiencies or superiority in one category. However, the consistently weak performance of countries suffering violent conflict indicates that a major priority has to be on policies that help avoid it.

At the outset we hypothesized that alternative patterns of behavior might be dictated by political choices, by constraints or by culture and history. Can we say more about this in light of the evidence? Our findings suggest that many poor countries are doing badly on economics and on basic HD. Despite this, a number do better on political and social aspects. Is this a matter of choice? There are three possibilities: (a) they chose to promote social and political at the expense of economic and basic HD; (b) they chose to promote

social and political despite weak economics and basic HD; or (c) all these developments just happened under the force of various external and internal forces.

It seems to us that (a) is unlikely given the expressed desire to promote economic growth and basic HD (e.g. meet the millennium development goals); and the fact that there is no obvious major resource cost in improving performance on social and political aspects. It seems more likely that weak performance on economic and basic HD is a consequence of deep constraints – including weak government capacity, heavy indebtedness, and frequent violent conflicts – and not, at least at the very low level, a matter of choice. But, given the low resource costs of social and political aspects, aspects of these can be chosen even in the context of low income economies. One needs to unravel the two categories, social and political, to consider which can be chosen and which occur exogenously.

Social, as interpreted and measured here, is partly a matter of income distribution, and partly of having close social and family relations and tolerant neighbors. The male suicide rate is used as an indicator here to reflect how stressful life is. The income distribution variable can be influenced (if with difficulty) by the government. The other variables probably could be influenced too – for example, if physical security is very low because of poor policing, social relations may be worse, and policies towards education, the media and discrimination may contribute to improving aspects of social relations. But to a considerable extent these variables are the outcome of social and economic forces, not governmental policy. It seems likely that they (particularly the ones involving relationships) depend in part on the size of places people live in (being stronger in rural

than in urban communities), and on the time people have (being stronger when people are less busy).

Our results suggest that poor countries that are socially superior are in this category, mainly because of their superior income distribution (with data largely missing for the other indicators in the social category); countries that are socially deficient, in contrast, typically have good data across the social indicators.

Putting all this together, it suggests, very speculatively, that one might expect the social side to do better in relation to economic aspects at lower levels of urbanization and employment – i.e. at lower levels of development. This is broadly what we find, and we would argue that it is more a matter of the stage of development and less of governments' or people's choices.

The political category is again a composite; it includes collective political violence, which is sometimes chosen, but can happen as a result of exogenous forces. It also covers the rule of law, over which governments have some influence but which evolves slowly with inputs from civil society as well as government; it also includes political and civil liberties which is the one variable that can be said to be chosen, albeit, especially in the case of low income countries, under the heavy influence of the donor community.

Thus, as far as this dimension of politics is concerned, the fact that some poor countries do better on politics than on other categories may be due to choices they make, not at the

expense of doing well on other elements, but as something they can choose without sacrificing other aspects.

The experience of middle income countries partly supports what has been said above, and partly indicates the wider range of choices open to middle income countries. In the first place, many are socially deficient. This does suggest that this aspect tends to lag as development proceeds: perhaps for the reason given above – people become more urbanized and disconnected and have less time, while government efforts that might compensate for this, through policing and redistributive policies, are not always in place or effective. Sometimes, of course, such compensatory action does occur, as shown by the countries that do appear high on the social category – fourteen out of the 77 middle income countries. This ratio is similar to that of the low income countries where nine out of 50 got a high classification on the social category (though again, this was largely owing to a superior income distribution).

The middle income countries show considerable variation in the political category, with 36 coming into the high category but 20 in the low category, and almost equal numbers being deficient and superior, according to our methodology. This suggests that countries make different choices in the political category – but are, of course, heavily constrained by history. Yet the limited, or short-lived, influence of history is most clearly demonstrated by the special position of the transition countries, which are categorized in this way precisely because of their past, yet currently show a rather balanced performance. One might have expected them to be basic HD superior, given their history,

which put great emphasis on health and education, politically and possibly economically deficient, and socially, mixed – good on income distribution and possibly poor on social relations. Yet this is apparently not the case.

The lack of systematic connections between life satisfaction and performance on our four dimensions of HD could be interpreted in two very different ways. One would be to argue, along with Layard (2005), that life satisfaction (or ‘happiness’) should be the overriding single indicator of success and hence the sole objective of development . The lack of correlation with other measures of performance might be taken as a good reason for adopting this position. Alternatively, one might argue, along with Amartya Sen, that development is about expanding choices, which is better captured by our four dimensions than by a single somewhat arbitrary measure of life satisfaction; moreover, to the extent that life satisfaction indicates that people’s expectations adapt to their circumstances, it becomes a poor indicator of country performance and a false guide to development.⁷ We tend to take the latter view, but perceptions are also important, and consistently low views of life satisfaction are a matter which should concern decision-makers, along with our more objective indicators.

In conclusion, the many patterns of behavior indicate that while countries may be constrained by history, culture and initial conditions, they also have choices. Even low income countries can achieve well in all categories. And even high income countries can achieve poorly. The first gives reason for optimism; the second for pessimism. It is, finally, necessary to reiterate that our methodology is patently arbitrary and subject to

⁷ Sen (1979, 1985, 1987, 1993, 2002) takes this view.

refinement and robustness checks. Our findings should therefore be viewed as suggestive only.

APPENDIX:

Table 1: The four categories of HD

Category	What it refers to	How it is measured*
Basic HD	Bodily well-being; mental development	Under five mortality rate
Economic aspects	Material development Work	Income per capita (PPP) Growth in per capita GDP (10 year average) GDP cycle (20 year average) Unemployment rate (latest available)
Social and community	Social relations	Income distribution (latest available) Importance of family (latest av.) Importance of friends (latest av.) Tolerance of neighbors (1999/2002) Gender empowerment (GEM) Male suicide rate (2003 or most recent)
Political freedoms and stability	Empowerment and political freedoms	Index of political and civil liberties (2003) Index of rule of law Collective political violence (1990s)

Note: *all data refer to 2002 unless otherwise indicated. See Appendix for more detail on indicators and data sources.

Table 2: Classifying country performance by category and overall

	Categorization of dimensions	Country overall classification	Qualification
1	All H	H	High throughout
2	3 H 1 M	H	High, deficient in one category
3	3H 1 L	M	As above
4	2H 2 M; 2H 2L; 2 H 1M, 1L	M	
5	1H 3M	M	Medium, superior in one dimension
6	4 M	M	Medium throughout
7	3M, 1L	M	Medium, deficient in one dimension
8	2M 2L	M	Medium, mixed
9	1M 3L	L	Low, superior in one dimension
10	4 L	L	Low throughout

Table 3: Geographic Performance

Region	Sub-Saharan Africa	Latin America	Middle East	East and SE Asia	S. and Central Asia	Eastern Europe	Landlocked	Distance from equator		
								Furthest third	Middle third	Closest third
Overall classification										
High	2	6	2	2	3	11	8	5	5	2
Medium	15	14	11	8	7	11	15	7	7	6
Low	25	1	2	1	0	0	13	1	2	6
Proportion imbalanced, %	57.1	42.9	28.6	18.2	30.0	40.9	52.8	46.2	35.7	50.0
HD superior	2	2	0	0	0	2	1	1	1	1
HD deficient	5	0	0	0	1	0	1	0	1	1
Social superior	6	0	1	0	1	0	4	1	0	0
Social deficient	1	2	0	1	0	4	2	1	1	1
Economic superior	0	1	1	0	1	0	0	1	0	2
Economic deficient	0	3	0	0	0	1	1	1	1	1
Politics superior	10	0	2	0	0	0	7	0	1	1
Politics deficient	0	1	0	1	0	2	3	1	0	0

Table 4. Performance by Country Type

Type of country	Low-income countries	Middle-income countries	Conflict countries	Post-conflict countries	Oil producers	Transition countries	Population Size		
							Top third	Middle third	Bottom third
Overall classification									
High	4	25	0	1	2	6	7	7	15
Medium	19	46	6	1	7	13	26	19	21
Low	27	5	7	5	4	0	9	16	7
Proportion imbalanced, %	46.0	42.1	30.8	71.4	46.1	21.0	26.2	52.4	46.5
HD superior	2	4	1	0	0	1	2	2	2
HD deficient	6	0	0	1	0	0	1	3	2
Social superior	6	3	2	1	2	1	3	3	3
Social deficient	0	7	0	0	0	0	2	3	2
Economic superior	2	3	0	2	2	0	2	2	1
Economic deficient	0	5	0	0	1	0	1	0	4
Politics superior	6	6	1	0	0	0	0	6	5
Politics deficient	1	4	0	1	1	2	0	3	1

Table 5 – Performance according to satisfaction with life

Type of country	Top third countries	Middle third of countries	Bottom third of countries
Overall classification			
High	4	4	6
Medium	11	11	8
Low	1	1	2
Proportion imbalanced, %	37.5	31.2	50.0
HD Superior	2	0	2
HD Deficient	0	0	0
Social Superior	1	0	0
Social Deficient	2	1	2
Economic Superior	0	1	1
Economic Deficient	1	2	0
Politics superior	0	1	0
Politics Deficient	0	0	1

Table A1: Summary of Indicators and Sources

INDICATOR	NOTES	DATE	SOURCE
HUMAN DEVELOPMENT			
Child mortality rate	Under 5 years old, per 1,000 live births	2002	UNDP HDR 2004
SOCIAL			
Gini of income		1990-2000 (most recent av.)	UNDP HDR 2004
Male suicide rate	per 100,000 people	2003 (or most recent av)	WHO
FamilyVeryImpt	Share indicating family “very important”	Most recent av.	World Values Survey
FriendsVeryImpt	Share indicating friends “ very important”	Most recent av.	World Values Survey
Neighbor Tolerance	Average response to whether would want to live next to various types of people; lower numbers indicate more tolerance.	1999/2001	World Values Survey
Gender empowerment measure (GEM)	Composite of gender inequality in parliament, occupational status & income	2002	UNDP HDR 2004
ECONOMIC			
Unemployment rate		Most recent av (1992-2003)	ILO LaborStat
p/c GDP	PPP US\$	2002	World Bank Development Indicators (WBDI) 2004
GDP Cycle	Avg. annual deviation from mean	1981-2002	Calculated from WBDI 2004 data.
p/c GDP growth	10 year average GDP growth	1994-2005	World Bank Development Indicators (WBDI) 2006

INDICATOR	NOTES	DATE	SOURCE
POLITICAL			
Combined pol rights/civ liberties indicator	Scale of 1-7 with 1 most free; average of 'political rights' & 'civil liberties' scales.	2003	Freedom House
Rule of law	Extent to which agents have confidence in & abide by rules of society; higher better	2002	World Bank Governance Indicators
Collective political violence in 1990s	Reflects levels of violence within country & whether excessive civilian targeting, 0-8 with 8 worst.	1990s	Marshall, M.G. (2002). <i>Global terrorism: An overview and analysis.</i>
CLASSIFICATIONS			
Landlocked		n/a	United Nations designation
Distance from equator	Countries are divided into thirds based on distance from equator (n=41)	n/a	Levine, Loayza and Beck dataset (1999, 2000)
Population levels	Countries are divided into thirds based on population (n=127)	2004	UNDP HDR 2006
Life satisfaction	Countries are divided into thirds based on life satisfaction (0-10 ladder, 10 = most satisfied) (n=48)	1990s	World Database of Happiness, www2.eur.nl/fsw/research/happiness

References

Alkire, S., 2002. *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*. Oxford: Oxford University Press.

Auty, R.M., 2001. The political economy of resource-driven growth. *European Economic Review*, 45 (4-6), p. 839-846.

Boozer, M., G. Ranis, F. Stewart & Suri, T. 2003. *Paths to Success: the Relationship between Human Development and Economic Growth*. Economic Growth Center Discussion Paper. New Haven: Yale University.

Camfield, L., 2005. Researching quality of life in developing countries. *ESRC Research Group on Well-being in Developing Countries Newsletter*, 3 (1).

Doyal, L. & Gough, I., 1991. *A Theory of Human Need*. Basingstoke: Macmillan.

Finnis, J., Boyle, J.M. & Grisez, G., 1987. *Nuclear Deterrence, Morality and Realism*. Oxford: Clarendon Press.

Layard, R., 2005. *Happiness: Lessons from a new science*. London: Penguin Press.

Narayan-Parker, D., Chambers, R., Shah, M.K. & Petesch, P., 2000. *Voices of the Poor*:

Crying Out for Change. New York, N.Y.: Published for the World Bank, Oxford University Press.

Nussbaum, M.C., 2000. *Women and Human Development: The Capabilities Approach*. Cambridge: Cambridge University Press.

Ranis, G. & Mahmood, S., 1992. *The Political Economy of Development Policy Change*. Cambridge, Mass.: Basil Blackwell.

Ranis, G., Stewart, F. & Ramirez, A., 2000. Economic Growth and Human Development. *World Development* 28 (2), p. 197-219.

Ranis, G., Stewart, F. and Samman, E., 2006. Human development: Beyond the Human Development Index, *Journal of Human Development* 7 (3), p. 323-358.

Rawls, J., 1972. *A Theory of Justice*. Oxford: Clarendon Press.

Sen, A. K., 1979. Utilitarianism and Welfarism. *The Journal of Philosophy*, 76 (9), p. 463-489.

Sen, A. K., 1985. Well-being, Agency and Freedom. *The Journal of Philosophy*, LXXXII (4), p. 169-221.

Sen, A. K., 1987. *The Standard of Living*. Cambridge, Cambridge University Press.

Sen, A. K., 1993. Positional Objectivity. *Philosophy and Public Affairs*, 22 (2), p. 126-145.

Sen, A.K., 2000. A decade of human development. *Journal of Human Development*, 1 (1), p. 17-23.

Sen, A. K., 2002. Health: Perception versus Observation. *British Medical Journal*, 324 (7342), p. 860-861.

Stewart F. & Fitzgerald, V. (Eds.), 2001. *War and Underdevelopment: The Economic and Social Consequences of Conflict*. Oxford: Oxford University Press.

Yale Center for Environmental Law and Policy and CIESIN, 2005. *Environmental Sustainability Index: Benchmarking National Environmental Stewardship*. New Haven, Conn.: Yale University.