

# Measuring Global Poverty

## Toward a Pro-Poor Approach

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## Monetary Approaches

The most widely used and dominant measures of poverty are monetary. Monetary measures of poverty track either a lack of income or a lack of consumption-expenditure. While income is undoubtedly very important for most poor people, and measuring consumption-expenditure has some important policy uses, both approaches are nonetheless inadequate as stand alone measures of poverty. As has been extensively argued, monetary measures of poverty are uni-dimensional, in the sense that they either track only one area of deprivation or attempt to measure multiple dimensions of deprivation through a single indicator. Many monetary poverty lines are not adequately anchored in an underlying conception of what the stipulated level of income or consumption is intended to represent, are insensitive to differential human needs, and are insensitive to differential abilities to turn income or consumption into achievements.

### 4.1 Income and consumption-expenditure

Categorizing a single family of poverty measures as ‘monetary’ risks conflating two distinct conceptions of poverty. All monetary conceptions of poverty attempt to quantify, in the form of a monetary value, both the poverty line and the ill-being or well-being of the people who are to be measured against that line. However, some measures are based on income, while others are based on consumption-expenditure.

Income poverty is the deprivation or lack of received formal currency below some established minimum threshold. Income poverty is the most common measure of poverty for national governments in developed countries. Many countries use relative income lines, identifying people as poor by reference to the distribution of income in a country. Relative poverty lines usually identify as poor either a) those households

or individuals who fall below some percentage of the median income in a country (for example, below 50% of median income) or b) those families who fall into the bottom level of income earners (for example, the bottom quintile of income earners). Other countries, most notably the United States, use poverty lines that are absolute, measured against an independent inflation-adjusted standard rather than against other members of society.

Consumption-expenditure poverty is the deprivation or lack of consumption below some minimum threshold. Because consumed goods and services, particularly in poor countries, are not all acquired through market mechanisms, consumption-expenditure is measured by combining the value of purchased goods and services with the imputed value of goods and services that are consumed but not purchased. For example, a poor family may have one member working on a neighbor's farm, for which he receives cash, while another raises small crops and livestock at home. The consumption from both activities is relevant to assessing the deprivation of this household. Therefore, consumption-expenditure approaches impute prices for goods not acquired through market mechanisms using shadow prices. Data on consumption-expenditure is frequently collected through household expenditure surveys, but is also one component of multitopic household surveys such as the Living Standards Measurement Survey. There is no single standardized way to calculate consumption-expenditure.<sup>1</sup>

## 4.2 Strengths of the monetary approach

In the remaining sections I will heavily criticize monetary approaches to poverty measurement. They are not, however, entirely without merit. In fact, improvements to existing income and consumption-expenditure measures would be very valuable for anti-poverty work.

First, data is widely available on income or consumption-expenditure, and methods for collecting information on consumption-expenditure are increasingly sophisticated. Most countries have a household expenditure survey that has been completed since the turn of the century.<sup>2</sup> There is institutional inertia in data collection, and though many states previously collected information on income or consumption, the establishment of the International Poverty Line in 1990 greatly increased demand for income/consumption statistics. Given that those are the data we have, there is an understandable desire to use them.

Second, monetary indicators are quickly responsive to changes in a person's situation. They can very usefully reflect short-term changes in

individual deprivation that may not register as quickly in other dimensions. For example, following an external shock like a debt crisis, it may be comparatively easy to see how the resultant financial turmoil changes an individual's consumption levels, but it may take much longer to see this reflected in an individual's health or educational achievements.

Similarly, because monetary measures of poverty are responsive to short-term changes, they can be used to predict the impact on individuals of future events. For example, the Center for Budget Policies and Priorities predicted that the number of poor people in the US would increase by 7–10 million if the unemployment rate reached 9 percent in 2009 (Parrot 2008). Globally, the United Nations estimated that the financial crisis would cause between 73 million and 103 million people to fall below the International Poverty Line (UN-DESA 2009). Monetary measures are also used to model the effect of an aggressive stimulus package used to counteract a financial crisis.

Third, monetary measures are easy to explain and understand. This makes them readily usable for advocates, the media, and even some policy makers. When an organization is attempting to fundraise or influence policy makers and it notes that some very large number (usually in the billions) of people live on less than 1 or 2 dollars per day, this is frequently assumed to be sufficiently compelling evidence to justify the desired request (whether it is a fundraising appeal or support for a given policy). It is much more useful as an advocacy tool than would be reference to some poorly understood composite index (Srinivasan 2010, p. 144).

Fourth, monetary measures collect information about a variety of dimensions in a person's life into a single figure, which provides cardinal information on deprivation. This allows for clear calculations of the distribution of deprivation that reflect how far one has fallen below some minimum standard.

### **4.3 Weakness of the income approach**

Measuring income, that is, the formal currency one receives for labor or through non-labor activities (such as remittances or cash transfers) is an inadequate measure of deprivation, particularly in the developing world where much valuable consumption does not happen through the marketplace. A majority of the surveys used to populate the World Bank's International Poverty Line are based on consumption-expenditure (Chen and Ravallion 2008, p. 15), and it is widely recognized that consumption-expenditure methods are preferred to income in the

developing world (Deaton and Grosh 2000). It is nonetheless worth reviewing here the deep problems with income poverty measurement.

Briefly, income poverty measures suffer from the following flaws:

- 1 They frequently fail to take account of the value of publicly provided goods and services. If two individuals have the same income, but one has access to guaranteed health care and education while the other has to pay for school and health care out of pocket, they cannot plausibly be understood as equally poor.
- 2 They are insensitive to different needs of individuals. Some individuals need much more income than others. For example, adults need more income to cover the nutritional and clothing needs than children.
- 3 They are insensitive to the differential ability of individuals to convert income into achievements. Different people have different personal conversion factors – that is, one person might be able to spend USD 3.00 and meet her basic needs while another must spend USD 5.00. Conversion factors can be based on both internal and external factors. For example, if two people both need to go to school, but one has to pay large transportation costs and the other can walk, her conversion factor of income into education will be lower.
- 4 They are frequently insensitive to the context-specific costs people face. Most income poverty lines are national, and therefore presuppose (for the purposes of evaluating deprivation) that prices are uniform within the country. Some countries have both an urban and rural poverty line, because different prices are faced in these settings. But even within any given urban or rural setting, individuals will face incredibly variable prices for the goods and services they need depending on where they are. This can be seen quite easily by considering the United States. Consider a hypothetical urban poverty line. This would assume that some level of income is adequate to meet basic needs equally in Detroit and New York. But the prices faced in New York, especially rent, will be far greater than in Detroit. This context insensitivity masks different levels of deprivation.
- 5 They frequently take the household as the unit of analysis, ignoring the intra-household distribution of income.<sup>3</sup>
- 6 They are inadequate for capturing the deprivations relevant to children. Child poverty, when using income lines, is frequently assessed on the basis of income level of the household in which they live. This is clearly implausible, as two children from households of the same income may have very different opportunities, in terms

of educational access (both at home and in schools), health care, opportunity for growth and development, and so on.

- 7 They are incapable of taking account of important dimensions of deprivation. Incomes cannot capture that which cannot easily be purchased – such as freedom from violence and leisure time.
- 8 Importantly, income measures ignore valuable sources of production and consumption not exchanged through the market, especially household labor and small-scale production.

Many of these flaws are not inherent to the income-based approach, but are rather features of existing flawed income measures. For example, income-based measures can in principle take account of some publicly provided goods. Similarly, income measures could, to some extent, take account of the different needs of differently situated individuals.

#### **4.4 The World Bank's International Poverty Line**

Most poor countries, whenever possible, use consumption-expenditure lines rather than income to measure poverty because most poor people consume many goods that they do not acquire through income. Consumption-expenditure data are the focus of a majority of the surveys used to populate the International Poverty Line (IPL). In the remainder of the chapter, I will focus on the IPL as an example of one effort at global poverty measurement conducted in monetary terms that strives to use consumption-expenditure as the basis for measuring deprivation. My comments here will address both the weaknesses of using only consumption-expenditure to measure poverty, and the challenges of making monetary comparisons across contexts meaningful for poor people.

Remarkably, there was no regular method of counting the number of poor people in the world until 1990. Prior to this time, the number of poor people was not tracked globally, though countries were categorized as poor or not on the basis of per-capita income. Starting in 1990, corresponding with the debut of the now landmark World Development Report, the World Bank began calculating the (IPL) on a regular basis.

The IPL is intended to serve as a global standard of extreme poverty. It is maintained in US dollars in a specified base year (currently USD 1.25 2005 Purchasing Power Parity (PPP)), and household consumption figures are converted to this currency for purposes of comparison across context. The IPL is based on an average of the national poverty lines of a set of representative poor countries. The IPL has a very specific

purpose – tracking global poverty – and is the primary indicator used for measuring the first and most prominent Millennium Development Goal, to halve global poverty.<sup>4</sup>

### **Measuring consumption-expenditure**

The value of the goods and services that individuals consume or fail to consume is undoubtedly one important part of the overall picture of deprivation, and in poor countries it is a far better representation of individual living standards than income, which can be highly variable and not representative of personal welfare. As Deaton and Grosh argue, ‘although there are many non-economic components of living standards, such as health, access to education, and political freedom, consumption is the best measure of the economic component of living standards’ (2000, p. 7).

Consumption-expenditure is generally measured at the household level, but in principle can be measured for every member of the household.<sup>5</sup> For some goods shared among household members, such as a roof or a refrigerator, attributing consumption to any single member is not possible.

To measure consumption, researchers must track the consumption of all goods and services over a given recall period. Researchers may ask households to keep a consumption diary, or visit the household on a periodic basis and ask detailed questions about consumption. Measuring consumption-expenditure requires a) tracking hundreds of goods that a household will consume over a given period, b) recording prices for goods consumed through market exchanges (either prices actually paid or a nationally representative price), and imputing values for goods consumed through non-market exchanges (such as self-provision through crops grown at home or public provision from neighbors, NGOs, or the state) and c) recording the number, age, and gender of household members (see Deaton and Grosh 2000).

### **Setting the IPL**

The first step in setting the International Poverty Line is establishing where the line should be drawn. The World Bank initially used what it claimed was a representative set of ten national poverty lines in poor countries. In the most recent update, 15 countries were used (Chen and Ravallion 2008, p. 10). The World Bank deliberately makes a conservative choice in setting these lines, selecting the small set of the poorest countries.

## **Converting currencies**

To convert national poverty lines (for setting the IPL) and national monetary data (for populating the IPL) to internationally comparable prices (US dollars from a given base year), the World Bank must convert between currencies and then into a base year. For purposes of comparing prices across contexts, one must both use consumer price indices to adjust for inflation within countries, and use purchasing power conversion to convert one currency to another.<sup>6</sup>

Converting one currency into another requires some conversion factor. What should ground this conversion? One could use current market exchange rates. But this would not work, as the value of US dollars that can be purchased on international markets is not reflective of the amount of goods that can be purchased in the country. We are interested in the goods that a specified amount of currency can purchase – its purchasing power. In order to establish purchasing power parity (PPP), we need conversion rates that will reflect an equivalence of purchasing power for two currencies. In other words, we want to know how much of currency A in country A can purchase exactly the same amount of goods that can be purchased by a unit of currency B in country B.

The World Bank uses the International Comparison Program to create PPP conversion rates between currencies, so as to convert the International Poverty Line into local currencies for a given base year. Consumption-expenditure poverty within the country is thus assessed against the PPP-adjusted IPL. There are two issues that arise for the purposes of comparing prices across currencies, which distinctly arise for the IPL (both in the setting of the line and in converting measured consumption-expenditure to a base currency and year): how should consumer prices be weighted, and which prices should be used? These questions will be discussed in the next section.

## **Updating the IPL**

Because the International Poverty Line is set using the national poverty lines of poor countries and purchasing power parity conversions provided by the International Comparison Program (ICP), as new information comes available from the ICP and regarding national poverty lines, the IPL has been updated. The IPL (in US dollars) has been: USD 1.02 1985 PPP, USD 1.00 PPP 1985, USD 1.08 1993 PPP, and currently stands at USD 1.25 PPP 2005.<sup>7</sup>



## 4.5 Critique 1: technical and conceptual issues

The IPL is a highly flawed measure of global poverty. I will structure my critique in two parts. First, I will review several technical and conceptual issues that have been widely discussed in the existing literature that seriously undermine the credibility of the IPL. Second, I will provide eight criticisms of the IPL that apply to consumption-expenditure measures more generally.

### **Anchoring the poverty line**

There is no underlying conception of the IPL. It is simply intended as an average of poor countries' national poverty lines. Failure to anchor the poverty line in any meaningful conception of what it is to be poor (discussed in much more depth below), makes the conception of extreme poverty that is supposed to be reflected in the USD 1.25 2005 PPP line vacuous.<sup>8, 9</sup> Various attempts to ground an international poverty line in some clear conceptual and normative understanding have provided significantly different results from the IPL.<sup>10</sup>

### **The use of PPPs and the ICP**

The conversion of prices both within and between countries for purposes of calculating the IPL is deeply problematic. In principle, this exercise should be sensitive to the weights of goods in poor people's consumption baskets and the prices they face, and insensitive to a) consumption that is not relevant for poor people b) the selected base year for currency conversion, and c) the consumption of goods in third countries not related to the two countries used for currency conversion.

In practice, PPPs are currently sensitive to irrelevant commodities (and thus insufficiently sensitive to the most important commodities), insensitive to the unique prices faced by the poor, and sensitive to the selection of base year, as well as to the price of goods in third party countries.

This is because the International Comparison Program, developed for the System of National Accounts for comparison of gross consumption between countries, does not currently collect information only on those goods and services consumed by poor people. Rather it collects information on all consumed goods and services. This makes both the weighting of goods in conversion indices and the prices included in those indices different from the bundle of goods consumed by poor people. But poor people do not allocate their expenditure in the same way as people in the rest of the economy, and they may not pay the

same prices. This problem is also found in the price deflation within a given currency through the consumer price index, which is sensitive to the price and weights of all goods consumed in the economy, rather than those faced by poor people.

Furthermore, the purchasing power parity conversions are sensitive to the consumption habits in third party countries. That is, when converting between Peruvian soles to US dollars, the calculation of the conversion factor is affected by consumption in Indian rupiah. The PPP conversion is also highly sensitive to the base year that is selected for international comparison – currently 2005. Changing the selected base year varies the estimation of global poverty figures by as much as 30%.<sup>11</sup>

### PPPPs

One possibility for correcting for errors in price conversions both within (CPI) and across (PPP) countries would be to take account of the purchasing power parity of the poor, or so-called PPPPs. The calculation of purchasing power parities for poor people would in principle need to take account of two factors. First, the *weighting* of different goods and services within the bundle that is consumed by the poor. If rice is 50% of the consumption basket for a poor person, a consumer price index that converts her expenditure should give rice due weight in her inflation-adjusted consumption-expenditure calculation. Second, such conversions should take account of the *prices* faced by poor people.<sup>12</sup> To make PPPP comparisons morally plausible, resolution of issues of price comparison and weighting must be grounded in a normative conception of what a poor person would need to meet her basic needs in her particular context. That is, PPPP conversions should not simply be based on how poor people do consume, but what they would need to consume to be non-poor on a morally plausible conception of poverty. The World Bank (2011) and International Comparison Program are currently undertaking a project to investigate PPPPs – hopefully this exercise will seek to resolve some of these technical issues within an explicitly normative framework.

It is not readily apparent what the global effect would be of taking account of the prices faced by the poor. Some have found that the prices faced by poor people are substantially higher than others (Rao 2000, Biru 1999). Intuitively, poor people may face higher prices because they cannot purchase in bulk, will likely have less information and access to markets to ensure the best price, and will not always have deployable income available when inexpensive goods could be purchased. Other

studies have found that poor people will face lower prices than their peers (Kakwani and Son 2006, ADB 2008). This is also intuitively plausible, as poor men and women may purchase goods that are similar but of lower quality or sold from less expensive venues, and when faced with scarcer resources might be better bargain hunters than their compatriots. In all likelihood some poor people face higher prices than their non-poor compatriots and others do not. Regardless, monetary poverty should be evaluated at the prices poor people face in the context where they consume, not the prices that their better-off compatriots face.

It is worth noting here that the overwhelming focus on determining appropriate currency conversions that take account of purchasing power unintentionally overlooks the other problem with prices and weighting – namely, that the *prices poor people face and the goods and services they consume will vary significantly within a country*. A single poverty line, or, in some cases an urban and rural poverty line, patently fails to reflect the very different cost of living that will exist in different locations in a single country.

### Updating the poverty line

Frequent revisions to the IPL have led to highly variable estimates of the extent, depth, and distribution of global poverty. The latest revision (in 2008) placed the global poverty line at USD 1.25 PPP 2005. This revision had the impact of adding nearly half a billion people to the global poverty counts. In 2011 a new round of the ICP will be completed, and a revision of the Bank's line can be expected which may deploy newly derived PPPPs.

Thomas Pogge notes that the revisions to the International Poverty Line have resulted in considerably lower standards for evaluating poverty. Converting the historical IPLs (USD 1.02 PPP 1985, USD 1.00 PPP 1985, USD 1.08 PPP 1993, USD 1.25 PPP 2005) into 2005 US dollars using the US consumer price index, Pogge finds that the International Poverty Line has been consistently reduced, from an initial figure of USD 1.85 to USD 1.82 to USD 1.46 and finally to the current USD 1.25 in 2005 US dollars (Pogge 2010a, pp. 66–67). Furthermore, these changes have not been uniform. For example, the shift from USD 1.02 PPP 2005 to USD 1.08 PPP 1993 resulted in 77 national poverty lines being lower, with 15 national lines being higher (Pogge and Reddy 2010, pp. 45–48).

Worse yet, not only is the distribution and extent of global poverty highly reliant on the level at which the IPL is set but so is the trend. The Bank currently provides information on the various poverty lines, including USD 1.00 PPP 2005, USD 1.25 PPP 2005, USD 2.00 PPP 2005,

and USD 2.50 PPP 2005. Using the World Bank's own data, Pogge calculates that between 1990 and 2005, there has been a 24% reduction in the number of poor people according to the IPL of USD 1.25 2005 PPP. However, using the figure of USD 2.50 PPP 2005, there has been a 0% reduction in the number of poor people. This has the effect of making the world look 40% ahead of its target in MDG 1 using the Bank's IPL, but the world would be 103% behind if the higher line of USD 2.50 PPP 2005 were used (Pogge 2010a, p. 64).

Of course, the World Bank can reply, following Keynes, that when the facts change, they change their mind.<sup>13</sup> The new revisions are simply a product of new and better data. And the differing trends of the USD 1.25 PPP 2005 and USD 2.50 PPP 2005 lines are simply reflective of how poverty reduction has progressed in the world. But it raises significant problems of legitimacy and credibility that both revisions of the IPL and the current calculations of different income lines provide wildly different portrayals of the extent, depth, trend, and distribution of poverty. A 50% increase in the number of poor people following the last resetting of the IPL is no insignificant recalculation. The 'facts' that the Bank takes as relevant for global poverty measurement will change again in the future, especially following the 2011 round of the International Comparison Program. Should we anticipate that current poverty estimates may again be off by 50%, and current distributions quite distorted as well? If so, what could be the rationale for taking them seriously now?

The technical and conceptual challenges listed here are sufficient to disregard the current method of calculating the IPL as meaningless for calculating the extent, trend, depth, and distribution of global poverty.

#### **4.6 Critique II: further charges against the IPL**

Below I extend the critique of the IPL beyond the methods specific to its current calculation. This critique will then apply, in most cases, to consumption-expenditure lines in general.

##### **Method of justification**

The World Bank claims that they do not want to engage in a debate about where the poverty line should be set, since such an effort will inevitably involve some degree of arbitrariness and it is better that the World Bank not interfere in what is essentially a political debate. As mentioned above, the IPL is thus calculated on the basis of a small set of representative poor countries. Therefore, the IPL is supposed to be what

poverty means in poor countries. This is achieved, according to the World Bank, by averaging the national poverty lines of a representative set of poor countries (Chen and Ravallion 2010, p. 1558)

This method of justification is deeply flawed, and if used to answer other serious public policy questions would be disregarded as highly implausible. First, there is no single underlying conception of poverty that is common to each of the national poverty lines that are averaged. Chen and Ravallion (2008, pp. 8–9) agree that there are significant differences between both the way in which national poverty lines are set and the way in which consumption and income surveys are carried out in poor countries. Since there is no common conception that underlies the representative national poverty lines, there is no conception that can be said to ground the International Poverty Line. In other words, if we ask the question, ‘in virtue of what is this particular household categorized as poor according to the IPL?’ we cannot answer ‘in virtue of lacking enough food’ or ‘in virtue of consuming below an adequate level to meet the following specified needs’, but rather, ‘in virtue of consuming goods and services below an average line’. When asked what it is that the ‘average line’ is supposed to represent, there is nothing much that can be said of its referent except to repeat that it is an average of some national poverty lines.

To make this point very clear, suppose that one wanted to establish a system of counting carbon emissions, and wanted to set a maximum threshold above which per capita carbon emissions would be deemed excessive and thus subject a country to sanctions. And suppose that national accounting systems of carbon emissions varied significantly from country to country. Then suppose the International Carbon Line, over which countries were determined to be excessive emitters, was based on the average of a representative set of national carbon lines from high per capita emitters. Clearly, this procedure could not be defended as producing a justifiable International Carbon Line because there is no underlying conception justifying the ICL. Furthermore, if we asked what makes it such that a country has exceeded the ICL, we could only respond that they have exceeded an average line.

Perhaps the World Bank could respond that the exercise of averaging national poverty lines will cancel out any differences inherent in the conception underlying each particular national line. In order to sustain this defense, the World Bank would then need to show that the flaws in each of the underlying poverty lines were different in nature, and that the resulting average captures some plausible underlying conception. But no such justification has ever been provided.

Second, there is reason to believe that many countries have deeply misguided poverty lines. For example, the United States, with far more resources available for data collection and analysis, uses a deeply flawed national poverty line (Greenberg 2009). The fact that a number of poor countries, including India, have recently revised their national poverty lines, should cast doubt on the Bank's claim that the IPL is reflective of what poverty means in poor countries.<sup>14</sup> The problem is not just that the IPL is based on very different poverty lines, but that these lines themselves, in so far as they do share certain features in common, share very problematic features in common. In particular, most national poverty lines use the household as the unit of analysis, obscuring the intra-household distribution of deprivation, and are insensitive to differential needs and prices within a country.<sup>15</sup>

Third, it is not at all clear that using national poverty lines reflects what poverty means in poor countries *to poor people*. It may be what it means to the governments of poor countries, but this is not the same thing as what it means to residents of poor countries. The World Bank's *Voices of the Poor* (Narayan et al. 2000) study amply demonstrated that poor men and women do not conceive of poverty in the narrow terms reflected by national poverty lines.

Fourth, this method of justification silences what should be a very public discussion about the values that do and should inform poverty measurement. The World Bank wants to be neutral in this discussion, and this impulse is understandable. *But their supposed neutrality is misleading, as the IPL is a very significant driver of how data is collected, presented, and disseminated, and thus how the broader public understands and addresses global poverty.* Quite interestingly, researchers at the World Bank have suggested that there is such a role for the process of public reason in determining how deprivations should be assessed (Ravallion 2010d, p. 15). It follows that such processes should also apply to the IPL.

### Household as unit of analysis

One could easily be misled by the reporting that suggests that the IPL tracks the number of poor individuals. For example, following the latest round of International Comparison Program price revisions, when the International Poverty Line was shifted to USD 1.25 PPP 2005, it was sobering news to learn that 'the number of poor was 1.4 billion' (*The Economist* 2008). This implies that the World Bank measures poverty at the individual level, and then aggregates the number of individuals. But this is not true.

The household is the unit of analysis for the IPL – no information on deprivation at the individual level can be gleaned from the World Bank's poverty statistics. Consumption is recorded for all members of the household, and values are imputed for the goods and services consumed. Information on the members of the household, including age and gender, is also gathered, but consumption per household member is not.<sup>16</sup>

There is much direct evidence of unequal intra-household distribution of goods (Haddad et al. 1997, among others). I do not reject that being part of a poor household will frequently affect the poverty of individual members, nor that coming from a non-poor household significantly decreases the likelihood of an individual being poor. But it is clearly not the case that being in a poor household is the essential characteristic of individual poverty. People within households can experience very different levels of deprivation, as well as different poverty dynamics (Gunther and Klasen 2009, pp. 93–95).

### **Different needs**

The IPL and other consumption-expenditure poverty lines do not take account of different needs of individuals. This is a problem inherent to all approaches to poverty measurement that use a single standard of evaluation.

Consider the case of disability. People with disabilities may need greater resources, and greater consumption, to reach the same level of functioning as otherwise similarly situated individuals. For example, a person who is paralyzed will need to spend significant resources to make herself mobile (such as with a wheelchair) and to make her home livable. Some disabled people will have far greater health care needs. But the level of consumption an individual must reach to be categorized by the IPL as not-poor is insensitive to her needs. One might object that these are non-standard cases which don't present significant problems for the consumption-expenditure approach. But people with disabilities represent nearly 10 percent of the global population, and an estimated 20 percent of poor people, and most of them are located in poor countries.<sup>17</sup>

In principle, monetary poverty measurement could take account of the different needs of different individuals. A poverty line could be set on the basis of a person's distinct needs, given their social environment and personal makeup. Each person would have a certain amount of consumption that she would need to have in a variety of dimensions to meet those needs. When the imputed value of their consumption

(or, alternatively, their income) passes their uniquely specified threshold, they would no longer be poor. In practice, of course, it is impractical for each of us to have our own poverty lines.<sup>18</sup>

### Different achievements

A closely related but distinct point is that consumption-based poverty measurement ignores the *actual achievements* that an individual reaches through her consumption. Two people may consume the exact same value of goods, but end up having very different achievements as a result. Consider a more familiar case of the working poor. Suppose that a person operates a rickshaw and it is his primary, if not sole, source of income – daily, back-breaking labor, walking through polluted streets, carrying several people at a time, on unstable and unsafe roads. Over the course of a day, he needs more calories than his counterpart who works in a less labor-intensive job. Over the course of a year, he needs to allocate more resources to a number of items, including clothing and footwear (which will wear out more quickly over the course of a year) and potentially health care. His poverty cannot be judged as equal to a peer who works in less arduous circumstances simply because he consumes the same amount. Much of his consumption gets ‘used up’ by his work in a way that his peer’s does not.

One might think that adjustments to the procedure for imputing values for goods and services consumed could fix this problem. For example, although necessary health care is important, it should not count as part of the person’s consumption-expenditure. But it is damned if you do, damned if you don’t. Failure to impute values for goods and services consumed can be equally misleading. If two individuals eat the same amount of food, but one is receiving regular education and free health care at a local clinic while the other receives no education and no health care, it is quite implausible to say that they are consuming at the same level, and thus that they are equally deprived.

The only way out of the dilemma is to measure achievements in addition to consumption, in at least some dimensions, rather than solely consumption-expenditure or income. If poverty measures focus on whether and to what extent a person gets educated, we can avoid the messy business of trying to impute values for the educational services she receives into an overall consumption-expenditure measure. The insensitivity of the IPL and other consumption-expenditure approaches to individual achievement requires, at a minimum, that monetary approaches to poverty measurement be complemented by other measurements, if not replaced.



## Gender

The gender neutrality of the IPL is itself largely reflected in the last three critiques. Gender influences the needs of different individuals, their ability to convert consumed resources into actual achievements, and their share of consumption within a household. For example, menstruating women may have greater need for sanitation than their male counterparts. Pregnant and breast-feeding mothers have greater caloric needs than other women. Men working in demanding physical labor such as mining may have much higher caloric needs than females employed in agriculture (though that can be equally demanding). By taking the unit of analysis as the household and attributing a single consumption level to all members, the IPL (and other consumption-expenditure approaches) ignores intra-household inequalities, which are frequently gendered. Importantly, the IPL and other consumption-expenditure measures are also insensitive to the amount of labor that one must produce to reach a needed level of consumption. For any given level of household consumption, if one member must do much more work than others to reach an equivalent level of consumption, she can plausibly be understood as more deprived than her peers.<sup>19</sup> Given the gendered division of labor within the home, this failure to account for contributed labor is frequently to the disadvantage of poor women.

## Exclusion of assets

One common criticism of income and consumption measures is that they ignore important dimensions of deprivation (more on this later). But it is also important to recognize that, within the single dimension of consumption, such measures can fail to capture either asset accumulation or asset depletion. If an individual must sell her land or borrow heavily or pledge her labor to maintain a given level of consumption, she is properly considered poorer than someone who maintains the same level of consumption without depleting her assets.<sup>20</sup>

## Missing dimensions and the usefulness of measurement

The most obvious critique of income and consumption-based measures of poverty is that they are uni-dimensional. Both income and consumption-expenditure can be read as multidimensional in the sense that they are intended to track an individual's ability to avoid deprivation in multiple dimensions. Yet both flatten measurements of other deprivations by converting them to a single monetary figure, reducing their meaningfulness and usefulness. The lack of education or basic sanitation or drinking water is not well captured in a single price, particularly when

that price is then bundled with a large set of other prices to represent a single overall figure of consumption.

The most telling critique of the IPL, and similar consumption-expenditure approaches, is that they are not useful for poor people. From a policy making perspective, consumption-expenditure, because it is reported as a single price, does not adequately inform on which goods and services poor people are lacking. Because consumption-expenditure provides little information on the content of deprivation, it cannot provide information on policy responses that will appropriately target the content of the deprivations.

Imagine you are the Minister for Social Development and a new nationally representative survey comes in. It provides information on consumption-expenditure, perhaps broken down by decile and administrative district. You are now capable of assessing the current level of deprivation in your country in one particular way that allows you to make one kind of interpersonal comparison. Surely you would have more and more useful information if that survey also provided data on housing, education, health care, basic sanitation, and so on, measured in units appropriate to each dimension, rather than forcing all that information into a single price.

Now imagine you are a poor person (or an ally or advocate for her) and you want to track your (or her) own deprivations in a way that allows you to both record progress over time and advocate on your (or her) behalf. Making claims to institutional actors around low consumption provides very little guidance on what one can demand, or what needs to change in order to improve one's circumstances. But if one can point to an absence of drinking water or electricity, she can make actionable demands of others, primarily but not solely the state, to address these deprivations.

## 4.7 Conclusion

Despite the substantial flaws in both income and consumption-expenditure approaches, there can be no doubt that both income and consumption are critical components of the standard of living, though clearly *only one* component. It is thus a mistake to elevate the methodologically flawed International Poverty Line to the status of being the sole or primary way of assessing progress in global poverty reduction. Consumption-expenditure approaches must always be complemented by multidimensional measures of deprivation that can provide information on salient deprivations. Improved measurement of consumption

and income poverty should be anchored in a plausible conception of the basket of goods and services one needs to meet certain basic needs and be sensitive to the prices and costs poor people face in their particular geographic and social locations. Price comparisons between context and over time will ideally be insensitive to goods and services that are irrelevant for poor people while taking account of the prices that poor men and women face, rather than the average consumer.