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## **Where Do The World's Poor Live? A New Update**

Andy Sumner  
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# Where Do the World's Poor Live? A New Update

Andy Sumner

## Summary

This paper revisits, with new data, the changes in the distribution of global poverty towards middle-income countries (MICs). In doing so it discusses an implied 'poverty paradox' – the fact that most of the world's extreme poor no longer live in the world's poorest countries.

The paper outlines the distribution of global poverty as follows: half of the world's poor live in India and China (mainly in India), a quarter of the world's poor live in other MICs (primarily populous lower MICs such as Pakistan, Nigeria and Indonesia) and a quarter of the world's poor live in the remaining 35 low-income countries. Underlying this pattern is a slightly more surprising one: only 7 per cent of world poverty remains in low-income, stable countries.

The paper discusses factors that are behind the shift in global poverty towards middle-income countries in particular and how sensitive the distribution of global poverty is to the thresholds for middle-income classification. The paper concludes with implications for research related to poverty.

**Keywords:** poverty; inequality; distribution; low-income countries; middle-income countries.

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## Acronyms

GDP	Gross Domestic Product
GNI	Gross National Income
HIC	High-Income Country
IDA	International Development Association
IMF	International Monetary Fund
LIC	Low-Income Country
LMIC	Lower Middle-Income Country
MIC	Middle-Income Country
PC	Per Capita
PINCI	Pakistan, India, Nigeria, China And Indonesia
PPP	Purchasing Power Parity
UMIC	Upper Middle-Income Country
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WFP	United Nations World Food Programme

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# Introduction

The majority of the world's poor, by income and multi-dimensional poverty measures, live in countries classified by the World Bank as middle-income countries (Alkire *et al.* 2011; Chandy and Gertz 2011; Glassman *et al.* 2011; Kanbur and Sumner 2011a, 2011b; Koch 2011; Sumner 2010, 2012). Such patterns matter beyond the thresholds of low-income countries and middle-income countries (LICs/MICs) set by the World Bank, because they reflect a pattern of rising average incomes. Further, although the thresholds do not mean a sudden change in countries when a line is crossed in per capita income, substantially higher levels of average per capita income imply substantially more domestic resources available for poverty reduction, and the international system treats countries differently at higher levels of average per capita income.<sup>1</sup>

This paper updates the data for the distribution of global poverty to 2008 in light of the updated World Bank *PovcalNet* (2012) dataset and new global poverty estimates of Chen and Ravallion (2012). The paper also discusses factors behind the shift in global poverty towards middle-income countries and how sensitive the distribution of global poverty is to the thresholds for middle-income classification.<sup>2</sup>

The paper is structured as follows: Section 1 updates the data on the changing distribution of global poverty, 1990 vs. 2008. Section 2 discusses the factors underlying the changes in the distribution of global poverty and Section 3, the thresholds for low and middle-income countries. Section 4 concludes.

## 1 The changing distribution of global poverty

This section updates the global poverty distribution data originally published in Sumner (2010), and refined in Sumner (2012a), based on a significantly updated dataset (*PovcalNet* 2012); and extends analysis to the \$2 poverty line which is the average (median) poverty line for all developing countries (Chen and Ravallion, 2008). The data produced is consistent with the new global and regional estimates of Chen and Ravallion (2012).

It is worth noting at the outset that the author is aware that there are a range of methodological questions about the use of poverty lines *per se*, and the international poverty lines *in particular*. These matters are discussed in Appendix. In terms of robustness by data coverage and corroboration: the new *PovcalNet* (2012) 2008 data covers 84 per cent of the population of LICs and 98 per cent of the population of MICs (see Appendix, Table A2);<sup>3</sup> and the estimates for the distribution of global poverty by income poverty are consistent with the global distribution of multi-dimensional poverty (Alkire *et al.* 2011), health-related poverty data (Glassman *et al.* 2011) and malnutrition (Sumner 2010).

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<sup>1</sup> At a policy level such changes matter because the thresholds are used in various ways by a number of bilateral and multilateral donors in decision-making, often with other indicators to determine the terms of engagement with countries, as well as by various non-aid actors (such as investment ratings agencies). For a detailed discussion of how the thresholds are used by UNICEF, UNDP, UNFPA, WFP and the Global Fund to Fight AIDS, TB and Malaria, see UNICEF (2009: 76–80).

<sup>2</sup> Special thanks to Pui Yan Wong and Henrique Conca Bussacos for research assistance. Thanks to Xavier Cirera, Ben Leo, Jeni Klugman, David Steven and Amy Pollard for feedback on earlier drafts. Correspondence to: [a.sumner@ids.ac.uk](mailto:a.sumner@ids.ac.uk)

<sup>3</sup> Most notably are: Afghanistan (29m population in 2008), Korea (23m population), Myanmar (49m population) and Uzbekistan (27m population). Argentina (total population 39m) is not included as it has only urban poverty data in *PovCal* (2012) (presumably due to its high urbanisation rate).

New estimates for global poverty in 2008, based on the significantly updated PovcalNet (2012) dataset, support earlier findings that most of the world's poor (by both \$1.25 and \$2 international poverty lines) live in South Asia and sub-Saharan Africa. In contrast, in 1990 half of the world's poor lived in East Asia and the Pacific, mostly in China (see Chen and Ravallion 2008, 2012).

The proportion of the world's \$1.25 poor in China fell to an estimated 14 per cent in 2008, while India's proportion of world poverty rose to 35 per cent, and sub-Saharan Africa's to 31 per cent (see Table 1.1 and 2.2). The \$2 estimates – as noted, the average poverty line for developing countries – tell a similar story to the \$1.25 estimates, with a notably lower contribution to world poverty from sub-Saharan Africa.

Estimates for 2008 also confirm that the world's poor (by both \$1.25 and \$2 poverty lines) largely live in middle-income countries (MICs). The proportion of the world's \$1.25 and \$2 poor accounted for by MICs is respectively 74 per cent and 79 per cent. This suggests that using the average poverty line for developing countries means that even more of the world's poor live in MICs.<sup>4</sup>

In spite of the global distribution of poverty, it is important of course to note that LICs typically have higher rates of poverty incidence (see Table 1.1) and a larger poverty gap (see Sumner 2012b). Thus any discussion of poverty in MICs should not distract from poverty in LICs.

That said, some MICs do have surprisingly high poverty headcounts (and a higher than expected poverty gap) even at the higher average level of per capita income found in MICs. Across all MICs, the average (population weighted) incidence of poverty is almost one in five of the population at \$1.25/day, and 40 per cent at \$2/day. In the lower middle-income countries (LMICs), this rises to 30 per cent and 60 per cent respectively.<sup>5</sup>

Importantly, the shift from the \$1.25 poverty line to the \$2 poverty line doubles the poor in MICs from almost 1bn to almost 2bn (meaning there are a billion people under \$1.25 in MICs and another billion between \$1.25 and \$2 in MICs). In contrast, the shift from \$1.25 to \$2 in LICs raises that total number of people in poverty less so (from 320m to 490m).

In sum, the distribution of global poverty is thus:

- Half of the world's poor live in India and China (mainly in India);
- A quarter of the world's poor live in other MICs (primarily populous LMICs such as Pakistan, Nigeria and Indonesia);
- A quarter (or less) of the world's poor live in the remaining 35 LICs.

Underlying this pattern is a slightly more surprising one when one considers 'fragile states'. In short, the world's poor are increasingly concentrated in fragile LICs (18.4 per cent of world poverty) and stable MICs (60.4 per cent of world poverty). Only 7 per cent of world poverty (90m poor people) is found in 'traditional' developing countries – meaning low-income and stable (e.g. Tanzania) (see Table 1.2).

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<sup>4</sup> There are about 920m extreme (\$1.25/day) poor people in MICs or a 'new bottom billion' as referred to in Sumner (2012a). This is 'new' in the sense it is not the 'bottom billion' originally discussed by Collier (2007), which was identified as the total population of 58 countries that were 'falling behind and often falling apart' (Collier 2007: 3). This was based on data from the late 1990s and the turn of the century. Incidentally, the total population of the new expanded OECD (2011) 'unofficial' list of fragile states is a little over one billion people of which 400m are extreme (\$1.25) poor and 650m are moderate (\$2).

<sup>5</sup> For comparison, the LMIC group without India has poverty incidences of 25 per cent and 50 per cent at \$1.25 and \$2 respectively.

**Table 1.1 Estimates of the distribution of global poverty, and poverty incidence, \$1.25 and \$2, 2008**

	\$1.25 poverty line			\$2 poverty line		
	Millions of people	% world's poor	Poverty incidence (% pop.)	Millions of people	% world's poor	Poverty incidence (% pop.)
East Asia and Pacific	265.4	21.5	14.3	614.3	26.1	33.2
Eastern Europe and Central Asia	2.1	0.2	0.5	9.9	0.4	2.4
Latin American and the Caribbean	35.3	2.9	6.9	67.4	2.9	13.1
Middle East and North Africa	8.5	0.7	2.7	43.8	1.9	13.9
South Asia	546.5	44.3	36.0	1,074.7	45.6	70.9
Sub-Saharan Africa	376.0	30.5	47.5	547.5	23.2	69.2
Low-income countries	316.7	25.7	48.5	486.3	20.6	74.4
Middle-income countries	917.1	74.3	19.5	1,871.1	79.4	39.7
New MICs (post-2000)	651.7	52.8	33.4	1,266.4	53.7	64.9
LMICs	711.6	57.7	30.2	1,394.5	59.2	59.1
LMICs minus India	285.6	23.1	23.4	569.4	24.2	46.7
UMICs	205.5	16.7	8.7	476.6	20.2	20.3
China and India	599.0	48.6	24.3	1,219.5	51.7	53.8
PINICs	785.9	63.7	26.1	1,570.0	66.6	52.2
45 fragile states (OECD 2011)	398.9	32.3	39.9	665.4	28.2	66.6
Least developed countries	317.8	25.8	46.1	497.2	21.1	72.1
Total	1,233.8	100.0	22.8	2,357.5	100.0	43.6

Source: Data processed from PovcalNet (2012). Note: PINICs = Pakistan, India, Nigeria, China and Indonesia. Fragile States = 45 countries in OECD (2011).

How many poor people live in 'fragile states' depends on the definition of 'fragile states' as well as the definition of poverty. The above estimates are based on the 'non-official' OECD (2011, p. 1) list of 45 fragile states which is based on the compilation of the 'Harmonised List of Fragile Situations' (2009; World Bank, African Development Bank and Asian Development Bank) and the 2009 Fund for Peace Failed States Index. The new PovcalNet (2012) data has high coverage of those 45 countries (see Appendix, Table A1). Of those 45 countries 26 are low-income and 18 are (lower) middle-income countries (and one country is not classified).

There are 400m poor (\$1.25) people living in those 45 'fragile states', who in total, account for just under a third of world poverty. 45 per cent of the poor in those fragile states are living in countries classified as middle income and 55 per cent in countries classified as low income. And 65 per cent are in sub-Saharan Africa. One issue that is evident is that, taking the OECD (2011) 'non-official' fragile states list, more than two-thirds of the poor in fragile states live in just five countries: Nigeria (100m poor) Bangladesh (76m poor), the DRC (55m poor), Pakistan (35m poor) and Kenya (15.7m poor). Similar patterns are even more pronounced if one uses the higher poverty measure of \$2/day (see Table 1.3).

**Table 1.2 Distribution of world poverty by low and middle income and fragile states combinations, 2008 (\$1.25)**

	LICs	MICs	Totals
% world poverty (%)			
Fragile states	18.4	13.9	32.3
Non-fragile states	7.3	60.4	67.7
	25.7	74.3	100.0
Poor (millions)			
Fragile states	226.8	172.1	398.9
Non-Fragile states	89.9	745.0	834.9
	316.7	917.1	1,233.8

Source: Data processed from PovcalNet (2012). Note: fragile states = 45 countries in OECD (2011).

The number of poor in fragile states has risen partially due to the revision of countries in the OECD (2011) list; most notably, the inclusion of populous Bangladesh in the group, which has a high poverty incidence but which wasn't in the 43 countries of the OECD (2010) 'Resource Flows to Fragile States' list.<sup>6</sup> This earlier list was the product of combining three available lists of 'fragile states' at that time (Carlton, Brookings and the World Bank's) thus producing the broadest possible list of 43 fragile states at that time. As noted in Sumner (2010), only 17 of those 43 'fragile states' were common across the lists, and the differences in the countries listed mean the proportion of the world's poor in fragile states in 2007 ranged from 6 per cent to 25 per cent (see detailed critique of the 'fragile states' lists from Harttgen and Klasen 2010).

The Carlton and Brookings lists of 'fragile states' have not been updated since 2007 and 2008 respectively, and are less frequently cited.<sup>7</sup> One further list that has come to prominence is the annually updated list of *The Fund for Peace*, called *The Failed States Index*. This list is *always* 60 countries which are divided into three groups of 20 countries, that are respectively classified as 'critical' (bottom 20), 'in danger' (bottom 21–40), and 'borderline' (bottom 41–60).

Chandy and Gertz (2011) estimated the proportion of the world's poor in fragile states at 40 per cent using this list.<sup>8</sup> The new PovcalNet (2012) dataset concurs producing a figure of 38 per cent. However, it is worth noting only 21 per cent of the world's poor are in the 'critical' countries and 11 per cent are in the 'in danger' countries. Thus, the use of the 40-country group produces an estimate of global poverty in 'fragile states' similar to that of the OECD (2011) country list.

**Table 1.3 Distribution of poverty in OECD (2011) fragile states (group of 45 countries), 2008**

	Millions of people (\$1.25)	% fragile states poor (\$1.25)
LICs	226.8	56.9
LMICs	172.1	43.1
Total in 45 fragile states	398.9	100.0
Total in five countries (Nigeria, DRC, Bangladesh, Pakistan and Kenya)	281.2	70.5
Europe and Central Asia	1.4	0.3
Middle East and North Africa	4.6	1.1
Sub-Saharan Africa	263.0	65.9
East Asia and Pacific	3.2	0.8
South Asia	120.4	30.2
Latin America and Caribbean	6.3	1.6

Source: Data processed from PovcalNet (2012). Note: fragile states = 45 countries in OECD (2011).

Foreign Policy magazine uses fixed category sizes, whereas the Fund for Peace base their category thresholds on absolute scores. Chandy and Gertz (2011) use the later.

<sup>6</sup> The following were added: Bangladesh, Burkina Faso, Georgia, Lebanon, Malawi, Palestinian Adm. Areas, Sri Lanka and Uzbekistan and the following were removed: Djibouti, Equatorial Guinea, The Gambia, Rwanda, Tonga, West Bank and Gaza. See Appendix, Table A1 for full list of OECD (2011) fragile states.

<sup>7</sup> For Carlton and Brookings lists see respectively: [www4.carleton.ca/cifp/app/ffs\\_raniking.php](http://www4.carleton.ca/cifp/app/ffs_raniking.php) and [www.brookings.edu/reports/2008/02\\_weak\\_states\\_index.aspx](http://www.brookings.edu/reports/2008/02_weak_states_index.aspx).

<sup>8</sup> The new PovCal (2012) dataset produces the following data: 259m \$1.25 poor in the 'critical' group, 119m \$1.25 poor in the 'in danger' group, and 69m \$1.25 poor in the 'borderline' group (totalling 378m without the 'borderline' group and 447m with the 'borderline group'). In short, 21 per cent of the world's poor live in the 20 'critical' countries, 11 per cent live 'in danger' and a further 6 per cent of the world's poor are in 'borderline' countries (in sum, 38.4 per cent of the world's poor in those 60 countries).

## 2 Factors underlying the changes in the distribution of global poverty

The changes in global poverty distribution are a result of several factors. First, almost 30 countries became better off in average per capita terms (by exchange rate conversion), attaining ‘middle-income’ classification, and thus the number of LICs fell from 63 in 2000 to 35 in 2010 (see Table 2.1). This could fall to just 16 LICs in 2030 if one applies IMF World Economic Outlook (2012) projections up to 2030 (see Sumner 2012b). Second, the world’s poor are surprisingly concentrated: not only do 80 per cent of the world’s extreme (\$1.25/day) poor live in just ten countries, which accounts for 980m (another ‘bottom billion’) of the world’s poor, but almost 90 per cent of the world’s extreme poor live in just 20 countries (see Table 2.2).

**Table 2.1 Number of LICs and MICs (GNI US\$ per capita, Atlas)**

World Bank Fiscal Year (data from calendar year)	FY02 (2000)	FY05 (2003)	FY10 (2008)	FY11 (2009)	FY12 (2010)
LICs	63	61	43	40	35
MICs	92	93	101	104	109

Source: World Bank (2011a).

Of these ‘top 20’ poor countries by numbers of poor people, only half of these countries are LICs and the remaining half are MICs, and almost all of these are MICs which have attained MIC status in the past decade.

The 28 ‘new MICs’ (‘new’ in the sense of ‘graduating’ over the last decade) account for two-thirds of the world’s poor when added to China, or half of the world’s poor without China. Most notably, there are five large MICs (Pakistan, India, Nigeria, China, and Indonesia – henceforth ‘PINICs’) which account for a substantial proportion of the world’s poor, and indeed, most of the number who ‘moved’ from living in LICs to living in MICs (Kanbur and Sumner 2011; Glennie 2011). In short, many of those countries where the world’s poor are concentrated are countries that became better off in average per capita income terms and graduated to LMIC status over the past decade.

In those countries becoming richer in average per capita terms and achieving MIC status, although the incidence of poverty (percentage of population poor) generally fell, the absolute numbers of poor people fell less than one might expect. The actual number of poor people (\$1.25/day) barely fell (or even rose) in India, Nigeria and Angola. In China, Indonesia, Pakistan, Vietnam and Sudan, \$1.25 poverty incidence did fall. However, when one considers \$2 poverty, there are only substantial declines in the number of poor people in China and Vietnam, and to a lesser extent Indonesia.

**Table 2.2 Top 20 poor countries (by number of \$1.25/day poor people), 2008, country classifications and GDP per capita PPP (countries transitioning from LIC to MIC since 1990 are highlighted)**

	% World \$1.25 Poor	% World \$2 Poor	Country classification (based on data for calendar year)		GDP pc/day (PPP, constant 2005 \$)	
	2008	2008	1990	2009	1990	2009
1. India	34.5	35.0	LIC	LMIC	3.4	8.2
2. China	14.0	16.7	LIC	UMIC	3.0	17.0
3. Nigeria	8.1	5.4	LIC	LMIC	3.9	5.6
4. Bangladesh	6.0	5.3	LIC	LIC	2.0	3.9
5. DRC	4.5	2.6	LIC	LIC	1.7	0.8
6. Indonesia	4.2	5.2	LIC	LMIC	5.5	10.1
7. Pakistan*	2.3	5.2	LIC	LMIC	4.4	6.5
8. Tanzania	1.4	1.6	LIC	LIC	2.4	3.4
9. Philippines	1.3	1.6	LMIC	LMIC	7.0	9.2
10. Kenya	1.2	1.1	LIC	LIC	3.9	3.9
11. Vietnam	1.1	1.6	LIC	LMIC	2.5	7.5
12. Uganda	1.1	0.9	LIC	LIC	1.5	3.1
13. Madagascar	1.1	0.7	LIC	LIC	2.8	2.4
14. Mozambique	1.0	0.8	LIC	LIC	1.1	2.2
15. Ethiopia*	0.9	1.8	LIC	LIC	1.5	2.4
16. Brazil	0.8	0.9	UMIC	UMIC	19.7	25.9
17. Angola	0.8	0.5	LIC	LMIC	9.0	14.8
18. Malawi	0.8	0.6	LIC	LIC	1.6	2.1
19. Nepal	0.8	0.8	LIC	LIC	1.9	2.9
20. Sudan*	0.7	0.8	LIC	LMIC	2.8	5.4
<b>Top 10</b>	79.2	79.5				
<b>Top 20</b>	86.6	89.1				
<b>New MICs (28)</b>	52.8	53.7				
<b>New MICs + China</b>	66.8	70.4				
<b>PINICs</b>	63.7	66.6				

Source: Data processed from PovcalNet (2012) and WDI (2011). Note: \* = The poverty data listed in PovcalNet (2012) for these countries in 2008 appears lower than one might expect suggesting caution (see also discussion in Sumner 2012b) and for rates by national poverty lines see Gentilini and Sumner (2012).

Clearly, there is much more to investigate here in terms of explanatory factors. There are also some data that one might question. The poverty rates listed in PovcalNet for three countries (Pakistan, Sudan and Ethiopia) in 2008 appears to be lower than one might expect compared to national poverty lines (see for discussion, Gentilini and Sumner 2012). One would want to look closely at population growth rates in the poorest expenditure groups, and what has happened in the channels whereby economic development could lead to poverty reduction (e.g. wage employment, real wages, self-employment and productivity in self-employment, and the output elasticity of demand for labour). And in doing so reconnecting poverty analysis to broader processes of economic development (Harriss 2007). Interestingly, for those new MICs with two data points there are some drastic changes away from agriculture value added as a proportion of GDP. For example, the proportion of agriculture value added as a percent of GDP drastically fell in Ghana, India, Laos, Lesotho, Vietnam and Yemen (see Table 2.4 and discussion in Sumner 2012b).

At a minimum, the fact that poverty persists at higher levels of average per capita income raises questions about the types of economic growth that lead some countries to reduce the number of people in extreme poverty and other countries not to. Most studies have argued that growth is good for the poor in the general sense that the income of the poor rises one-for-one in line with average income (Dollar and Kraay 2002; Gallup *et al.* 1999; Roemer and Gugerty 1997), and the poverty headcount ratio declines significantly with growth (Bruno *et al.* 1998; Ravallion 1995, 2001; Ravallion and Chen 1997). While it has been strongly asserted that, on average, growth is matched by proportionate reductions in poverty, some evidence challenges this view; suggesting rather that the incomes of the poorest may increase less than proportionately with growth (Besley and Cord 2007; Grimm *et al.* 2007). Importantly, the averages hide large variations across countries and across measures of

poverty, both questioning the relevance of the global average and whether growth responds differently to different kinds of (chronic and transient) income poverty. Initial inequality has most commonly been identified as deterministic in the heterogeneity of country experience: a higher level of inequality leads to less poverty reduction at a given level of growth (Deininger and Squire 1998; Hanmer and Naschold 2001; Kraay 2004; Ravallion 1995, 1997, 2001, 2004, 2007; Ravallion and Chen 1997; Son and Kakwani 2003; Stewart 2000). The heterogeneity of country experience has also been linked to changes in inequality over time, due to geographical differences (urban-rural); the sectoral pattern of growth; the composition of public expenditure; labour markets; social capital endowments and the variance in actual rates of growth (Fields 2001; Kraay 2004; Mosley 2004; Mosley *et al.* 2004; Ravallion 1995; Ravallion and Chen 1997).<sup>9</sup>

**Table 2.3 Poverty in the top 20 countries, 1990 vs. 2008 (countries transitioning from LIC to MIC since 1990 are shaded)**

	% population poor				Poor people (millions)			
	\$1.25		\$2		\$1.25		\$2	
	1990	2008	1990	2008	1990	2008	1990	2008
1. India	51.3	37.4	82.6	72.4	435.9	426.0	701.7	825.1
2. China	60.2	13.1	84.6	29.8	683.2	173.0	960.6	394.3
3. Nigeria	60.4	66.5	80.1	84.0	58.8	100.5	77.9	127.0
4. Bangladesh	68.4	46.6	91.8	78.4	79.1	74.6	106.2	125.5
5. DRC	56.3	86.2	77.5	94.5	20.8	55.4	28.7	60.7
6. Indonesia	54.3	22.6	84.6	54.4	96.3	51.5	150.0	123.6
7. Pakistan *	61.9	21.0	87.0	60.2	66.9	34.9	93.9	99.9
8. Tanzania	69.8	66.8	90.2	87.3	17.8	28.4	23.0	37.1
9. Philippines	29.7	19.4	54.9	42.2	18.5	17.5	34.2	38.1
10. Kenya	36.2	40.6	57.0	64.5	8.5	15.7	13.4	25.0
<b>TOP 10</b>					1,485.6	977.5	2,189.6	1,856.4
11. Vietnam	73.1	16.9	90.1	43.3	48.4	14.5	59.6	37.4
12. Uganda	68.7	44.4	86.5	70.6	12.2	14.1	15.3	22.3
13. Madagascar	74.1	71.6	88.8	89.3	8.3	13.7	10.0	17.1
14. Mozambique	81.3	59.6	92.9	81.8	11.0	13.3	12.6	18.3
15. Ethiopia *	62.1	16.0	85.3	53.6	30.0	12.9	41.2	43.2
16. Brazil	17.2	6.0	30.0	11.3	25.8	11.5	44.9	21.7
17. Angola	46.7	55.9	62.9	71.6	5.0	10.1	6.7	12.9
18. Malawi	89.0	67.3	96.0	87.5	8.4	10.0	9.1	13.0
19. Nepal	74.5	33.9	92.0	64.9	14.2	9.8	17.6	18.7
20. Sudan *	56.2	20.4	82.1	45.0	15.2	8.4	22.2	18.6
<b>TOP 20</b>					1,664.2	1,095.8	2,428.8	2,079.6

Source: Data processed from PovcalNet (2012). Note: \* = The poverty data listed in PovcalNet (2012) for these countries in 2008 appears lower than one might expect suggesting caution (see also discussion in Sumner 2012b) and for rates by national poverty lines see Gentilini and Sumner (2012).

**Table 2.4 Selected 'new MICs' and structural change of GDP**

	Agriculture, value added, % GDP	
	1990	2009
Ghana	45.1	31.8
India	29.3	17.8
Indonesia	19.4	15.3
Lao PDR	61.2	35.2
Lesotho	24.9	7.7
Mauritania	29.6	20.2
Pakistan	26.0	21.6
Senegal	19.9	17.2
Vietnam	38.7	20.9
Yemen, Rep.	24.4	9.9

Source: WDI (2011).

<sup>9</sup> Increases in agricultural productivity have been thought to be the most effective for the reduction of poverty (Bourguignon and Morrisson 1998; Gallup *et al.* 1999; Timmer 1997; Thirtle *et al.* 2001). Similarly, labour intensive growth is more poverty reducing because the poor's main asset is labour. Adelman (2000) has argued that the factor intensity of growth determines the distribution of benefits.

### 3 The thresholds for low and middle-income countries

The shift in global poverty raises various questions about the thresholds themselves, and whether any thresholds solely or largely based on defining poverty by 'poor' countries rather than 'poor' people are useful any longer, given the declining number of low-income countries.

The LIC/MIC thresholds are based on GNI per capita average income (exchange rate conversion).<sup>10</sup> One could argue that thresholds set in the 1960s are worthy of a substantial review, particularly because (i) the methodology for original threshold setting has never been published;<sup>11</sup> (ii) some 40–50 years of new data are available since the thresholds were originally established; (iii) there are questions over whether 'international inflation' ought now to include China and other 'emerging economies' in its calculation, and indeed whether the use of 'international inflation' rates for the world's richest countries is an appropriate way to assess the LIC/MIC thresholds over time for the world's poorer countries, which may have had inflation rates above the 'international inflation' rate.

More fundamentally, one could also ask: should such thresholds simply be *abandoned outright* or a more sophisticated approach considered? Alternatively, such thresholds could instead be applied at a different level, for example, sub-national level (so poorer states in India would qualify; see later discussion on sub-national income per capita).

With regards to assessing if the changing global distribution of poverty is an artefact of methodology (meaning a sleight of hand), there are several issues. First, are the thresholds a meaningful way of dividing the world into four groups of countries, in relative terms at least? Interestingly, and coincidentally, the current thresholds for LIC, LMIC, UMIC and HIC are somewhat similar to the quartile boundaries if one splits the world's countries with the necessary data into four equal groups. For example, the current classification, the threshold for LICs (<\$1005 GNI per capita) is reasonably close to the threshold for the bottom quartile (<\$1,180); the threshold for LMICs (\$1006–\$3,975) corresponds with quartile two (\$1,181–\$3,850); and the threshold for UMICs (\$3,976–\$12,275) corresponds with quartile three (\$3,851–\$10,120) (see Table 3.1).

Analysis of the countries in each quartile (GNP pc Atlas and GDP PPP pc 2005 constant \$) in 1990 and 2008/9 and the changing distribution of world poverty by quartiles produces interesting results (see Tables 3.2 and 3.3). Of course, this is a relative comparison in contrast to an absolute comparison of country thresholds. What is evident is that the vast majority of countries are in exactly the same quartile by GNI pc Atlas and GDP PPP pc in

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<sup>10</sup> The World Bank's thresholds are discussed in-depth in Sumner (2012a). See also Nielsen (2011). The World Bank's 'Atlas method' takes GNI in national currency and converts it to US dollars using the three-year average of exchange rates (taking the average of a country's exchange rate for that year and its exchange rates for the two preceding years), adjusted for the difference between national inflation and that of 'international inflation' (the weighted average of inflation in the Euro Zone, Japan, the UK, and the US as measured by the change in the IMF's Special Drawing Rights deflator).

<sup>11</sup> According to the short history of the Bank's classifications available on their website (World Bank 2011a), the actual basis for the original thresholds was established by: 'finding a stable relationship between a summary measure of well-being such as poverty incidence and infant mortality on the one hand and economic variables including per capita GNI estimated based on the Bank's Atlas method on the other. Based on such a relationship and the annual availability of Bank's resources, the original per capita income thresholds were established.' The actual documentation containing the original formulae are identifiable by their World Bank document numbers (contained in the Excel sheet on the World Bank's classification history webpage noted above), but these are World Bank board documents and not publically available. The exact formulae of the thresholds have never been published. Indeed, the World Bank's Public Information Centre notes in personal correspondence that: 'there is no official document that we can find that ever specified an exact formula for setting the original income thresholds... When IDA was established in 1960, member countries were classified... based more on a *general understanding and agreement by the executive directors of each country rather than strict income guidelines* [emphasis added] – though, for the most part, the classifications were in line with per capita income levels'. [Personal correspondence].

1990 and in 2008 with the exception of 17 countries which have risen quartile by GNI pc and 16 countries that have risen quartile by GDP pc PPP.

**Table 3.1 Country thresholds and quartile data, 1990 and 2009**

	1990		2009	
	Thresholds (US\$ pc, Atlas)	Quartiles (US\$ pc, Atlas)	Thresholds (US\$ pc, Atlas)	Quartiles (US\$ pc, Atlas)
HIC or Q4	> 7,621+	7330–75810	> 12,276	> \$10,120
UMIC or Q3	2,466–7,620	1740–7260	3,976–12,275	3,851–10,120
LMIC or Q2	611–2,465	550–1720	1006–3975	1181–3850
LIC or Q1	<=610	< 540	<=1005	< 1,180

Source: Data processed from WDI (2011).

Taking either the GNI pc by Atlas (as per the LIC/MIC estimation) or the GDP PPP per capita, in 1990 almost 90 per cent of the world's poor lived in the poorest quartile of countries. Whilst, in 2008, only a third of the world's poor were in the poorest quartile and two-thirds were in the quartile above (Q2) the poorest quartile.

Four-fifths of the world's poor in Q2 GDP PPP per capita in 2008 were accounted for by India and China. The remainder relate both to countries rising from Q1 to Q2: notably Pakistan and Vietnam and also Bhutan, Cape Verde and Guyana and populous countries already in Q2 such as Indonesia.

**Table 3.2 GNI pc (Atlas) and GDP pc PPP (constant 2005 \$): Relative position of countries by quartiles (countries by 1990 and 2008 position, Q1 = poorest)**

GNI pc Atlas	2008	1990			
		Q4	Q3	Q2	Q1 (*) (**)
Q4	35	6	0	1	
Q3	1	29	4	0	
Q2 (*)	0	2	28	6	
Q1 (**) (poorest)	0	0	5	30	
GDP pc PPP constant 2005 \$	2008	1990			
		Q4	Q3	Q2	Q1 (*) (**)
Q4	40	3	1	0	
Q3	2	33	5	0	
Q2 (*) (**)	0	5	30	7	
Q1 (poorest)	0	0	3	35	

Source: Processed from WDI (2011). Note: \* = China; \*\* = India.

**Table 3.3 Distribution of global poverty (\$1.25 and \$2) by GNI pc (Atlas) and GDP pc (PPP 2005 constant \$) quartiles**

	\$1.25		\$2	
	1990	2008	1990	2008
GNI pc (Atlas)				
Q4	0.0	0.0	0.0	0.0
Q3	2.4	2.4	3.2	3.1
Q2	8.9	31.3 (*)	10.9	33.6 (*)
Q1 (poorest)	88.7 (*) (**)	66.3 (**)	85.9 (*) (**)	63.4 (**)
GDP pc PPP (constant 2005\$)				
Q4	0.0	0.0	0.0	0.0
Q3	2.5	2.5	3.8	3.4
Q2	8.9	60.6 (*) (**)	11.1	67.8 (*) (**)
Q1 (poorest)	88.5 (*) (**)	36.8	85.1 (*) (**)	28.9

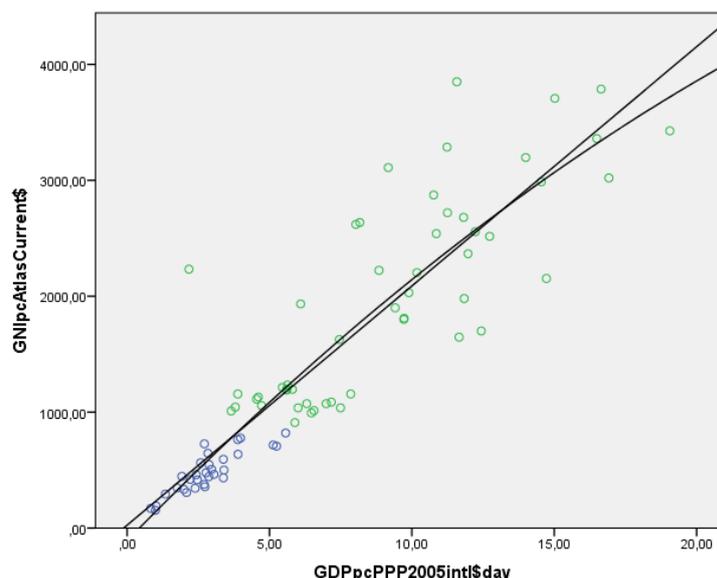
Source: Processed from PovcalNet (2012) and WDI (2011). Note: \* = China; \*\* = India.

By GNI pc (Atlas) India is second from the top of Q1. However, by GDP PPP pc India is in Q2.

Does the graduation of countries reflect higher per capita income in PPP terms or simply in exchange rate conversion? In general there is a close correlation between GNI per capita by Atlas and PPP (see Figure 3.1 and Table 3.4). Although all of the 28 New MICs are better off in terms of GNI per capita (exchange rate conversion) in 2009 compared to 1990 (or they

wouldn't have crossed the LIC to MIC threshold), there are a very small number of countries (including Cameroon, Côte d'Ivoire and Zambia), who although having higher GNI per capita, by GDP PPP per capita terms they were barely better off, or in some cases worse off.<sup>12</sup>

**Figure 3.1 GNI pc (Atlas, Current \$) vs. GDP pc PPP (2005, int'l \$)**



Source: Data processed from WDI (2011). Note: Dark/Blue = LICs, Light/Green = LMICs

**Table 3.4 Correlation, GNI pc (Atlas) and GDP pc PPP, average value, 2008–10**

		GDPpcPPP2005intl\$day	GNIpcAtlasCurrent\$
<b>LICs and LMICs</b>			
GDPpcPPP2005intl\$day	Pearson Correlation	1	,899**
	Sig. (2-tailed)		,000
	N	84	83
GNIpcAtlasCurrent\$	Pearson Correlation	,899**	1
	Sig. (2-tailed)	,000	
	N	83	87
**. Correlation is significant at the 0.01 level (2-tailed). R2 linear =0.807; R2 quadratic =0.801			
<b>LICs, LMICs and UMICs</b>			
GDPpcPPP2005intl\$day	Pearson Correlation	1	,955**
	Sig. (2-tailed)		,000
	N	135	134
GNIpcAtlasCurrent\$	Pearson Correlation	,955**	1
	Sig. (2-tailed)	,000	
	N	134	139
**. Correlation is significant at the 0.01 level (2-tailed). R2 linear = 0.913; R2 quadratic = 0.913			

Source: Data processed from WDI (2011).

There is the question of how sensitive the changes in the distribution of global poverty are to the LIC/MIC thresholds. The two figures (Figures 3.2 and 3.3) below respectively show the cumulative poverty counts by GNI per capita with LIC/LMIC/UMIC thresholds identified. 44 per cent of the world's poor live in India and Nigeria; countries that are about 20 per cent above the \$1005 threshold. The shift in the global distribution of poverty from LICs to MICs is thus, of course, a function of the thresholds themselves; but the bulk of world poverty is well above the current \$1005 per capita LIC threshold.

<sup>12</sup> Further, some but not all of the 'transition' economies in the new MIC group, such as Georgia and Ukraine, are not better off in PPP per capita terms despite graduating by Atlas terms. However, for such countries, unreliable GNI per capita data for 1990 may be an issue.

Such an assessment is, however, based on a methodological mismatch – the mismatch between the Atlas (exchange rate conversion) method used to construct the ‘poor countries’ threshold (meaning the LIC/MIC threshold), and the PPPs method used to construct the ‘poor people’ threshold (meaning the international poverty lines). Thus to assess more systematically how sensitive estimates of global poverty are to thresholds, one approach that can be taken is to produce cumulative poverty counts for \$1.25 poverty and plot against GDP PPP per capita at multiples of the \$1.25 poverty line (see Figures 3.3 and 3.4). Indeed, one way one could think about absolute and relative ‘poor’ countries is by applying the international poverty line – \$1.25/day (or \$2/day) – for individuals, and multiples of them, to each country’s average income.<sup>13</sup> This might mean that one could say there are:

- ‘Absolute poor’ countries: VLICs (very low-income countries) with an average income of less than \$1.25 per capita/day, and MLICs (moderately low-income countries) with an average income of less than \$2.50 pc/day;
- ‘Relatively poor’ countries: LMICs with an average income of less than \$5 pc/day, and UMICs with an average income of less than \$13 pc/day (which would be below the poverty line in the USA; see Ravallion 2009);
- ‘Non-poor’ or high-income countries: countries with an average income of more than \$13 pc/day (which would be above the poverty line in the USA).

Such an approach is open to the criticism that it simply replaces one set of arbitrary thresholds with another set, albeit a set that logically links definitions of poverty. Alternatively, one might make more use of the classifications of low, (and medium, high and very high) Human Development Countries (see UNDP 2011). These are relative and based on the quartiles of HDI distribution across countries, meaning there will always be a quarter of all countries that are low HDI in any year. There is also the UN category of ‘Least Developed Countries’ used in Table 1.1 in this paper, which utilises a sophisticated methodology that combines human assets (including nutrition, child mortality, school enrolment and adult literacy), economic vulnerability (including measures of the instability of agricultural production, population displaced by natural disasters, instability in exports, the share of agriculture in GDP and exports), and proxies for economic ‘smallness’ (less than 75 million people), ‘remoteness’ and GNI per capita. However, the graduation criteria make it very difficult to leave the category (see Guillaumont 2010) and a third of the 49 LDCs are MICs.

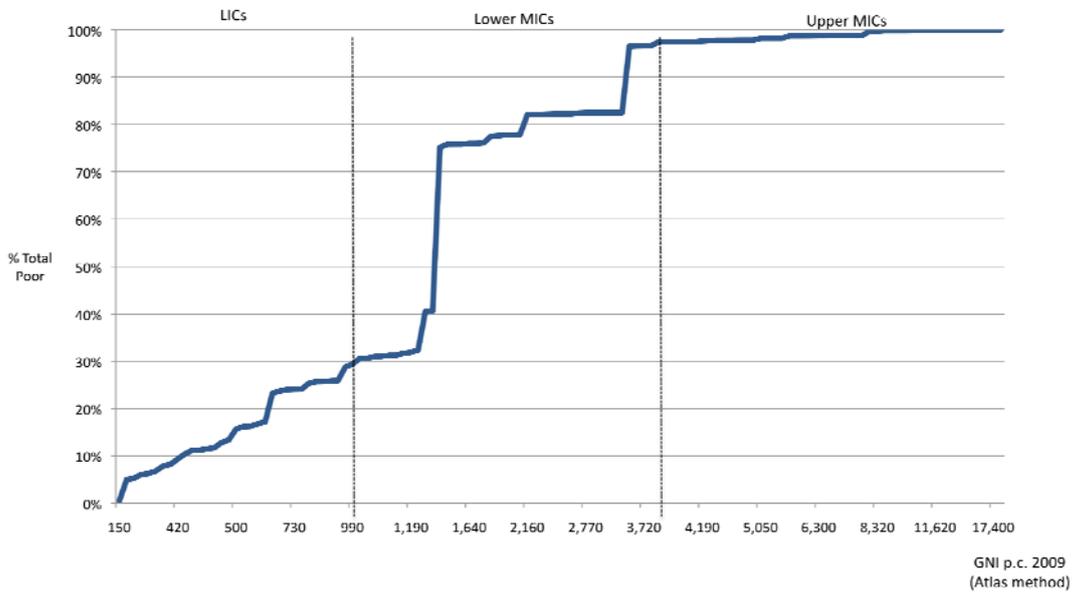
Are the current thresholds comparable with the thresholds in 1990? This is a difficult question to answer. Whether ‘international inflation’ is a meaningful way to update the thresholds is open to discussion. To assess the comparability fully one would want to assess PPPs, although this too is contentious (see Deaton 2010, 2011; Deaton and Heston 2010). One way of looking at the issue is to compare, over time, changes by country group averages. If one considers various GNI and GDP per capita measures, (see Table 3.5), one finds that that the ‘average’ for the LIC and MIC country groups are approximately the same as in 1990 by average GDP pc/day PPP (constant 2005 international \$). This comparison is interesting as the countries in each grouping have changed substantially, and yet the group average is (reasonably) comparable (and the degree of dispersion within country groups is not high).

An alternative is to make a relative assessment – relative to world average GNI per capita (see Table 3.6 below) in order to compare the LIC/MIC thresholds to world per capita GNI. Nielsen (2011: 13) notes, ‘the low-income threshold fell from 16 to 11 percent of average world income over this period [1976–2009] and the high-income threshold fell from 189 to 140 percent’.

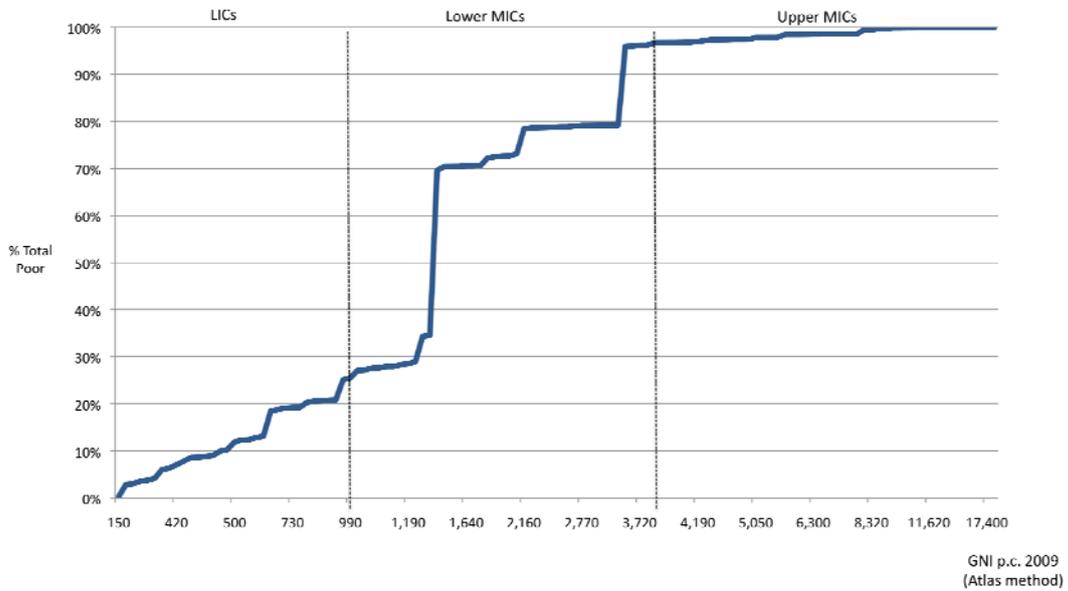
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<sup>13</sup> \$1.25/day is the mean of the national poverty lines of the poorest 15 countries in terms of consumption per capita, and thus there is clear logic that one should judge extreme poverty by the poverty lines in the poorest countries, rather than \$2/day which is the median poverty line for all developing countries (Chen and Ravallion 2008: 4).

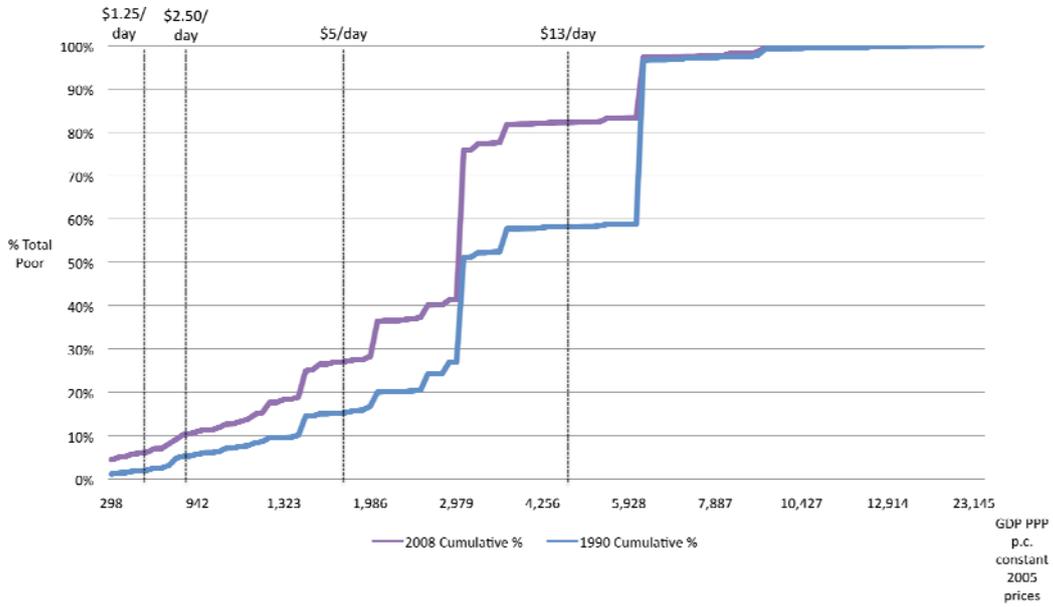
**Figure 3.2**  
**Global poverty, US\$1.25, by GNI per capita, Atlas, 2008/9**



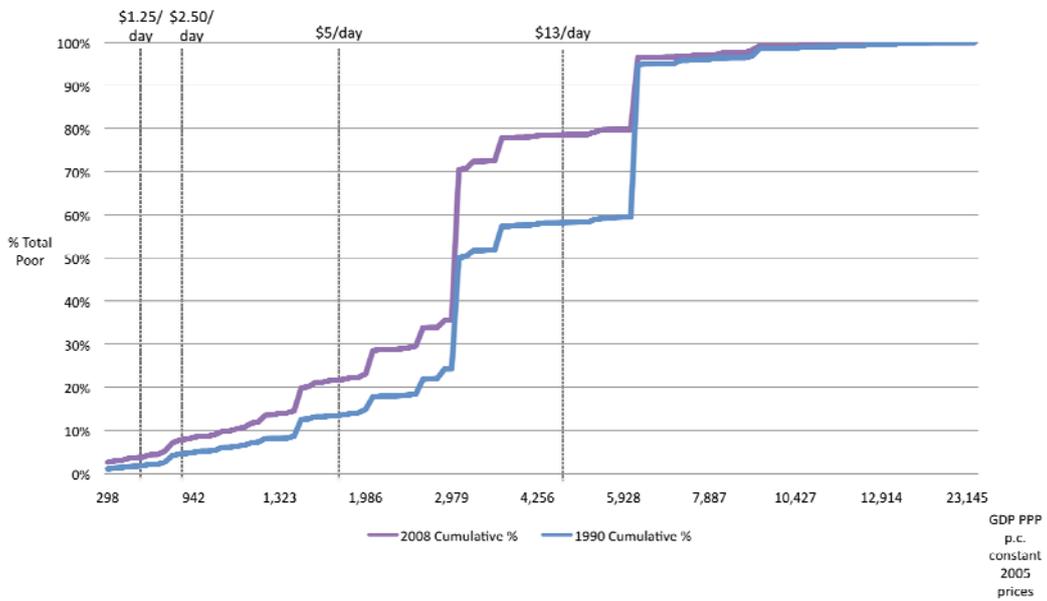
**Figure 3.3**  
**Global poverty, US\$2, by GNI per capita, Atlas, 2008/9**



**Figure 3.4**  
**Global poverty, \$1.25, by GDP pc, PPP, 1990 vs 2008/9**



**Figure 3.5**  
**Global poverty, \$2, by GDP pc, PPP, 1990 vs 2008/9**



One can consider other indicators but it is not clear how to interpret these, as the LIC group average reflects those countries 'left behind'. For example, comparing 1990 and 2009, the average for the LIC group saw little change in forex reserves but significant increases in aid dependency, primary export concentration and weaker domestic savings; all of which likely reflects the LICs 'left behind' being structurally poorer LICs than those which saw average incomes rise over the period. Conversely, the LMIC group average was significantly better off by forex, and had lower aid dependency and lower primary export concentration. However, within each country grouping, although the variation by per capita income is low, the degree of dispersion within country groups for indicators of aid dependency and export indicators would suggest caution in interpretation of the country group averages for these indicators (see for discussion, Sumner 2012b).

**Table 3.5 Estimates of Average GDP pc/day PPP, constant 2005 intl \$, pop. unweighted, 1990 vs. 2009**

	1990	2009
LICs	3.2	2.8
MICs	17.1	17.7

Source: Processed from WDI (2011).

**Table 3.6 LIC threshold as a percent of world per capita GNI**

	FY1978	FY1984	FY1989	FY2011
Threshold as % world GNI per capita	17	16	15	11

Source: Adapted from Nielsen (2011: 12).

One further issue is spatial and group inequalities within MICs, and whether the world's poor live in low-income provinces or specific social groups in MICs or 'LICs within MICs' (and/or certain social groups within MICs) or conflict-affected states within MICs. One could test the hypothesis that many MICs, especially lower MICs, are in fact collections of LIC-like provinces with a small number of higher per capita income MIC-like provinces. To pursue this is, of course, a much bigger endeavour. However, if one considers India, one finds support for this hypothesis. If one applied the LIC-MIC threshold at sub-national level, a substantial number of states in India would likely be LICs and an estimated two-thirds of India's poor would live in those LIC states and perhaps surprisingly, a third of India's poor would live in MIC states in India (see Table 3.7).<sup>14</sup>

Further, almost half – 46 per cent - of India's poor live in states with significant Naxal-related conflict (proxied by deaths data). One could extend this analysis to look at if the world's poor live in conflict-affected and/or poorly governed states in middle-income countries such as Nigeria and Pakistan for example as argued by Evans and Steven (2012). However, one might also say 60% of Naxalite-related conflict deaths are in just two states (one low income and one middle income - respectively, Jharkhand and Chhattisgarh) and those two states only account for 7% of poverty in India. And as the government of India (GoI, 2012: 2) notes, rural dwelling Scheduled Tribes, Scheduled Castes and Other Backward Castes face, respectively, poverty rates of 47.4 per cent, 42.3 per cent and 31.9 per cent, compared to 33.8 per cent for all classes. In contrast, urban dwelling Scheduled Tribes, Scheduled Castes and Other Backward Castes face respectively poverty rates of 34.1 per cent, 30.4 per cent and 24.3 per cent, compared to 20.9 per cent for all classes.

<sup>14</sup> The new poverty line in India utilised in 2009–10 data, 'happens to be close to, but less than, the 2005 PPP \$1.25 per day poverty norm used by the World Bank in its latest world poverty estimates' (Government of India 2009: 8), and produces a national poverty rate of 29.8 per cent or 355m poor (compared to the \$1.25 data that produces a rate of 32.7 per cent or 426m poor according to PovCal (2012) and population data in WDI (2011).

**Table 3.7 Estimates of the distribution of poverty by national poverty line in India by state, 2009/10**

	Est. GNI pc by state, 2009 (US\$)	State GNI pc, 2009 as % India average (\$1220)	% Population poor in each state (2009/10)	% of total Indian poor by state	% of total number of deaths in India due to Naxal-related conflict, 2007-2011
Bihar	415	34	53.5	15.3	9.4
Manipur	587	48.1	47.1	0.4	-
Madhya Pradesh	609	49.9	36.7	7.4	0.1
Uttar Pradesh	646	53	37.7	20.8	0.2
Jharkhand	691	56.6	39.1	3.6	23.1
Assam	751	61.6	37.9	3.3	-
Jammu and Kashmir	753	61.7	9.4	0.3	-
Nagaland	780	63.9	20.9	0.1	-
Tripura	821	67.3	17.4	0.2	-
Mizoram	845	69.3	21.1	0.1	-
Rajasthan	853	69.9	24.8	4.7	-
Orissa	881	72.2	37.0	4.3	8.0
Arunachal Pradesh	922	75.6	25.9	0.1	-
Meghalaya	925	75.8	17.1	0.1	-
West Bengal	990	81.2	26.7	6.8	12.4
<b>% of Indian's poor in LIC states</b>				67.4	
Tamil Nadu	1,039	85.2	17.1	3.4	-
Sikkim	1,078	88.4	13.1	0	-
Chhattisgarh	1,147	94	48.7	3.4	36.7
Uttaranchal	1,236	101.3	18	0.5	-
Andhra Pradesh	1,253	102.7	21.1	5.0	3.6
Karnataka	1,304	106.9	23.6	4.0	-
Kerala	1,365	111.9	12	1.1	-
Himachal Pradesh	1,541	126.3	9.5	0.2	-
Gujarat	1,684	138	23	3.8	-
Punjab	1,739	142.5	15.9	1.2	-
Maharashtra	1,933	158.4	24.5	7.6	6.1
Haryana	2,171	178	20.1	1.4	-
Delhi	2,399	196.6	14.2	0.7	-
Goa	3,019	247.4	8.7	0.0	-
<b>% of India's poor in MIC states</b>				32.5	
<b>Total</b>				99.9	99.7

Sources: GNI pc by state from [www.ceicdata.com](http://www.ceicdata.com) based on relative GDP PPP pc: (Province GDP pc / National GDP pc)\*(National GNI per capita). Poverty data based on GoI (2012). Deaths from Naxal-related conflict from Ministry of Home Affairs data: [http://mha.nic.in/pdfs/nm\\_pdf1.pdf](http://mha.nic.in/pdfs/nm_pdf1.pdf)

## 4 Conclusions

This paper has updated the data for the distribution of global poverty to 2008 with the most recently available data and explored the factors behind the shift in global poverty towards middle-income countries. It has also examined how sensitive the distribution of global poverty is to the thresholds for middle-income classification.

The updated data and broader analysis substantiates the changing distribution of global poverty towards MICs (however defined) and suggests an apparent 'poverty paradox' – most of the world's poor do not live in the world's poorest countries.

The changing distribution of global poverty challenges the orthodox view that most of the world's extreme poor live in the world's poorest countries, and that extreme poverty is minimal at higher levels of average per capita income. This shifts how we view global poverty because understandings and definitions of poverty have: (i) tended to underemphasise questions of national inequality, and (ii) tended to present poverty as 'residual' at higher levels of average per capita income rather than a structural outcome of specific patterns of growth and distribution, and their interaction with sub-national/spatial inequalities and horizontal/group inequalities.

One take on the data is that extreme poverty is turning gradually from a question of poor people in absolute poor countries to poor people in relative poor countries or non-poor countries (depending on the definition applied for this). This implies a shift over time from international redistribution (via aid) to national redistribution of some kind; and thus a greater focus on governance and the relationship between the poor and the non-poor, as the latter, in the not-too-distant future, may have the capacity to end the poverty of the former.

What the above points to is that poverty research needs to go beyond studying the 'poor.' This would suggest that, rather than study individual or household *deprivations* as poverty research has tended to do, much more focus should be placed on socioeconomic groups and inter- and intra- group *distribution* and social differentiation. This means less focus on studying the 'poor' and greater focus on studying the 'non-poor', meaning not only those groups vulnerable to poverty but the secure middle class and elites, and their social relationships with the 'poor'. This would mean more focus on reconnecting poverty research with the broader processes of economic development, and implies a shift from researching the 'traditional' area of mainstream poverty research (meaning *deprivation*) to researching something different and far more political: *distribution*.

Of course, many researchers have been doing this already, but some argue that poverty research in the mainstream has been depoliticised by the 'measurement obsession'. Measurement is not the problem, however. The problem is embedding poverty research within an analysis that includes distribution, social differentiation and the process of economic development – in short, the political economy of poverty. Poverty research has underemphasised questions of inequality under the assumption that poor people always live in poor countries so inequality does not matter if everyone is poor. That is no longer so certain. Mainstream poverty research has also tended to present poverty as 'residual' at higher levels of average per capita income, rather than an outcome of specific patterns of economic development and social structures and relationships. Poverty in middle-income countries raises a question mark over this. In sum, in the future the questions for poverty research might be reframed from 'Who is poor?' and 'Why are they poor?' to 'Who does what?' and 'Who gets what?'.

## Appendix: Methodological appendix

The pattern observed in the distribution of global poverty raises numerous methodological questions. First, there are the \$1.25 and \$2 poverty lines themselves have been subject to considerable contention (for critical review see Fischer 2010). Most notably, such contention has centred on Purchasing Power Parity (PPP) related issues (see discussion in Sumner 2012 drawn from Deaton 2010, 2011; Deaton and Heston 2010; Klasen 2010). However, in spite of various issues related to data quality (e.g. the treatment of urban and rural areas of large countries); prices for 'comparison resistant items' (e.g. government services, health and education); the effects of the regional structure of the latest International Comparison Programme; the absence of weights within basic headings which may result in basic headings being priced using high-priced, unrepresentative goods that are rarely consumed in some countries; the use of national accounts statistics data that does not reflect consumption patterns of people who are poor by global standards), Deaton (2010: 31) concludes that the reweighting of the PPPs matters less than might be thought and instead, the quality of underlying household surveys and national accounts is a more urgent area for improvement:

PPPs for the poorer countries in Africa or in Asia may be *good enough* [emphasis added] to support global poverty counts, at least *provided the uncertainties are recognized* [emphasis added]. (Deaton 2010: 31).

Further, clustering around the 'international poverty line' between \$1 and \$1.25 'Asianised' world extreme poverty because 200m Indians live(d) between \$1 to \$1.25 in 2005 (Deaton 2011). It is for this reason that it is important to make global estimates both with and without India and China) in tables, so comparisons can be made.

This points towards the fact that people move in and out of poverty, and numerous studies have shown that there is no such group as 'the poor' in the way the term is conventionally used. Of particular relevance is the poverty dynamics literature, and the research on chronic and transient poverty (e.g. Baulch 2011; Hulme *et al.* 2001; Hulme and Shepherd 2003 McKay and Lawson 2002; Narayan and Petesch 2007). In countries with data, it has been estimated that the percentage of the poor that are always poor comprises typically 20–40 per cent of poor households (see data in Dercon and Shapiro 2007).

Given these points, it is important that the distribution of global poverty noted by expenditure poverty holds across other poverty measures (see Alkire *et al.* 2011). Further, that the population coverage of the poverty data used is reasonable (see Table A1 below). In fact the population coverage is of such a level that countries with missing data comprise a relatively small proportion of the population of LICs and MICs, and their absence will not make a substantial difference to estimates of the global distribution. For this reason, as per Chandy and Gertz (2011), estimates here do not 'fill' data gaps like Chen and Ravallion (2008) with weighted regional averages. There is some slight bias in the estimates towards MICs, but the population coverage of LICs is still respectable.

**Table A1. Population coverage of US\$1.25 and US\$2 poverty data by country classifications, 2008 (% population covered by category, current country classifications)**

	<b>2008</b>
LICs	83.5
MICs	98.0
LICs and MICs	96.0
Fragile states (45 countries of OECD 2011)	97.2
Least developed countries	85.3

Source: Processed from PovcalNet (2012). Note: Consumption surveys used for all countries with the following exceptions for countries with income surveys: Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Croatia, Czech Republic, Dominican Republic, Ecuador, El Salvador, Estonia, Guatemala, Guyana, Honduras, Malaysia, Mexico, Moldova, Rep., Nicaragua, Panama, Paraguay, Poland, Russian Federation, Slovak Republic, Slovenia, Trinidad and Tobago, Turkmenistan, Ukraine, Uruguay, Uzbekistan and Venezuela. OECD (2011) fragile states = Afghanistan, Angola, Bangladesh, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Dem. Rep., Congo, Rep., Côte d'Ivoire, Eritrea, Ethiopia, Georgia, Guinea, Guinea-Bissau, Haiti, Iraq, Kenya, Kiribati Korea, Dem Rep., Lebanon, Liberia, Malawi, Myanmar, Nepal, Niger, Nigeria, Pakistan, Palestinian Adm. Areas, Papua New Guinea, São Tomé and Príncipe, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, Sudan, Tajikistan, Timor-Leste, Togo, Uganda, Uzbekistan, Yemen, Rep. and Zimbabwe.

**Table A2. Countries with no poverty data**

<b>Country</b>	<b>Country Classification</b>	<b>Population (2008)</b>
Afghanistan	Low income	29,021,099
Eritrea	Low income	4,926,877
Korea, Dem. Rep.	Low income	23,818,753
Myanmar	Low income	49,563,019
Somalia	Low income	8,926,326
Zimbabwe	Low income	12,462,879
Kiribati	Lower middle income	96,558
Kosovo	Lower middle income	1,795,000
Marshall Islands	Lower middle income	59,667
Micronesia, Fed. Sts.	Lower middle income	110,414
Mongolia	Lower middle income	2,641,216
Samoa	Lower middle income	178,869
Solomon Islands	Lower middle income	510,672
Tonga	Lower middle income	103,566
Tuvalu	Lower middle income	n/a
Uzbekistan	Lower middle income	27,313,700
Vanuatu	Lower middle income	233,866
American Samoa	Upper middle income	66,107
Antigua and Barbuda	Upper middle income	86,634
Argentina	Upper middle income	39,882,980
Cuba	Upper middle income	11,204,735
Dominica	Upper middle income	73,193
Grenada	Upper middle income	103,538
Lebanon	Upper middle income	4,193,758
Libya	Upper middle income	6,294,181
Mauritius	Upper middle income	1,268,854
Mayotte	Upper middle income	191,187
Palau	Upper middle income	20,279
St. Kitts and Nevis	Upper middle income	49,190
St. Vincent and the Grenadines	Upper middle income	109,117

Source: Processed from PovcalNet (2012).

# References

Adelman, I. (2000) 'Fifty Years of Economic Development: What have we Learnt?', paper presented at the Annual Bank Conference on Development Economics-Europe. Paris, 26-28 June

Alkire, S.; Roche, J.; Santos, E. and Seth, S. (2011) *Multidimensional Poverty Index 2011*, Oxford: OPHI

Baulch, B. (ed.) (2011) *Why Poverty Persists: Poverty Dynamics in Asia and Africa*, Cheltenham, UK: Edward Elgar

Besley, T. and Cord, L. (eds) (2007) *Delivering on the Promise of Pro-Poor Growth: Insights and Lessons from Country Experiences*, Basingstoke: Palgrave Macmillan

Bourguignon, F. and Morrisson, C. (1998) 'Inequality and Development: the Role of Dualism', *Journal of Development Economics* 57, 233–57

Bruno, M.; Ravallion, M. and Squire, L. (1998) 'Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues', in V. Tanzi and K. Chu (eds), *Income Distribution and High Quality Growth*, Cambridge, MA: MIT Press

Chandy, L. and Gertz, G. (2011) *Poverty in Numbers: The Changing State of Global Poverty from 2005 to 2015*, Policy Brief 2011-01, Washington, DC: Global Economy and Development at Brookings, The Brookings Institution

Chen, S. and Ravallion, M. (2012) *An Update to the World Bank's Estimates of Consumption Poverty in the Developing World*, Washington, DC: World Bank

Chen, S. and Ravallion, M. (2008) *The Developing World is Poorer than thought but no less Successful in the Fight Against Poverty*, Policy Research Working Paper 4703, Washington, DC: World Bank (also published in 2010 in *Quarterly Journal of Economics* (2010), 125.4: 1577–1625)

Collier, P. (2007) *The Bottom Billion*, Oxford: OUP

Deaton, A. (2011) 'Measuring Development: Different Data, Different Conclusions', paper presented at the 8<sup>th</sup> AFD-EUDN Conference, Paris

Deaton, A. (2010) 'Price Indexes, Inequality, and the Measurement of World Poverty', *American Economic Review* 100.1, 5–34

Deaton, A. and Heston, A. (2010) 'Understanding PPPs and PPP-based National Accounts', *American Economic Journal* 2.4, 1–35

Deininger, K. and Squire, L. (1998) 'New Ways of Looking at Old Issues: Inequality and Growth', *Journal of Development Economics* 57.2, 259–87

Dercon, S. and Shapiro, J. (2007) *Moving On, Staying Behind, Getting lost: Lessons on Poverty Mobility from Longitudinal Data*, Global Poverty Research Group Working Paper Series, 75

Dollar, D. and Kraay A. (2002) 'Growth is Good for the Poor', *Journal of Economic Growth* 7, 195–225

Evans, A. and Steven, D. (2012). *Beyond the Millennium Development Goals - Agreeing to a Post-2015 Development Framework*, Washington, DC and New York: Brookings and CIC NYU

Fields, G. (2001) *Distribution and Development: A New Look at the Developing World*, Cambridge, MA: Massachusetts Institute of Technology (MIT) Press

Fischer, A.M. (2010) 'Towards Genuine Universalism within Contemporary Development Policy', *IDS Bulletin* 41, 36–44

Gallup, J.; Radelet, S. and Warner, A. (1999) *Economic Growth and the Income of the Poor, Consulting Assistance on Economic Reform II*, Discussion Paper 36, Harvard, MA: Harvard Institute of International Development

Gentilini, U. and Sumner A. (2012) *What do National Poverty Lines Tell Us about Global Poverty?* IDS Working Paper, Brighton: IDS

Glassman, A. Duran, D. and Sumner, A. (2011) *Global Health and the New Bottom Billion: What Do Shifts in Global Poverty and the Global Disease Burden Mean for GAVI and the Global Fund?*, CGD Working Paper, Washington, DC: Center for Global Development

Glennie, J. (2011) *The Role of Aid to Middle-Income Countries*. ODI Working Paper. London: ODI

Government of India (2012) *Press Note on Poverty Estimates, 2009-10*, Planning Commission, New Delhi: Gol

Government of India (2009) *Report of the Expert Group to Review the Methodology for Estimation of Poverty*, Planning Commission, New Delhi: Gol

Grimm, M.; Klasen, S. and McKay, A. (2007) *Determinants of Pro-poor Growth: Analytical Issues and Findings from Country Cases*, Basingstoke: Palgrave Macmillan

Guillaumont, P. (2010) *Caught in a Trap: Identifying the Least Developed Countries*, Paris: Economica

Hanmer, L. and Naschold, F. (2001) 'Attaining the International Development Targets: Will Growth be Enough?', *Development Policy Review* 18, 11–36

Harriss, J. (2007) *Bringing Politics back into Poverty Analysis: Why Understanding Social Relations Matters More for Policy on Chronic Poverty than Measurement*, CPRC Working Paper, Manchester/London: CPRC

Harttgen, K. and Klasen, S. (2010) *Fragility and MDG Progress: How Useful is the Fragility Concept?*, European University Institute Working Paper 2010/20, Robert Schuman Centre For Advanced Studies, European University Institute, Fiesole, Italy.

Hulme, D.; Moore, K. and Shepherd, A. (2001) *Chronic Poverty: Meanings and Analytical Frameworks*, Chronic Poverty Research Centre Working Paper 2, Manchester/London: CPRC

Hulme, D. and Shepherd, A. (2003) 'Conceptualising Chronic Poverty', *World Development* 31.1, 403–23

IMF (2012) *World Economic Outlook Database*, Washington, DC: IMF

- Kanbur, R. and Sumner, A. (2011a) *Poor Countries or Poor People? Development Assistance and the New Geography of Global Poverty*, Working Paper 2011-08, Ithaca, NY: Charles H. Dyson School of Applied Economics and Management, Cornell University
- Kanbur, R. and Sumner, A. (2011b) *Poor Countries or Poor People? Development Assistance and the New Geography of Global Poverty*, CEPR Working Paper, London: CEPR
- Klasen, S. (2010) Levels and Trends in Absolute Poverty in the World: What We Know and What We Don't', paper prepared for the International Association for Research in Income and Wealth, St. Gallen, Switzerland, August 22–28
- Koch, S. (2011) Poverty Reduction in a Changing Development Landscape', paper presented at DSA-EADI Conference, York, UK
- Kraay, A. (2004) *When is Growth Pro-Poor? Cross-Country Evidence*, World Bank Working Paper 3225, Washington, DC: World Bank
- McKay A. and Lawson, D. (2007) 'Assessing the Extent and Nature of Chronic Poverty in Low Income Countries: Issues and Evidence', *World Development* 31.3, 425–39
- Mosley, P. (2004) *Severe Poverty and Growth: A Macro-Micro Analysis*, Chronic Poverty Research Centre Working Paper 51, Manchester, UK: CPRC
- Mosley, P.; Hudson, J. and Verschoor, A. (2004) Aid, Poverty Reduction and the New Conditionality, *Economic Journal* 114, 214–43
- Narayan, D. and Petesch, P. (2007) *Moving out of Poverty*, Washington, DC: World Bank
- Nielsen, L (2011) *Classifications of Countries Based on Their Level of Development: How it is Done and How it Could be Done*. IMF Working Paper 11/31. Washington, DC: IMF.
- OECD (2010) *Resource flows to Fragile and Conflict Affected States*, Paris: Organisation for Economic Co-operation and Development
- OECD (2011) *Ensuring Fragile States Are Not Left Behind: 2011 Factsheet on Resource Flows in Fragile States*. Paris: OECD.
- Ravallion, M. (2009) *Do Poorer Countries have Less Capacity for Redistribution?*, Policy Research Working Paper 5046, Washington, DC: World Bank
- Ravallion, M. (2007) *Inequality is Bad for the Poor*, Washington, DC: World Bank
- Ravallion, M. (2004) *Measuring Pro-poor Growth: A Primer*, World Bank Working Paper 3242, Washington, DC: World Bank
- Ravallion, M. (2001) 'Growth, Inequality and Poverty: Looking Behind the Averages', *World Development* 29.11, 1803–15
- Ravallion, M. (1997) 'Can High-Inequality Developing Countries Escape Absolute Poverty?', *Economic Letters* 56, 51–57
- Ravallion, M. (1995) 'Growth and Poverty: Evidence for Developing Countries in the 1980s', *Economic Letters* 48, 411–17

- Ravallion, M. and Chen, S. (1997) 'What Can New Survey Data tell us about Recent Changes in Distribution And Poverty', *World Bank Economic Review* 11.2, 357–82
- Roemer M. and Gugerty, M. (1997) *Does Economic Growth Reduce Poverty? Consulting Assistance on Economic Reform II*, Discussion Paper 4, Harvard: Harvard Institute of International Development
- Son, H. and Kakwani, N. (2003) 'Poverty Reduction: Do Initial Conditions Matter?' mimeo, Washington DC: World Bank
- Stewart, F. (2000) *Income Distribution and Development*, Queen Elizabeth House (QEH) Working Paper, Oxford University, Oxford: QEH
- Sumner, A. (2012a) 'Where do the Poor Live?', *World Development* 40.5, 865-877
- Sumner, A. (2012b) (forthcoming, 2012) 'From Deprivation to Distribution: Is Global Poverty Becoming A Matter of National Inequality?', IDS Working Paper, Brighton: IDS
- Sumner, A. (2010) *Global Poverty and the New Bottom Billion*, IDS Working Paper 349, Brighton: IDS
- Thirtle, C.; Irz, I.; Lin, L.; McKenzie-Hill, V. and Wiggins, S. (2001) *The Relationship Between Changes in Agricultural Productivity and the Incidence of Poverty in Developing Countries*, Department for International Development Report No.7946, London: Department for International Development
- Timmer, P. (1997) *How Well did the Poor Connect to the Growth Process? Consulting Assistance on Economic Reform II*, Discussion Paper 17, Harvard: Harvard Institute of International Development
- UNDP (2011) *Human Development Report*, New York: UNDP
- UNICEF (2009) *Working Paper of the Task Force on UNICEF Engagement in Countries with Low Child Mortality*, New York: UNICEF
- World Bank (2012) *PovcalNet* <http://iresearch.worldbank.org/PovcalNet/index.htm> (accessed 1 April 2012)
- World Bank (2011a) *Country Classifications: a Short History*, <http://data.worldbank.org/about/country-classifications/a-short-history>. (accessed 1 March 2011)
- World Bank (2011b) *World Development Indicators*, Washington, DC: World Bank