

Global Poverty Measurement: A Reassessment

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Money-metric indicators of poverty are a powerful tool to understand human deprivation. However, as the measurement of money-metric poverty lends itself to a wide range of definitions, theories and methodologies, there is often little agreement, even among poverty experts, on basic questions such as: How many poor people are there in the world today? Have developing countries been successful in reducing poverty? This paper addresses those two questions.

First and foremost, the authors argue that the choice of an appropriate poverty line is a crucial pre-requisite for sensible measurement of money-metric poverty. A poverty line can be held constant over time and across countries, as has been the practice in the specialised literature (e.g. the World Bank's famous US\$1 per day per person purchasing power parity (PPP) poverty line).

However, PPPs do not equate purchasing power across countries. Thus, as argued elsewhere,¹ the cost of the same bundle of goods and services of similar quality will generally be higher in richer countries even in PPP terms. In that case, the \$1.25 line (and indeed any fixed poverty line) cannot serve as a reliable measure of poverty outside the poorest countries.

A more sensible approach for international comparisons, as argued in this paper, would need to allow the poverty line to be related to changes in the standard of living between countries. To that end, it is important to note that we accept the World Bank's basic idea of relying on national poverty lines to construct a globally comparable poverty measure. However, we reject the assumption that this measure should be constant, or that it should be based on the national poverty lines of the poorest countries only. Rather, we argue that an internationally comparable poverty line should be based on well-established stylised facts regarding the relationship between national poverty lines and average per capita expenditure (in 2005 PPP) across *all developing countries*. Once established, this poverty line can then lead to a more realistic estimate of global poverty.

Three steps are required to reach this new poverty estimate. First, using data from over 300 household surveys covering 107 countries, we establish a robust regression equation between

Headcount Poverty Rates for Developing Regions According to \$1.25 and Authors' Estimated Poverty Lines (PL), 1990–1999 and 2000–2009

Headcount Poverty Rate (%) in 2000s		
Arab countries	3.9	21.5
East Asia & Pacific	16.9	28.1
Europe & Central Asia	1.7	20.3
Latin America & Caribbean	5.5	32.4
South Asia	40.3	37
Sub-Saharan Africa	49.8	47.3
Developing region	23.6	31.8
Poverty Change (%) from 1990s		
Arab countries	-35.7	-8
East Asia & Pacific	-55.1	-21.8
Europe & Central Asia	-50.5	-11.1
Latin America & Caribbean	-41.6	-22.7
South Asia	-14.3	-6.1
Sub-Saharan Africa	-16.3	-12.5
Developing region	-32.3	-14.4

Source: Authors' estimates based on World Bank POVCAL online datasets and UNDP Poverty Assessment Reports for Arab Countries.

both variables. Second, we use the regression equation to estimate our country-specific poverty line. Third, we apply these poverty lines to the World Bank POVCAL dataset to calculate new poverty rates.

The main finding, shown in the table, is that developing countries may be significantly poorer than conventionally thought, with hundreds of millions more people living in poverty. More alarmingly, with only a 14.4 per cent reduction in poverty since 1990, the world may be far less successful in its fight against poverty and as such may be missing the target of halving poverty by 2015.

The regional story is also quite different depending on the poverty measure used. Our methodology leads to the conclusion that Latin America is the leader in poverty reduction among developing regions, followed closely by East Asia. Conversely, South Asia and Arab regions had the slowest pace of poverty reduction. This outcome can be explained in part by slower growth and sharply rising inequality in both regions, which the authors conclude is the case based on comparing survey and national accounts data for both regions.

Note:

1. See, for example, Reddy, S. (2009). 'The Emperor's New Suit: Global Poverty Estimates Reappraised', SCEPA Working Papers 2009-11. Schwartz Center for Economic Policy Analysis (SCEPA). The New School.