DESA Working Paper No. 79
ST/ESA/2009/DWP/79

December 2009

The Emperor's New Suit: Global Poverty Estimates Reappraised

Sanjay G. Reddy

Abstract

The recent revision of the World Bank's global poverty estimates based on a new $1.25 (2005 PPP) poverty line underlines their unreliability and lack of meaningfulness. It is very difficult to justify various aspects of the Bank's approach. In the short term, less weight should be given to the Bank's poverty estimates in monitoring the first MDG. In the longer term, a solution to the observed problems requires adopting an altogether different method. Such an alternative exists but requires global institutional coordination. Until it is implemented, the crisis in the monitoring of global consumption poverty can be expected to intensify. Subsequent versions of this paper, correcting errors or extending the argument, will be made available on socialanalysis.org

JEL Classification: B41, C80, D31, D63, I32, O10, O19

Keywords: Millennium Development Goals, poverty, purchasing power parities (PPPs), world poverty

Sanjay G. Reddy is an Associate Professor in the Department of Economics of The New School University for Social Research, New York. The author would like to thank Zeest Haider for valuable research assistance, Thomas Pogge and an anonymous referee for helpful comments, and Jomo KS and S Subramanian for their sustained encouragement. Finally, he would like to dedicate this paper to Michael Ward (without at all implicating him in its contents). He was a thoughtful and honest independent statistician, a distinguished international civil servant and a fine human being.

Comments should be addressed by email to the author: reddys1@newschool.edu

Contents

Why Does It Matter? 1
A Brief History of the Debate 2
The Bank's Concept of Global Consumption Poverty 2
The Recent Revision: A New 'Suit' For The World Bank 5
The Choice of the IPL: Is it Reflective of Perceptions in Poor Countries? 5
Does the Revision of the IPL Raise or Lower It in Countries, and Why Does It Matter? 8
Are the PPPs Used of the Appropriate Type? 11
The Substantive Interpretation of the IPL 13
Is There an Alternative? 14
The Need for Institutional Reforms 15
References 16

Tables

1 Mean and Median Poverty Lines for Alternative Reference Groups 18
2 Mean and Median Poverty Lines for Alternative Reference Groups 19
3 Global and Regional Headcounts At Different Poverty Lines From $25 To $50 Per Month 20
4 Sensitivity of Regional Composition and Global Poverty Trend since 1990 to IPL Choice . 23
5 Comparison of Real Values of Poverty Lines for All Countries*. Detailed Listing of Countries 24
6 Ratio of 2005 Food PPP to 2005 General Consumption PPP for Countries in World Bank National Poverty Line Database 26
7 Comparison of ECLAC and World Bank Poverty Headcount Ratios for Nearly Comparable Years 27

Appendix

Proximate Sources for Poverty Lines World Bank Describes As 'National Poverty Lines' Ostensibly Reflecting Perceptions of Poverty in Poor Countries 29

Editor: *Anis Chowdhury*

Typesetter: *Małgorzata Juszczak*

United Nations
Department of Economic and Social Affairs
2 United Nations Plaza, Room DC2-1428
New York, N.Y. 10017, USA
Tel: (1-212) 963-4761 • Fax: (1-212) 963-4444
e-mail: esa@un.org
http://www.un.org/esa/desa/papers

The Emperor's New Suit: Global Poverty Estimates Reappraised

Sanjay G. Reddy

> *The emperor marched in the procession under the beautiful canopy, and all who saw him in the street and out of the windows exclaimed: "Indeed, the emperor's new suit is incomparable! What a long train he has! How well it fits him!" Nobody wished to let others know he saw nothing, for then he would have been unfit for his office or too stupid. Never emperor's clothes were more admired.*
>
> –*The Emperor's New Suit,* by Hans Christian Andersen, 1837, English Translation: H. P. Paull (1872)

Why Does It Matter?

It is widely agreed that how many poor people there are in the world, how poor they are, how their number has been changing over time and where they are to be found are important questions. Persons who differ in nationality, institutional affiliation or role, and ideological perspective appear to agree that these questions must play a central role in assessing the state of the world.

Within the United Nations and the broader family of international organizations, as well as in national governments, there is a broad stated commitment to poverty reduction, and to engaging in the reasoning and analysis necessary to identify effective poverty reducing policies. The Millennium Development Goals (MDGs) concretely express such a commitment at the global level. The first MDG demands that the world "eradicate extreme poverty and hunger" and identifies as a target the halving, between 1990 and 2015, of "the proportion of people whose income is less than one dollar a day".[1]

In light of these stated commitments, it is astonishing to learn how the questions raised above are currently answered. Conceptual arguments, as well as mounting empirical evidence, strongly suggest that the prevailing approaches to assessing global income poverty are logically unsound and may poorly reflect the empirical reality. Moreover, there has been little improvement over time in the methods employed. The current global financial and economic crisis represents a major setback to growth prospects in developing countries, and is likely to have repercussions in relation to poverty reduction. However, the absence of a credible monitoring framework for global poverty will make it difficult effectively to determine their extent. It will also make it difficult to identify in an informed manner where to deploy resources or how to revise policies so as to reduce poverty.

In this short paper, we will note some of the relevant arguments and evidence, bringing previous discussions up to date where required, and will make some suggestions as to how to improve the quality of global poverty estimates.

---

1 http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm. This may be the fist time that the concept of eradication has been understood in terms of halving. See Pogge (2004) for related discussion.

A Brief History of the Debate

In recent years, understandings of poverty as a multi-dimensional concept, under-girded by the capability approach to well-being assessment, have rightly gained prominence. Nevertheless, income (and consumption) poverty remain at the core of public and institutional discussions of the subject, both for reasons of data limitations and because of the traditional centrality of this approach. For this reason, we will focus on such measures although, as we shall see, the capability approach has a role to play even in the assessment of income poverty, especially in defining an appropriate threshold for distinguishing the poor from the non-poor.

Although there is a long history of income poverty assessments in individual countries, the assessment of income poverty in regions comprised of multiple countries or indeed the world as a whole is fairly recent and begins in the late 1970s. In this early period, such assessments were undertaken by the Economic Commission for Latin America and by the World Bank (henceforth Bank), using rather different methodologies. Beginning in 1990, the Bank began the periodic production of global poverty estimates from household surveys. It has comprehensively revised and extended these estimates twice since then, modifying the details of its methods on each occasion but maintaining a general approach. We might say that the Bank has consistently maintained its concept of global consumption poverty since 1990 (and indeed in important respects, since 1979), even though it has varied the specific conception that it has concretely employed.[2]

Although some criticisms of the Bank's global poverty estimates were voiced from the early 1990s onwards (see e.g. Anand and Kanbur (1991) and Lipton (1996) and Yaqub (1996)) a number of additional and sometimes trenchant criticisms were brought to public view in the current decade. While certain critics (e.g. Pogge and Reddy, forthcoming) focused on the methodological limitations of the Bank's methods and suggested alternatives while refraining from presenting estimates of their own, others applied the Bank's method (its concept of global consumption poverty) with small variations (distinct detailed conceptions) and produced very different empirical estimates (see, *inter alia*, Bhalla (2002), Sala-i-Martin (2006), Kakwani and Son (2006), Asian Development Bank (2008), etc.).[3]

Despite the existence of various criticisms, the Bank's approach remains highly influential, and provides the reigning benchmark for discussions of the extent and trend of poverty globally, including in the United Nations system. Accordingly, we focus here on the methods employed by the Bank.

The Bank's Concept of Global Consumption Poverty

The Bank's method can be straightforwardly described. It presupposes that PPPs (purchasing power parity conversion factors) which are deemed to reflect the relative purchasing power of currencies have previously been calculated. These PPPs are defined as rates of exchange between national currencies and an abstract unit known as an international dollar (constrained to have an exchange rate of one with the currency of a numeraire country, the United States). The PPPs are purely spatial price indices defined only for a given base year. They are calculated using weights which reflect the pattern of consumption observed in the world in that year.

2 For the idea of a general concept comprising many distinct conceptions, see e.g. Rawls (1999).

3 Some of the criticisms made (in particular concerning the PPPs employed) appear to have led to an extensive subsequent work program on the part of the International Comparison Program and the World Bank to remedy the perceived drawbacks of existing approaches, although the critics whose work has spurred the revisions do not appear to have been consulted about them.

Once an International Poverty Line (IPL), defined as a certain number of international dollars per unit of time, is established, the PPPs can be used to identify the number of local currency units (LCUs) which is to be deemed equivalent to the IPL in each country in the base year in which the PPPs are defined, and this is the poverty line employed to determine the number of poor. To assess poverty in estimation years other than the base year it is necessary to shift the LCU poverty line from the base year to the estimation year (generally using the national consumer price index) so as to determine the number of LCUs in the estimation year which should be deemed equivalent to the base year poverty line.[4] In practice, the Bank has used an upper poverty line as well as a lower poverty line, and has recently moved toward using a broader range of poverty lines which include "subjective" poverty lines. However, we shall be concerned throughout with the lower poverty line described in various Bank documents as an "absolute" poverty line, which is that most widely referred to in public discussions and policy debates. When we refer to the International Poverty Line henceforth, it should be understood that we are referring to this line.

This approach to global consumption poverty has been at the core of the Bank's efforts in this area from the late 1970s to the present day and is that which is also applied by many of those who represent themselves as its critics.

How is the IPL to be set? It is useful to distinguish between two general approaches in order to understand the Bank's method, which has varied in its details over time.

The first general approach specifies an IPL on the grounds of its ostensible extrinsic properties, such as its usefulness in public advocacy. For example, an IPL of $1 might be thought (indeed has been thought, in the case of the $1 1985 PPP poverty line applied in the poverty estimate presented by the Bank during most of the 1990s) to be useful from this standpoint. Such an IPL is likely to command wide recognition and be thought to be easily interpretable by those who refer to these poverty estimates. This has been suggested by various analysts to be an appealing feature of the poverty lines the Bank has applied (see e.g. Deaton, 2003).

The second approach specifies an IPL on the grounds of its ostensible intrinsic properties, such as its interpretation in terms of the living standards that it permits. For example, an IPL may be argued to reflect the perceptions of poverty prevailing in poor countries (Chen and Ravallion, 2001, Ravallion, Chen and Sangraula 2008). This approach is that which has formally been referred to by the Bank in justifying its choices of IPLs. The Bank has consistently claimed that the IPLs it has employed are reflective of poverty lines created in developing countries themselves. In this respect, the Bank's concept of the IPL is empirical and inductive. In practice, the Bank has adopted shifting conceptions of what it means for an international poverty line to be "reflective" of those generated in developing countries and has not motivated these distinct individual conceptions very fully.

The poverty lines of developing countries must be converted into common units, and indeed the same unit as the international poverty line is defined, international dollars, while also preserving deemed purchasing power, in order for an international poverty line with the required interpretation to be derived. Hence, PPPs must be used. As these PPPs change when the base year in which the IPL is defined is changed, the inductive exercise of IPL construction must be undertaken again each time such "updating" takes place.

4 A subsidiary issue is that of how to deal with the fact that surveys may not have been undertaken in the estimation year itself. This problem is resolved by the Bank by "moving" the nearest survey data to the estimation year by applying the growth rate of real consumption per capita from the national income and product accounts to the nearest surveys in order to increase or decrease the consumption imputed to individuals.

Accordingly, a new IPL is defined by the Bank on each occasion that new PPPs are calculated for a more recent base year (in practice, after the results of new price surveys have been reported by the International Comparison Program). Since 1990, this inductive procedure has resulted in three distinct international poverty lines defined in the international dollars of distinct base years and each claimed to reflect the 'perceptions of poverty prevailing in poor countries': $1 (1985 PPP), $1.08 (1993 PPP) and $1.25 (2005 PPP).[5] It is important to understand that the use of PPPs implies that this international poverty line must have the same purchasing power interpretation (i.e. in terms of command over goods and services) in every country of the world, including the base country. This having been said, the role of the base country is merely as a numeraire. Since the IPL is to be converted into local currency units of developing countries before being applied, and is itself ostensibly generated from national poverty lines applied in those countries, there is a real sense in which the role of the PPPs in the Bank's poverty assessment approach is to make feasible South-South intermediation, by identifying a representative developing country poverty line which can in turn be adopted in developing countries. It would suffice for that purpose to have PPPs between the developing countries themselves. This characteristic of the Bank's method is obscured by the adoption of the convention that the international dollar will have an exchange rate of one with respect to the US dollar as well as the convention of specifying the IPL in international dollars.

Each "updating" of the base year leads to a change in the associated PPPs and the associated IPL. These changes generate in turn in an entirely new *edition* of poverty estimates—comprising new poverty estimates for each of the estimation years for which poverty is assessed by the Bank. In practice, each edition includes a series of years from the early 1980s to the most recent year estimated and detailed estimates of poverty in individual countries and regions for each of these estimation years. Thus, at present there are three distinct editions of such poverty estimates, each of which presents a distinct "space-time tableau" offering an entirely different description of the level of poverty in each country at each moment in time (and thus the evolution of poverty over time). Bank official have consistently claimed that the more recent edition is to be favoured (see e.g. Chen and Ravallion, 2001, and Ravallion, Chen and Sangraula, 2008). The United Nations does not appear to have taken an explicit position on this issue, although it is hard to see how it can avoid doing so in its role of monitoring progress toward the first Millennium Development Goal of 'eradicating poverty'.

Since the Bank's method involves specifying an international poverty line in abstract international dollar units and then converting it into the local currencies of countries, we may refer to its method as being a "money-metric" approach. Although the Bank claims to be pursuing an inductive approach based on the national poverty lines actually adopted in developing countries, it does not make explicit reference to a level of living which is achievable by adopting its IPL.

5 There have been four such IPLs if one includes that employed by Ahluwalia, Carter and Chenery (1979).

The Recent Revision: A New 'Suit' For The World Bank

> *At this moment the King, who had been for some time busily writing in his note-book, cackled out 'Silence!' and read out from his book, 'Rule Forty-two. All persons more than a mile high to leave the court.'*
> *Everybody looked at Alice.*
> *'I'm not a mile high,' said Alice.*
> *'You are,' said the King.*
> *'Nearly two miles high,' added the Queen.*
> *'Well, I shan't go, at any rate,' said Alice: 'besides, that's not a regular rule: you invented it just now.'*
>
> –*Alice's Adventures in Wonderland,* by Lewis Carroll, 1865

The Bank claims that the most recent edition of its poverty estimates, released in 2008, provides the most accurate estimates of poverty to date. Elsewhere, we have attempted to present systematic criticisms of the Bank's concept of poverty, and argued that there are deep distortions inherent in its method, which diminish its credibility to a point that its estimates are not fit for use (see e.g. Reddy and Pogge, forthcoming, Pogge and Reddy, 2006, and Reddy 2008). All of the points which we have made there in regard to previous editions of the Bank's estimates also apply to this one. Since those criticisms are available in the public record, we shall not systematically attempt to reiterate all of those criticisms here, although we shall reiterate some of them. Rather, we aim to examine closely the Bank's claims concerning its most recent edition of poverty estimates. Some of the new points we make apply incidentally to previous editions of the Bank's estimates while others apply only to this most recent edition.

The Choice of the IPL: Is it Reflective of Perceptions in Poor Countries?

The Bank has repeatedly claimed that its inductive procedure is based on national poverty lines which reflect perceptions of poverty in poor countries. Moreover, this description of the procedure appears to have been widely accepted (see, for example, Besley and Burgess, 2003, among others). In the most authoritative description of the Bank's latest edition of poverty estimates (Ravallion, Chen and Sangraula 2008), it is noted for the first time that most of these so-called "national" poverty lines are in fact compiled from World Bank Poverty Assessments (PAs) and other official documents referring to countries, as well as Poverty Reduction Strategy Papers and other documents which the World Bank played a heavy role in producing. Although PRSPs are nominally government documents, it is well known that they are very frequently heavily drafted by World Bank and IMF staff members as well as consultants and that their contents at most reflect a negotiation between all of the national and international stakeholders involved.

Although this may not make the poverty lines quoted "biased toward the Bank's international poverty line", it does raise a very serious concern about the claimed independence of these poverty lines (Ravallion, Chen and Sangraula, 2008: p. 8). The authors defend their use of PAs and PRSPs by arguing that "their aim is to use a poverty line appropriate" to the country and indeed go so far as to argue that the poverty lines they use possess a "stronger claim to be national poverty lines than those used…[in earlier Bank work], which were largely based on academic studies" (Ravallion, Chen and Sangraula, 2008: p.7). Although they also argue that "the process of producing a PA entails (often extensive) consultation with the government [of a country]...including discussion is[sic] about the most appropriate poverty line", it is hardly clear that we can conclude that these poverty lines therefore "reflect prevailing notions of what poverty means in each country setting" (Ravallion, Chen and Sangraula, 2008).

In the Appendix, we describe the results of our own effort to catalogue which of the national poverty lines used are demonstrably independent, in the sense that the source cited is not a World Bank source or a PRSP. It turns out that only nine of the eighty-seven sources cited have this feature. Since two of those are produced by other multilateral agencies rather than by a national government or agency only seven of the eighty-seven can be argued to have been both produced independently of the Bank and in a manner which provides some institutional assurance of being reflective of national perceptions. Only ten of the sources are explicitly labelled as PRSPs whereas 75 of the 87 sources are World Bank documents unrelated to PRSPs. It is possible that the World Bank documents or PRSPs cited draw on an independent and previously established national poverty line. However, there is no way of doing of knowing whether this is so.

It can be seen easily that the "national" poverty lines, converted into common international dollar units using general consumption PPPs, vary widely. In what sense then can these poverty lines be distilled into a single idea of the "perception of poverty" in developing countries? The Bank has argued in all of its money metric exercises since 1990 that the international poverty line it has chosen is one which is "typical" for the poorer countries in its sample. It claims that these poorer countries poverty lines fall in a relatively "flat" region of the curve representing the relationship between per capita consumption expenditure and the national poverty line 'chosen' by the country. It is argued, in other words, that within a certain range of variation of per capita consumption of countries, poverty lines used in those countries do not, when expressed in international dollars, vary a great deal. However, in practice, the Bank's method of identifying this "typical" poverty line has had a substantial *ad hoc* component. For example, for the edition of poverty estimates first produced in 1990, it was argued that the $1 1985 PPP international poverty line was "typical" because it fell in the midst of a supposed cluster of poverty lines for low-income countries. This cluster broke down when subsequent PPPs were employed. In the edition of poverty estimates which came next, it was argued that the $1.08 1993 PPP international poverty line was "typical" because it was the median of the bottom ten poverty lines in the sample—an entirely different criterion. In the latest edition of poverty estimates, the international poverty line is the average of those in a reference group defined by having a per capita consumption level beneath an apparently arbitrarily chosen ceiling (less than $60 per month as judged by the Bank's favoured PPPs)—yet a different criterion.

Why should one accept the Bank's latest consumption ceiling based approach (to restricting the set of national poverty lines used to generate the IPL)? It is evident that it is all-important how the ceiling (and thus the reference group) is chosen. As noted, in the latest exercise it is chosen, apparently arbitrarily, to be "the sampled countries with PCE [consumption expenditure] per capita less than $60 [2005 PPP] per month, namely: Malawi, Mali, Ethiopia, Sierra Leone, Niger, Uganda, Gambia, Rwanda, Guinea-Bissau, Tanzania, Tajikistan, Mozambique, Chad, Nepal, and Ghana".[6] It is interesting that this list of countries consists of only fifteen out of the eighty-seven in the original list (and fifteen out of the seventy-five countries for which all of the data, including PCE and PPPs, needed to use them in the international poverty line construction exercise, were available). The remaining seventy-two of eighty-seven (or sixty out of seventy-five) play no role at all in the construction of the international poverty line which is deemed to reflect 'absolute' poverty. Thirteen of the fifteen countries are sub-Saharan African countries and twelve of the fifteen poverty lines which enter the reference group derive from World Bank documents or PRSPs. Many of the countries are also small. Does this set of poverty lines provide a robust basis for constructing an international poverty line "representative" of perceptions (or indeed realities) in poor countries?

6 It turns out that the median poverty line in the full sample is just under $61 per month although the mean "is higher at about $2.90 per day" (or just under $90 per month). However, the level of the median is not provided as a justification for the threshold chosen.

It turns out, as shown in Table 1, that twelve more countries with incrementally higher per-capita consumption expenditures could have been added to the reference group (corresponding to India's PCE of $84.24 2005 PPP or lower) without notably changing the mean poverty line of the reference group (and therefore the international poverty line defined according to the rule adopted)—although the mean fluctuates as additional countries are added.[7] The reference group can also be contracted to a degree without appreciably changing this mean. Should we then conclude that the "absolute" international poverty line is "robust" to the choice of reference group? This does not in any way follow, since our finding of a relative lack of sensitivity of the average poverty line to the reference group expansion just discussed depended on choosing as our starting point the initial reference group as well as on the specific PPPs employed. It is also by no means obvious that the average poverty line is the appropriate measure to be adopted when identifying the poverty line "typical" of a reference group, given the considerable variation between group members. For example, also as shown in Table 1, the leading alternative criterion for a representative poverty line, the median (used by the Bank itself in its earlier edition of poverty estimates) actually falls when the ceiling for defining reference group membership is expanded sufficiently and increases when it is contracted sufficiently.

Further, if we were to discard some or all of these poverty lines on the ground that they were not well constructed and institutionally independent poverty lines, we might well get a rather different answer, given the wide variation in the poverty lines that is observed. In fact, as shown in Table 2, it turns out that restricting the reference group to that very small number of countries for which the cited source of the poverty line is not a World Bank document or a PRSP leads to average and median poverty lines which are slightly lower than that adopted by the Bank. Restricting this reference group further to countries for which the per capita consumption expenditure is lower than some ceiling leads to additional reductions in the mean and median. Taking a different approach, and including poverty lines from PRSPs along with those from independent national sources in the reference group leads to mean and median poverty lines which are substantially higher than that adopted by the Bank when there is no income restriction and very slightly lower poverty lines when an income ceiling corresponding to that (seemingly arbitrarily) adopted by the Bank ($60 2005 PPP) is imposed (also as shown in Table 2). However, it is clear that the mean and the median can be made to increase considerably *either* by decreasing or by increasing this ceiling. There seems no obvious path out of this forest of arbitrariness.

Do the national poverty lines used all reflect a sound method of construction? It is patently false that "Each of the national lines meets 'industry standards' in its construction, in that it uses a food bundle that attains standard nutritional requirements means by prevailing diets and it includes an allowance for non-food spending" (Ravallion, 2008). This statement contradicts the contents of the final column in Table A1 of Ravallion, Chen and Sangraula (2008) and the slightly more modest statement in that paper that "In 80% of cases, some version of the 'cost of basic needs' method has been used" (albeit with widely discrepant understandings of what that method is). In fact, the claim that the national poverty lines used in constructing the IPL reflect "industry standards" cannot be sustained when it is restricted to those countries which actually enter the Bank's reference group. Only seven of the fifteen countries (i.e. a minority) used in constructing the "absolute" 2005 $1.25 IPL possess poverty lines which are based on the cost of meeting nutritional or other needs.[8] The median of a reference group consisting of these countries alone is only slightly higher than the

7 It would have increased from $37.98 to $38.24. By restricting the threshold a little more even this increase could largely be avoided.

8 These are the countries in the group which are marked in Table A1 of Ravallion, Chen and Sangraula, 2008, as possessing poverty lines constructed according to the "cost of basic needs" method. Including countries classified as adopting the "food energy intake" method (none of the countries) or the "same food basket" method does not add to this number.

Bank's IPL and the mean is only slightly lower but this cannot be taken as especially informative, given the small number of number of countries used and the questionable premises already noted.

There would, it appears, be substantial uncertainty as to what international poverty line to apply, even if one accepted the Bank's general approach. As may be seen in Table 3, the proportion of the world's poor who live in different regions as well as the overall trend of poverty are substantially dependent on the international poverty line chosen, even when the PPPs used to translate the IPL are held fixed. The trend of poverty and the regional composition are related since the rate of poverty reduction in different regions differs (see e.g. Minoiu and Reddy (2008)). Suppose we consider the lowest of the IPLs which may be identified as an absolute poverty line 'reflective' of poverty lines in poor countries, while adopting the Bank's money metric approach, as being $25 (2005 PPP) per month and the highest as being $50 (2005 PPP) per month (both contrasting with the Bank's currently favoured actual 'absolute' poverty line of $38 (2005 PPP) per month). The corresponding estimates of global poverty and its composition across regions are reported in Table 4. As may be seen the poverty trend is less favourable when the upper poverty line we adopt is applied (indeed it is even less so when the Bank's own preferred 'upper' poverty line of $76 (2005 PPP) per month or $2.50 per day is chosen). According to the lower poverty line, the goal of halving the share of the developing country population living in poverty has already been achieved but according to the higher poverty line there is still a considerable distance to go. Much more strikingly, the regional composition shifts dramatically. When the higher poverty line is used, the proportion of the world's poor living in South Asia is seen to be much greater than in sub-Saharan Africa. When the lower poverty line is used, the proportion living in Sub-Saharan Africa is somewhat higher in 2005 (although not in 1990). Perhaps most surprisingly, the proportion of the world's population of poor persons living in East Asia is more than a quarter even in 2005, when the higher poverty line is used. The low proportion of the world's poor deemed to be living in other regions, as well as the low proportion of persons in other regions deemed to be poor, regardless of the IPL chosen within this range, provides an additional reason for concern about the plausibility of the results.

Does the Revision of the IPL Raise or Lower It in Countries, and Why Does It Matter?

There cannot be a single answer to the question of whether the poverty line corresponding to the current edition of the World Bank's global poverty estimates is higher or lower than that corresponding to an earlier edition. This is because each of these IPLs is defined in terms of a distinct abstract unit, and these are not directly comparable. There is no general rate of exchange between PPP dollars of different base years.[9]

Can the question be answered at all? It *can* be answered from the standpoint that ultimately matters: whether it leads to a higher or a lower poverty line at the point of application—in each individual country. If the change of IPL were to lead to a uniform increase or uniform decrease in these poverty lines expressed in local currency units we might be able to come to an unambiguous conclusion about the impact of the revision. Unfortunately, the change in the base year is accompanied by a twisting and not merely a rescaling of the "PPP vector", i.e. the PPPs of some countries go up and the PPPs of other countries go down. These changes might be justified if it were thought that the relative purchasing power of distinct currencies over the commodities needed to avoid poverty had changed in the interval between the base years. However, as discussed in Reddy and Pogge (forthcoming), there are reasons to think that there might be distortions of these relative purchasing power assessments arising from the method of calculation of PPPs (especially due to the entry into the calculation of "irrelevant commodities" and "irrelevant countries").

9 For this reason, those who have written about the concept of 'PPP inflation' are making a methodological error (see e.g. Bhalla, 2002).

There is a straightforward method of assessing empirically whether the changes in PPPs between base years are ones which can be justified on the ground of changes in the relative cost of purchasing relevant commodities. Since the PPPs are defined in units of distinct base years an temporal price index must be used within each country in order to convert the purchasing power represented by the IPLs, once they are translated into local currency units, into common temporal units. The national consumer price index of a country may be used as the temporal price index within each country, and indeed is what is used by the Bank itself when converting its IPL from the base year to a given estimation year.

The results of such a country-by-country comparison of the relative magnitudes of the international poverty lines of the three different base years employed by the Bank since 1990, once they are expressed in the local currency units of a common year, are contained in Table 5 which provide this information for all countries in the dataset for which the analysis was possible. It may be observed that each shift in base year led to an increase in the poverty line in certain countries and a decrease in the poverty line in other countries beyond that which would be warranted on the ground of price changes in the country as reflected by the national consumer price index. Since the direction as well as level of the change varies considerably, it is not possible to speak of the international poverty line either having increased or decreased. Rather, it decreased in some places and increased in others. For example, according to the table, the 1993 local currency value of the IPL was forty-five per cent of its 2005 value in the Gambia, fifty-nine per cent of its 2005 value in China and sixty-three per cent of its 2005 value in Indonesia, but it was 115 per cent of its 2005 value in Thailand, 120 per cent of its 2005 value in Egypt, and 122 per cent of its 2005 value in Gabon (as judged by applying the local CPI). This is reflected in the fact that the distribution of estimated poverty across regions and countries in the world as well as its absolute level in individual regions and countries has changed greatly between the last edition and the current edition of the Bank's poverty estimates, just as they changed between the preceding two editions[10]. In constructing Table 5, we employed the PPP for 'Actual individual consumption' (as opposed to the PPP for 'Individual consumption expenditure by households') in order to use a comprehensive measure of the cost of those items ultimately consumed by individuals which corresponds most closely (although still inexactly) to the PPP concept used in earlier base years.[11] However, qualitatively similar, and numerically even more dramatic, results would have been arrived at by using the slightly narrower PPP concept employed by the Bank in generating its 2005 base year poverty estimates.

It might be argued that the new international poverty line need not be required to be consistent in any way with the earlier international poverty line and in particular may be allowed to reflect an entirely different level of purchasing power over commodities in each local context. This position involves treating each edition of international poverty estimates as being utterly incommensurate with that which precedes or

10 Compare for example the regional results reported in Chen and Ravallion (2008) and in Chen and Ravallion (2001). Reddy and Pogge (forthcoming) and Pogge and Reddy (2006) undertake a comparison of the two previous base years' poverty estimates for specific regions and countries.

11 The concept of 'final national consumption' employed by the ICP to calculate the consumption PPP it reported for the 1985 base year included 'Collective Consumption of Government' as well as items consumed by individuals, including education and health care, which are often provided by government. The basis for the construction of the 1993 PPPs employed by the Bank has never been made transparent, although the PPPs used were referred to as "consumption PPPs", suggesting that, as per then prevailing ICP practice, they reflected the cost of all consumption items, whether or not privately financed. The 2005 ICP results appear for the first time to report separately PPPs for "actual individual consumption" (inclusive of such government provided private consumption) and for the narrower concept of "individual consumption expenditure by households" (which excludes it). However, even the broader PPP concept now excludes "collective consumption expenditure by government" and appears thus not to be strictly comparable in its coverage of items with those employed in earlier base years.

follows it. That position is intellectually consistent. However, it is neither the position which is adopted by the Bank itself, nor is it easy to justify. We take these two points up in turn.

The Bank has made efforts when introducing each new edition of poverty estimates to argue that the new poverty line is in some sense "consistent" with the old one, despite elsewhere noting the incommensurability of its different IPLs. When introducing its 1993 PPP IPL it argued that such consistency existed because the new global headcount of the poor was similar to the old, resulting from the 1985 PPP IPL. Reddy and Pogge (forthcoming) argued that this argument was spurious. More recently, Ravallion, Chen and Sangraula (2008), devote extensive energy to presenting such an argument for consistency, this time centred on the claim that the "mean poverty line in 2005 PPP amongst countries with poverty lines around the $1.08 figure at 1993 PPP" is not greatly different from the new poverty line that they choose.[12] However, the proof of the pudding is in the eating: and Table 5 demonstrates that the effect of the change in PPPs is to generate broadly discrepant values of the IPL, as expressed in constant value local currency units, in countries themselves.

The more principled position that each edition of the Bank's poverty estimates is not comparable with other editions suffers from a different problem. If this is so, then which edition should be chosen? Is there a ground on which to pick one over another, or do they simply present alternative reasonable portraits of the world? The fact that the different editions differ in their assessment of the extent of poverty in the world, as well as in their portrait of the composition of poverty across regions and in its trend over time, should provide grounds for serious concern that rank confusion might result from taking this position. Indeed the Bank's own explicitly articulated position is that the latest edition of its poverty estimates is always to be favoured over the previous ones. Typically it has argued that this is the case on grounds that the later editions employ "higher quality" price data in the construction of PPPs, resulting from more extensive coverage of countries in price surveys as well as better approaches to the collection of price data and their synthesis into aggregate indices.

However, the argument that later editions should always be preferred is hard to sustain. We may address this issue from two perspectives, respectively that of pure time preference and that of data quality. The perspective of pure time preference suggests that the latest edition is always to be preferred simply because it employs a base year nearest to the present. A base year nearer to the present presumably better reflects relative prices which currently prevail across countries than does a base year that is earlier. This might provide an argument for this base year to be chosen when assessing poverty in the most recent available estimation year. However, as noted above when a base year is changed this results in an entirely new edition of poverty estimates—a space-time tableau used to assess poverty trends. A similar argument can be used symmetrically to suggest that the PPPs which most closely corresponds to some earlier year for which poverty estimates are produced (e.g. 1981) is that which should be preferred for the purpose of estimating poverty in *that* year. However, since the IPL is in the Bank's method itself a consequence of the PPPs used, this would mean either using different and incomparable poverty lines in the different years, or choosing between one edition of poverty estimates and another on a basis other than time preference. It is evident that the perspective of pure time preference has little to offer in adjudicating this dispute.

What about the perspective of data quality? According to this perspective the latest base year is to be preferred not because it is closer to the present but because of the superior quality of the data entering into a construction of its PPPs. It has been argued (see Heston, 2008, International Comparison Program (2008),

12 This is of course still different from arguing that using the same operation which they used to generate the IPL in the preceding base year, namely to take the median of the poverty lines of the poorest ten countries, gives rise to the same answer. As can be seen in Table 1, repeating that operation in fact leads to a slightly higher poverty line.

Klasen (2008) and Ravallion, Chen and Sangraula, 2008) that the 2005 PPPs are to be preferred from this standpoint. It is suggested that this is the case of the general consumption PPPs which have been most recently employed by the Bank, and that it will be even more true of the poverty specific PPPs which are currently being constructed. This argument can and should be treated on its merits. There are some reasons to argue that not every change that has been brought about constitutes an improvement for the purpose at hand. For example, the better measurement of government consumption and services in these surveys may be rather irrelevant for the exercise of poverty assessment (see Reddy, 2008). Whether or not these changes bring about more sound poverty assessment overall (or indeed even less sound assessment) will depend on the extent to which they help to correct other distortions which existed, which is difficult to assess in individual countries, let alone globally.

Equally importantly, the argument that a later survey possesses better data quality cannot be viewed as decisive over the argument that an earlier price survey is more appropriate for assessing poverty in earlier years. It might be argued that a price survey from an intermediate year (e.g. 1993 for the period from the early 1980s to the present) is to be viewed as superior from the standpoint that it distorts relative prices perceived to exist across countries in both earlier and in later years but that it does so less for at least one of these years than would the choice of a base year at an extreme end of the time period covered. The far more serious problem (as discussed in Reddy 2008b) is that each new price survey by the International Comparison Program necessitates, within the Bank's approach, an unhappy choice. Either the new set of PPPs must be adopted, thus introducing an entirely new IPL which is possibly higher in some countries and lower in others than can be justified on the basis of national consumer price index change, and which also reflects relative prices that are still more distant from the earliest estimation year than was the previous IPL, or the old set of PPPs must be retained, in which case the interpretation of the IPL associated with that earlier set of PPPs in terms of current money is lost, diminishing the suppose merit of the IPL that it provides a meaning which has value in public advocacy and debate, and they also reflect relative prices which become still more distant from the most recent estimation year. There is no way to resolve this conundrum within the Bank's approach.

If the method used by the Bank to choose an IPL which was "representative" of national poverty lines in poor countries was held constant, along with the national poverty lines used[13], then a change in the base year (and associated PPPs and IPL) could be seen as having two effects. The first effect is to change the relative magnitude attached to individual national poverty lines when they are converted into a common unit. This may affect what is determined to be representative. The second effect is potentially to bring about increases or decreases in the real value (i.e. after adjustment for changes in the consumer price index) of the LCU poverty lines applied in individual countries. Both of these effects will bring about a shift in the relative proportions of the poor in different countries. It has been argued elsewhere that such shifts bring about instability in poverty estimates, on a scale which severely undermines the aim of credibly monitoring poverty in the world.

Are the PPPs Used of the Appropriate Type?

A major issue addressed in previous criticisms of the Bank's global poverty estimates is, as mentioned above, that of whether the PPPs being used are the appropriate ones. The issue goes beyond that of the choice of base year and concerns the question of whether the commodities for which relative prices are being collected are receiving weights which are appropriate when overall PPPs based on these prices are calculated. Such appropriateness is to be judged in regard to the purpose of the exercise, viz. poverty assessment. There are also other issues of calculation such as the entry of irrelevant countries into the generation of bilateral price comparisons.

13 Neither is the case.

One persistent misunderstanding of previous criticisms is that the critics have argued that "it would be better to use the PPP for food consumption alone" in the construction of an IPL, on the ground that food is an important component in the avoidance of poverty. In fact, it was merely argued in Reddy and Pogge (forthcoming) and other writings that the fact that PPPs for food and other tradable necessities are higher than are PPPs for general consumption is merely illustrative of the distortions which arise due to the inappropriate use of the latter. It was not suggested that an appropriate substitute would be the PPP for food. It was found in Reddy and Pogge (forthcoming) that PPPs for food were significantly higher than those for general consumption, as was to be expected due to the tendency for international price equalization to take place for tradable goods. Thus, for a fixed international dollar poverty line, the local currency equivalents would be higher if a more appropriate PPP, giving greater weight to such necessities were to have been employed.

If the IPL is allowed to be affected by the PPP is used, then the effect of a shift of these PPPs is in principle indeterminate, since whether it raises or lowers local poverty lines applied will influence how it affects the relative magnitudes of the national poverty lines which are used to generate the IPL when they are expressed in a common unit as well as the extent to which it raises or lowers the local currency equivalent of the revised IPL. It was shown in Reddy and Pogge (forthcoming), however, that for the previous (1993) base year a shift from general consumption PPPs to food PPPs led to an increase in LCU equivalents of the revised IPL even if the international poverty line was recalculated, using the rule for such calculation then in place. Ravallion, Chen and Sangraula present a food poverty line based IPL of $22.74 2005 PPP per month (or $0.96 2005 PPP per day) based on their current method for calculating the IPL from national poverty lines. This represents a reduction of 40 per cent in the nominal 2005 international dollar value of the IPL. However, it may be seen from Table 6 that, for the countries included in the Bank's national poverty line database, food PPPs are on average about 70 per cent higher than general consumption PPPs. This is also true of the median ratio of food to general consumption PPPs in these countries. The population weighted mean ratio of food PPPs to general consumption PPPs suggests that food PPPs are on average about 60 per cent higher than general consumption PPPs even after taking population into account. It can thus be concluded that the use of food PPPs would lead to substantially higher (perhaps 30 per cent higher, similarly to the finding in Reddy and Pogge, forthcoming) poverty lines and poverty estimates in poor countries, even if the IPL is recalculated using the Bank's own method. If the IPL is not recalculated the increase in poverty lines is even more dramatic and is much higher than for previous base years. The implication of these findings is that the use of more realistic PPPs (even while preserving other aspects of the Bank's approach) might lead to much higher estimates of the amount of poverty in the world (and therefore also lower rates of poverty reduction, on which point see e.g. Pogge (2008), Reddy (2008b) and Subramanian (2009). For the general consumption PPPs used to calculate the ratios in Table 6 we employed PPPs for Actual Individual Consumption in order to use a broad consumption concept most closely corresponding to those PPPs employed in earlier base years, and to have a resulting basis for comparison with earlier analyses. If PPPs for "Individual consumption expenditure by households" were used instead as the general consumption PPPs with which to compare food PPPs then the magnitudes of the ratios would look slightly less dramatic but the comparison would lead to rather similar conclusions. Since the concept of "actual individual consumption" encompasses all of those forms of consumption which are "closely linked to the welfare of the population" (United Nations, 1992, II.A.2.b.65) it may be the more appropriate PPP concept to employ in generating as well translating the IPL, especially if some or all of the forms of consumption it includes are also imputed to households when assessing household consumption on the basis of surveys. The prevailing definitions of consumption in surveys appear to vary widely. The concept of "individual consumption expenditure by households" is that which the Bank appears actually to employ in generating its 2005 base year poverty estimates, although no justification has been provided for this choice.

Since the initial circulation of Reddy and Pogge (forthcoming) in 2002, the Bank has moved, in conjunction with the International Comparison Programme, the secretariat of which it now hosts, to begin to develop so-called poverty specific PPPs. These PPPs are not yet being employed in the Bank's poverty estimates. Although these PPPs may mitigate the problems we identify, they are unlikely to eliminate them, for reasons discussed, *inter alia*, in Pogge and Reddy (2006), Reddy and Pogge (forthcoming) and Reddy (2008b)). Most centrally, the calculation of such PPPs cannot be undertaken in a fully valid manner since the prices paid by the poor cannot be identified without determining who the poor are, which is the tasks to which the poverty specific PPP are meant to be applied! The use of iterative algorithms and other approaches only obscures rather than overcomes this unavoidable fact. The recent effort by the Asian Development Bank (2008) to present estimates based on such poverty specific PPPs, although a creditable effort, is dogged by such problems.

The Substantive Interpretation of the IPL

We have pointed out in other work (see Pogge and Reddy, 2006 and Reddy and Pogge, forthcoming) that the Bank fails to apply an IPL which has the substantive significance that it ought to have if all the PPPs employed succeeded in capturing purchasing power equivalence in the required sense. In particular, the IPLs fail to capture the costs of meeting the most basic requirements of human life in the base country (the United States) which is an inescapable logical requirement of combining the definition of the IPL in purchasing power equivalence terms with a substantive interpretation of the IPL in terms of the requirements of escaping "absolute" poverty.

On the other hand, we noted above that there is a sense in which the interpretation that PPPs capture purchasing power equivalence in the relevant sense in each and every case can be relaxed without altogether undermining the Bank's approach. In particular, PPPs between developed countries and developing countries can be "inaccurate" without reducing the "accuracy" of the bank's poverty assessment exercise under certain circumstances. If the international dollar (constrained to have purchasing power parity with the US dollar) is viewed only as a numeraire, any exchange rate whatever between that unit and the currencies of the developing countries involved in the exercise can be adopted as long as the PPPs implicitly applied between developing countries do capture purchasing power equivalence in the relevant sense. If so, the Bank's approach may succeed in inductively deriving an IPL from national poverty lines from developing countries which has the required interpretative significance within such countries. Is there any reason to believe that the Bank's PPPs do this at a minimum?

We have already presented evidence that the Bank's IPLs have substantially shifting real local currency values in individual developing countries and that the direction and magnitude of the shifts varies from country to country. Since the same international dollar IPL is applied in all countries, the extent to which international dollars of different base years implicitly capture real purchasing power equivalence (when they are converted using PPPs into local currencies) have also been shifting. If the CPIs of countries are trusted to capture real equivalence over time than it cannot be argued that the PPPs that the Bank uses capture real purchasing power across countries appropriately in one base year without arguing that it did so *inappropriately* in the other base years. Putting it baldly, the PPPs of a given base year together with the CPIs of countries tell one story about the relative purchasing power of local currencies across country-years. This story typically contradicts that told by the PPPs of another base year, and by a very wide margin. Which of the three witnesses is the liar?

The appropriate rates of exchange of currencies which capture real purchasing power equivalence is of course only one element of the poverty lines used within the Bank's approach. It is also necessary to ensure that the poverty lines employed possess a required substantive interpretation in terms of the command over the commodities necessary to escape deprivation. This idea is implicit in the description of the Bank's IPL as "absolute". Here, it can only be pointed out that in practice the IPL appears to be higher than the poverty lines used in some countries and lower than those in others, although it is quite possible that none of the poverty lines constructed are truly adequate for capturing the costs of avoiding absolute deprivations. Interestingly, the Economic Commission for Latin America's nutritionally based poverty line was roughly equal in many countries to the poverty line adopted by the World Bank in 1979 [Ahluwalia, Carter and Chenery, 1979] which was designed to be comparable with the Indian poverty line (and which, in turn, has been compared to the lower poverty line of the Bank in subsequent base years—see e.g. the discussion in Ravallion, Chen and Sangraula 2008). Since then, the Bank's "absolute" poverty estimates appear to have become much lower than those of the Economic Commission for Latin America [see Table 7 as well as Reddy, 2008a, and Chen and Ravallion, 2008: Table 7]. The substantive validity of the Bank's IPL can only properly be assessed by comparing it against well constructed national poverty lines which capture the requirements of avoiding absolute consumption poverty understood in an appropriately common way.

Reddy and Pogge (forthcoming) recognized that regional differences within countries in the costs of avoiding absolute deprivations could be substantial, and that the Bank's approach often seemed inadequately to take account of this. This is an issue not merely of the absence of relative price indices, but of a failure to account for the presence of different challenges to living an adequate life in different contexts. Recently, the possibility that urban poverty has been severely underestimated has been interestingly discussed [see e.g. Bapat (2009) and Satterthwaite (2004)]. This possibility gains special significance in light of the fact the world has been rapidly urbanizing.

An approach to poverty assessment which is grounded in a concern for basic human rights must also include an insistence that the criteria used for identifying who is poor must have something to do with the substance of human experience. The approach taken cannot be that this exercise is essentially arbitrary (on which claim, see e.g. Deaton, 2003).[14]

Is There an Alternative?

It has been argued elsewhere [See Pogge and Reddy 2006, Reddy 2004, Reddy 2008b, Reddy and Pogge forthcoming, Reddy, Visaria and Asali 2008] that there is an alternative to the Bank's money metric approach to global consumption poverty estimation. This alternative is simple. It is that the construction of national poverty lines and the design of surveys should be appropriately coordinated through appropriate international standards (on the lines of those applied by the United Nations to the creation of the System of National Accounts) so as to reflect a common meaning of the poverty lines constructed in terms of the resource requirements of essential human achievements. One way of interpreting these achievements is in terms of consumption-dependent basic capabilities. The range of relevant basic capabilities considered

14 Ahluwalia, Carter and Chenery (1979) wrote, "The first step in measuring the scale of poverty is to establish a common poverty line to be applied across countries. It is self-evident that such a definition is necessarily arbitrary". This explicit position is one which finds echoes in subsequent writings on global poverty estimates from the Bank, although it is sometimes combined with the contradictory claim that the poverty lines used represent an absolutist understanding of poverty.

should be made comprehensive enough to possess a persuasive interpretation in terms of adequacy of life, while being sufficiently narrowly drawn to command broad agreement. Such an approach must include a detailed approach to assessing the resources needed to fulfil individual elementary capabilities (such as the freedom to be adequately nourished) while going beyond individual capabilities to consider their joint resource requirements.

With coordination of poverty line construction (and survey design) across countries, the need for the use of PPPs in poverty assessment would altogether disappear. The coordination of poverty assessment methods would generate "bottom-up" inherent comparability, over time as well as space[15]. Such an approach can be made fully consistent with the need to take adequate account of relevant features of local context, since it does not insist on uniformity at the level of detailed application, but only uniformity at the level of interpretation. In spirit, this approach is in line with Amartya Sen's suggestion that one may think of poverty as a concept which is "absolute in the space of capabilities and relative in the space of commodities". Of course, there can be reasonable disagreement about appropriate methods to apply in poverty assessment. It is desirable for this reason that poverty lines should be constructed in a transparent and participatory process involving national poverty commissions or the like (see e.g. Atkinson 2006).[16] Such national processes should operate according to common guidelines so as to ensure international comparability but seek to apply these in an adequately tailored and context-sensitive manner so as to ensure relevance. An approach of this kind combines interpretative attractiveness, analytical clarity, and empirical applicability. It is grounded in the insistence that consumption or income poverty assessment must be based on a conception of basic requirements of human beings. In doing so, it does not in any way take away from the need to supplement such information with other direct information about deprivations experienced (related either to information on such outcomes or on the means for avoiding them). Although a capability-based approach to income poverty assessment seeks to set poverty lines in accordance with a conception of the relevant basic capabilities it cannot substitute for other capability-based information.

The Need for Institutional Reforms

There is an urgent need for institutional reforms in the collection and dissemination of global poverty statistics. The current approach is centralized, obscurantist and un-transparent. The resources expended on the International Comparison Program and other activities which are at least in part intended to support the Bank's global poverty estimates (for example, the recent effort to collect information for the construction of poverty specific PPPs) are enormous. The costs of the present approach may well outstrip those of implementing an alternative. More pertinently, the value of having better estimates of poverty is incontestable. Such estimates are used every day by UN agencies, as well as by national governments and non-governmental organizations, and enter influentially into public debates. Improving the quality of these statistics is in the global public interest.

An alternative to the current slipshod approach can only be developed over the intermediate term. In the short run, there is little alternative but to rely less on the existing money-metric global poverty estimates and to place greater weight on other sources of information.

15 Such an approach of periodically reconstructing a poverty line while maintaining an invariant capability-based interpretation of the poverty line could have avoided some of the recent poverty assessment related controversies seen in India. See Reddy (2007), Subramanian (2009) as well as the contributions of Deaton and Kozel (2005).

16 For an interesting recent application of a participatory approach to building poverty lines anchored in a concept of basic human requirements, see Human Resources and Skills Development Canada [2008].

In the intermediate and long term, the United Nations system should return to a position of public leadership in statistical data collection and interpretation. It can begin by convening a high-level multi-stakeholder committee to begin a transparent and participatory review of current global poverty statistics and to examine proposed alternatives.

References

Ahluwalia, M.S., N.G. Carter and H.B. Chenery (1979). "Growth and Poverty in Developing Countries". World Bank Staff Working Paper No. 309, World Bank, Washington, DC.

Anand, Sudhir, and Ravi Kanbur (1991). "International Poverty Projections". Policy, Research and External Affairs Working Paper WPS 617, World Bank, Washington, DC.

Asian Development Bank (2008). "Comparing Poverty Across Countries: The Role of Purchasing Power Parities". Asian Development Bank, Manila.

Atkinson, A.B. (1996). "Promise and Performance: Why We Need an Official Poverty Report". In Paul Barker [ed.]. *Living as Equals*. Oxford University Press, Oxford.

Bapat, Meera (2009). "Poverty Lines and Lives of the Poor: Underestimation of Urban Poverty—The Case of India". International Institute for Environment and Development, London.

Besley, Timothy J, and Robin Burgess (2003). "Halving Global Poverty". *Journal of Economic Perspectives*, 17 (3).

Bhalla, Surjit (2002). *Imagine There's No Country: Poverty, Inequality and Growth in the Era of Globalization*. Peterson Institute for International Economics, Washington, DC.

Carlson, Andrea, Mark Lino, WenYen. Juan, Kenneth Hanson and P. Peter Basiotis (2007). *Thrifty Food Plan, 2006*. Center for Nutrition Policy and Promotion, U.S. Dept. of Agriculture, Washington, DC.

Chen, Shaohua, and Martin Ravallion (2001). "How Did the World's Poorest Fare in the 1990s?" *Review of Income and Wealth*, 47 (3), September: 283–300.

Chen, Shaohua, and Martin Ravallion (2008). "The Developing World is Poorer than We Thought, but No Less Successful in the Fight Against Poverty". Policy Research Working Paper No. 4703, World Bank, Washington, DC.

Deaton, Angus (2003). "How to Monitor Poverty for the Millennium Development Goals". Research Program in Development Studies Working Paper No. 221, Princeton University, Princeton, NJ.

Deaton, Angus (2006). "Purchasing Power Parity Exchange Rates for the Poor: Using Household Surveys to Construct PPPs". Working paper, Research Program in Development Studies, Princeton University, Princeton, NJ.

Deaton, Angus, and Valerie Kozel [eds] (2005). *The Great Indian Poverty Debate*. Macmillan, New Delhi.

ECLAC (2003). *Social Panorama of Latin America*. Statistical Annexes. Economic Commission for Latin America and the Caribbean, Santiago.

ECLAC (2006). *The CEPAL Statistical Yearbook for Latin America and the Caribbean*. Economic Commission for Latin America and the Caribbean, Santiago.

Heston, Alan (2008). "The 2005 Global Report on Purchasing Power Parity Estimates: A Preliminary Review". *Economic and Political Weekly*, March 15th.

Human Resources and Skills Development Canada (2008). "Low Income in Canada: 2000–2006; Using the Market Basket Measure". Human Resources and Skills Development Canada, Ottawa.

International Comparison Program (2008). "Global Purchasing Power Parities and Real Expenditures". World Bank, Washington, DC.

Kakwani, Nanak, and Hyun Son (2006). "New Global Poverty Counts". Working Paper 29, International Poverty Centre, Brasilia.

Klasen, Stephan (2009). "Levels and Trends in Absolute Poverty in the World: What We Know and What We Don't". Working paper, University of Gottingen, Gottingen.

Lipton, Michael (1996). "Emerging Asia, the Penn Tables, and Poverty Measurement". *Poverty Research Unit Newsletter,* No. 4, School of African and Asian Studies, University of Sussex, Brighton.

Minoiu, Camelia, and Sanjay Reddy (2008). "Has World Poverty Really Fallen?". *Review of Income and Wealth*, 53 (3), pp. 484–502.

Pogge, Thomas (2005). "The First UN Millennium Development Goal: A Cause for Celebration". *Journal of Human Development*, 5 (3).

Pogge, Thomas (2008). "Where the Line is Drawn: A Rejoinder to Ravallion". One Pager 68, October, International Poverty Centre, Brasilia.

Pogge, Thomas, and Sanjay Reddy (2006). "Unknown: The Extent, Distribution and Trend of Global Income Poverty". *Economic and Political Weekly*, 3rd June.

Ravallion, Martin (2008). "How Many Poor in the World?: A Reply". *Economic and Political Weekly*, November 8th.

Ravallion, Martin, and Shaohua Chen (2007). "Absolute Poverty Measures for the Developing World, 1981–2004". *Proceedings of the National Academy of Sciences*, Oct. 23rd, 104 (43).

Ravallion, Martin, Shaohua Chen and Prem Sangraula (2008). "Dollar a Day Revisited". Policy Research Working Paper 4620, World Bank, Washington, DC.

Ravallion, Martin, Gaurav Datt and Dominique van de Walle (1991). "Quantifying Absolute Poverty in the Developing World". *Review of Income and Wealth*, 37 (4).

Rawls, John (1999). *A Theory of Justice*, revised edition. Belknap Press, Cambridge, MA.

Reddy, Sanjay (2004). "A Capability Based Approach to Estimating Global Poverty". *In Focus*, September, UNDP International Poverty Centre, Brasilia.

Reddy, Sanjay (2007). "How Great is the Debate?" *Economic and Political Weekly*, February 10th.

Reddy, Sanjay (2008a). "Counting the Poor". *Americas Quarterly*, Spring.

Reddy, Sanjay (2008b). "Differently Distorted: The World Bank's 'Updated' Poverty Estimates". *Economic and Political Weekly*, October 25th.

Reddy, Sanjay, and Thomas Pogge (forthcoming). "How Not to Count the Poor". In Joseph Stiglitz, Sudhir Anand, and Paul Segal (eds). *Debates on the Measurement of Global Poverty*. Oxford University Press, Oxford; working paper available on www.socialanalysis.org

Reddy, Sanjay, Sujata Visaria and Muhammad Asali (2008). "Inter-Country Comparisons of Income Poverty Based on a Capability Approach". In Ravi Kanbur and Kaushik Basu (eds). *Arguments for a Better World: Essays in Honor of Amartya Sen, Vol. II.* Oxford University Press, Oxford.

Sala-i-Martin, Xavier (2006). "The World Distribution of Income: Falling Poverty and ….Convergence, Period". *Quarterly Journal of Economics*, 121 (2).

Satterthwaite, David (2004). The Under-Estimation of Urban Poverty in Low and Middlle-Income Nations". Working Paper on Poverty Reduction in Urban Areas, 14, International Institute for Environment and Development, London.

Subramanian, S. (2009). "How Many Poor in the World?: A Critique of Ravallion's Reply". *Economic and Political Weekly*, January 31st.

United Nations (1992). *Handbook of the International Comparison Programme*. Department of Economic and Social Development, Statistical Division, United Nations, New York.

Yaqub, Shahin (1996). "Internationally Comparable Estimates of Poverty". *Poverty Research*

Unit Newsletter, No. 4, School of African and Asian Studies, University of Sussex, Brighton.

Tables

Table 1
Mean and Median Poverty Lines for Alternative Reference Groups
(Poverty Lines from Bank Dataset as Presented in Ravallion, Chen and Sangraula (2008), PPPs used for 'Individual Consumption Expenditure by Households')

Number of Countries' PLs used in IPL Construction (from bottom by Per-Capita Consumption Rank)	Per-Capita Consumption ($ 2005 PPP)	National Poverty Line reported by Bank ($2005 PPP)	Mean Poverty Line ($2005 PPP)	Median Poverty Line ($2005 PPP)
10	31.34	26.11	37.27	39.78
11	31.96	41.89	39.23	41.04
12	35.22	41.04	38.42	27.83
13	36.94	51.54	37.51	38.51
14	39.34	33.35	36.72	35.93
15*	40.01*	38.51*	37.98*	38.51*
16	40.88	44.92	38.09	39.1
17	41.33	30.17	37.69	38.51
18	45.12	45.96	37.35	35.93
19	45.26	19.2	36.77	33.35
20	45.49	58.83	38.33	35.93
21	45.52	29.54	37.62	33.35
22	47.04	26.6	37.86	35.93
23	54.55	26.43	39.06	38.51
24	56.9	55.65	38.22	35.93
25	60.4	39.69	39.01	38.51
26	61.49	31.38	38.76	35.93
27	64.34	31.46	38.24	33.35
28	68.54	26.27	38.69	35.93
29	72.13	67.99	39.70	38.51
30	72.82	23.57	40.41	39.10
31	75.06	42.8	42.19	39.69
32	76.37	65.37	43.52	40.37
33	78.92	19.05	44.31	41.04
34	80.55	57.88	44.48	41.47
35	81.18	32.52	43.95	41.04
36	84.24	24.81	44.42	41.47
37	98.31	50.67	44.46	41.89
38	99.63	68.16	44.59	42.35
39	109.85	60.81	44.29	41.89
40	111.7	95.61	44.56	42.35

* This case corresponds to the reference group adopted by the Bank.

Table 2
Mean and Median Poverty Lines for Alternative Reference Groups
(For Countries with Poverty Line Sources Other Than The Bank; Poverty Lines from Bank Dataset as Presented in Ravallion, Chen and Sangraula (2008), PPPs used for 'Individual Consumption Expenditure by Households')

Per-Capita Consumption Ranks from Bottom	Mean for Independent Poverty Lines ($ 2005 PPP)	Median for Independent Poverty Lines ($ 2005 PPP)
Poorest	26.11	26.11
Poorest two	28.14	28.14
Poorest three	25.16	26.11
Poorest four	35.87	28.14
Poorest five	33.87	26.11
All six	35.79	28.14

Per-Capita Consumption Ranks from Bottom	Mean for Independent and PRSP Poverty Lines ($ 2005 PPP)	Median for Independent and PRSP Poverty Lines ($ 2005 PPP)
Poorest	26.11	26.11
Poorest two	33.58	33.58
Poorest three	39.56	41.04
Poorest four	40.90	42.98
Poorest five	38.76	41.04
Poorest six	35.50	35.61
Poorest seven	34.23	30.17
Poorest eight*	36.90	35.61
Poorest nine	40.36	41.04
Poorest ten	38.68	35.61
Poorest eleven	41.36	41.04
Poorest twelve	43.71	42.98
Poorest thirteen	44.23	44.92
Poorest fourteen	42.92	42.98
Poorest fifteen	43.35	44.92
All sixteen	43.47	45.15

* This case corresponds to the reference group adopted by the Bank, with per capita consumption of $60 (2005 PPP) or below per month

Table 3
Global and Regional Headcounts At Different Poverty Lines From $25 To $50 Per Month
Note: All results from World Bank Povcalnet database, accessed on June 30th, 2009.

Aggregation: **$25 per month**

2005

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	25	4.54	0.75	0.23	85.55	1884.42
Europe and Central Asia	25	1.26	0.33	0.17	5.97	473.6
Latin America and the Caribbean	25	3.16	1.1	0.66	17.39	550.43
Middle East and North Africa	25	0.75	0.2	0.11	2.29	305.23
South Asia	25	12.16	2.08	0.57	179.53	1476.4
Sub-Saharan Africa	25	29.91	10.24	4.85	228.18	762.88
Total	25	9.52	2.41	1	518.91	5452.96

1990

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	25	25.94	6.34	2.21	413.99	1595.94
Europe and Central Asia	25	0.51	0.18	0.1	2.38	465.75
Latin America and the Caribbean	25	5.26	1.63	0.8	23.04	438.09
Middle East and North Africa	25	0.83	0.26	0.17	1.87	225.57
South Asia	25	20.25	4.11	1.29	226.82	1120.09
Sub-Saharan Africa	25	37.74	14.89	8.07	195	516.69
Total	25	19.79	5.33	2.2	863.09	4362.14

Aggregation: **$30 per month**

2005

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	30	8.92	1.74	0.53	168.09	1884.42
Europe and Central Asia	30	2.09	0.56	0.25	9.9	473.6
Latin America and the Caribbean	30	4.98	1.59	0.87	27.41	550.43
Middle East and North Africa	30	1.47	0.34	0.16	4.49	305.23
South Asia	30	22.8	4.58	1.35	336.62	1476.4
Sub-Saharan Africa	30	38.75	14.25	7.11	295.62	762.88
Total	30	15.44	4.06	1.66	842.12	5452.96

1990

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	30	38.07	10.61	4.12	607.57	1595.94
Europe and Central Asia	30	0.86	0.28	0.16	4.01	465.75
Latin America and the Caribbean	30	7.53	2.46	1.23	32.99	438.09
Middle East and North Africa	30	1.61	0.41	0.22	3.63	225.57
South Asia	30	32.97	7.84	2.7	369.29	1120.09
Sub-Saharan Africa	30	46.41	19.43	10.86	239.8	516.69
Total	30	28.82	8.49	3.64	1257.29	4362.14

Aggregation: **$35 per month**

2005

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	35	13.78	3.09	1.02	259.67	1884.42
Europe and Central Asia	35	3.04	0.85	0.39	14.4	473.6
Latin America and the Caribbean	35	7.07	2.33	1.26	38.92	550.43
Middle East and North Africa	35	2.65	0.58	0.24	8.09	305.23
South Asia	35	33.94	7.98	2.66	501.09	1476.4
Sub-Saharan Africa	35	46.67	18.34	9.54	356.04	762.88
Total	35	21.61	6.14	2.58	1178.2	5452.96

1990

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	35	49.07	15.34	6.48	783.13	1595.94
Europe and Central Asia	35	1.59	0.55	0.36	7.41	465.75
Latin America and the Caribbean	35	9.88	3.35	1.68	43.28	438.09
Middle East and North Africa	35	3.05	0.68	0.3	6.88	225.57
South Asia	35	45.1	12.3	4.65	505.16	1120.09
Sub-Saharan Africa	35	53.77	23.82	13.73	277.82	516.69
Total	35	37.22	12.02	5.41	1623.68	4362.14

Aggregation: **$40 per month**

2005

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	40	18.81	4.73	1.69	354.46	1884.42
Europe and Central Asia	40	4.06	1.19	0.54	19.23	473.6
Latin America and the Caribbean	40	8.99	3.04	1.6	49.48	550.43
Middle East and North Africa	40	4.34	0.94	0.36	13.25	305.23
South Asia	40	44.39	11.89	4.37	655.37	1476.4
Sub-Saharan Africa	40	53.56	22.32	12.07	408.6	762.88
Total	40	27.52	8.44	3.68	1500.39	5452.96

1990

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	40	58.08	20.14	9.13	926.92	1595.94
Europe and Central Asia	40	2.24	0.72	0.42	10.43	465.75
Latin America and the Caribbean	40	12.27	4.33	2.22	53.75	438.09
Middle East and North Africa	40	5.32	1.11	0.44	12	225.57
South Asia	40	55.81	17.08	7	625.12	1120.09
Sub-Saharan Africa	40	59.89	27.95	16.59	309.45	516.69
Total	40	44.42	15.63	7.39	1937.68	4362.14

Aggregation: **$45 per month**

2005

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	45	23.55	6.51	2.48	443.78	1884.42
Europe and Central Asia	45	5.12	1.57	0.71	24.25	473.6
Latin America and the Caribbean	45	10.93	3.8	1.98	60.16	550.43
Middle East and North Africa	45	6.6	1.44	0.53	20.15	305.23
South Asia	45	53.59	16.03	6.39	791.2	1476.4
Sub-Saharan Africa	45	59.49	26.12	14.63	453.84	762.88
Total	45	32.89	10.84	4.93	1793.38	5452.96

Aggregation: **$50 per month**

2005

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	50	28.52	8.46	3.43	537.44	1884.42
Europe and Central Asia	50	6.24	1.98	0.91	29.55	473.6
Latin America and the Caribbean	50	12.89	4.62	2.4	70.95	550.43
Middle East and North Africa	50	9.41	2.09	0.76	28.72	305.23
South Asia	50	61.4	20.18	8.62	906.51	1476.4
Sub-Saharan Africa	50	64.53	29.72	17.16	492.29	762.88
Total	50	37.88	13.3	6.28	2065.46	5452.96

1990

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	45	65.05	24.75	11.92	1038.16	1595.94
Europe and Central Asia	45	3.05	0.93	0.5	14.21	465.75
Latin America and the Caribbean	45	14.64	5.34	2.77	64.14	438.09
Middle East and North Africa	45	8.28	1.74	0.64	18.68	225.57
South Asia	45	64.7	21.9	9.64	724.7	1120.09
Sub-Saharan Africa	45	64.95	31.79	19.39	335.59	516.69
Total	45	50.33	19.17	9.5	2195.47	4362.14

1990

	Poverty line	H (%)	PG (%)	SPG (%)	Num.of poor (m)	Population (m)
East Asia and Pacific	50	70.76	29.07	14.78	1129.29	1595.94
Europe and Central Asia	50	4.06	1.19	0.61	18.91	465.75
Latin America and the Caribbean	50	16.99	6.39	3.36	74.43	438.09
Middle East and North Africa	50	11.72	2.56	0.93	26.44	225.57
South Asia	50	72.16	26.58	12.39	808.26	1120.09
Sub-Saharan Africa	50	69.14	35.32	22.09	357.24	516.69
Total	50	55.35	22.55	11.66	2414.56	4362.14

Table 4
Sensitivity of Regional Composition and Global Poverty Trend since 1990 to IPL Choice

	Region's Proportion of World's Poor by IPL ($2005 PPP)			
	2005		1990	
	$25/month	$50/month	$25/month	$50/month
East Asia and the Pacific	16.49%	26.02%	47.97%	46.77%
Europe and Central Asia	1.15%	1.43%	0.28%	0.78%
Latin America and the Caribbean	3.35%	3.44%	2.67%	3.08%
Middle East and North Africa	0.44%	1.39%	0.22%	1.10%
South Asia	34.60%	43.89%	26.28%	33.47%
Sub-Saharan Africa	43.97%	23.83%	22.59%	14.80%

Proportion of Developing World's Population Deemed Poor			
2005		1990	
$25/month	$50/month	$25/month	$50/month
9.52%	37.88%	19.79%	55.35%

Source: Author's calculations based on preceding table.

Table 5
Comparison of Real Values of Poverty Lines for All Countries*. Detailed Listing of Countries

Country	LCU 1993 IPL / LCU 2005 IPL	LCU 1985 IPL / LCU 2005 IPL
Algeria		
Australia	1.14	1.69
Austria	1.25	1.54
Bahrain	0.86	0.90
Bangladesh	0.94	0.76
Belgium	1.10	1.36
Botswana	1.06	1.09
Burkina Faso	0.77	1.12
Burundi	0.63	1.26
Cameroon	0.93	2.09
Canada	1.13	1.29
Central African Republic	0.63	1.07
Chad	0.70	1.15
Chile	0.91	1.05
China	0.59	0.62
Colombia	0.68	1.00
Congo	1.36	2.34
Denmark	1.16	1.37
Ecuador	1.21	1.50
Egypt	1.20	2.28
Ethiopia	0.79	0.64
Fiji	0.73	0.78
Finland	1.07	1.32
France	1.17	1.38
Gabon	1.22	1.75
Gambia, The	0.45	1.08
Germany	1.22	1.58
Ghana	0.61	0.94
Greece	1.18	1.56
India	0.94	1.03
Indonesia	0.63	0.60
Iran, Islamic Rep.	0.86	0.80
Ireland	0.98	1.26
Italy	1.05	1.30
Japan	1.24	1.72
Jordan	0.83	0.89
Kenya	1.01	1.91
Korea, Rep.	1.17	1.16
Kuwait	0.97	1.20
Lesotho	0.78	1.08
Luxembourg	1.07	1.29
Madagascar	0.80	0.94
Malawi	0.49	0.83
Malaysia	1.01	0.93
Malta	1.15	1.11
Mauritania	0.56	1.44
Mauritius	0.80	1.40
Morocco	0.70	1.12
Mozambique	0.59	0.43
Nepal	0.69	0.71
Netherlands	1.23	1.54
New Zealand	1.10	1.68
Niger	0.75	1.22
Nigeria	1.52	1.07
Norway	1.06	1.21
Pakistan	0.92	0.84
Paraguay	1.09	1.39
Philippines	0.52	1.08
Portugal	1.01	1.47
Rwanda	0.86	1.55
Saudi Arabia	0.78	1.49
Senegal	0.71	1.10
Sierra Leone	0.94	1.06
Singapore	1.20	1.07
South Africa	0.75	0.89
Spain	1.19	1.44
Sri Lanka	0.93	0.84
Sudan	1.03	1.57
Swaziland	0.84	1.08
Sweden	1.09	1.44
Switzerland	1.17	1.61
Syria	0.70	0.61
Tanzania	0.93	0.73
Thailand	1.15	0.87
Togo	0.70	1.38
Tunisia	0.73	1.09
Turkey	1.22	1.58
United Kingdom	1.18	1.49
United States	1.17	1.45
Venezuela	1.13	1.67
Zambia	1.52	2.08
Zimbabwe	0.13	0.17

* The comparison is confined to those countries for which PPPs are available for all three years as well as CPIs. All means are geometric. CPI data are from the World Development Indicators online, consumption PPP data for 1985 and 2005 are from ICP official reports and consumption PPPs for 1993 are from the World Bank. PPP for 2005 is for "Actual Individual Consumption".

Summary

Summary (all countries):		
Un-weighted Mean	0.90	1.16
Population Weighted Mean	0.85	0.94
Median	0.94	1.20

Summary (without high income countries):		
Un-weighted Mean	0.81	1.07
Population Weighted Mean	0.79	0.88
Median	0.80	1.08

For ratios greater than one only:		
Un-weighted Mean	1.15	1.36
Population Mean	1.20	1.25
Median	1.16	1.38

For ratios greater than one only:		
Un-weighted Mean	1.15	1.33
Population Mean	1.22	1.15
Median	1.15	1.18

For ratios less than one only:		
Un-weighted Mean	0.74	0.78
Population Weighted Mean	0.74	0.67
Median	0.78	0.84

For ratios less than one only:		
Un-weighted Mean	0.71	0.72
Population Weighted Mean	0.74	0.67
Median	0.74	0.80

Table 6
Ratio of 2005 Food PPP to 2005 General Consumption PPP for Countries in World Bank National Poverty Line Database*

Country	Ratio
Albania	1.70
Argentina	1.40
Armenia	1.84
Azerbaijan	1.83
Bangladesh	1.55
Belarus	1.61
Bolivia	1.71
Brazil	1.23
Burkina Faso	1.92
Cambodia	1.74
Cameroon	1.92
Chad	2.55
Chile	1.31
China	1.60
Colombia	1.63
Congo, Rep	2.15
Cote d'Ivoire	1.91
Djibouti	2.06
Egypt	1.82
Ethiopia	1.80
Gambia	2.68
Georgia	1.70
Ghana	2.37
Guinea Bissau	1.96
Hungary	1.36
India	1.56
Indonesia	1.59
Jordan	1.21
Kenya	1.90
Lao	1.96
Latvia	1.41
Lesotho	1.93

Country	Ratio
Macedonia	1.58
Malawi	2.13
Mali	2.01
Mauritania	2.15
Mauritius	1.61
Mexico	1.19
Mongolia	1.65
Morocco	1.57
Mozambique	1.90
Nepal	1.50
Niger	2.05
Nigeria	2.47
Pakistan	1.88
Paraguay	1.42
Peru	1.56
Philippines	1.59
Poland	1.30
Romania	1.57
Russia	1.51
Rwanda	1.71
Senegal	2.07
Sierra Leone	2.40
Sri Lanka	1.75
Tanzania	1.97
Thailand	1.63
Tunisia	1.68
Uganda	1.68
Uruguay	1.26
Venezuela	1.66
Vietnam	1.72
Yemen	1.54
Zambia	1.68

Median	**1.70**
Unweighted Mean	**1.73**
Population Weighted Mean	**1.61**

* Note: Means are geometric. PPPs are drawn from 2005 ICP Final Report ("Global Purchasing Power Parities and Real Expenditures") from ICP website. PPP for 2005 is for 'Actual Individual Consumption'.

Table 7
Comparison of ECLAC and World Bank Poverty Headcount Ratios for Nearly Comparable Years

1993 Base Year

ECLAC Estimates of Proportion of Population In Poverty			World Bank Estimates of Proportion of Population In Poverty		
	Upper Poverty Line	Lower Poverty Line		1993 PPP $1/Day	Ratio Of ECLAC Lower Poverty Line Proportion to $1 Per Day 1993 PPP Proportion
	Poverty	Poverty			
Argentina 2005 (Urban)	26	9.1	Argentina 2003 (Urban)	6.59	**1.38**
Bolivia 2003	63.9	34.7	Bolivia 2002	24.01	**1.45**
Brazil 2005	36.3	10.6	Brazil 2004	7.59	**1.40**
Chile 2003	18.7	4.7	Chile 2003	0.53	**8.87**
Colombia 2005	46.8	20.2	Colombia 2003	7.63	**2.65**
Costa Rica 2005	21.1	7	Costa Rica 2003	1.84	**3.80**
Ecuador 2005	49.3	21.1	Ecuador 1998	14.66	**1.44**
El Salvador 2004	47.5	19	El Salvador 2002	20.41	**0.93**
Guatemala 2002	60.2	30.9	Guatemala 2002	13.93	**2.22**
Honduras 2003	74.8	53.9	Honduras 2003	14.05	**3.84**
Mexico 2005	35.5	11.7	Mexico 2004	1.9	**6.16**
Nicaragua 2001	69.3	42.3	Nicaragua 2001	47.67	**0.89**
Panama 2005	33	15.7	Panama 2003	6.02	**2.61**
Paraguay 2005	60.5	32.1	Paraguay 2003	13.56	**2.37**
Peru 2004	51.1	18.6	Peru 2003	10.53	**1.77**
Dominican Republic 2005	47.5	24.6	Dominican Republic 2004	2.79	**8.82**
Uruguay 2005 (Urban)	18.8	4.1	Uruguay 2004 (Urban)	0.03	**136.67**
Venezuela 2005	37.1	15.9	Venezuela 2003	18.7	**0.85**
Latin America 2005	39.8	15.4	Latin America 2004	8.01	**1.92**

Note: Latin American aggregate is based on listed countries only.
Table based on World Bank Povcalnet estimates accessed on Jan. 30th, 2007 and on Table 1.61 of ECLAC (2006).

2005 Base Year

ECLAC Estimates of Proportion of Population In Poverty		
	Upper Poverty Line	Lower Poverty Line
	Poverty	Poverty
Argentina 2005 (Urban)	26	9.1
Bolivia 2003	63.9	34.7
Brazil 2005	36.3	10.6
Chile 2003	18.7	4.7
Colombia 2005	46.8	20.2
Costa Rica 2005	21.1	7
Ecuador 2005	49.3	21.1
El Salvador 2004	47.5	19
Guatemala 2002	60.2	30.9
Honduras 2003	74.8	53.9
Mexico 2005	35.5	11.7
Nicaragua 2001	69.3	42.3
Panama 2005	33	15.7
Paraguay 2005	60.5	32.1
Peru 2004	51.1	18.6
Dominican Republic 2005	47.5	24.6
Uruguay 2005 (Urban)	18.8	4.1
Venezuela 2005	37.1	15.9
Latin America 2005	39.8	15.4

World Bank Estimates of Proportion of Population In Poverty		
	2005 PPP $1.25/day	Ratio of ECLAC Lower Poverty Line Proportion $1.25/day 2005 PPP Proportion
Argentina 2003 (Urban)	4.5	**2.02**
Bolivia 2002	22.81	**1.52**
Brazil 2004	7.76	**1.37**
Chile 2003	1.1	**4.27**
Colombia 2006	16.01	**1.26**
Costa Rica 2005	2.37	**2.95**
Ecuador 1998	14.92	**1.41**
El Salvador 2005	10.97	**1.73**
Guatemala 2002	16.92	**1.83**
Honduras 2003	18.1	**2.98**
Mexico 2004	2.8	**4.18**
Nicaragua 2001	19.42	**2.18**
Panama 2006	9.48	**1.66**
Paraguay 2005	9.3	**3.45**
Peru 2005	8.18	**2.27**
Dominican Republic 2005	4.98	**4.94**
Uruguay 2005 (Urban)	0.05	**82.00**
Venezuela 2003	18.41	**0.86**
Latin America 2005	7.43	**2.07**

Note: Latin American aggregate is based on listed countries only.
Table based On World Bank Povcalnet estimates accessed on March 24th, 2009, And On Table 1.61 Of ECLAC (2006).

Appendix

Proximate Sources for Poverty Lines World Bank Describes As 'National Poverty Lines' Ostensibly Reflecting Perceptions of Poverty in Poor Countries*

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Malawi	"Note on Construction of Expenditure Aggregate and Poverty Lines for IHS2," October 2005	31.34	26.11	National Office of Statistics			
Mali	Assessment of Living Conditions, June 1993, Report # 11842 – MLI	31.96	41.89		World Bank		
Ethiopia	Ethiopia PRSP, 2002	35.22	41.04			PSRP	
Sierra Leone	Sierra Leone, Poverty Reduction Strategy Paper: A National Program For Food Security, Job Creation And good Governance (2005-207).	36.94	51.54			PRSP	
Niger	Niger: Poverty Assessment, June 1996	39.34	33.35		World Bank		
Uganda	Changes in Poverty in Uganda, 1992-1997, Centre for the Study of African Economies, Oxford University, May 1999	40.01	38.51		World Bank		
Gambia	Gambia: PRSP and Joint Assessment, June 2002	40.88	44.92			PSRP	
Rwanda	A Profile of Poverty in Rwanda, Feb 2002, Ministry of Finance & Economic Planning, National Poverty Reduction Program & Stat Dept.	41.33	30.17	National Poverty Reduction Program & Dept. of Statistics			
Guinea Bissau	Republic of Guinea Bissau: Poverty Assessment and Social Sectors Strategy Review, June 1994	45.12	45.96		World Bank		
Tanzania	Household Budget Survey 2000/01, July 2002, National Bureau of Statistics Tanzania	45.26	19.2	National Bureau of Statistics			
Tajikistan	Republic of Tajikistan, Poverty Assessment, June 2000, Report # 20285 – TJ	45.49	58.83		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Mozambique	Mozambique 2002/03 data file in STATA received from Louise Fox	45.52	29.54		World Bank, Source was World Bank Employee		
Chad	National Poverty Reduction Strategy Paper, June 2003	47.04	26.6			PRSP	
Nepal	Nepal Resilience Amidst Conflict, June 2006, Report # 34834 - NP, table 4a	54.55	26.43		World Bank		
Ghana	Ghana: Joint IDA-IMF Staff assessment of the PRSP, 3/1/2003	56.9	55.65			PRSP	
Zambia	Zambia: Poverty and vulnerability assessment: discussion draft, June 2005, Report 32573	60.4	39.69		World Bank		
Nigeria	The Evolution of Poverty and Welfare in Nigeria, 1985-92, Table A1.1, January 1997	61.49	31.38		World Bank		
Bangladesh	Poverty in Bangladesh: Building on progress, December 2002, Report # 24299-BD	64.34	31.46		World Bank		
Burkina Faso	Burkina Faso: Reducing Poverty with Sustained Equitable Growth; Poverty Assessment, June 2005	68.54	26.27		World Bank		
Congo, Rep	Enquete Congolese après des menages (ECOM 2005), Centre National de la Statistique et des Etudes Economiques, April 2006	72.13	67.99	Centre National de la Statistique et des Etudes Economiques			
Benin	Benin Poverty Reduction Strategy Paper 2003-2005	72.82	23.57			PRSP	
Cambodia	Cambodia: Halving Poverty by 2015, poverty assessment 2006	75.06	42.8		World Bank		
Yemen	Republic of Yemen: Poverty Update, vol. 1, main report; June 2002, Report # 24422	76.37	65.37		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Senegal	Senegal an Assessment of Living Conditions, Vol. 2, May 1995, Report # 12517 – SE	78.92	19.05		World Bank		
Mongolia	Mongolia Poverty Assessment, April 2006, Report # 35660 – MN	80.55	57.88		World Bank		
Vietnam	Vietnam Development Report 2004: Poverty, Report # 27130	81.18	32.52		World Bank		
India	Poverty in India: The Challenge of Uttar Pradesh, May 2002, Annex Table 1.1	84.24	24.81		World Bank		
Pakistan	Pakistan Poverty Assessment, Oct 2002, table A-2-2, per adult equiv, Report # 24296 – PAK	98.31	50.67		World Bank		
Mauritania	Poverty Reduction Strategy Paper: Action Plan 2006-2010, October 2006	99.63	68.16			PRSP	
Kyrgyz	Kyrgyz Republic Poverty Updates, August 2005, Report # 36602 - KZ,	109.85	60.81		World Bank		
Djibouti	Profil De La Pauvrete A Djibouti, December 2002	111.7	95.61				UNDP
Kenya	2003 Country Economic Memorandum for Kenya	112.8	84.71		World Bank		
Cameroon	Joint IDA-IMF Staff Assessment and PRSP, July 2003	112.96	69.62			PRSP	
Cote d'Ivoire	Document de strategie pour la reduction de la pauvrete - interimaire, January 2002	117.07	50.36			PRSP	
China	"Memo on poverty lines," National Bureau of Statistics, China, 2002	120.78	25.89	National Bureau of Statistics			
Moldova	"Living Standards and Poverty in Moldova" by Kathleen Beegle, June 2004	124.89	60.81		World Bank		
Philippines	Philippines: An Opening for Sustained Growth, Vol. II, April 1993, Report # 11061 - PH	134.17	46.02		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Lesotho	PRSP and Joint Staff Advisory notes, July 2005	135.84	49.37			PRSP	
Indonesia	Poverty Reduction in Indonesia: Constructing a New Strategy, Oct 2001	139.96	32.63		World Bank		
Morocco	Kingdom of Morocco: Poverty Update, Annex; March 2001, Report # 21506 – MOR	167.73	55.33		World Bank		
Armenia	Armenia Poverty update December 9, 2002, Report #24339-AM.	174.84	73.36		World Bank		
Georgia	Georgia Poverty and Income Distribution 1999	182.79	111.24		World Bank		
Kazakhstan	Kazakhstan: Living Standards during Transition, March 1998, Report # 17520-KZ	213.41	95.32		World Bank		
Bolivia	Poverty Assessment: Establishing the Basis for More Pro-Poor Growth, December 15, 2005, report #: 28068-BO	216.66	142.39		World Bank		
Paraguay	Paraguay Capital city poverty line from the working file of Ezequiel Molina, LAC region, World Bank. (Poverty line from capital city.)	222.27	192.14		World Bank		
Egypt	Arab Republic of Egypt poverty reduction in Egypt: diagnosis and strategy, June 2002	225.68	53.43		World Bank		
Sri Lanka	Announcement of the Official Poverty Line—Department of Census and Statistics, Jun 2004, ISSN 1391-4693	233.05	45.38	Dept. Of Census and Statistics			
Tunisia	Tunisia: Social and Structural Review 2000, Middle- East and North Africa Region, World Bank	240.63	41.17		World Bank		
Thailand	Thailand: Growth, Poverty and Income Distribution, Dec 1996, Report # 15689	243.52	57.58		World Bank		
Jordan	Jordan Poverty Assessment, Vol.1, December 2004, report # 33802	251.59	71.47		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Ukraine	Ukraine Poverty Assessment (PULSE report), 2005	254.62	109.43		World Bank		
Albania	Albania: Poverty Assessment, June 28, 2003, per cap per month	280.71	85.18		World Bank		
Ecuador	Ecuador: Poverty Assessment, April 2004	289.72	122.62		World Bank		
Azerbaijan	Azerbaijan Republic: Poverty Assessment, Vol II, The main report, June 2003	292.23	84.8		World Bank		
Peru	Peru: Opportunities for All—Poverty Assessment, Dec 2005, Report # 29895 – PE	326.61	76.1		World Bank		
Mauritius	Mauritius: Country Economic Memorandum: Sharpening the Competitive Edge, April 1995, report # 13215 – MAS	328.33	272.99		World Bank		
Colombia	Colombia: Poverty Report Vol. 1, November 2002, Table A1	334.47	199.56		World Bank		
Macedonia	FYR Macedonia: Focusing on the Poor; Vol. II, June 1999, Report # 19411 - MK	348.96	177.25		World Bank		
Belarus	Belarus: Poverty Assessment; Vol.1; Main report, Jan 04	362.04	187.73		World Bank		
Latvia	Latvia: Poverty Assessment, Vol. 1, June 2000	370.11	137.91		World Bank		
Turkey	Turkey: Joint Poverty Assessment Report, August 2005, Report # 29619 – TU	391.42	112.26		World Bank		
Bosnia & Herzegovina	Bosnia & Herzegovina: Poverty Assessment Vol. I, Main Report , November 2003	393.95	217.65		World Bank		
Romania	Romania Poverty Assessment, Vol. II, Background Paper, September 2003, Report # 26169 – RO	397.77	125.57		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Estonia	Estonia: Living Standards during the transition, June 1996, Page 10, poverty line is the minimum pension in July 1995	431.16	102.78		World Bank		
Bulgaria	Bulgaria Poverty Assessment October 2002, Report #: 24516-BUL	445.7	100.77		World Bank		
Russia	Russian Federation Reducing Poverty Through Growth and Social Policy Reform, Feb 2005, Report # 28923 – RU	455.72	132.67		World Bank		
Poland	Poverty in Poland, Vol. 1, Sept 1994, Report # 13051 – POL	465.05	203.23		World Bank		
Brazil	Measuring Poverty using household consumption, September 2006 draft, January 2008 Final Report #: 36358-BR	465.45	180.14		World Bank		
Chile	Chile urban poverty line from the working file of Ezequiel Molina, a data coordinator of LAC region at the World Bank.	487.08	119		World Bank		
Venezuela	Venezuela Poverty Study: From Generalized Subsidies to Targeted Programs, 1991	492.3	224.73		World Bank		
Uruguay	Uruguay Maintaining Social Equity in a Changing Economy, July 2001	593.71	275.71		World Bank		
Mexico	Poverty in Mexico, 2004, Report # 31115, table 1.1	630.73	192.22		World Bank		
Argentina	Crisis and Poverty 2003: A Poverty Assessment, vol. II, adult equivalent poverty line for metro Buenos Aires.	641.9	183.07		World Bank		
Hungary	Hungary Long Term Poverty, Social Protection and the Labor Market, vol. 1, April 2001, subsistence minimum for 1997	668.31	247.87		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Lao	Poverty in Lao PDR During the 1990s, May 2002, Annex 2, Table 2.7	n.a.	32.1				ADB
Algeria	Democratic and Popular Republic of Algeria: Growth, Employment and Poverty Reduction: Main Report, January 20, 1999.	n.a.	n.a.		World Bank		
Costa Rica	Costa Rica: Identifying the social needs of the poor: An update, Annex 3, May 1997	n.a.	n.a.		World Bank		
Dominican Rep	Dominican Rep: Poverty Assessment: Achieving more pro-poor growth, Oct 2006	n.a.	n.a.		World Bank		
El Salvador	El Salvador: Poverty Assessment: Strengthening Social Policy, Dec 2005	n.a.	n.a.		World Bank		
Guatemala	Guatemala: Poverty in Guatemala February 2003,	n.a.	n.a.		World Bank		
Haiti	Haiti: The Challenges of Poverty Reduction, Volume II Technical Papers, March 1998	n.a.	n.a.		World Bank		
Honduras	Honduras: Country Economic Memorandum/ Poverty Assessment Nov 1994, Annex table: C:11	n.a.	n.a.		World Bank		
Jamaica	Jamaica Survey of Living Conditions, 2002	n.a.	n.a.	Planning Institute of Jamaica			
Nicaragua	Nicaragua: Poverty Assessment; Raising Welfare and Reducing Vulnerability, Dec 2003, Box 1.1, Report # 26128 – NI	n.a.	n.a.		World Bank		
Panama	Panama Poverty Assessment, June 1999; Vol. 2, Annex 2.	n.a.	n.a.		World Bank		
Trinidad & Tobago	Trinidad and Tobago: Poverty and Under-employment in an Oil Based Economy; Oct 1995, Report # 14382-TR	n.a.	n.a.		World Bank		

Country	Source Documents	Per capita consumption expenditure per month for survey year in $ 2005 PPP	Poverty line per capita per month in $ 2005 PPP	Type of Source Cited:			
				National Government or Agency	World Bank Document	PRSP Document	Other Multi lateral Agency
Uzbekistan	Relative Food Poverty Line: Uzbekistan Living Standards Assessment; May 2003, Report # 25923 – UZ	n.a.	n.a.		World Bank		
TOTAL				**7**	**68**	**10**	**2**

* Source: Ravallion, Chen and Sangraula (2008), Table A1, and supplementary library and internet research on sources mentioned therein.