

COUNTING THE POOR: THE TRUTH ABOUT WORLD POVERTY STATISTICS

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Knowing the extent of acute deprivation in the world, and how far it is changing over time, is crucial to assessing the state of the world, and the appropriateness of the policies currently being followed by states and international institutions. This explains the widespread interest that has attended the strenuous debate which has emerged in the last four years concerning the present extent and recent trend of poverty in the world. This debate centres, in particular, on the validity of the global poverty estimates produced by the World Bank. It is entirely uncontroversial that the extent of absolute deprivations is centrally relevant to assessing the state of the world. Thus, the fact that the Bank's global poverty estimates have been questioned from all sides is very significant. In particular, the controversy is relevant to assessing progress toward the first of the so-called Millennium Development Goals (adopted by the United Nations as a governing framework for development policy), which calls for halving poverty (as estimated by the Bank on the basis of its one dollar a day concept, discussed further below) by 2015.

The production of global poverty statistics is a relatively recent activity. Until around 1980 there had been no effort to produce internationally comparable poverty statistics or comprehensive regional and global poverty estimates. Beginning around 1980, both the Bank and the UN Economic Commission for Latin America made initial efforts to do so. However, the first significant global poverty estimates were those published in 1990 in the Bank's flagship *World Development Report*. Since then, the Bank has periodically updated these. Until very recently, the Bank was the sole producer of global poverty estimates. As public debates on the effects of liberalization and globalization have become more heated, interest has grown in estimates of global poverty and their relevance to assessing the present form of globalization.¹

Some critics of the Bank who are proponents of the prevalent mode of private property-entrenching market-oriented liberalization claim that the

Bank's estimates of global poverty *understate* the rate of reduction of poverty in recent years.² They argue that poverty reduction has been substantial, and that it can be attributed to the economic reforms recently undertaken by developing countries. This is a position that they share with the outgoing president of the World Bank, Jim Wolfensohn, who, citing the Bank's poverty statistics, claimed that: 'over the past few years [these] better policies have contributed to more rapid growth in developing countries' per capita incomes than at any point since the mid-1970s. And faster growth has meant poverty reduction'.³ Other critics question the methodology employed both by the Bank and by its critics on the right.⁴ It is far from clear to non-technical observers which descriptions of the world are most in keeping with 'the truth'. The reasons for the confusion are deep-seated and are ultimately rooted in the lack of transparency and accountability of international institutions.

THE MONEY-METRIC APPROACH TO GLOBAL POVERTY ESTIMATES

The method of global poverty estimation adopted by the Bank as well as by almost all of its recent critics may be described as a 'money-metric' approach. The phrase 'money-metric' is used here to signify that the international poverty line is defined in relation to a money amount rather than an explicit conception of human well-being. The money-metric approach to global poverty estimation consists of four steps. In the first step, an international poverty line (or IPL) is defined. The IPL is defined in terms of a certain number of notional 'international' currency units (or so-called PPP dollars) deemed 'equivalent' in purchasing power to the US dollar in a specific base year. In the second step, the IPL is translated spatially into some number of units of each local currency, with respect to which it is deemed to possess an 'equivalent' amount of purchasing power in the base year. The conversion factors used for these spatial translations are purchasing power parity conversion factors (or PPPs) calculated on the basis of price data in all countries. In the third step, the IPL is translated temporally into some number of units of each local currency in the year in which the poverty assessment is being undertaken. Typically, a country's consumer price index is used to judge what constitutes the rate of 'equivalence' between purchasing power in the base year and in the assessment year. In the fourth step, the resulting poverty line expressed in terms of local currency units is used to undertake a poverty assessment. A household survey is used to identify the number of individuals whose level of disadvantage (understood in terms of the monetary value ascribed to their consumption or their income) falls beneath the level of the poverty line, as well as the extent of such disadvantage in the case of each such individual.

The Bank's most recent global poverty estimates are based on a lower IPL of 'one dollar per day' (actually \$1.08) and a higher IPL of 'two dollars per day' (actually \$2.16) of 1993 international dollars (deemed equivalent in purchasing power to US dollars). On the basis of these IPLs the Bank concludes that in the most recent year for which it has produced estimates (2001) the share of the developing world population living under the lower (one dollar per day) poverty line was 21.1 per cent, amounting to 1,092.7 million people. This is, according to the Bank, a reduction from the 1990 level of 1218.5 million and even more from the 1981 level of 1,481.8 million.⁵ Whereas the most prominent recent critics of the Bank's estimates (who claim that poverty has been falling more rapidly than the Bank estimates) adopt methodologies which differ from that of the Bank in certain respects, they share the money-metric framework, and indeed they present themselves as adopting poverty lines which are identical or at least comparable to those of the Bank.⁶

The money-metric approach to global poverty estimation is inherently flawed. It lacks both coherence and meaningfulness. The approach lacks coherence because a concept of 'equivalent' purchasing power (needed to translate the IPL both spatially and temporally) cannot be defined without a conception of the *purpose* to which that purchasing power is intended to be put. However, by definition, the money-metric approach lacks such a conception. This was the focus of the critique of the money-metric approach in Reddy and Pogge⁷ which emphasized that the purchasing power parity conversion factors used at present to translate the IPL spatially are inappropriate for the task of poverty assessment; since they are meant to capture 'equivalent purchasing power' over a broad range of commodities, rather than over the specific goods (in particular, foodstuffs) that must be commanded by the poor in order that they may escape absolute poverty. In particular, the conversion factors used, which encompass the cost of purchasing services (which are relatively inexpensive in poor countries) significantly overstate the purchasing power of currencies when they are applied to essential commodities such as food. The resulting poverty estimates are demonstrably too low in this particular sense – that they misrepresent the relative local currency costs of purchasing the same amounts of *necessities* in different countries.⁸ The one dollar per day line is also demonstrably too low in another sense. It fails to correspond to the level of purchasing power required to attain basic human requirements in the base country in which the IPL is defined (the United States), where careful exercises show that the minimum cost of meeting basic nutritional requirements alone is likely to be several times higher than one dollar per day.⁹ Perhaps unsurprisingly, nutritionally-based poverty estimates for Latin America lead to poverty estimates that are substantially higher than those produced by the Bank.¹⁰

The approach also lacks meaningfulness, because the IPL (again, as defined by the money-metric approach) is not specified in relation to an explicit conception of human well-being. As a result, whatever question is answered by the money-metric poverty assessment exercise, it is not especially relevant to determining the extent of the real human deprivations that arise as a result of income inadequacy (i.e., poverty as it is most widely understood). That task, which is the appropriate focus of poverty assessment, is ultimately and unavoidably a normative exercise, as it presupposes the specification of a space in which well-being is to be assessed and of a conception of minimal adequacy in this space. The normative character of the exercise is not, contrary to the view of some economists, an embarrassment. Rather, it is simply in its very nature. 'Telling the truth' regarding the extent of poverty in the world depends both on our having an appropriate concept of poverty and on our having the tools to assess its empirical extent.

Until now, global poverty estimates have also been based on a weak informational base. It is especially noteworthy that the International Comparison Program, which coordinates the price surveys that provide the basis for constructing PPPs, did not (prior to its most recent round) take any interest at all in collecting the prices of goods specifically relevant to poverty estimation. It appears to have begun to do this, as a direct result of the recent questioning of the poverty estimates of the World Bank, which now hosts the programme.¹¹ In addition, many countries – including some which are believed to contain large numbers of the world's poor (such as China and India) – simply do not participate in the surveys. For these and other reasons, the empirical basis of present global poverty estimates is extremely weak.

THE ALTERNATIVE: A CAPABILITY-BASED APPROACH TO GLOBAL POVERTY ASSESSMENT

There is an alternative to the money-metric approach, astounding in its simplicity, which can bring about global poverty estimates that are both coherent and meaningful. The alternative is a capability-based approach, which seeks to identify whether individuals possess sufficient income to achieve the income-dependent 'elementary human capabilities' (as they have been defined by Amartya Sen: the 'beings and doings' that human beings generally need to possess if they are to live an adequate life). The ability to achieve income-dependent elementary human capabilities has long implicitly provided the standard of adequacy that has anchored poverty lines in well-designed poverty assessments within particular countries. For example, possession of income sufficient to enable an individual to consume a diet that contains enough calories and nutrients has long provided a means of specifying a poverty line. Famously, this is true of India's poverty assessments,

which are grounded in norms of calorie adequacy. An approach of this type has the merit that the poverty line to which it gives rise has a meaningful interpretation.

Analogously, a capability-based approach to global poverty assessment would specify a uniform basis for constructing poverty lines, not only in one country but in all countries. By doing so, it would give rise to a common interpretation to the poverty lines thus arrived at in all countries. Moreover this interpretation would be meaningful by design. The approach would do away altogether with the need for PPP conversion factors which specify abstract rates of 'equivalence' between currencies, by specifying instead a common basis for defining poverty lines in all countries, related directly to the basic requirements of human beings. The alternative approach would require that a common conception of the relevant elementary capabilities be adopted in all countries. It would specify general guidelines for defining poverty lines in light of this conception, but permit poverty lines to be defined through a process otherwise specific to each country.

The specification of the elementary capabilities (for example, the ability to be adequately nourished) that must be possessed by an individual in order that he or she be deemed 'non-poor' should be undertaken at a global level, through a transparent and broadly consultative process. The manner in which this conception should be translated into detailed poverty lines in each country (for example, through requiring that poverty line incomes suffice to attain a certain level of calories and nutrients deemed adequate for individuals) might also be specified to a degree at the global level.¹² This approach offers a potential foundation for a 'people-centered' alternative to the current 'money-metric' approach to global poverty assessment.

Recent work has demonstrated that a capability-based approach to global poverty statistics *is* possible. It has been shown, using existing data from three countries in three continents (Nicaragua, Tanzania and Vietnam) that it is possible to undertake nutritionally-based assessments of poverty that are comparable across countries.¹³ This work demonstrates that relative comparisons of the extent of poverty across countries can be significantly influenced by whether such comparisons are undertaken on the basis of a money-metric approach or the capability approach. For example, a comparison of the extent of poverty between Nicaragua and Vietnam was found in this preliminary exercise to be crucially dependent on the approach used. Such conclusions must be hesitant, however, since comparisons of this kind are undertaken on the basis of existing household surveys, which have not been designed to facilitate international comparisons.

It is interesting in this regard to note that the global private sector and international organizations have long produced estimates of the relative costs

of living for executives and senior officials throughout the world, in order to inform salary scales.¹⁴ These estimates are based on extraordinarily detailed assessments of the cost of living, which are implicitly ‘capability-based’. It seems disingenuous, in this light, to argue that a parallel exercise for the world’s poor is not feasible.

A FAILURE OF ACCOUNTABILITY

The present money-metric approach to global poverty assessment understandably emerged, under the imperative to produce poverty estimates for popular consumption and institutional use, as a ‘rough and ready’ means of estimating global poverty. However, that this approach has endured so long and has been as influential as it has been in the global policy environment is a testament both to the lack of accountability of those who produce these estimates, and the failure to hold them to account. On the one hand, estimates of global poverty are produced in a non-transparent manner within international institutions, and on the other hand those who use them, including activists, have lacked an adequate understanding of what they mean and how they are produced.

The Bank has shown little sign of undertaking a fundamental reassessment of its methodology of global poverty assessment. The modifications it has introduced in recent years, almost certainly due to the pressure from critics, are largely cosmetic. In particular its so-called PPPP project, which aims at constructing PPPs more narrowly focused on necessities, offers such an example. Although this initiative will certainly help to diminish one of the distortions that are present in the Bank’s approach, it cannot eliminate this distortion nor address other basic problems inherent in the approach. In particular, although the initiative can reduce the degree to which measures of purchasing power equivalence across countries depart from the true relative cost of purchasing basic necessities, it cannot do this coherently without identifying a relevant set of basic necessities and the relative weights to be attached to them. This exercise must in turn necessarily rely on specifying some conception of the ultimate *purpose* to which these necessities are meant to be put. However, the money-metric approach exactly avoids such a specification. More importantly, the use of more appropriate PPPs will not help to address the lack of relation between the \$1 and \$2 per day money-metric international poverty lines and a meaningful conception of the elementary human requirements for which the level of income defined by the IPL should suffice. Once again, the money-metric approach precisely avoids explicitly anchoring the IPL in such a conception.

The apparent intransigence of the Bank in relation to its poverty estimates may be an instance of a broader phenomenon in the careers of institu-

tions. Once institutional commitments are made to a specific way of doing things, there are strong pressures for its continuance, however 'suboptimal' the chosen way may come to be deemed, if only to protect the 'reputational capital' of the institution and the individuals who are attached to it.

In this particular instance, what is also at stake is the claim of economists, and of an institution largely shaped by them, to possess special technical expertise. Changes of leadership provide an important opportunity for institutional change, as individual 'reputational capital' can be separated from institutional 'reputational capital' on such occasions. However, the recent change of leadership at the World Bank, which has brought to its helm an individual who has shown contempt for the truth in his past public activities, offers little hope that such an opportunity will be grasped. The reasons for pessimism are compounded by the fact that there exist few organized constituencies which can be relied on to push the Bank to enhance the extent to which its statistics 'tell the truth' regarding the present world situation. Even those 'civil society' activists who otherwise watch the Bank carefully have shown little interest in the question, preferring to treat it as a matter for economic 'experts'.

The reluctance may be psychologically understandable. Who wishes to know how a sausage is made? In any case, the lack of interest in this debate, even on the part of many otherwise progressive economists, is notable. To a degree, this may be an instance of the general disregard for the conceptual and practical problems that arise in the collection of statistics, which are often viewed as 'mere data problems' that are unprestigious to study. However, it may also be an instance of the hold of dominant institutions and ideology over the discipline. The 'dollar a day' approach coheres well with the instinct of many economists to avoid explicit normative commitments and to favour money-metric assessment in other spheres. Less abstractly, the conclusion of both the Bank and its right-wing critics that the extent of world poverty is diminishing coheres well with the prior beliefs of most standard economists.¹⁵ The close working relationship between practitioners of the discipline and the international financial institutions may also be consequential in explaining their approach to this and other issues.

It is perhaps unsurprising that right-wing critiques of the Bank's poverty statistics have received prominent publication and widespread journalistic coverage or acclaim, while other criticisms have received scant attention.¹⁶ Journalists and even many activists appear to have too little tolerance for the complex and uncomfortable truth that 'we don't know'. It appears that many find comfort in a number, however inadequate its basis. The zeal for enumeration, perhaps fuelled by the false sense of security that a numerical estimate presents, can become an important obstacle to knowing and telling the truth, when the underlying basis of such estimation is weak.

WHAT NEXT?

An important lesson of this debate is that activists cannot shy away from the details of data production. Economic statistics are too important to be left to the economists. It is necessary for activists to become familiar with the meaning and method of production of economic statistics in order to hold those who produced them appropriately accountable.

Activists should call for the United Nations to sponsor the equivalent, for global poverty statistics, of the construction of internationally comparable national income statistics, which was pioneered after the Second World War by the Nobel Prize-winning economist Richard Stone and the United Nations under the heading of the 'System of National Accounts'.¹⁷ This effort received tremendous support from governments and international organizations, and due to efforts over several decades has been an enormous success. Countries have almost universally adopted methods of national accounting that facilitate both comparisons within nations over time, and comparisons between countries. This is an achievement that was barely dreamt of prior to the Second World War. The effort has been so successful that stock markets now tremble at the thought that the national income may dip by a small percentage, and vicissitudes in the national income become the subject of endless speculation and analysis by financiers, central bankers and economists.¹⁸

It is entirely possible similarly to invest in counting the number of the world's poor, by establishing appropriate international protocols for poverty line construction, survey design and analysis. If this has not been done so far, it is because this task has seemed to decision-makers to be less than urgent. This tells us a great deal about their priorities. It is interesting in this connection to note the following comment by Joseph Rowntree, who sponsored the first studies of the extent of poverty in England in the nineteenth century:

I feel that much of the current philanthropic effort is directed to remedying the more superficial manifestations of weakness or evil, while little thought or effort is directed to search out their underlying causes. Obvious distress or evil generally evokes so much feeling that the necessary agencies for alleviating it are pretty adequately supported. For example, it is much easier to obtain funds for the famine-stricken people in India than to originate and carry through a searching enquiry into the causes and recurrence of these famines. The Soup Kitchen in York never has difficulty in obtaining adequate financial aid, but an enquiry into the extent and causes of poverty would enlist little support.¹⁹

NOTES

- 1 See e.g. Robert Wade and Martin Wolf, 'Are Global Poverty and Inequality Getting Worse?', *Prospect*, March 2002.
- 2 See especially Surjit Bhalla, *Imagine There is No Country: Poverty, Inequality and Growth in the Era of Globalization*, Washington: Institute of International Economics, 2002, and Xavier Sala-i-Martin, 'The Disturbing "Rise" of World Income Inequality' (2002) and 'The World Distribution of Income (Estimated from Individual Country Distributions)' (2002) available on <http://www.columbia.edu>.
- 3 Statement to meeting of Central Bank Governors and Ministers of Finance in Ottawa, Canada on November 17th, 2001, previously available on www.worldbank.org. It is interesting to note that this speech is no longer on the website of the Bank, though the collection of speeches of Jim Wolfensohn presented there appears to be otherwise comprehensive. Moreover, the speech is only available on the website of the International Monetary Fund in an edited form from which this passage is absent.
- 4 These studies have been rightly criticized for extrapolating from limited data and for employing non-transparent and often inappropriate methods. See e.g. Branko Milanovic, 'The Ricardian Vice: Why Sala-i-Martin's Calculations of World Income Inequality are Wrong', 2002, available on <http://papers.ssrn.com> and Camelia Minoiu and Sanjay Reddy (forthcoming), 'The Use of Kernel Density Estimation in Poverty and Inequality Analysis' (provisional title).
- 5 See e.g. Shaohua Chen, S and Martin Ravallion, 'How Have the World's Poorest Fared Since the Early 1980s?', 2004, available on <http://www.worldbank.org>.
- 6 Xavier Sala-i-Martin, in the papers previously cited, adopts a poverty line of one dollar per day of *GDP per capita*, which automatically ensures that he arrives at lower poverty estimates than those of the Bank, which are based on a poverty line of \$1 per day of private consumption. See e.g. Howard Nye, Sanjay G. Reddy, and Thomas Pogge, 'What is Poverty', letter to the *New York Review of Books*, 49(18), 2002, available on: <http://www.nybooks.com>.
- 7 Sandjay G. Reddy and Thomas W. Pogge. 'How *Not* to Count the Poor', Version 4.5, New York: Institute for Social Analysis, 26 May 2003, <http://www.columbia.edu>.
- 8 Perhaps to the extent of 30–40 per cent. See *ibid*.
- 9 See the 'Thrifty Food Plan' produced by the Center for Nutrition Policy and Promotion of the US Department of Agriculture, described at <http://www.cnpp.usda.gov>.

- 10 UN Economic Commission for Latin America, *Social Panorama of Latin America*, Santiago, Chile: ECLA, various years, and the comparison of poverty estimates from the two sources in Sanjay Reddy and Camelia Minoiu, 'Has World Poverty Really Fallen During the 1990s?', 2004, available on www.columbia.edu.
- 11 The Programme was previously hosted by the UN Dept. of Statistics, which gave up this role in the early 1990s due to lack of adequate financing.
- 12 This approach should of course make allowance for relevant sources of variation in these requirements, such as age.
- 13 See Sanjay Reddy, Sujata Visaria and Muhammad Asali, 'Inter-Country Comparisons of Poverty Based on a Capability Approach' available on www.columbia.edu.
- 14 See e.g. the 'post adjustments' produced by the International Civil Service Commission and the cost of living estimates produced by private consultancy firms such as Employment Conditions Abroad and Mercer Human Resources Consulting.
- 15 For a critical examination of this claim, see Sanjay Reddy and Camelia Minoiu, 'Has World Poverty Really Fallen During the 1990s?', available on www.columbia.edu.
- 16 Bhalla's work, *Imagine There is No Country*, was sponsored and published by the influential Institute for International Economics. Sala-i-Martin's work has been circulated by the prestigious National Bureau of Economic Research and is widely cited by leading economists. Sala-i-Martin obligingly provides a list of major world press outlets that have celebrated his results, on <http://www.columbia.edu>.
- 17 See e.g. <http://nobelprize.org>.
- 18 In which connection, see the interesting proposal for national income-based options derivative contracts in Robert Shiller, *Macro-Markets: Creating Institutions for Managing Society's Largest Economic Risks*, Oxford: Oxford University Press, 1993.
- 19 See the 'Founder's Memorandum' of 29 December 1904, available on <http://www.jrf.org.uk>.