Since 1990, the World Bank and the United Nations have tracked global poverty trends using a common international poverty line – the so-called “USD 1.25 per day” line. This indicator has been helpful for comparing global poverty over time and for monitoring progress against key development targets such as the Millennium Development Goals. However, it appears to be reaching the limits of its usefulness and relevance. This is partly because of the increasing number of poor people in middle-income countries – where per capita consumption and national poverty lines are substantially above USD 1.25 per day. Other considerations also raise questions as to the appropriateness of this measure to reflect levels and trends in world poverty: the multiple dimensions of poverty, the disconnect between national and international poverty lines, comparability over time, the need to measure not only absolute, but also relative poverty, etc. As the world works towards a new set of international goals it will be critical to address and resolve these issues. This chapter supports a new approach for measuring global poverty that takes these weaknesses into account: an internationally co-ordinated national poverty measurement.
The world can declare victory for having reached the first Millennium Development Goal (MDG) target of halving the share of the population suffering from extreme income poverty (living on under USD 1.25 per day; Chen and Ravallion, 2012; World Bank, 2013). Between 1990 and 2010, the incidence of poverty fell from 43.1% to 20.6%, with five years to spare before the MDG target date of 2015.

Of course, there are at least five reasons for being sceptical about this result:

1. Reaching the MDG target at the global level has depended mainly on the overachievement of some rapidly growing and populous Asian economies – most notably the People’s Republic of China, but also Bangladesh, Indonesia, Thailand and Viet Nam. Yet if one looks at the MDGs as country-specific goals, there are many countries that are still not on track to reach the target (or for which data are missing); poor performance is particularly evident in Africa and Oceania (UN, 2012).

2. Halving the share of people in extreme poverty is hardly the end of global poverty. In fact, as has been argued by Pogge (2008), among others, the target of halving the incidence of poverty (MDG 1a) was modest compared to the overarching MDG 1 goal of “eradicating extreme poverty and hunger”, or to the objective expressed in the Millennium Declaration of halving the number of poor people by 2015 (Chapter 12). Because of intervening population growth, the reduction in the actual number of poor people globally has only been from about 1.9 billion in 1990 to about 1.2 billion in 2010 (Chen and Ravallion, 2012; World Bank, 2013). In Africa, it is substantially higher than in 1990 and the number of poor there will certainly not be halved by 2015; it is also unclear whether the number of poor will be halved globally by 2015.

3. Poverty is now widely accepted to be a “multidimensional” phenomenon (Chapter 3). In other words, income is only an imperfect proxy for the ability of people to achieve minimal levels of well-being in multiple realms, such as education and health (e.g. Klasen, 2000). While concrete proposals now exist for how to measure this so-called multidimensional poverty across the developing world (Chapter 3), data gaps limit a similar assessment of trends in this indicator over time (see also Chapter 4). Thus, we do not know whether progress to eliminate poverty in this broader sense has been faster or slower than progress on income poverty.

4. There is substantial debate around uncertainties and problems associated with the way extreme income poverty is currently measured, using a single international poverty line expressed in USD and adjusted for purchasing power parity (PPP; see Box 2.1) (e.g. Deaton, 2010; Klasen, 2013).

5. The appropriateness of a USD 1.25 per day cut-off for most people in developing countries is also increasingly being questioned, particularly for the rapidly rising share of the extreme poor living in middle-income countries (Chapter 1).
In this chapter I will focus on the last two issues to highlight the current state of flux in international poverty measurement. As we move forward on international poverty measurement – and towards a new set of international goals – it will be crucial to resolve these issues. I present some options for a possible way forward.

**Immense uncertainties surround how we measure global poverty**

The international poverty line was first developed by the World Bank for its 1990 World Development Report on poverty. Global poverty measurement using this line is based on a four-step procedure:

1. National poverty lines of poor countries (where such lines exist) are translated into PPP-adjusted dollars (Box 2.1).
2. The poverty lines of the poorest countries are then averaged to establish the international poverty line (Chen and Ravallion, 2010). This is based on the empirical finding that below a certain level of per capita consumption, poverty lines are rather similar.
3. The international poverty line is translated back into national currencies using PPP exchange rates (Box 2.1).
4. Each of these national poverty lines is then adjusted according to national inflation rates in the country over time. Household incomes for a given year are then compared with the national poverty line to calculate the poverty rate for that year.

While using an internationally comparable line to calculate poverty has allowed us to assess global poverty for the first time, the approach has two significant drawbacks.

First, the differences among developing countries mean that the international poverty line often has little correspondence with individual national poverty lines, even for countries whose national poverty line was used to create the international line (Dotter, 2013). For example, Tanzania’s and Tajikistan’s poverty line were both used to create the international line, but Tajikistan’s poverty line is more than three times higher than...
Tanzania’s in PPP dollars (USD 1.96 in Tajikistan versus USD 0.64 in Tanzania). This is despite the fact that both have roughly the same per capita consumption and therefore, according to the logic of the international poverty line, should have about the same poverty line. Based on the international poverty line of USD 1.25 a day, however, poverty in Tanzania is 40 percentage points higher than it is on that country’s national poverty line; conversely, in Tajikistan poverty is about 40 percentage points lower when using the international poverty line rather than the national one. This limits the legitimacy of the international line as a tool to monitor and analyse poverty in individual countries; these countries often prefer, instead, to use their own national income poverty lines, which typically bear little relation to the international poverty line.

A second problem relates to the updating of the international poverty line and the associated PPP comparisons over time (Klasen, 2013). By way of brief explanation, in order to make comparisons that reflect differences in purchasing power across countries, the UN (and more recently, the World Bank) has co-ordinated a global process of international price comparison to generate “PPP-adjusted exchange rates” (Box 2.1). The rounds relevant for international poverty measurement took place in 1985, 1993 and 2005. With each new PPP round, the international poverty line has been updated (from USD 1.02 in 1985 prices to USD 1.08 in 1993 prices, which was used for the first MDG target, to USD 1.25 in 2005 prices). The most recent update incorporated changes to the country sample of national poverty lines used to estimate the international poverty line, as well as to the PPP rates.

As has been noted by many (e.g. Chen and Ravallion, 2010; Klasen, 2013; Deaton, 2010), this update led to a substantial upward revision of the number and share of poor people in the developing world – from about 29% in 1990 using the USD 1.08 line to 41% that same year using the USD 1.25 line. The effect on measured trends in poverty reduction has been small, but there remain huge discrepancies in the levels of poverty in the world, as well as in its regional distribution. For MDG 1a, this may have mattered less at the time it was formulated since the target was to halve world poverty; this means that the focus was more on trends and less on levels. The international discussion has now moved on to focus on eradicating global extreme poverty using the USD 1.25 per day indicator (Chapter 1), as advocated by the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda (HLP, 2013 and Chapter 11). To reach this new goal, we must be certain about levels of poverty. Drastic revisions in the methods for calculating levels of poverty, such as those associated with the change to the 2005 PPPs, will seriously undermine the whole exercise.

It is also not obviously clear which round of adjustments has produced the “best” poverty line or PPP rate. While there are good arguments to believe that the 2005 PPP process was superior to the 1993 process in many respects, it had its own biases (see Ward, 2009; Klasen, 2013). Moreover, even if the 2005 measure may be the best way to generate comparable prices and poverty lines for 2005, it is unclear whether it generates comparable prices and poverty lines for 1990, let alone for 1981 – or for the future. We are now awaiting the results of the 2011 international price comparisons, which will generate a new international poverty line in 2011 PPPs; this will also lead to recalculations of poverty levels.
across the world as far back as 1981, with all the uncertainties this implies about our intended commitment to bring global extreme income poverty to zero.

**Co-ordinated national poverty measures may be one way forward**

Because of the immense uncertainties generated by these procedures, it is well worth thinking about alternatives. One plausible approach which would deal with the problems just outlined is to base the definition of a new global goal of reducing income poverty on national measurements of poverty that are internationally co-ordinated and consistent. The general idea would be: 1) to co-ordinate the methods for setting the poverty line in each country internationally (e.g. using the widely used “cost of basic needs” method\(^3\)); and 2) to calculate poverty levels and trends nationally, using national currencies (Reddy, 2008; Klasen, 2013). Using this method, global poverty numbers (and proportions) would simply be the sum of the poor in each country calculated using an internationally comparable method. This approach would have two immediate advantages. First, there would be no need to rely on PPP comparisons, with all the uncertainties and fluctuations they entail. Second, international poverty measurement would be closely linked with national poverty levels and trends.

While these advantages are substantial and suggest that this approach is well worth trying, there are also some challenges (Klasen, 2013). First, it will require international co-ordination and agreement to set the poverty line. While a de-politicisation of this politically sensitive topic would likely be beneficial, it is not sure that this can be achieved in most countries. Second, there are a number of difficult technical issues to be dealt with, including how to establish the detailed procedures to initially set the line, update the line over time, and ensure consistent and comparable household surveys that measure poverty across countries and over time. Substantial technical and political effort is required to pursue this agenda. My recommendation is that this option be studied in great detail, tested and piloted, and then considered for implementation if it proves feasible.

**Relative poverty lines can help track inequality**

The other increasingly urgent question about the USD 1.25 international poverty indicator is whether this is still a relevant cut-off point for the increasing number of poor people in the developing world who are living in middle-income countries – countries with per capita consumption and national poverty lines substantially above USD 1.25 per day (Chapter 1). The fact that economic conditions in many parts of the developing world are improving has made the USD 1.25 per day poverty line far too low to resonate with local conditions in nearly all of Latin America (except Haiti and some countries of Central America), most of the Middle East and North Africa (with the exception of Yemen), and most of East and Southeast Asia (with the exceptions of Cambodia, Laos, Myanmar, Democratic People’s Republic of Korea and Viet Nam). In fact, it only remains firmly relevant, for the foreseeable future, for most of sub-Saharan Africa and South Asia.

There are two ways one can react to this issue. The first one is to celebrate the fact that the basic survival conditions reflected (very roughly) by the USD 1.25 indicator have now been surpassed in many countries.\(^4\) This very low poverty line allows us to zero in on that dwindling number of countries where this is still is a problem. Yet, while this might resonate with donors wanting to focus their attention on the poorest of the poor, such an approach may be ill-suited for new global goals designed to capture relative poverty.
A second way to address this issue is to view poverty in middle-income developing countries as an equally urgent issue (see also Chapter 1). This would mean that one must find new approaches to measure poverty in these emerging economies. Ravallion and Chen (2011) have made a particularly interesting proposal in this regard: to establish a “weakly relative” international poverty line. For the poorest countries, the poverty line would remain at USD 1.25; for richer countries, however, it would rise with increasing incomes, but not at the same rate (e.g. an increase in per capita consumption of 10% would increase the poverty line by about 3%). For example, China and India recently increased their poverty line to reflect their generally improved economic conditions. In recent papers, Chen and Ravallion have reported results using such measures which show that weakly relative poverty is actually increasing in many regions, particularly Latin America, the Middle East and North Africa. In these regions, despite rising incomes (and therefore rising poverty lines), growing inequality has led to more people falling below this weakly relative international poverty line (e.g. see Chen and Ravallion, 2012).

Using internationally co-ordinated national poverty lines could also help to incorporate relative criteria into poverty measurements (Box 2.2). For example, poverty lines based on the cost of basic needs would rise as economic development increases the costs and agreed quality of those basic goods included in the poverty basket. To what extent adjustments in the national poverty lines could incorporate relative poverty considerations could be examined as this approach is piloted and tested.5

The World Bank recently changed its goals for poverty measurement, retaining the USD 1.25 per day poverty line, but adding a separate measure that monitors the mean income growth rate for the poorest 40% to account for inequality, thus bringing in inequality and relative considerations. These changes, however, only partly address the issues highlighted here, as the proposal continues to have the drawbacks of the USD 1.25 per day indicator and does not necessarily capture changes in economic conditions among the poorest segment of the population.6 To address these issues, it would be better either to move towards the weakly relative poverty approach promoted by Ravallion and Chen (2011), or to consider using relative elements when setting national poverty lines.
Conclusions

International poverty measurement is at a crossroads. While the USD 1.25 per day indicator has served well for promoting global poverty measurement and has done much to assist in goal setting as well as the monitoring of key development outcomes, it appears to be reaching the limits of its usefulness. To address the relativities of the international poverty line and PPP comparisons, and of the poverty problem in many countries, other approaches are needed. An approach focused on internationally co-ordinated national poverty measurement might be a way to address both issues, but requires detailed feasibility testing.

Notes

1. There are also conceptual and empirical issues relating to details of the indicators, the cut-offs which determine who is poor and who is not, and the procedures used when aggregating poverty across dimensions. See Dotter and Klasen (2013) for a discussion of some of these issues and possible ways to address them. Addressing these issues would not only affect comparisons of poverty levels among countries, but also over time.

2. Purchasing power parity (PPP) is used to determine the relative value of currencies. It asks how much money would be needed to purchase the same goods and services in two countries, and uses that to calculate an implicit foreign exchange rate. Using a PPP rate gives the same purchasing power to a given amount of money in different countries. PPP rates make it easier to compare incomes in different countries, as market exchange rates are often volatile.

3. This method estimates how much income is needed to attain a minimum access to food (measured in calories). It then fixes a poverty basket using current expenditure patterns of people close to the poverty line that achieves this caloric norm, and additionally makes some allowance for non-food spending. For details, see Ravallion (1992).

4. Although the dependence of the USD per day poverty rates on PPP rounds puts into question whether it neatly measures exactly the resources required for survival (Box 2.1).

5. Arguably, one would also want to incorporate relative elements in a multidimensional poverty index. See Dotter and Klasen (2013) for more discussion.

6. In particular, when using the growth rate of average income of the poorest 40%, growth for that group will be largely driven by the richest people within that group. Thus, the measure largely disregards the plight of the poorer people. Another problem is that it is unclear which price index should be used for this assessment: the overall inflation rate or the price index relevant for the poor (or the poorest 40%)?

References


