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The Politics of Global Poverty – Diverse Perspectives on Measurement

Review of: Sudhir Anand, Paul Segal and Joseph E. Stiglitz (eds.): *Debates on the Measurement of Global Poverty* (Oxford: Oxford University Press, 2010).

Introducing the Volume

The volume *Debates on the Measurement of Global Poverty*, edited by Anand, Segal and Stiglitz, is an impressive collection of essays that captures the most important methodological aspects of global poverty measurement. With a range of approaches to measurement, it assesses whether poverty has declined in the course of the last decade's efforts towards achieving the Millennium Development Goals (MDGs). In the introduction, the editors emphasize that global poverty is not only higher on the political agenda now, but that we also know more about it than ever before, due to intensified collection and analysis of data. Their motivation for collecting the 15 essays, which discuss the ins and outs of poverty measurement, goes beyond academic interest: With the introduction of the MDGs, it matters tremendously, from a policy perspective, whether or not we are likely to reach the first MDG of halving poverty by 2015 (in comparison to 1990 levels). To address this and other questions, the volume includes essays by scholars and policy researchers within international organizations (IOs), who have developed a range of methodological conceptions on the measurement of global poverty.

Poverty measurement is not merely a technical matter, and the volume addresses the major disagreements and contentions surrounding it. The debate focuses primarily on whether poverty has indeed been decreasing to the extent that World Bank studies suggest. The World Bank's policy researchers assert that more than half a billion people have escaped at least the most miserable state of absolute poverty, which they define as an income at or below 1.25 US\$ a day in 2005 prices.¹ Reddy and Pogge (chapter 3) have strong doubts that such a positive scenario is justified, whereas Bhalla (chapter 4) argues in favor of a different measurement method, according to which poverty has never been as

¹ Shaohua Chen and Martin Ravallion, 'The Developing World is Poorer than We Thought, but No Less Successful in the Fight against Poverty', (2008), Policy Research Working Paper 4703, Washington, DC: The World Bank. http://siteresources.worldbank.org/JAPANINJAPANESEEXT/Resources/515497-1201490097949/080827_The_Developing_World_is_Poorer_than_we_Thought.pdf

high as other measures suggest, and that it has decreased even more than Chen and Ravallion believe.

The introduction provides an excellent overview of the bases of these disagreements: First, poverty can be defined in various ways, in particular when different poverty lines are used as a threshold. This problem cannot be solved easily, due to the challenge of factoring in relative price changes across time and space. Reddy and Pogge thus object to the money metric approach used by the World Bank, as they claim that in the end it sets-up an entirely “arbitrary international poverty line” (p. 43). Instead they argue for a focus on achievements that can be compared across countries. Similarly, others in the book like Srinivasan (chapter 5) are in favor of a poverty line that incorporates the multidimensional aspects of poverty, even if this means that comparability across countries cannot be guaranteed. Sahn and Younger (chapter 15) try to include non-monetary aspects and are thus again closer to Reddy and Pogge’s achievement concept. Bhalla (chapter 4) develops an argument for increasing the poverty line of about 1 US\$ a day which has remained constant for almost 25 years. He suggests instead a threshold of approximately 1.69 US\$ in 1993 prices (or 2.16 US\$ in 2005 prices), that is, about 2 US\$ a day.

Second, the authors in this volume strongly disagree about purchasing-power-parity (PPP) exchange rates. This disagreement is due to the surveys from the International Comparison Program, which are only undertaken every ten years and which are used to calculate the PPP exchange rates. Aten and Heston (chapter 6) discuss how the calculation of PPP exchange rates leads to a potential underestimation of poverty due to the fact that they are biased towards larger economies. They propose instead to work with “poverty PPPs”. In contrast to existing PPP exchange rates, these would be specifically designed to reflect the situation of the poor. Reddy and Pogge (chapter 3) hold that existing PPPs are based on the price of larger bundle of commodities, some of which are simply not relevant to very poor people, such as prices of real estate or services which are consumed disproportionately by the non-poor. Therefore, they support the introduction of “poverty PPPs” as a counterbalance in this respect.

Third, another area of contention is the varying accounts of income distribution within countries, which can primarily be traced back to the difference between income and consumption poverty. GDP serves as a national measure of income but its use for measuring poverty is limited. Since it includes retained earnings of corporations and government revenue taxes, its scaling to GDP per capita will most probably overestimate incomes and underestimate poverty. The World Bank uses consumption surveys, but these might underestimate the level of poverty that actually exists. To make things even more complicated, Havinga,

Kamanou and Vu (chapter 9 of the volume) discuss the differences between data for household consumption taken from the Household Final Consumption Expenditure (HFCE) in the national account of developing countries, and other survey data. Both sources of data are prone to double-counting, under-reporting and under-representation. Additionally, surveys cannot measure perceptions about relative deprivation, as Ravallion points out (chapter 2). The problem of surveys is also illustrated in the chapters on India (chapter 14) and Latin America (chapter 11).

Finally, data coverage and data comparability are another major reason for different perspectives on the decline of poverty. All authors agree that data for Africa, particularly for Sub-Saharan Africa, are less reliable and less available when it comes to consumption surveys (chapter 15). Although the availability of survey data on income and consumption distribution has improved, comprehensive coverage is still unavailable. In Sub-Saharan Africa and other parts of the developing world homeless people or people living in remote rural areas – an important group of the poorest of the poor – are not represented in such surveys. The quality of data for India and China has improved within the last years, but the result is that both countries are judged to be poorer both historically and currently, in comparison to earlier estimates based on less complete data. Specifically, for China an update on the PPP exchange rate (using the 1.25 US\$ in 2005 prices) shows that the reduction of poverty has been less than most estimates between 2000 and 2010 have claimed. Nevertheless, the reduction has been considerable (chapter 13). In addition, different methods for compiling surveys make it difficult to compare data across countries. Whereas in some countries surveys indicate gross incomes, others refer to net income. Some include only cash income, while others integrate different types of in-kind income. In addition, these survey data can relate to different population units, such as individuals, households or families, possibly resulting in significant differences in the measurement of inequality and poverty.

As this first overview shows, measuring poverty is a highly complex undertaking and is prone to various methodological biases, thus allowing for productive contestation about which method is the most appropriate. In the following, we highlight some particularly interesting chapters that tackle specific approaches or selected countries and regions.

Basic Concepts and Important Approaches towards Measurement

Part one of the edited volume focuses on introducing relevant measurement concepts and approaches. Here, several authors engage in a dialogue about their methodological techniques and pertinent writings. This section critically reflects on some of these controversies.

In Chapter 2, Martin Ravallion takes up the question of “Why Measurement Matters” and provides an overview of basic concepts like poverty and inequality. He explains the difference between measuring absolute or relative poverty as well as measuring poverty within countries or between countries. In this chapter, he reiterates some findings that are largely undisputed. He claims, for instance, that absolute global poverty has been falling in all estimates since the end of the Cold War, particularly due to the impressive growth rates of India and China. However, this has only minor consequences for relative poverty. Ravallion goes on to discuss the issue of trade openness and whether the integration of poor countries into the global economy is good or bad for the poor – specifically whether there is absolute and relative poverty decrease due to trade. Ravallion is generally optimistic that a case for trade openness can be made, but he is cautious to generalize this finding to other contexts. At this point, the reader would like to know much more about why Ravallion is so cautious and on which methodological details his assumptions are based. It is not evident, for example, how Ravallion would judge Rodrik’s claim that trade is potentially problematic for the poorest countries due to the high transaction costs it entails.² At the very end of his short article, Ravallion clarifies that his findings should not be understood as an argument that growth always benefits the poor, as there are well-known cases like India in which the benefits of growth are distributed very unevenly across different regions of the country. However, the chapter does not include a more systematic discussion of the conditions under which growth is pro-poor. Is it macro-economic institutions, state-intervention, decline of relative poverty or something else?

In their article titled “How *Not* to Count the Poor” (Chapter 3), Sanjay Reddy and Thomas Pogge are highly critical of the World Bank’s approach to measuring global poverty, reiterating the problems outlined in the volume’s introduction (the fact of an arbitrary international poverty line, inappropriate PPP exchange rates and incorrect extrapolation of limited data). They underline their critique with a range of statistics and in-depth discussions about the potential problems, particularly of Ravallion’s assessment of decreasing global poverty. Many of the technical arguments are presented very clearly, and they convincingly show that there is no easy way of measuring global poverty, and that the popular claim that we will soon see an end to poverty is questionable. However, the validity of Reddy and Pogge’s overall argument, that the World Bank’s measurements are more or less meaningless, may be disputed. In his rejoinder (chapter 3a of the volume), Ravallion claims that the money metric approach of the World Bank can

² See Dani Rodrik, *One Economics - Many Recipes. Globalization, Institutions, and Economic Growth* (Princeton: Princeton University Press, 2007), chapter 8.

be defended – despite its many problems – on the ground that it is an adequate tool of measuring the development of absolute poverty over time. At the end of their chapter, Reddy and Pogge present an alternative way of measuring poverty based on the concept of achievements. Their approach focuses on how elementary human requirements, like being adequately nourished, can be reached. The authors show that the problems associated with the calculation of PPP exchange rates can be overcome by such an approach. However, it remains an open question whether the cost of a bundle of local and nutritionally appropriate food items, for example, can be compared across countries in a meaningful way. Thus, Reddy and Pogge's achievement concept seems open to criticism, just as the money metric approach of the World Bank.

The main argument Surjit Bhalla presents in chapter 4 is that the international poverty line needs to be raised to about 2 US\$ a day. He builds his argument on empirical evidence from statistics for growth and poverty decline that suggest that researchers of the World Bank have continuously overestimated poverty. This overestimation, he claims, has resulted from an adjustment of survey methods the World Bank has undertaken, especially of surveys from China and India.

Bhalla's calculations reveal that poverty prevails first and foremost in Sub-Saharan Africa and is not as prevalent in other world regions. According to the author, Africa is the only continent in which people live in absolute poverty, while other developing countries face relative poverty. On top of that, Latin America has already been using a poverty line above 2 US\$ for quite some time and Asia's poverty line is, due to its fast growth, in urgent need of revision. A first adjustment, Bhalla claims, would be an increase towards 1.69 US\$ in 1993 PPP prices (or 2.16 US\$ in 2005 prices). This would raise the standard by about 45 percent in real terms.

Besides advocating adaptation of the poverty line, Bhalla brings forward a major critique pertaining to fundamental assumptions regarding poverty determinants, which he incorporates into his main argument. Inequality, he argues, does not affect poverty reduction. Growth leads to increasing consumption at the bottom and at the top of a respective population.

However, Bhalla's argument is incomplete. He fails to translate his argument from statistics into policy implications: What exactly are the political consequences of raising the poverty line? How do we adjust policies to these new estimations? And, if Africa remains the only continent with absolute poverty, have other regions applied more successful poverty reduction strategies? Such qualitative assessments – at least as a brief concluding reflection – would have improved his argument.

Measurement within Specific Regions and Countries

In part two of the volume, measurement approaches and methodologies introduced in the first section are applied to different regional and country studies. It includes chapters on Latin America, Africa, China and India. Two examples, one study on China and one on Africa, will be briefly outlined in this section.

Shaohua Chen and Martin Ravallion analyze China in chapter 13. The title of the chapter (“China is Poorer than We Thought, but No Less Successful in the Fight against Poverty”) indicates the general message. The reason for the new estimate of the number of China’s poor is that new data became available for China’s PPP exchange rate for 2005. All earlier analyses relied on PPP exchange rates from 1986 that were then integrated in the country-level price surveys of 1993. It was the first time China had participated in the International Comparison Program, although price surveys were only implemented in eleven metropolitan areas. The authors discuss the potential bias toward urban areas that this might entail, and explain that prices for food items are lower in most rural areas. Finally, the authors compare various poverty lines using the 2005 PPP exchange rates. The results are that the number of Chinese considered poor has dropped less than previously thought. Using a poverty line of 1.25 US\$, 26.4% of the population are considered poor, or 15.6% if adjusted for the lower rural prices. In comparison, the “old” poverty line of 1.08 US\$ using 1993 PPP exchange rates placed the percentage of poor people at 5.5. However, the new calculations also show that poverty was much higher from the very beginning (the earliest data presented is from 1981). Thus, the claim that the fight against poverty has been successful is substantiated. The authors argue that the steep reduction in the number of poor people in China – regardless of how it is measured – is due to the persistently high growth rates the country has enjoyed since the beginning of the 1980s. The reader would now like to know whether pro-poor growth can continue and might eventually also influence relative poverty, but unfortunately the authors do not take up these issues in the chapter.

The chapter on Africa, authored by David Sahn and Stephen Younger (chapter 15), brings forward two important claims. First of all, the authors argue that Africa’s poverty is decreasing neither consistently nor significantly. Secondly, they call for an empirical investigation of poverty in Africa using a multi-dimensional capabilities approach. This approach is based on the work of Amartya Sen³ and embraces an understanding of well-being based on capabilities such as education, an adequate standard of health and nutrition, and political freedoms. The authors

3 See, e.g., Amartya Sen, *Commodities and Capabilities* (Amsterdam: North Holland, 1985) and Amartya Sen, ‘The Standard of Living: Lecture II, Lives and Capabilities’, *Tanner Lectures in Human Values* (Cambridge: Cambridge University Press, 1987), 20-38.

give three arguments for a capabilities-based investigation: Measurement errors occur less for non-income variables; public policy focuses on delivering health and education services; and finally, outcomes pertinent to nutrition, health and education can be measured at the individual level and do not need to be assessed at the household level. The variables they use to test consistency in projected increase or reduction of poverty are: *per capita* expenditures for income poverty; children's height-for-age and women's body mass for health poverty; and women's years of school completed for education.

The results of Sahn and Younger confirm that major poverty reductions have not yet been realized, which “paint[s] a relatively sobering picture of economic and social progress in Africa” (p.409). An important exception is the increasing number of primary school enrollments, which will eventually lead to increased education achievements in Sub-Saharan Africa. Francophone Africa, however, does not follow suit on these educational improvements. Another finding – which is consistent with the outcomes of Bhalla (chapter 4) – is that progress is not hampered by inequality. Sahn and Younger find that education and health deprivations are related to a lack of growth in average income. Finally, they point to the fact that the indicators used may move inconsistently and in different directions. Here, they again highlight the utility of their approach beyond material standards. In such cases, they suggest to investigate each indicator, its movement and the reasons behind that individually.

While the authors apply a widely accepted approach to their empirical analysis in Africa, some issues remain untouched throughout their chapter. One is the relationship between income and capabilities. Sahn and Younger's claim that the two are not highly correlated is inconsistent with Sen's statement that “money metrics of poverty, particularly as measured by income (or consumption expenditures) are *instrumentally* important to these capabilities” (p.372). This is puzzling and calls for a more detailed reflection, which could have been embedded in their justification of the capabilities approach. Furthermore, after drawing a relatively pessimistic picture of Africa's achievement in poverty reduction, it would have been helpful had they explained more about the causes of such failure. After bringing forward a claim in favor of a multi-dimensional measurement procedure (based on the argument that policies rather deliver education and health services instead of disseminating cash transfers), it would have been important to evaluate the success of such policies according to the empirical data utilized for this study. Otherwise we might conclude that the more comprehensive measurement approach does not in fact add to what we already knew before: that Africa is poor, and poorer than other regions in the world.

Evaluating the Volume

As the summary above indicates, the chapters of this volume overall do an excellent job of tackling the various aspects, contentions and problems in evaluating the levels of poverty in the world. The volume provides knowledge of the various technical details and methodologies of poverty measurements. The authors take seriously the alternative methods and carefully evaluate the benefits and drawbacks of each through insightful dialogue. In many chapters, the authors engage directly with each other's arguments. This helps the reader to grasp and evaluate the different arguments brought forward for the application of particular measurement concepts. The diversity of perspectives that are offered within a single book is remarkable. These vary from the use of standard poverty lines and calculations based on household surveys to more sophisticated approaches with a theoretical basis in Amartya Sen's approach of multi-dimensional wellbeing.⁴

However, the extensive discussion of methodological aspects of poverty measurement comes at a price. One problem with the volume is that it is not very accessible to a general audience and to professionals in the field of development policies, who are not experts in techniques such as calculating PPP exchange rates or assessing the comparability of different consumption surveys. Furthermore, although a short section on data coverage and comparability has been integrated into the introduction (chapter 1), a brief critical reflection on the methodological approach utilized in each chapter (or at least on problems in application) would have improved the volume's quality considerably and would have guided the reader in selecting his or her method. The overall style is still highly technical and the reader should be aware that the volume has nothing to do with Stiglitz's other highly popular work.⁵ In our view, the volume's main drawback is related to the highly technical focus: the authors avoid explicit statements about the political and policy consequences that follow from their different methods in measuring global poverty. This is regrettable because the rationale for the book goes beyond the academic specialized knowledge of the topic. The measurement of poverty is very pertinent for the first Millennium Development Goal, i.e. the goal of halving poverty by 2015. But the relevance for existing or future policies is not explicitly drawn. The book's technical focus might therefore disappoint those who would like to learn more on what can be done against poverty. Other works, with both normative⁶ and institutionalist⁷ approaches, have made achievements in this regard.

4 See Sen (1985; 1987).

5 Compare, e.g., Joseph E. Stiglitz, *Globalization and Its Discontents* (New York: Norton, 2002) and Joseph E. Stiglitz and Andrew Charlton, *Fair Trade For All* (Oxford: Oxford University Press, 2007).

6 See Thomas Pogge, 'World Poverty and Human Rights', *Ethics & International Affairs* 19/1 (2005), 1-7.

7 See Daron Acemoglu and James Robinson, *Why Nations Fail. The Origins of Power, Prosperity, and Poverty* (New York: Crown, 2012).

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