Chronic Poverty
Research Centre

Background Paper for the Chronic Poverty Report 2008-09

Pro-Poor Growth and the Poorest

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March 2005

What is Chronic Poverty?

The distinguishing feature of chronic poverty is extended duration in absolute poverty.

Therefore, chronically poor people always, or usually, live below a poverty line, which is normally defined in terms of a money indicator (e.g. consumption, income, etc.), but could also be defined in terms of wider or subjective aspects of deprivation.

This is different from the transitorily poor, who move in and out of poverty, or only occasionally fall below the poverty line.

The research for this Background Paper was made possible by CPRC core funding from the United Kingdom's Department for International Development (DFID).

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1 Summary

This paper examines the relationship of the poorest with growth (absolute sense), and whether or not the relationship the very poorest people have with growth is different from that for the poor as a whole (relative). Impacts of economic growth on the poorest are routed through direct channels (raising their production or income levels) and indirect channels (due to increased public spending or remittances). However, benefits are not guaranteed to all people, and in some cases the impact of growth on the poorest may be adverse. The paper begins the process of assembling data on this relationship and unpacking some explanation for patterns.

The findings of a series of 14 case studies commissioned by AFD, BMZ, DFID and the World Bank as part of the 'Operationalising Pro-Poor Growth' (OPPG) Project, are interrogated with a specific focus on the poorest people. These countries fall into two broad categories: those where poverty was significantly reduced over the 1990s, along with high rates of growth and significant increased inequality (El Salvador, Ghana, Senegal, Uganda, Vietnam, India, Brazil, Bangladesh); and those that experienced moderate rates of poverty reduction and growth, and where inequality declined (Burkina Faso, Bolivia, Indonesia, Romania, Zambia).

The paper examines the growth incidence curves (GICs) for specific information on what happens to the poorest in comparison to the poor and national average growth rates. The GICs clearly show that using aggregate measures of growth, poverty and inequality hides much of the variation across different populations. In summary the GICs show that:

- Growth rates are often positive among the poorest and therefore these groups are able to participate in growth in an absolute sense. Sometimes this happens quite significantly however often this may not be enough to actually reduce poverty.
- The poorest usually do less well than the national average and the poor. This is not unexpected in contexts where inequality is rising.
- However there are a number of cases where the poorest do better than the poor and the national average.

This is summarised as averages in Table 1.1 below.

Table 1.1: Comparative average growth rates among the poor and poorest

Country & Date	Poorest 10%	Poorest 20%	All poor (headcount)	Average growth rate
Bangladesh 1991-2000	0.9	0.8	0.7	1.2
Bolivia 1989-2002	2.4	2.5	1.9	1.6
Brazil 1993-2001	2.7	3.0	3.2	3.2
Burkina Faso 1994-2003	0.8	0.8	1.0	0.8

El Salvador 1991-2000	0.9	2.4	4.4	4.6
Ghana 1991-1998	1.0	1.3	2.2	2.9
India 1994-2000	3.2	3.2	3.2	4.1
Indonesia 1996-2002	3.0	3.0	3.0	2.6
Senegal 1994-2001	1.9	1.7	2.2	2.5
Tunisia				
Romania 1996-2002	-2.8	-2.6	-2.6	-2.6
Uganda 1992-2003	2.9	2.9	2.7	2.9
Vietnam 1992-2003	4.1	4.0	4.3	4.9
Zambia 1991-1998	5.5	4.8	1.3	0.4

It is also possible to disaggregate GICs to sub-periods and different regions. The shape of the curve provides further information on what happens across the distribution. Among the poorest end of the distribution we find that inequality is stable in half of the studied countries, decreasing in Zambia and Senegal, and increasing among the poorest in Ghana, Bolivia, El Salvador, Romania and Brazil. Rural and urban differences are clearly driving the growth rates in some countries, with implications for how the poorest are able to participate.

All the countries are pro-poorest in an absolute sense, except for Romania. A number of countries are also relatively pro-poorest. Bolivia for example had both pro-poor and pro-poorest growth over the 1990s. The growth elasticities of poverty indicate how effective growth is in translating into poverty reduction. Only a few studies provided elasticities for extreme poverty or the lower population percentiles. These are summarised in Table 1.2.

Table 1.2: Responsiveness of extreme poverty to growth in selected OPPG countries

	Pro-poorest growth rate (average growth rate)	Growth Elasticity of Extreme Poverty (poverty)		
		P0	P1	P2
Bolivia	2.2 (1.7)			
Brazil	2.7 (3.2)	-0.9 (-0.5)	-1.0 (-0.7)	-1.2 (-0.8)
Burkina Faso	0.8 (1.0)			
El Salvador	2.4 (4.1)	-1.5 (-1.1)		
Ghana	1.3 (2.1)			
Romania	-2.8 (-2.6)	-0.9 (-1.1)	-0.6 (-0.8)	-0.2 (-0.7)
Uganda	2.8 (2.7)	-2.5 (-1.8)	-3.4 (-2.3)	-4.2 (-2.8)
Vietnam	4.1 (4.9)	-1.0 (-0.8)	-1.1 (-0.9)	-1.1 (-1.0)

The OPPG case studies present a highly heterogeneous sample that illustrate how the poorest often do as well as the poor and even the national average, even where poverty is declining slowly. Analysis indicates that pro-poorest trends may reflect not only incidences of pro-poor growth but also the distributional impacts of recession and shocks that hit richer groups hardest.

Agriculture and the rural economy clearly offer important safety nets and buffers against shocks for the poorest (e.g. in Zambia, Romania, Bolivia). Where agriculture is linked with other domestic developments, such as non-farm activities, or the export sector it can be an important driver of pro–poor and pro-poorest growth. Rural infrastructure and market investment is crucial to support this sector expansion (e.g. Bangladesh, Zambia). Broad based rural development also includes investments in rural non-farm and export activities (e.g. Burkina Faso) and pro-poorest outcomes can potentially be improved through using labour intensive approaches (e.g. Indonesia, El Salvador) to infrastructure development.

Improved households inputs, including agricultural inputs, human capital investments and non-farm activities can be assisted through credit (e.g. Ghana, Bangladesh, Zambia, and Vietnam). These investments are absolutely critical for opening up remote, excluded, lowly populated areas (e.g. Ghana, Indonesia, Brazil) and overcoming spatial poverty traps and developing the rural non-farm sector (e.g. Bangladesh).

Economic, political and environmental stability is essential to attract inward investments, and protection against risks is important for the poorest. Public expenditures and safety nets have played a part in most of the OPPG countries, but social protection approaches have been weak. Protection from violence through national peace agreements allows for greater public sector investments to be diverted to social sectors, but quality of services is an issue. Urban-rural and overseas remittances play an increasing role in the local economies of many developing countries. However the poorest tend to miss out (e.g. Burkina Faso, Bangladesh) although in some cases there have been positive spin offs from which to build (e.g. El Salvador).

Policy distortions favour some people and areas over others. These can take a long time to change but discrimination, exclusions and bias create unbalanced economies, and high levels of inequality and resentment. To drive pro-poorest growth the factors that drive income and consumption growth among the poorest people need policy consideration.

Acknowledgements

The paper was funded by DFID's Reaching the Very Poorest Team. It is part of a series of work funded by DFID to examine the relationship between growth and the poorest people, as background work for the Chronic Poverty Report 2008-09.

Thanks are due to Andy McKay for his guidance and input into this paper.

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2 Introduction

This paper examines the relationship of the poorest with growth (absolute sense), and whether or not the relationship the very poorest people have with growth is different from that for the poor as a whole (relative). It examines the findings of a series of 14 case studies commissioned by AFD, BMZ, DFID and the World Bank as part of the 'Operationalising Pro-Poor Growth' (OPPG) Project, and interrogates these with a specific focus on the poorest people.

First, it is necessary to define what is meant by 'pro-poor growth' (PPG). There are two conceptual understandings. A relative concept of PPG refers to growth in which the incomes of the poor increase disproportionately (such that inequality decreases). An absolute concept of PPG in turn focuses on the growth rates among the poor, defining growth as pro-poor if poverty is reduced. Clearly both concepts are important to understanding how the poor contribute to and benefit (or not) from growth.

Implications of economic growth on the poorest are routed through both direct channels (raising their production or income levels) and indirect channels (due to increased public spending or remittances). However, benefits are not guaranteed to all people, and in some cases the impact of growth on the poorest may be adverse. The limited empirical evidence available suggests that the poorest may not benefit pro-rata (McKay, 2004). It is possible to assemble a much wider body of evidence through drawing on analysis of existing household data, including panel data sets, and drawing lessons from the multi-donor work on pro-poor growth (OPPG). This paper begins the process of assembling this data. The case studies provide rich evidence from a selection of countries representing global heterogeneity in terms of geographic and socio-economic characteristics as well as varied growth paths.

2.1 Who are the poorest?

We consider the poorest in terms of relative severity (i.e. the lowest 10% or 20%). In the short time frame available to carry out this work, we limit ourselves to looking at national poverty lines. This inhibits cross-country comparisons but does allow for broad discussion around patterns of poverty change among the poorest with growth. A more in depth analysis would involve identification of the $1/day poor and extreme poor (usually at 75 cents), but is out of the scope of this paper.

In each country and in addition to looking at general trends within the lowest 10% and 20%, particular areas and groups are identified as likely to fall within the poorest category. Where case studies allow, some discussion centres on the impact of growth on these spatially and socially defined groups.

Table 8 (Annex) summarises the case study data on poverty and the poorest.

2.2 Poverty, growth and inequality trends

Initial analysis of the 14 country sample, over the 1990s, carried out by the World Bank (Cord and Fiestas, 2005) indicate two broad categories–

1. Those countries who experienced *significant poverty reduction*, *high rates of growth and significant increases in their inequality* (El Salvador, Ghana, Senegal, Uganda, Vietnam, India, Brazil, Bangladesh). These countries were associated with an upward sloping Growth Incidence Curve suggesting that the income growth of richer percentiles was faster than the income growth of the poorer percentiles;

2. Those who experienced *moderate rates of poverty reduction and growth, and where inequality declined* (Burkina Faso, Bolivia, Indonesia, Romania, Zambia). This pattern of development was associated with downward sloping growth incidence curves implying that the income of households in the lower percentiles grew by more than income in the top percentiles

Within a *relative* definition Cord and Fiestas conclude that only the second category of countries would be classified as having experienced pro-poor growth. However, they found that despite this fact the poor were actually better off in the first category than they were in the second, where economic growth was more moderate. This is illustrated by the fact that 'the median income growth for the first two quintiles was a steady 3 percent in the first category, while in the second category it starts at 3 percent, but then abruptly falls down to 2 percent'. This is partly explained by the growth incidence curves which Cord and Fiestas suggest show that 'the rise in inequality reflects a strong income performance for the upper centiles, but not a decline in income for the lower centiles. In contrast, a decline in inequality is also driven by very low or declining income levels for the upper centiles and less by falling income for the poorer households.'

Cord and Fiestas identify a number of general trends across the case studies:

1. *First, overall growth was pro-poor among the 14 countries in the 1990s.* The recovery in growth experienced by most of the 14 countries was clearly the major force behind the poverty reduction. As would be expected, higher growth was associated with higher levels of poverty reduction. On average, a 1 percent increase in annual GDP per capita leads to a 1.2 percent decline in headcount poverty. However, the relationship between growth and poverty reduction is not invariant and that growth explains only 60 percent of the changes in poverty.

2. Second, given the fact that poverty was falling more rapidly in urban areas than in rural areas, and that inequality was higher and rose faster in the 1990s in urban areas, growth in urban areas was considerably stronger than growth in rural areas.

3. *Third, higher poverty reduction was not correlated with falling inequality*. In fact,

falling poverty was correlated with rising inequality in the 1990s. Changes in inequality explain about 60 percent of the variance in poverty reduction and a one percent increase in the Gini is associated with a reduced poverty headcount, on average by 1.9 percent.

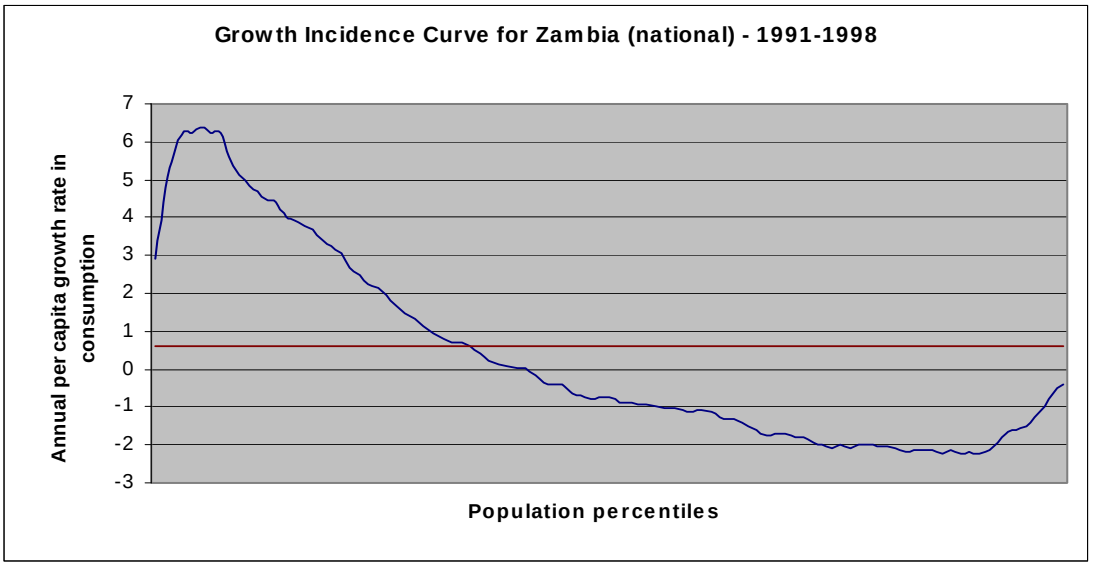
4. Fourth, this unusual relationship between poverty and inequality reflects the strong positive correlation between inequality and growth. Similar to the global trends, the 14 countries show that growth and rising inequality were positively correlated in the 1990s (with growth rates explaining 80 percent of the variation in inequality). As with the global data, a one percent increase in the growth rate led to a 0.56 increase in the Gini score.

It is the purpose of this paper to provide evidence on the relationship between growth and the *poorest*. Can the poorest benefit where there are rising levels of inequality with growth? Do the poorest respond differently to the poor? Table 12 (Annex) summarises the evidence from the 14 OPPG case studies and the discussion below provides an analysis.

3 Growth incidence curves: Evidence 1

We examined the growth incidence curves (GICs)[1], looking specifically at income growth among the poorest percentiles and comparing this with the poor (measured by national poverty line) and average growth. GICs show rates and patterns of overall growth across a distribution, whether inequality changed over the period of observation, how poverty changed and also whether growth affected the poorest percentiles in a different way to the poor and to the general population. Some of the case studies allowed for disaggregation to different time periods and provided GICs for urban and rural areas.

Figure 3.1: Example of a Growth Incidence Curve



All the national GICs are available in the Annex. Figure 1 provides an illustration of Zambia's national GIC, which provides an example of a pro-poor downward slopping line showing the poor have higher annual growth rates than the rich. The analysis below is focused on the 1990s (but using the longest possible time range available) and provides some summary indicators. These indicators highlight how the poorest 10% and 20% of the population fared on average in comparison to the poor (using national headcount data) and the national average. The summary data are disaggregated to rural and urban areas, and sub-periods, where data allows. Secondly we examine in more detail the overall shape of the GICs, focusing specifically on what happened at the lower end of the distribution in comparison to the rest of the population. Average statistics do not allow for this more detailed overview across a whole distribution.

[1] GICs plot change in consumption or income growth over two points in time. They show the growth rate between the same percentile households in the first and the second period. They do not use panel data and so do not growth rates of households over time but show growth rates of percentiles.

The GICs clearly show that using aggregate measures of growth, poverty and inequality hides much of the variation across different populations. In summary the GICs show that:

- Growth rates are often positive among the poorest and therefore these groups are able to participate in growth in an absolute sense. Sometimes this happens quite significantly however often this may not be enough to actually reduce poverty.
- The poorest usually do less well than the national average and the poor. This is not unexpected in contexts where inequality is rising.
- However there are a number of cases where the poorest do better than the poor and the national average.
- National GIC patterns are driven by differences in rural and urban growth.
- Disaggregation to different sub time periods allows for greater detail on how the poorest respond to economic changes within two points in time. It is possible to determine whether, on average, it is where countries have sustained periods of growth that the poorest do well/best, and see how the impacts of recessions and reforms are felt by the poorest. Answering these questions is however beyond the scope of this paper.

3.1 National level patterns:

All the countries, except for Romania, had positive growth for the poorest (see Table 1). For the poorest 10% of the population, the annual growth rate ranged from 0.9% (in Bangladesh and El Salvador) to 5.5% (in Zambia), with four cases above 3% and three between 2 and 3%. For the poorest 20% the range was 0.8% (again in Bangladesh) to 4.8% annual growth in Zambia. Five cases were above 3 percent per annum and another three were between 2 and 3 percent.

Table 1 illustrates how the national poorest average growth rates compare to growth among the poor generally. In five countries (Bangladesh, Bolivia, Brazil, Uganda and Zambia) the poorest 10% and 20% of the distribution have done better than the poor as a whole over the 1990s. In both India and Indonesia the poorest have experienced the same average growth rates as the poor. It is worth noting that in Zambia the poorest 10% have actually had higher average growth rates than the poorest 20%, indicating quite clear pro-poorest growth.

Of these countries, the poorest in Bolivia, Indonesia, and Zambia experienced positive growth rates that on average were higher than the national average. This indicates clear pro-poorest growth patterns in these countries with the poorest population increasing their income/consumption faster than the average. In Zambia this difference is large, the poorest 10% growing at 5.5% per annum compared to a average growth rate of 0.4% per annum.

The remaining five countries (Burkina Faso, El Salvador, Ghana, Senegal and Vietnam) saw the poorest populations faring less well than the poor. These countries also all saw the poorest faring less well than the national average, and so at the national level saw rising inequality across the distribution. It is notable however that within the poorest section of the population in both Senegal and Vietnam the poorest 10% actually had higher average growth rates than the poorest 20%, indicating that the very poorest may have engaged in growth differently to the slightly less poor people.

Likewise, in Bangladesh, Brazil, India and Uganda, although the poorest have higher or equal average growth to the poor, these averages are lower than the national average, again indicating rising inequality in these countries, but is affecting the poorest less negatively than the poor.

Romania is the only country where the poorest experienced negative growth on average in the 1990s. Negative average growth was experienced across the distribution. The poorest 20% and the poor (poverty rate also at 20%) experienced negative average growth rates the same as the average population. The poorest 10% fared slightly worse than average and the poor during the 1990s.

Table 3.1: Comparative average growth rates among the poor and poorest

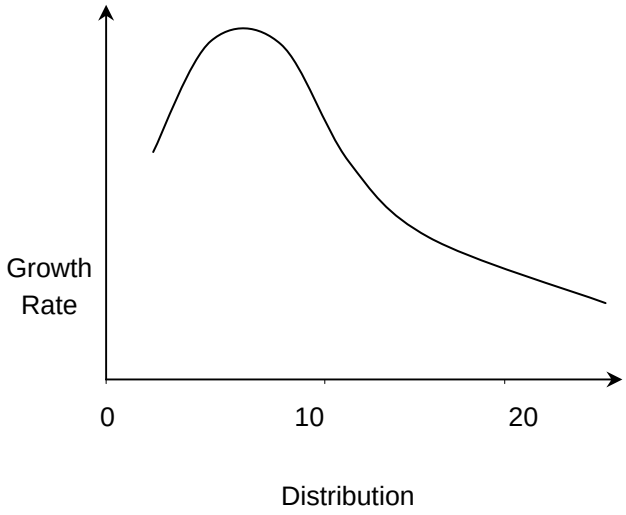
Country & Date	Poorest 10%	Poorest 20%	All poor (headcount)	Average growth rate
Bangladesh 1991-2000	0.9	0.8	0.7	1.2
Bolivia 1989-2002	2.4	2.5	1.9	1.6
Brazil 1993-2001	2.7	3.0	3.2	3.2
Burkina Faso 1994-2003	0.8	0.8	1.0	0.8
El Salvador 1991-2000	0.9	2.4	4.4	4.6
Ghana 1991-1998	1.0	1.3	2.2	2.9
India 1994-2000	3.2	3.2	3.2	4.1
Indonesia 1996-2002	3.0	3.0	3.0	2.6
Senegal 1994-2001	1.9	1.7	2.2	2.5
Tunisia				
Romania 1996-2002	-2.8	-2.6	-2.6	-2.6
Uganda 1992-2003	2.9	2.9	2.7	2.9
Vietnam 1992-2003	4.1	4.0	4.3	4.9
Zambia 1991-1998	5.5	4.8	1.3	0.4

In addition to looking at average growth rates, it is also useful to look at the general shapes of the GICs themselves to see how the poorest fare in comparison to the rest of the distribution. Looking at the national GICs we find three broad patterns concerning growth rates of the poorest.

The first shape indicates a broadly declining curve through the bottom 20 percent of the population, indicating roughly that the poorest have fared relatively well (Figure 2). Only Zambia and Senegal clearly show this distribution pattern. These countries

fall into different categories as broadly identified by Cord and Fiestas. Senegal was categorised as having high growth and poverty reduction, alongside increasing inequality. Zambia in contrast was categorised as a low growth country with moderate poverty reduction and declining inequality. This implies that the poorest have a different relationship with growth compared to the poor in these two countries.

Figure 3.2



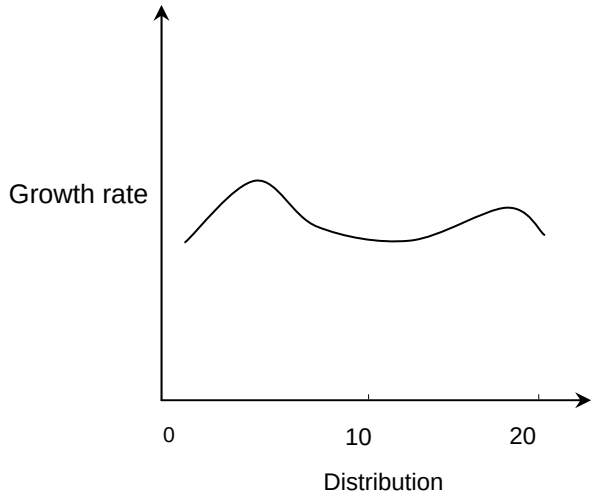
The comparative average growth rates indicate that Zambia's growth path has favoured the poorest. The shape of its national GIC shows that from about the fifth percentile this pro-poorest pattern is clear, however the distribution below the fifth percentile experienced slightly lower growth rates, indicating that the poorest of the poorest did not do quite as well. What the averages above do not show us is that the top half of the distribution experienced below zero growth (refer to Figure 1). This implies low overall growth but with clear growth occurring among the poorest people in Zambia.

Senegal in contrast had pro-poor growth among the poorest section of the distribution, but followed by a rising GIC until the 95th percentile, indicating clearly increasing inequality. The very top of the distribution however did not have such high growth rates indicating a equalising effect of growth among the richest percentiles.

The second broad shape (Figure 3) shows a fairly flat curve across the bottom distribution indicating that growth was fairly evenly spread among the poorest. The vast majority of countries fall into this category. Annual average growth rates within this group of countries are positive but mainly low, ranging between 1% and 3.5% - Uganda (2.9), Indonesia (2.6), Bangladesh (1.2), and Burkina Faso (0.8), except for Vietnam (4.9) and India (4.1) who had a higher (and sustained) growth. The poorest 20% of the distribution in all these countries have also experienced growth rates

above zero, indicating absolute income/consumption growth at the bottom distribution.

Figure 3.3



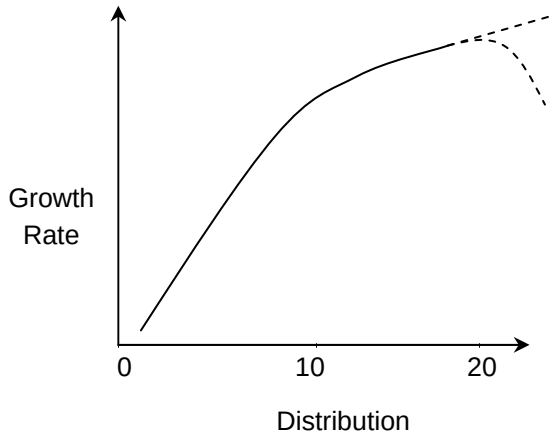
The whole distribution in each country experienced positive growth rates, meaning absolute poverty reduced to some degree. Four of these six countries fall within Cord and Fiestas' first category of high poverty reducing countries, with high growth rates and significantly increasing inequality. For each of these four countries the GIC was generally upward sloping, after the initial 20th percentile. Something about the growth paths in these countries meant that inequality increased at the top of the distribution but growth was more equal at the lower distribution.

The poorest did less well than the rich. In Bangladesh annual growth rates among the poorest five percent is roughly 0.9 percent compared with 3.02 percent for the richest 5 percent. The GIC is similarly skewed towards the top 10 percent in Uganda, and in this case this was the only segment of the population that enjoyed higher than average growth. Although the distributional shift did not favour the poor in Uganda, its growth impact was not bad given that the rate of pro-poor growth for this entire period of analysis was only slightly lower than the ordinary rate of growth (Okidi *et al*, 2004). Beneath the 80th percentile, growth appears to be relatively pro-poor, with the very poorest enjoying higher growth rates than the higher percentiles. Relatively, the poorest therefore did well from growth over this period, although not in comparison to the highest percentiles.

Indonesia and Burkina Faso on the other hand fall into Cord and Fiestas' second broad category of reducing inequality along with low growth and poverty reduction. Annual per capita growth in expenditure is fairly evenly experienced across the whole distribution, in Burkina Faso, flat around the mean of approximately 1% per year.

The third distinct shape (figure 4) indicates rising inequality *within* the poorest group. This occurs in countries where the poorest have experienced positive growth rates (Ghana, Bolivia, and El Salvador) and negative growth rates (Romania and Brazil). In the case of Romania the poorest remain fully under zero, as does the whole population distribution. In the cases of Brazil however the higher end of the poorest distribution cuts across zero and the rest of the population are considerably higher than zero indicating significantly increasing inequality.

Figure 3.4



Of these countries only Bolivia and Romania fall within Cord and Fiestas' second more pro-poor country category. Their national level GICs are generally downward sloping, indicating the income/expenditure grew more in the lower percentiles than in the top percentiles. However, as Figure 4 indicates, inequality within the poorest percentiles was rising.

In Bolivia, on the whole, the poor gained proportionately more from growth than the rich. From about the 10th percentile the GIC begins to decline, indicating that although there is rising inequality among the very poorest, the poorest from the 10th percentile are benefiting disproportionately from growth. We need to know why the very poorest 10 percent did not benefit from this otherwise fairly pro-poorest pattern.

In Romania the national GIC always remains below zero, with no positive growth at any point in the distribution. Absolute poverty increased. Generally, consumption losses are distributed uniformly along the curve (around a mean of -1.9%) but the overall shape (inverted U) indicating that the poorest and the richest were hardest hit by economic stagnation.

The other three countries (Ghana, El Salvador and Brazil) feature high inequality. Despite an impressive decline in poverty during the 1990s owing to the acceleration

of growth, poverty in El Salvador still affected over 40 percent of the population and the distribution of income and assets remains highly unequal. However, while the poor had relatively even growth rates, ranging between the mean (4.9% pa) and the median rates (5.1% pa), the poorest two deciles experienced low and negative growth rates, well below the mean and the median. Rising inequality disproportionately affected the poorest population. For the very lowest decile growth was negative, indicating rising absolute poverty.

Negative growth rates were also experienced by the poorest in Brazil, where growth benefited most percentiles except those at the very bottom of the distribution. Income growth was negative up to the 5th percentile and was considerably lower growth than for the rest of the population. Although inequality increased across the distribution it particularly affected the very poorest.

3.2 Disaggregating over time and by location

National GICs give little indication as to *why* a particular income percentile has done better than others. Rural-urban GICs and time period GICs (where these are available) can provide some explanation for the emerging national patterns. The following discussion examines the underlying dynamics evident from the disaggregated GICs.

3.2.1 Urban-Rural Disaggregation

The incidence of rural poverty is generally higher, and often much higher (Burkina Faso, Zambia), than urban poverty. This can affect the national GIC considerably and so it is useful to look to the rural–urban GICs for comparison with and explanation of national patterns (Table 2).

Burkina Faso and El Salvador provide clear examples of divergent urban-rural trends. In Burkina growth rates among the urban poorest were negative and the same was true for the whole distribution except for the richest 15 percent. In contrast the rural population had positive growth rates. The population of Burkina Faso is largely rural based, and rural poverty headcount is much higher (63% compared to 15% in urban areas). Positive growth alongside rising inequality in the rural areas was clearly driving the national picture. At the national level, average growth among the poorest were quite close to the national average growth rate, an equalling effect of positive rural growth and negative urban growth.

In El Salvador the upward sloping national GIC was also clearly driven by rural-urban disparity. In contrast to Burkina, the rural poorest experienced negative growth rates while the urban poorest experienced positive growth. The poorest did very badly in rural areas, experiencing negative growth rates of -3.1% (poorest 10 percent) and -1.1% (poorest 20 percent). The poorest also did badly compared to the rural average. However growth was high and fairly evenly spread across the urban population. Average urban growth is around 5.1% compared to 1.5% in rural areas. It

will be important to see what happened in the rural area to negatively affect the poorest.

In other countries where inequality is increasing this can also be understood better through looking at urban-rural differences. Brazil's national inequality trend is being driven by urban growth rates which are faster for richer groups. In rural areas there is clearly more pro-poorest growth. The rural poorest have higher average growth than the rural average.

Among the pro-poorest countries, Zambia showed a particularly strong trend. This was driven largely by rural growth. The rural GIC indicates strong pro-poor growth. As with the national level, the poorest out performed the poor on average and the rural average. In urban Zambia however the whole distribution did badly (average growth rate of -1.8%), although the poorest in urban areas on average didn't do as badly (average growth rate of -0.9 for the poorest 10 percent).

Rural trends clearly drove the pro-poorest growth trend at the national level in Bolivia. There was much lower absolute poverty in urban areas (33% compared to 83% in rural areas); however rural growth rates on average are much higher than the urban average growth, and the rural poor/poorest had higher growth than the rural average. Bolivia's urban areas have had lower average growth, and the urban poorest have done badly. The poorest 10% in urban Bolivia experienced average growth rates of 0.1%, low compared to the urban poor (0.5) and the urban average (0.7), and clearly lower than the national average (1.6) and national poorest (2.4).

In general it is notable that the national picture is clearly driven by rural economic change in 4 countries (Zambia, Burkina Faso, Bolivia and El Salvador) and by urban change in Brazil. Disparity between rural and urban growth was less pronounced in other countries. Indonesia, for example, shows pro-poor and pro-poorest growth rates in both the rural and urban areas.

Table 3.2: Average growth rates among the urban and rural poor and poorest, 1990s

	Poorest 10%		Poorest 20%		All poor		Average growth rate	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Bangladesh 1991-2000	0.2	1.1	0.2	1.0	0.4	0.8	1.5	1.1
Bolivia 1989-2002	0.1	2.3	0.2	2.5	0.5	1.9	0.7	1.7
Brazil 1993-2001	1.4	3.6	1.9	3.8			2.7	2.9
Burkina Faso 1994-2003	-1.5	0.8	-1.6	0.7	-1.6	1.0	-1.5	1.1
El Salvador 1991-2000	5.2	-3.1	5.2	-1.1	5.1	1.7	5.1	1.5
Ghana 1991-1998	1.3	0.8	1.6	1.0			3.0	2.8
India 1994-2000	3.9	3.0	3.8	2.9			4.9	3.4
Indonesia 1996-2002	2.3	2.8	2.3	2.7			1.5	2.2
Senegal 1994-2001	2.1	1.9	2.5	1.6			3.1	1.6
Tunisia								
Romania 1996-2002	-2.1	-3.1	-2.0	-3.0			-2.4	-3.0

Uganda 1992-2003	3.3	2.9	3.4	2.8			4.0	2.7
Vietnam 1992-2003	5.5	3.7	5.7	3.6	5.9	3.9	7.1	4.2
Zambia 1991-1998	-0.9	6.2	-1.4	6.7	-1.7	4.1	-1.8	3.6

The shapes of the urban and rural curves tell us more than the average summary figures alone. In Bolivia for example rising inequality within the lowest percentiles is seen most starkly in the urban areas disproportionately affecting the poorest. In Bolivia's departmental capitals (and El Alto) growth was anti-poorest and the very poorest percentile had negative growth (indicating increased absolute poverty). In urban Bolivia, in contrast to capital cities, growth was generally pro-poor, but among the bottom 5% inequality rose starkly.

Growth appeared generally pro-poorest in rural Bangladesh, and the poorest experienced higher growth rates than the urban poorest. In urban areas levels of inequality increased more starkly, illustrated by a steadily rising curve across the whole distribution. This contrasts with the rural and national GIC which were more pro-poor, until about the 70^{th} percentiles. Despite the distributional impact, mean urban growth was higher than both the national and rural levels.

The Ghana study provides insights disaggregated beyond a mere rural-urban distinction and shows significant differences between different regions. In urban Accra the rates of growth are very high in the poorest 3 quintiles, and the slope of the curve implies that growth has been accompanied by falling inequality. Growth has been pro-poor in relative and absolute sense. The Rural Forest area has a similar looking GIC. Growth rates are high for all percentiles but distribution appears more neutral. In others areas increasing poverty indicates rising inequality at the national level. The Rural Savannah is particularly bleak, with growth rates being negative throughout most of the lowest 3 quintiles (up to 75%) and pro-poor growth therefore negative. Some reduction in the incidence of poverty here, though increase in absolute numbers, suggests those close to poverty line are moving about.

Zambia and Burkina Faso are exceptions to the general trend in rising rural poverty. In Zambia this reflects the removal of longstanding urban bias in government policies which had undermined the profitability of agriculture, and in Burkina Faso reflects growth in cotton production alongside macroeconomic shocks and rising food prices in urban centres (Cord and Fiestas). A moderate decrease in poverty in rural Burkina Faso, contrasts with increased poverty and inequality in urban areas. Absolute rural poverty clearly declined in Zambia. Severity of poverty probably also declined as both absolute poverty (line above 0) and relative poverty (clear reducing inequality through downward sloping line) declined in the rural areas. Urban per capita consumption growth was consistently negative for the whole urban distribution however (clear rising poverty). Only the poorest and richest consumption households performed better than the average. Changes in these two tails offset each other leading to only small changes in inequality within urban areas.

3.2.2 *Disaggregating different time periods*

Not all the case studies allow for disaggregation into different time periods. However, this is useful data where it is available as it allows us to look further than just at two separate points in time but disaggregates how growth distribution changes over time.

First we are able to calculate and compare average growth rates across different time periods. Romania is the only country for which we have access to the necessary data however. It is worth noting that the aggregate GIC for Romania showed negative growth across the whole distribution. This is reflected in increased headcount poverty from 20% to 33%. When the data is broken down in to sub-periods however it is evident that by the end of the 1990s growth was positive across the distribution.

The Romanian data also allows us to compare the 10th and 20th percentiles with the average among those living beneath the nationally defined extreme poverty line (6.3% in 1996, and 11.3% in 1999). Table 3 shows how the extreme and bottom 10% performed worse than the less poor, but also that the negative average growth rate was also very low in the earlier period. By 1999-2003 however this pattern had changed. Again, the poorest (however defined) are doing worse, but at least now growth rates were positive. Along with economic recovery inequality increased during the later period.

Table 3.3: Disaggregated time series GICs for Romania

	Poorest 10%	**Poorest 20%**	**Extreme poor**	**All poor**	**Average growth rate**
1996-1999	-7.1	-6.8	-7.4	-6.8	-7.3
1999-2003	1.7	1.7	1.7	1.8	2.3

Although we do not have access to the data for more comparisons, some of the OPPG studies provide disaggregated time period GICs which allow for some insights below the averages looking at the general shape of the curves.

For example, Ugandan GICs are provided for three different periods: 1992-97; 1997-2000; and 2000-03. Ugandan reforms begun in 1987 and the country has experienced steady GDP growth since then. The highest mean growth rate of 6% was recorded for the period 1997-2000 during which only the richest 20% experienced above-average growth. Welfare inequality clearly widened in this period. For the earlier 1992-97 and 1997-2000 periods, growth was robust across percentiles and poverty headcount fell significantly. But a dramatic pattern is observed for the 2000-2003 period. The mean growth rate was negative, the top quintile was the only group enjoying positive growth, inequality has risen significantly (also seen in the Gini index increase from 0.40 to 0.43), and absolute and relative poverty rose (from 34 to

38 percent). Okidi *et al* (2004) note that while only the top 20% enjoyed positive growth during this period, the real GDP growth rate was still about 5.8% per annum.

It should be possible and useful to analyse disaggregated GICs to determine how the poorest respond to periods of low growth and recession compared to the poor and average. We might guess that the poorest would tend not to do too badly and that the middle distribution might be worse affected. In Brazil for example the GIC for 1981-1986 suggests that perhaps there was a recession at this time with the middle of the distribution and the poor being hit hardest. Inequality declined and the income growth rates for the poorest 10% of the distribution were well above the average. Growth also favoured those in the top of the distribution, but not by as much.

Vietnam GICs are provided for two sub-periods, either side of the Asian crisis in 1998. National poverty reduced (from 57% to 39%) across the two periods but both curves indicate rising levels of inequality. So, although Vietnam experienced an absolute reduction in poverty, the poor did less well relative to the better off. This was more pronounced during the second period, after the crisis. The experience of the poorest however is interesting. During the earlier period this group had been doing rather well. Although this performance was reduced by the second period the GIC indicates that the poorest 20% were still doing better than the general poor (at 39%).

How the poorest fare will depend largely on how they are directly and indirectly affected by formal sector decline. In Romania we saw that the poor were less affected by negative growth than other groups during the recession, they also benefited less from the subsequent economic recovery. The poorest were hit hard and the richest were hit hardest. During subsequent recovery the poorest benefited least. The poor gained relatively more from the improving economic situation and the richest benefited most.

Romania's time period GICs are also disaggregated according to location and economic activity of household head. These GICs show that both urban and rural populations followed similar patterns to the national GIC. However, self-employed persons outside agriculture and employers benefitted the most during the period of economic recovery, while transfer recipients and those employed in agriculture did not benefit significantly from growth.

It would also be interesting to determine how the poorest fare during periods of reform and consistent economic growth as well. The El Salvador study provides information for the whole period after the 1980s, covering reform and subsequent growth periods of the 1990s. During 1991-1995, growth in household per capita income of the lowest percentiles was not only below the mean but was also negative. Income growth above the 15th percentile was relatively high. In contrast, during the 1995-2000 period, growth in income per capita of the lowest percentiles was positive and above the mean. Growth was relatively more pro-poorest with much of the distribution after the 10th percentile having fairly even and low income growth rates, with the top of the distribution experiencing higher growth rates, but not as high as

those experienced by the poorest.

There is information on crisis, reform and growth periods in the case studies however such detailed analysis is beyond the scope of this paper. It is clear through the brief illustrations provided above though, that GICs and disaggregated GICs hold potential to tell us much about the relationship between the poorest people and economic growth.

4 Beneath the averages: Evidence 2

The case studies provide data on headcount poverty at the national level and also disaggregated to different locations and over time. More specific detail on what happens to the poorest is available in two different ways. Firstly information on the depth and severity of poverty is available through the poverty gap (P1) and the squared poverty gap (P2) indicators. Secondly, country specific measures of extreme poverty are often provided. This section draws on this data to measure the relationship of the poorest to growth, compared with the poor and the population average.

4.1 Indicators of poverty change for the poorest

The poverty gap (P1) measures the depth of poverty, the average distance of the poor to the poverty line in relation to the poverty line. The poverty gap squared (P2) measures the severity of poverty, and is particularly important because it takes into account inequality among the poor by giving more weight to the poorest of the poor. Table 4 provides a summary of the main changes in the OPPG studies for these different measures. A more detailed table can be found in the Annex (Table 8) which provides more time periods and detail on urban and rural locations.

Is P2 falling more or less than P0 (poverty headcount)? We find in Ghana that the poverty severity measure has actually increased as poverty headcount declined indicating that those closest to the poverty line saw benefits from growth while the poorest did not. Similarly, the lower poverty line shows lower poverty decline. Poverty reduction favoured certain locations far more than others in Ghana, indicating rising national geographical inequality. Benefiting areas have included Accra (capital city, location of a main port, and beneficiary of significant external inflows of aid and remittances) and the Rural Forest zone (key export commodity production region – cocoa, gold and timber).

Headcount poverty reduced considerably in Senegal. Also, Uganda, Vietnam and Bolivia experienced big reductions across all three measures indicating that the poorest did relatively well from growth in these countries. This has been particularly true for extreme measures in Bolivia. However in Zambia we find that the poverty depth and poverty severity measures have declined while the headcount measure has actually increased, indicating that the poorest have done proportionately better than the poor in general. Extreme poverty also increased however but disaggregated data indicate that this was largely attributable to significant rising urban poverty. Poverty in the rural areas reduced slightly and the P2 declined considerably. In urban Zambia the P2 increased indicating worsening inequality and poverty in urban Zambia.

Poverty clearly increased in Romania and Indonesia. Rising poverty is underlined by increased rural poverty in Indonesia. Urban areas experienced a small decline in

poverty. In Romania the severity and depth of poverty also increased. Again, much of this is driven by rural dynamics where two-thirds of the poor live. Within rural Romania, the poorest households are highly correlated with characteristics such as being headed by older people and/or uneducated people self-employed in agricultural sector.

Table 4.1: Summary poverty data

Country	Dates	Head-count (%)	Extreme poverty line	Poverty Gap (P1)	Poverty Gap Squared (P2)
Bangladesh	1991 2000	49.7 39.8		13.6 10.3	5.1 3.6
Bolivia	1989 2002	76.88 67.22		45.45 32.94 Extreme: 27.53 15.32	31.37 20.04 Extreme: 16.78 8.19
Brazil	1993 2001	61.62 51.38	34,12 25,72	32,62 25,55 Indigent: 15,26 11,07	21.45 16.25 Indigent: 9,27 6,73
Burkina Faso	1994 2003	55.5 47.2		20.9 16.0	10.0 7.3
El Salvador	1991 2002	60 43	33 19	29.8 16.5	17.7 10.0
Ghana	1992 1999	51.7 39.5			6.6 8.8
India	1993 2000	36 28.6			
Indonesia	1990 2002	15.8 18.2			
Romania	1996 2002	20.1 28.9	6.3 11.0	4.79 7.61 Extreme: 1.22 2.42	1.70 2.96 Extreme: 0.37 0.82
Senegal	1994 2001	67.83 57.1			
Tunisia	1990 2000:	14.1 9.9			
Uganda	1992 2002	55.7 37.7		20.3 11.3	9.9 4.8
Vietnam	1993 2003	58.1 28.9	24.9 10.9	18.5 6.9	8.3 2.6
Zambia	1991 1998	68.9 75.4	56.5 59.8	41.7 40.0 Extreme: 32.4 27.6	30.6 25.6 Extreme 23.2 16.2

Rural-urban disparities are clear in El Salvador where urban poverty decreased more than in rural areas, and particularly among the urban extreme poor. A clear decrease

in the urban poverty gap measure indicates that urban growth had a strong impact on national poverty reduction. In Bolivia too poverty reduction was much stronger in the urban areas along with reduction in urban P1 and P2. The differential between rural and capital cities poverty has grown over time (from about 25 percent in 1989 to 29 percent in 2002). This is not true however for the poverty gap for which the differential gap has narrowed suggesting that the very poor have been able to make some gains in the 1990s while those close to the poverty line in the rural areas did not benefit as much (ref). The OPPG case study on Bolivia illustrates that absolute poverty reduced more among the poorly educated and those speaking indigenous languages. But this decline was not sufficiently large to narrow the widening gap between these groups and others.

In Bangladesh and Burkina Faso rural poverty declined more than urban poverty. However, about 36 percent of Bangladesh's rural poor are extremely poor, compared to 28 percent of the urban poor. In Burkina Faso strong poverty reduction in rural areas was not matched in urban areas where poverty actually increased. The poverty gap and severity measure increased in urban areas while they reduced in the rural area. This suggests an urbanisation of poverty that perhaps conflicts with most understandings of African poverty but needs special attention.

4.2 Responsiveness of poverty to growth

The case studies calculated pro-poor growth rates, and also looked at the pro-poorest growth rates, when available. These indicate whether growth is pro-poor both in an absolute sense (whether they are positive or negative) and in a relative sense (i.e. larger than the mean income growth rate). It may be that growth is more or less effective for the poorest. Other useful measures provided in the case studies include the growth elasticities of poverty, which indicate how effective growth is in translating into poverty reduction. This measures the percentage change in poverty in response to a one percent increase (or decrease) in average income (McKay, 2005).

In some of studies these statistics have been provided for the poorest using an extreme poverty line, and also the poverty gap and squared poverty measures. The higher the growth elasticity; the higher the responsiveness of poverty reduction to growth. This data is summarised in Table 5 specifically for the extreme poor where it is available (more detail is provided in the Annex, Tables 9, 10 and 11).

All the countries's growth policies are pro-poorest in an absolute sense, except for Romania. A number of countries's growth policies are also relatively pro-poorest. Bolivia for example had both pro-poor and pro-poorest growth over the 1990s.

Indonesia also experienced considerable pro-poor growth, as did El Salvador and Zambia. In Uganda the poorest have done as well as the poor in general, although not as well as the average Ugandan. In rural areas however the poorest have clearly benefited from growth, more than the rural poor, the rural average and the national

Ugandan average. Urban Vietnam had incredibly high pro-poorest growth in 1993-1998 but this had declined by 1998-2002.

Burkina Faso's policies are not clearly pro-poorest but the pro-poorest growth rate equals the mean, indicating that the poorest are doing as well as the average. The pro-poor growth rate however is higher than the mean, indicating that the poor are doing best.

Table 4.2: Responsiveness of extreme poverty to growth in selected OPPG countries

	Pro-poorest growth rate (average growth rate)	Growth Elasticity of Extreme Poverty (poverty)		
		P0	P1	P2
Bolivia	2.2 (1.7)			
Brazil		-0.9 (-0.5)	-1.0 (-0.7)	-1.2 (-0.8)
Burkina Faso	0.8 (1.0)			
El Salvador	2.4 (4.1)	-1.5 (-1.1)		
Ghana	1.3 (2.1)			
Romania		-0.9 (-1.1)	-0.6 (-0.8)	-0.2 (-0.7)
Uganda	2.8 (2.7)	-2.5 (-1.8)	-3.4 (-2.3)	-4.2 (-2.8)
Vietnam	4.1 (4.9)	-1.0 (-0.8)	-1.1 (-0.9)	-1.1 (-1.0)

The elasticity data determines how effective growth is in translating into poverty reduction, by measuring how a percentage change in poverty responds to a percentage change in growth. We find that in most countries the relationship is negative, such that poverty reduces with income growth. Some countries have particularly high elasticises (notably Bangladesh, El Salvador, Indonesia, Uganda and some Indian states). In some cases we can see that this is also the case for extreme poverty too. In El Salvador, for example the extreme poor improved 1.5% to each 1% of growth, while the poor had a lower elasticity of -1.3. In Vietnam too there are high poverty elasticities, no matter which poverty measure is used.

In Ghana, the poverty elasticity is low (comparable however to other sub-Saharan African countries). The positive measure implies that at the lower end of the distribution people are falling back into poverty as escaping (ref). The P1 and P2 measures have a stronger relationship with growth than P0.

Headcount elasticity of growth is stronger than the depth and severity measures in Romania. In contrast, Brazil, India, Uganda, Vietnam and Zambia have higher depth and severity poverty elasticities of growth than headcount measures. That means that growth is more poverty reducing with the poverty gap and squared poverty gap measures in these countries. In Brazil this is even clearer using the extreme poverty line. In Zambia the ability of growth to reduce deeper and more severe poverty increased over the 1990s.

Although India's average elasticity is modest, some states performed better than

others. For example Kerala and West Bengal compare much more favourably to Bihar, Assam, Madhya Pradesh, Maharashtra and Rajasthan, which show elasticities as low as sub-Saharan Africa.

4.3 Growth and Redistribution Decompositions

The Datt-Ravallion composition indicates how much poverty reduction is due to growth and how much is due to inequality reduction. Where growth is accompanied by a reduction in inequality it is likely that the poorest will have benefited (McKay, 2005). In general the growth component dominates, both in cases where poverty reduces or increases.

In some countries the redistribution component reduces the impact on poverty – Brazil, Ghana, Uganda, Vietnam. In other cases such as Bolivia and Burkina Faso however redistribution has contributed to poverty reduction.

Generally the impact of redistribution on poverty can be quite large (ibid). A reduction in inequality in Romania between 1996 and 1999 slightly moderates the effect of falling average incomes on poverty. The same is true in Zambia.

Table 4.3: Summary data on Datt-Ravallion decompositions for extreme poverty in selected countries

	Datt-Ravallion Decomposition	
	Growth	Redistribution
Brazil (1981-2001)	-8.9	-1.8
Vietnam (1993-2002)	-28.1	5.9
Zambia (191-1998)	P2: 4.0	P2: -9.8
India* (rural) (urban)	-0.2 -0.2	0.02 0.04
Romania (1996-99) (1999-2002)	8.3 -0.02	-0.9 0.01

* India: 1993-2000

For Brazil, while extreme poverty reduction is largely due to growth, redistribution also plays a part (Table 6). In contrast although there has been considerable reduction in extreme poverty in Vietnam, there could have been more if inequality had reduced. Similarly, inequality has inhibited the reduction of extreme poverty in rural and urban India. Extreme poverty increased in Romania during 1996-99, but this would have been worse if redistribution had not played a role. During the later period in Romania the reverse is true. Although poverty is now beginning to reduce inequality is inhibiting this reduction to a degree. With regards to Zambia, data is provided on the P2 measure. This shows that growth has contributed to increasing severity of poverty, however a very high redistribution component indicates that the pro-poorest growth in this country has had strong inequality reducing effects which in

turn have mitigated the negative growth component and reduced poverty severity.

5 Explanations for observed patterns

This paper begins a process of filling an empirical evidence gap on the relationship between economic growth and the poorest. Growth rates and the distributional pattern of growth are key, as seen above. It is important to consider the factors which enable the very poorest to participate in growth (as well as those that prevent their doing so), and also what enables them to protect themselves from hazards. The extent to which the very poorest are able to participate in growth (direct benefits) is mediated by the sectoral composition of growth, and the way in which the extra incomes provided by growth provide benefits to the very poorest through public or private channels (indirect benefits). Below we examine both direct and indirect relationships the poorest had with national growth in the 14 OPPG countries.

It is important to note that the OPPG case studies tend not to disaggregated explanations further than poverty generally. However, where possible we unpack the factors that likely drove pro-poorest growth in Bolivia, Indonesia and Zambia. We ask why the poorest did better than, or at least as well as, the poor in Bangladesh, Bolivia, Brazil, India, Indonesia, Uganda, and Vietnam? In contrast, why has there been anti-poorest growth in El Salvador, Ghana, and among the very poorest in Brazil? What has driven rising inequality among the poorest in Bolivia, Brazil, El Salvador, Ghana and Romania, while Senegal and Zambia experienced declining inequality among their poorest deciles? Table 7 summarises some key messages from the national GIC analysis.

Table 5.1: Summary of GIC data

	AVERAGES			GIC SHAPE FOR POOREST 20%		
	Poorest > poor	**Poorest > average**	**Poor > average**	**1 (declining inequality)**	**2 (flat)**	**3 (increasing inequality)**
Bangladesh	✓				✓	
Bolivia	✓	✓	✓			✓
Brazil	✓		(✓)			✓
Burkina Faso		(✓)	✓		✓	
El Salvador						✓
Ghana						✓
India	(✓)				✓	
Indonesia	(✓)	✓	✓		✓	
Senegal				✓		
Romania						✓
Uganda	✓	(✓)			✓	
Vietnam					✓	
Zambia	✓	✓	✓	✓		

This section examines these patterns in light of the general findings on national change in income, poverty and inequality. Clearly, the case studies present a heterogeneous group of countries, experiencing very different aggregate growth. In

some cases pro-poorest growth has emerged but from very low initial starting points (e.g. Zambia, Burkina Faso) while in other countries patterns emerge alongside more sustained growth over recent periods (e.g. Uganda, India). Some countries have recently emerged from conflict (e.g. El Salvador), while others (Northern Uganda) contend continuing conflict.

5.1 Direct channels (raised production or income levels among the poorest)

What drove growth and inequality changes in different countries and what are the implications for the poorest? The three pro-poorest countries, Bolivia, Zambia and Indonesia, had quite different starting points and growth paths. Bolivia has pursued more 'Washington Consensus' reforms since the 1980s than most developing countries. It has deregularised its markets, denationalised and privatised state owned companies, liberalised trade, FDI and other capital markets. Bolivia's rural economy absorbed retrenched workers and provided a buffer against external shocks – the effects of which were amplified by liberalisation.

Growth has favoured urban areas, the capital-intensive natural resource sector and small modernised agriculture sector. With the exception of coca, Bolivia's main lucrative exports are capital intensive (oil, gas, mining, soya) and hold few links to the poor. The formal and export sectors have however been hit hard by shocks. The pro-poorest national GIC reflect the fact that the poor and the poorest are least represented in these sectors. They are concentrated in subsistence agriculture and informal activities, separated from the main income-generating and risk prone growth processes in this highly segmented economy.

As a consequence of El Nino small-holders and agricultural workers suffered income losses, for example, but were less affected than workers in the export-oriented modern sectors. They are buffered by domestic markets, where domestic agricultural shortages have increased domestic pricing and dampened negative economic effects.

In urban areas, however, the story is different for Bolivia's poorest. Urban inequality has increased and urban poverty has risen more than rural poverty. Real devaluation has affected the providers of non-traded informal services. The construction sector, a major employer, was hit worst by reduced real investments. Unskilled and urban informal sector workers have been severely hurt. Labour market distortions have however limited the mobility of informal workers into formal markets, leaving them less threatened directly by external economic and environmental shocks.

Zambia's current pro-poorest pattern of growth signals substantial policy shifts. Although, poverty is higher in rural areas, absolute poverty is declining in rural Zambia and rural growth appears to be driving the national pro-poorest growth trend. However urban growth rates are negative in response to the removal of historical

urban policy bias which previously favoured the powerful urban political and mining elite over the growing rural population.

Before the 1990s, the Zambian government adopted agricultural policies that favoured urban centres by supporting maize production and providing food price subsidies, limiting rural infrastructure investments and constraining agricultural exports. In 1991, the newly elected government pushed for reforms to counter this historical bias and economic stagnation.

As in Bolivia, structural adjustment reforms resulted in increased formal sector unemployment as state assets were privatised (particularly the urban copper mines). Again, the agriculture sector acted as an important buffer for large numbers of less educated poorer people pushed out of the formal sector. The sector has responded positively to increased opportunities from lowered export restrictions and the removal of previous market distortions. So as manufacturing and mining dramatically declined over the 1990s, agriculture and agricultural exports grew. Inequality declined in both urban and rural areas as the formal sector declined and agricultural reforms created new opportunities for small and medium farmers.

Inflation lowered real incomes and consumption for all urban households, particularly in low income areas. Urban poverty has risen substantially, as exacerbated by increasing food prices and limited food supply because of severe droughts in 1992 and 1995. Usually among the non-poor, rural non-farm households also experienced rising poverty. These occupation groups have become more vulnerable to economic instability, resulting in households previously above the poverty line being pulled under. Zambia's small-holders, particularly in well connected rural areas, have been the main beneficiaries of reform and responded well to expanding agricultural opportunities.

The 'secret' of Indonesia's early pro-poor growth was the labour intensity of its rapid growth. Since the 1960s investments were targeted to the poor as part of President Suharto's purposeful policy to reduce poverty alongside growth. Investments in agricultural infrastructure notably used labour intensive techniques, targeted at poor unskilled labourers through low wages, and contributed to considerably increased agricultural productivity. Indeed, all three major sources of early Indonesian growth – infrastructure, agriculture, and manufacturing sector, drew on the abundance of unskilled labour.

The rural economy has again provided a crucial national safety net. Following the Asian crisis in 1998 millions of Indonesian workers previously employed in the urban economy were absorbed into the rural economy. Without this rural resilience, the impact of the crisis on poverty would have been much deeper. Agricultural growth continues to account for most poverty reduction in Indonesia, with growth in agricultural output contributing to fast growth in manufactured exports. A manufacturing export boom directly benefited only a handful of provinces, all of which

were in Java, while the local agricultural economy remained key for most poor people's livelihoods.

Like the three previous countries, Burkina Faso too had fairly pro-poorest and pro-poor growth, with low per capita growth and poverty reduction alongside declining inequality. Burkina's economy is largely agricultural, accounting for about 30% GDP and 80% workforce, including 90% of the poor. The sector is affected by changing climatic conditions and world prices for cotton, the major export crop. Growth in the cotton sector has been the main driver of economic growth but has only directly benefited a fifth of rural households with low positive spin offs for the majority subsistence farmers. Subsistence farmers were not connected to the export trade sector and experienced low growth and productivity. This reflected limited investments, because of limited credit and the high risks involved in investing because of annual climatic fluctuations. Recent crisis in neighbouring Cote d'Ivoire constrained poverty reduction as previously important remittances and remigration collapsed.

The poorest did better than, or at least as well as, the poor in Bangladesh, Brazil, India, Uganda, and Vietnam. Unlike in the previous countries where growth was relatively pro-poor, all five of these latter countries experienced significantly increasing inequality. In Bangladesh, for example, inequality rose starkly in urban areas; the urban poorest had lower rates of growth than the rural poorest, even though mean urban growth rates were high in Bangladesh. However, rapid expansion of the readymade garment sector may have protected the urban poorest, providing an important source of salaried employment for women. Garment workers tend to be among the poorest manufacturing workers, and their increased income security will be reflected in higher spending on low quality goods and services with subsequent boost to the informal sectors.

The Government of Bangladesh carried out wide-ranging rural reforms, and by deregulating and liberalising the marketing and distribution of key agricultural inputs such as fertiliser, irrigation and improved crop varieties, substantially reduced agricultural volatility and increased rural agricultural wages. Improvements in real agricultural wages is consistent with the picture of falling incidence of extreme rural poverty, suggesting welfare gains at the lower end of rural income distribution. The male-female gap in the wage rate has been persistent, however.

Physical infrastructure developments during the 1990s included main and feeder roads, bridges, culverts, and market places as the major rural development strategy connecting markets throughout the country. This extensive road network contributed to increased farm productivity, employment and income, especially of the rural poor and women with landless and small farmers gaining a larger share of the increase from crops, wages, livestock and fisheries.

Non-farm sector employment, roadside shops, petty trading etc. also improved, emerging as an important source of rural income and employment (especially part-

time employment) and supported by the micro finance operations of Bangladesh's NGO sector. Since a large proportion of the landless and near landless remain employed in the non-farm sector, it is now relatively less difficult for the rural poor to adjust to the loss in employment in the food grain production activity during a flood-affected year.

Rising inequality reflects differential access to productive opportunities. The expansion of a large-scale rural non-farm enterprise sector, during the 1990s, contrasts with the lower-end self-employed sector expansion of the 1980s. It employed wage labour and was highly productive but was less likely to include the poorest. Remittances too have been important in Bangladesh during the 1990s. Urban-rural and overseas remittances have been allocated to house repairs, land purchases and agricultural inputs such as irrigation and fertilisers to cultivate HYV rice strains, strengthen human capital development through children's education and treatment of the sick. Remittances however tend not to reach the poorest families who have tended to miss out.

As in Bangladesh, remittances have been important in El Salvador, but again the direct benefits are felt by the non-poor population. While the poorest households are not likely to have received either remittances or credit, better-off households have been able to use remittances for human capital or micro enterprise investments. Remittances have therefore contributed to inequality. That said, rural non-agricultural opportunities have increased as human capital and enterprises have developed. These opportunities have presented options for the rural poor.

A peace agreement was only established in El Salvador during 1992, but with it came increased stability and public spending. Growth therefore began from a depressed base. Increased international competition and market reforms however, alongside an international coffee crisis, resulted in major rural decline and insecurity initially. Traditional productive export commodities such as coffee, cotton and sugar have declined as services and industry have risen. This has not been accompanied by increased economic productivity however and poverty continues to be a rural problem, with rising inequality disproportionately affecting the poorest. During the later 1990s however the poorest rural households had greater access to non-agricultural employment through opportunities opened up via remittances.

Also growing from a low base after achieving peace and a degree of stability, Uganda's economy grew at an impressive rate, averaging about 6.3% per annum for about 15 years from 1987/88. The high rates of economic growth were the result of good economic policies that led to increased foreign direct investment, inward repatriation of earning by Ugandans living abroad, and high growth of the real sector. The liberalisation of the coffee sector in 1991/92 increased the farm-gate prices which along with the coffee boom in 1994/95 and easy availability of high-yielding varieties resulted in increased revenues to Ugandans in coffee production, processing and marketing.

Uganda's poorest did better than the poor but not as well as the national average, however a fairly flat curve along the bottom distribution range indicates neutral growth within the poorest percentiles compared to rising inequality nationally. Between 2000 and 2003 mean growth was negative however, and the top quintile was the only group enjoying positive growth, indicating rising inequality alongside rising absolute and relative poverty at this later period. Predominantly agricultural households have been highly vulnerable to volatility in the prices of commodities such as coffee. Although about 45% of Ugandan households have non-agricultural enterprises, these tend to be small and family labour based.

El Niño, droughts, and limited access to land and credit have constrained domestic productivity, alongside a decline in the international price of coffee and rising oil prices. It is likely that opportunities and output have concentrated in the top firms and richest individuals. Efforts to diversify export commodities from coffee into fish and flowers have been successful but the poverty effects have been limited as unlike the coffee sector these newly emerging sectors only involve small proportions of the population. The purchasing power of large numbers of Ugandans has declined as increased trading and small-scale non-agricultural production is likely to have raised competition and lowered profits, without a sufficient increase in demand as nominal wages have not kept pace with inflation.

Rising inequality in India reflects growth differences across States, and is felt not only geographically in the poorest states but also within particular caste and occupation groups. Inequality is also geographically distinct in Vietnam and again indicates strong ethnic imbalances too. Rural households in the South experienced income growth of 95% during the 1990s in contrast to Vietnam's North where considerably lower growth was achieved (55%). This reflects an agricultural strategy, involving productivity expansion through farm commercialisation that was more concentrated in the northern regions. Lack of infrastructure, including roads and telecommunications but also financial and other business related services have inhibited investment interest in poorer provinces.

Vietnam's poorest fared less well than the poor and the national average; however the poorest 10% did better than the poorest 20% indicating that the very poorest perhaps engaged in growth differently to those who were slightly less poor. The success of Vietnam's *doi moi* reforms (de-collectivisation and integration into world markets) is reflected in her high and sustained growth performance (almost 7% over the 1990s), accompanied by a reduction in absolute poverty. Early agricultural policies made efficient use of rural unskilled labour but over time urban areas have risen in importance, driving national growth through more capital intensive and skill intensive production. As inequality has risen the poor have been more reliant upon remittances and public transfers.

In India some states performed well while others did not. Indian States are still a high level of aggregation, bigger than many countries, and display incredible heterogeneity in economic performance. Some states display remarkable economic

growth, such as Kerela, Maharashtra and Tamil Nadu, as opposed to the more modest performances of Bihar and Jammu and Kashmir. Andhra Pradesh, Maharashtra, Tamil Nadu and West Bengal exhibit rapid increases in non-agricultural output, while for instance in Punjab the agricultural sector is still very important. Kerala's good performance is linked with far reaching social reforms that transformed patterns of gender and caste and class dominance after Independence. In West Bengal, agricultural reforms have achieved good poverty reduction through strengthening property rights, welfare of the landless and economic incentive structures, but have not achieved substantial growth rates. Maharastra is the most industrialised state in India, while agriculture has remained low and urban slums expanded, and reflected in its high rates of inequality compared to other Indian states.

Over the past twenty years, Ghana has managed to achieve sustained per capita growth accompanied by a reduction in poverty, even though levels of poverty remain high. Its growth performance over this period, while not exceptional by international standards, has been significantly above average by African standards, and it has made reasonable progress in reducing poverty in income and some non-income dimensions. In that aggregate sense Ghana has achieved pro-poor growth in absolute terms over this period. How-ever the picture is more complex once disaggregated (particularly by location), and there has been less progress in other indicators, especially health.

Accra and Ghana's rural forest zones have seen significant reductions in income poverty, particularly among export crop farmers, while other areas have seen little poverty reduction. This reflects regional improvements in cocoa export sector, alongside large inflows of remittances especially in the forest zones and growth of Accra's profitable non-farm self employment activities in trading, construction, transport and communications. Less favoured areas of Ghana require urgent agricultural reforms, particularly for fairer and more transparent land tenure systems. The poorest regions are those where subsistence farming predominates and infrastructure constrained profitable move into exports. In the coastal region political and economic exclusions are trading constraints.

There is a great deal of heterogeneity in poverty and growth trends across different regions in Brazil too. A huge disparity is observed between the northeast and north regions compared to other regions. The northeast region had the lowest per capita GDP growth between 1985 and 2000, lower even than the north region, typified by very low human indicators. The southeast region has the highest per capita GDP and contributes most to the total GDP, followed by the south region. The poorest regions are also the most unequal ones, reflecting severe poverty traps along lines of ethnicity. Ethnic discrimination in Brazil's labor market is illustrated in wage differentials. Where the differential between whites and non-whites was initially higher, (e.g. Bahia, Rio de Janeiro and Ceara) a lower level of poverty reduction was achieved for the same rate of growth. This demands policies to encourage better integration and less discrimination if growth in Brazil is to become more pro-poorest.

Uganda too has witnessed rising inequality in the last few years, (2000-03), during which time growth was confined to the richest quintile and poverty increased in rural and urban areas, wholly attributed to worsening inequality. Poor people identify environmental degradation as one of the factors that have reduced agricultural productivity.

Romania is the only OPPG country where the poorest on average experienced negative growth in the 1990s. The very poorest did only slightly worse than the national average. Economic transition moved more slowly in Romania than other post-communist countries resulting in economic decline immediately after the fall of communism and uneven growth through the 1990s. Disaggregating to different time periods, average growth rates improved by 1999-2003 but inequality also increased.

Relatively robust economic growth started after the 1997-99 recession, in 2000 and averaged 4.4% per year (2000-03). The agricultural sector has acted as a buffer, absorbing people who lost jobs in industry but were unable to find employment in the expanding service sector because of a lack of appropriate skills, regional inequalities, or institutional rigidities, such as labour market structures. Small-scale farming has therefore mitigated escalating rural poverty, but is not enough to reduce vulnerability to poverty. Increasing inter-group inequalities show economic exclusions linked to education levels and labour-market status, with the unemployed and agricultural self-employed being highly vulnerable to pauperisation.

Even in countries where average growth appears to be poverty reducing and pro-poorest there may be certain groups or areas experiencing negative growth impacts. In Indonesia, for example, economic benefits are regional with differences in agricultural potential and efficiency of market connections clearly contributing to spatial poverty gaps. Diverse job opportunities are available on densely populated Java which are not available to rural households on the Outer Islands, where infrastructure does not connect rural households to non-farm employment opportunities. Providing good infrastructure in areas with low population densities is an important challenge that directly affects who and how people can benefit or not from economic opportunities.

There are similarly considerable regional inequalities in Bolivia. The central highlands (*altiplano*) and valley provinces have much higher poverty and more difficult ecological and climatic conditions which present problems for agricultural production, in contrast to the outlying valley areas and lowland provinces. Growth has occurred in provinces with lower poverty, while the poorest provinces experience below average growth and low poverty reduction

Bolivia's poor find it hard to resettle in the higher economic potential areas of the lowlands however because they lack the social networks, and are not used to the climate or health conditions of these areas. Tight regulation of Bolivia's formal labour market restricts the access of rural workers, women, indigenous non-Spanish speaking groups and the poorly educated. Low social mobility contributes directly to

intergenerational poverty among these groups who in turn feel powerless and mistrustful of government, which for example until recently had no indigenous representation. This is despite evidence of pro-poorest dynamics at the national level.

5.2 Indirect channels (benefits via increased public spending)

Lack of assets or an inability to earn an adequate return on their assets may be key to how the poorest participate or protect themselves from adverse effects of growth. Processes such as social exclusion or discrimination, and a lack of rights typically underlie insecure and/or low livelihood productivity. Responding to discrimination and low returns to assets is a major responsibility of government, and is often directly tackled through social policies and public spending. How this provision is targeted to the poorest can indirectly relate therefore to how these groups engage economically.

Social spending has been an important part of the growth picture in a number of the OPPG countries. Financial reforms increased taxation revenues and enabled a rapid expansion of social spending in Bolivia during the 1990s (aided also by HIPC II funds). Bolivia has the second highest Latin American percentage of its GDP allocated to the social sectors. However, there have been targeting limitations. The poor receive about the same in health expenditures as the non-poor, and slightly more from primary education (possibly reflecting larger family sizes and greater use of the public system) but total public expenditures are pro-rich, reflecting spending in secondary and tertiary services. Infrastructure spending has been clearly pro-rich, with the richest quintile capturing about twice the absolute amount of subsidies as the poorest fifth in 2000. The recently passed National Dialogue Law is however an attempt to redress these spending imbalances.

Health and education spending was considered the most important way to improve the assets of the poor in Indonesia. Again, however, the direct impacts of public expenditures on the poor were limited by poor resourcing and poor targeting. In Vietnam high literacy was a positive legacy of its socialist past. However illiteracy has increased within the bottom quintiles during the 1990s, particularly among women and ethnic minorities, leaving higher quintiles to take up more rewarding economic opportunities. Growing regional disparities in lower secondary schooling are explained by change in financing structures, which have left poorer provinces with fewer resources to invest.

Poor targeting is also a problem. Vietnam's urban informal sector population are not eligible for services provided under its targeted public investment programme (e.g. low interest loans, exemption from school fees, access to water and sanitation, and so on). The Ghana study illustrates that public spending is not just about resource levels but performance centres on the quality of service provided.

Most public expenditure on education in Bangladesh is directed towards basic education, including primary and mass education, with a shift towards secondary education over the last decade. The proportional allocation to education has increased continuously over the last two decades. A large part of the primary education spending has been focused on increasing demand, through food for education programmes, and secondary school stipends for example. The non-government sector has also played an important role by expanding the non-formal education sector, alongside growth-conducive concomitant activities such as micro-credit programmes, the readymade garment export sector, child nutrition programmes and so on.

In both Uganda and El Salvador public expenditures have increased over the last decade or so. The Poverty Action Fund in Uganda aims to increase the poverty orientation of public expenditures, which have increased from 16% to 33% between 1997/8 and 2001/2 notably on health, education, water and sanitation. Government spending on health and education more than doubled over the 1990s, and attendance at schools and clinics have increased (particularly following the introduction of Universal Public Education and the removal of user fees). Among the poorest rural 20%, enrolment increased from just 45% to 71%, between 1992 and 1999, and to 75% by 2003. Enrolment gaps still exist however between rural and urban areas, with the poorest conflict affected northern region well behind, and enrolment rates are declining across all quintiles.

In El Salvador increased public spending is in part owed to the peace agreement, reached in 1992. Expenditure has largely benefited the poorer groups, and is reflected in improved social indicators and improved access to basic services by the poor. Post conflict price liberalisation was accompanied by electricity, water and transport subsidies. Infrastructure reconstruction was achieved through labour intensive methods with contracts to small companies to build or rebuild community basic services. Education reforms were prioritised to previously under-served poorest areas, and many ex-combatants received scholarships to education. Inequality was also redressed through land redistribution. Resources were drawn from reduced military expenditure.

There is a big difference between a safety net approach, which separates the growth agenda from the anti-poverty agenda, providing residual services to those not participating in growth, and a social protection approach which combines a response to vulnerability with policies to promote growth. In Bolivia increased social spending was targeted to the poor via a number of specific safety nets. For example, the Bolivian Social Fund and public works programmes were designed to catch those left behind by reforms. This approach failed to address equity problems in Bolivia or to promote the productive activities of the poor. Credit is not viewed as a mechanism for reaching the poorest and only available to self-employed and informal producers, reaching just 10% of the population in just 68 of Bolivia's 314 municipalities. In rural areas credit is virtually unobtainable, except for very large scale producers.

Growth benefits have not trickled down as planned and productivity among the poorest has not been actively encouraged through policy support in Bolivia. Although the sale of state companies was used to finance an annual old age pension the scheme was targeted badly and 83% of the benefits went to the non-poor.

Indonesia has focused on profitability and labour intensity in an effort to include the poor in growth, rather than transfers. Village safety nets have been undermined. A village-level rice storage system (*lumbung desa*) for example was replaced through subsidised competition. After the Asian crisis in 1998 a number of hastily designed and implemented safety nets included subsidised rice, school vouchers and identity cards for health service access, but they were poorly targeted and inefficient.

The emergence of NGOs and CSOs as alternative delivery mechanisms and vocal civil institutions has compensated for weak state and market institutions in Bangladesh. Women's micro-credit programmes have achieved impressive results, particularly in rural areas. Of about five million borrowers 90% have been women.

6 Conclusion

Many sub-Saharan African countries and other low income countries have growth rates of per capita incomes that have been negative over the last couple of decades. In these contexts the very poorest, as with the majority of the population, are adversely affected by the absence of growth. The highly heterogenous OPPG case studies illustrate that the poorest often do as well as the poor and even the national average, even where poverty is declining slowly. However, the detailed analysis of underlying patterns of growth indicates that pro-poorest trends may reflect not only incidences of pro-poor growth but also the distributional impacts of recession and shocks that hit richer groups hardest. Macro factors and policies are important to the level, stability and distributional pattern of growth, which in turn influence poverty reduction.

A number of channels are important in enabling the poorest to protect themselves from adverse effects of growth and rising inequality. Agriculture and the rural economy clearly offer important safety nets and buffers against shocks. In Zambia the agriculture sector provided an important safety net for less educated formal sector urban workers pushed out by reforms. Similarly, the agricultural sector has acted as a safety net in Romania, absorbing people who lost jobs in industry but were unable to find employment in the expanding service sector because of a lack of appropriate skills, regional inequalities, or institutional rigidities, such as labour market structures. In Bolivia agriculture was a buffer for the poor who were less hurt by the external shocks that primarily affected the formal and export sectors. Small-scale farming can mitigate escalating rural poverty, but in many contexts is not sufficient to reduce vulnerability to poverty.

Where agriculture is linked with other domestic developments, such as non-farm activities, or the export sector it has can be an important source of pro–poor and pro-poorest growth. Rural infrastructure investment is crucial to support sector expansion. Substantial infrastructure and market development occurred alongside opening of access to credit for poorer households in rural Bangladesh. Physical infrastructure developments during the 1990s included main and feeder roads, bridges, culverts, and market places as the major rural development strategy connecting markets throughout the country and contributed to increased farm productivity, employment and income, especially of the rural poor and women with landless and small farmers gaining a larger share of the increase in income from crops, wages, livestock and fisheries. With more developed rural markets, incentives are stronger for private sector investments, which in turn can open up opportunities not only to the larger land owners but also to the small-scale farmers. The expansion of cotton farming has been supported in favourable areas in Zambia by large private companies who have supported small-scale farmers with required inputs in return for their cotton sales at harvest.

The Burkina Faso study argues for broad-based rural development that invests in agricultural development but focuses on staples as well as non-farm and export

activities. This approach might include rural subsidies for essential agricultural inputs and investments into staples crops, which the majority of the poorest households farm.

The development of rural infrastructure can itself be directly linked to the incomes of the poorest households through prioritising labour intensive approaches. In Indonesia for example investments in infrastructure development targeted poor and unskilled labourers through low wages. Infrastructure reconstruction in post-conflict El Salvador was also achieved through labour intensive methods with contracts to small companies to build or rebuild community basic services.

Alongside rural market and infrastructure development, the non-farm sector also offers opportunities for progress. In Bangladesh roadside shops and petty trading for example emerged as an important rural livelihood activity alongside the expanded rural main and feeder road development in the 1990s.

Public expenditures and safety nets have played a part in most of the OPPG studied countries. Clearly education is essential to income generation in many contexts and the poorest tend to be less educated. Universal access to health services is also crucial. Uganda has gone a long way in improving access for all. In Bolivia the Natural Dialogue Law is beginning to redress a bias against the poor and poorest in public spending. Less however is discussed on social protection measures, although in a number of countries these approaches are clearly gaining more attention from policy makers.

The role of credit is clear. In Burkina Faso, El Salvador and Uganda the lack of credit is noteworthy and a major constraint on agricultural and non-farm productivity. Ghana's high interest rates have pushed up the cost of credit to the private sector and made it extremely difficult for the poor to access. In Vietnam the informal sector is considered superior to the formal system as access is greater. However, informal credit is often provided by wealthy private moneylenders who take considerable interest rates. Other options available to the poorest may be informal borrowing between families, friends and neighbours, or rotating savings and credit schemes, in which self help groups pool money and loans can be made with low or zero interest.

In Bangladesh, the credit gap has been filled by an active and strong NGO sector, where in successful cases the provision of credit has been linked to other productive and asset building activities (e.g. employment based, and based around education or nutrition programmes). In Zambia, the rural credit gap has been bypassed by private companies in the cotton sector, but this is limited only to well connected rural areas. Some form of transfers is essential to reducing risk and vulnerability and vital to increasing the productivity of the poorest and thereby enabling them to escape poverty traps.

Building individual and household assets has also been achieved through remittances. In Bangladesh urban-rural and international remittances are an

important source of household income, used for house repairs, buying land and agricultural inputs such as irrigation and fertilisers to cultivate HYV rice strains, strengthen human capital development through children's education and treatment of the sick. However in most cases these assets do not reach the poorest. There may be cases though where the benefits from investments made possible from remittances can have beneficial spin-offs for the poorest (e.g. this was the case in El Salvador). It is worth investigating whether there are ways that remittance systems could be better managed so that poorer households could benefit more.

Protection from violence is essential to safeguarding the productivity of the poor and poorest people. Recent crisis in neighbouring Cote d'Ivoire constrained poverty reduction in Burkina Faso as previously important remittances and remigration collapsed. Post-conflict economic progress in El Salvador and Uganda however resulted from inward investments and re-investment quickly attracted by emerging opportunities.

Also growing from a low base after achieving peace and a degree of stability, Uganda's economy grew at an impressive rate, averaging about 6.3% per annum for about 15 years from 1987/88. Ensuring continued peace is a real challenge however.

Economic, political and environmental stability is also essential to attracting inward and domestic investment and safeguarding against crises. The poorest groups need protection against the impacts of economic crises; the international coffee price crash for example had terrible consequences for the poorest in Uganda and El Salvador. Economic crisis do not always affect the poorest most severely, as these groups tend not to be represented in the formal sector. Environmental crises however tend to affect the poorest disproportionately. Improved crop resilience in some countries has had very positive results for the poorest. In Bangladesh the expansion of the non-farm sector offers alternative livelihood options allowing households to adapt during flood affected years.

A geographically and socio-politically broad view of the economy is required to ensure that policy distortions against less favoured areas and excluded groups are addressed. Addressing biases can be hugely difficult when vested interests are at stake. It took some time (and donor pressure) to reverse Zambia's urban bias for example. It is not easy to address discriminatory policies, such as the labour markets barriers to women and indigenous groups in Bolivia, Brazil, India, Romania and so on, but necessary if growth is to become more pro-poorest. Low poverty elasticities of growth in Bolivia indicate weak integration of the poor into the economy, and reflect deep seated inequalities in assets, opportunities, resources and power. Ethnic undertones remain strong in Ghana and state institutions are liable to capture by interest groups. These dynamics have a long history however and can not hope to be changed quickly.

Enabling links to develop between formal and informal sectors is one avenue for encouraging maximum and pro-poorest productivity in developing country

economies. Large numbers of poor, and also the poorest, people are located in the informal sector but their productivity can be constrained by limited access to formal sector goods and services. It is also a challenge to extend infrastructure and market reach to harder to access geographical areas and excluded groups. In the Indonesian context, diverse job opportunities are available on densely populated Java which are not available to rural households on the Outer Islands, where infrastructure does not connect rural households to non-farm employment opportunities. Providing good infrastructure in areas with low population densities is an important challenge that directly affects who and how people can benefit or not from economic opportunities.

The extent to which the poorest are able to participate in growth and the way in which extra income provided through growth benefits the poorest through public and private sectors, are important channels for pro-poorest growth. There is considerable scope for policy to influence each of these channels but it is also important that policy decisions ensure that substantial adverse effects do not hurt the poorest. To drive pro-poorest growth the factors that drive income and consumption growth among the poorer and more vulnerable groups should be built. In turn, institutional capacity is required to deliver effective and appropriate support, and may involve tailoring policy interventions to the poorest households.

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Annex

Table A 1: Poverty and the poorest in the 14 OPPG countries

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
Bangladesh	1983: **52.3** 1991: **49.7** 2000: **39.8** Rural: 1983: **53.8** 1988: **49.7** 1991: **52.9** 2000: **43.6**		1983: **14.5** 1991: **13.6** 2000: **10.3** Rural: 1991: **14.6** 2000: **11.3** Urban: 1991: **8.4**	1983: **5.7** 1991: **5.1** 2000: **3.6** Rural: 1991: **5.6** 2000: **4.0** Urban: 1991: **2.8**	Child malnutrition (measured by the anthropometric measures) has gone down substantially over the last decade, with faster decline recorded for the second half of the nineties. The proportion of children (6-71 months) underweight has declined nationally from 72% in 1985/86 to 51% in 2000. Rapid expansion of primary education – the gross primary enrolment increased from 72% in 1990 to 91% in 2000; narrowing disparity between rural and urban primary enrolment; closing gender gap, including for the very poor (although net enrolment rate is lower) Considerable regional variations: incidence of poverty tends to be high in disaster-prone areas. Thus, the poverty-trapped areas (defined as areas which had the highest incidence of poverty in both 1991 and 2001) have a distinct mark of *ecological vulnerability* as they are found to be in the depressed basins of the northeastern districts; the river-erosion belts of the

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
	Urban: 1983: **40.9** 1991: **33.6** 2000: **26.4**		2000: **6.7**	2000: **2.3**	northwestern districts; coastal islands; and remote hill tracts Poverty is typically high for the landless, especially those who have agricultural wage labour as their principal occupation and for those who are engaged in marginal occupations and skills.
Bolivia	1989: **76.88** 2002: **67.22** Rural: 1989: **89.7** 2002: **83.8** Urban:	**Should be there! Check.**	P1: poverty gap 1989: **45.45** 1994: **41.89** 1999: **32.53** 2002: **32.94** Extreme pov: 1989: **27.53**	(extreme) 1989: **31.37** (**16.78**) 1994: **28.94** (**15.79**) 1999: **20.19** (**8.68**)	Non-income measures declined more than income measures in 1990s, particularly in urban areas. Impressive reductions in child mortality and expansion of primary and secondary education. Very high poverty rates among those with less than 5 years of schooling. Poorest quintile (in contrast to other groups) suffered slight declines in enrolment and attendance rates. General improvements in non-income dimensions, much smaller in rural

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
	1989: **81.1** 2002: **67.7**		1994: **25.21** 1999: **15.73** 2002:**15.32** Rural: (extreme) 1989: **58.30** (**39.13**) 2002:**44.86** (**23.88**) Urban: (extreme) 1989: **51.31** (**34.10**) 2002: **32.88** (**13.10**)	2002: **20.04** (**8.19**)	areas (e.g. 2001: **91%** pop had unmet basic needs) Rural-urban divide and very large regional variations in P1: very high in the two highland and valley departments of Chuquisaca and Potosi (dependent on subsistence agriculture); much lower in the lowland departments of Santa Cruz, Beni, Pando, and the valley department of Tarija (large-scale farming, as well as most oil and gas production); 3 remaining provinces La Paz, Oruro, and Cochabamba are in intermediary. Poorest: large households, many dependents, young head. Unemployed heads also have very large poverty rates Language: P1of indigenous language speakers is nearly twice as large when the moderate poverty line is applied, and three times as large when the extreme poverty line is used. Much higher poverty gap in agriculture than any other profession.

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
Brazil	1981: **60,89** 1993: **61.62** 2001:**51.38**	1981: **32,81** 1993: **34,12** 2001: **25,72**	1981: **31,32** (13,61 indigent) 1993**:** **32,62** (15,26 indigent) 2001:**25,55** (11,07 indigent)	1981: **19,95** (7,70 indigent) 1993: **21,45** (9,27 indigent) 2001: **16,25** (6,73 indigent)	Poverty associated with having children, being non-white, having less education, no access to infrastructure, being unemployed or working in an informal agricultural job. Education, access to infrastructure and sector of activity are more important in rural areas.
Burkina Faso	Nacional 1994: **55.5** 2003: **47.2** Urban: 1994: **14.7**		National: 1994: **20.9** 2003: **16.0** Urban 1994: **3.9**	National 1994: **10.0** 2003: **7.3** Urban 1994: **1.5**	Spatial differences: several economic regions where poverty headcounts across all three survey years are considerably lower than in other regions, mainly in the 'Center' (region of the capital Ouagadougou) and the 'cotton' region 'Hauts Bassins' (47% of national cotton production). In contrast, the regions 'North' and 'Centre-South' have consistently shown poverty rates well above 60%. Social differences: households earning their main income from the public or formal private sector had a much *lower* poverty incidence (never more than 10% and 20% respectively) than all other socio- economic groups, but also

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
	2003: **20.3** Rural: 1994: **63.4** 2003: **53.3**		2003: **5.7** Rural 1994: **24.1** 2003: **18.3**	2003: **2.3** Rural: 1994: **11.7** 2003: **8.3**	the *highest* increase of poverty between 1994 and 2003 (28% and 47% respectively).
El Salvador	1991: total poverty = 60% moderate: **33%** 1995: total poverty: 54% moderate: **32%** 2000: total: 45 mod: **25**	1991: total poverty = 60% extreme: **33%** 1995: total poverty: 54% extreme: **22%** 2000: total: 45 extreme: **19**	1991: **29.8** 2002: **16.5**	1991: **17.7** 2002: **10.0**	Poverty predominantly a rural problem. 41% of the pop lives in rural areas, but 56%rural pop is in poverty and 27% in extreme poverty. Poverty also disproportionately affects the young. Those younger than 18 years old represent 41% of the population but 52% are in poverty and 24% in extreme poverty. Older people represent 10% of the population, but 38% are in poverty (reflects the weakness of the social safety net, including the limited coverage of the pension system).

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
	2002: total: 43 mod: **24** Urban [rural]: 1991: 60 [71] mod: **32** [**34**] 2002: 34 [56] Mod: **22** [**27**]	2002: total: 43 extreme: **19** Urban/rural: 1991: 60 [71] Extreme: **28** [**37**] 2002: 34 [56] Extreme: **12** [**29**]			Household characteristics, employment and geographic location have been found to be significant.
Ghana	1992: **51.7**			1992: **6.6**	Spatial: substantially higher levels of deprivation in more marginal, remote and less well endowed regions, e.g. in the northern savannah region

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
	1999: **39.5**			1999: **8.8**	compared to the south. 42.4% households in lowest quintile located in the rural savannah (1998/9). This accounts for 20.6% of total population. Also, a number of poor areas in coastal areas – notably Central region. Important variations within regions. Strong urban-rural differentiation. Deprivation higher in rural areas. Landlessness becoming increasingly important in peri-urban areas. Gender: women facing higher levels of deprivation to men, levels of income poverty are higher among households with higher dependency ratios. Few poor work in non-agricultural wage employment. Majority work in small-scale agriculture (food crops, cocoa, and some other export crops). In PPAs poorest of the poor identified as those with lack of labour resources

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
					due to various factors including disability, age combined with a lack of adult children or widowhood, and childlessness.
India	1993: **36** 2000: **28.6**				
Indonesia	1990: **15.8** 1998**:** **24.2** (crisis year) 2002**: 18.2** Urban**:** 1990**: 16.1**				Spatial: 4 times as many poor people live in rural areas as in urban areas, despite the rapid urbanisation of the population over the past four decades. Java contains **75 %** of the urban poor and just **55%** of the rural poor. (Diverse job opportunities are available on densely settled Java which are not available to rural households on the Outer Islands). The dominance of Java in the total numbers of poor people (**58.9 %,** with a poverty incidence of **15.3%)**, and of the Eastern Islands in poverty incidence. Eastern Indonesia (excluding Maluku and Papua) has **9%** of the poor, but a poverty incidence of **36.9**%

Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
	2002**: 14.5** Rural**:** 1990**:15.7** 2002**: 21.1**				
Romania	 1996: **20.1** 1999: **33.3** 2002: **28.9**	1996: **6.3** 1999: **12.6** 2002: **11.0** P1: 1996: **1.22** 2002: **2.42**	P1: 1996: **4.79** 2002: **7.61**	P2: 1996: **1.70** 2002: **2.96**	Households headed by people self-employed in agriculture and unemployed appeared most vulnerable to pauperisation. In 2002, the poverty headcount among the unemployed was 50%, or 22 percentage points higher than the national average. The situation was even worse among households headed by agricultural self-employed persons, with the poverty headcount reaching 60%. In rural areas, poverty incidence was almost three times higher than in urban areas.

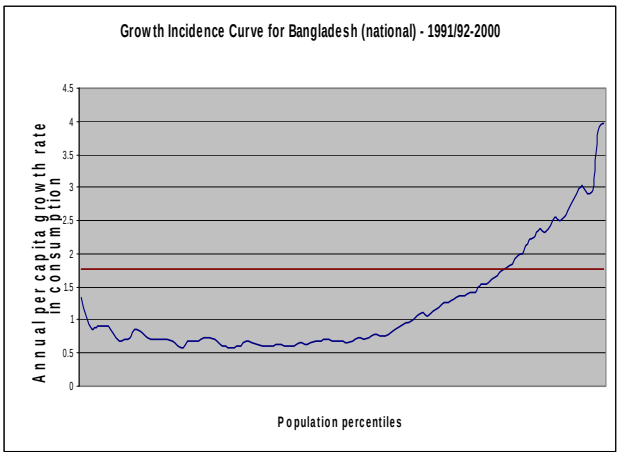
Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
		P2: 1996: **0.37** 2002: **0.82**			
Senegal* **	1994: **67.83** 2001: **57.1**				
Tunisia	1990: **14.1** 2000: **9.9**				
Uganda	1992: **55.7** 2002: **37.7**		1992: **20.3** 2002: **11.3**	1992: **9.9** 2002: **4.8**	Human capital has improved significantly. The proportion of household heads with no formal education has consistently declined overtime, from 34 to 27% and from 21 to 12% for the poor and non-poor respectively between 1992 and 2003. Health conditions remain a problem: between 1992 and 2000, the number of adult days lost to illness by the average household rose from 8 to 12. A major burden to households is AIDS related shocks, particularly because households have to sell off their assets in order to meet medical bills and the

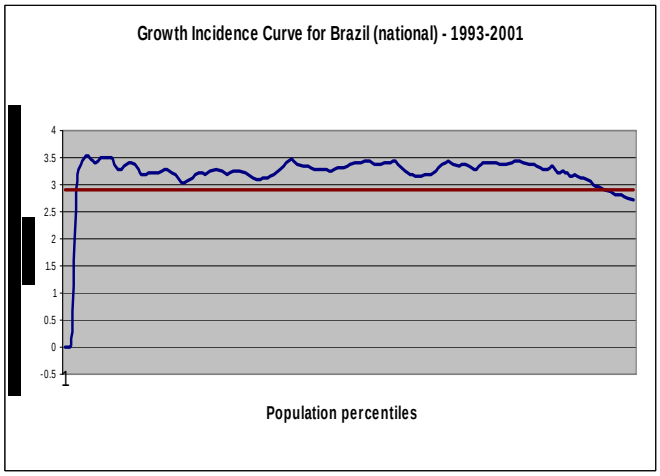
Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
					resulting high incidence of foster childhood associated with AIDS related deaths. Between 1992 and 2000 the proportion of households hosting a foster child tripled from 5% to 15% with the average share of foster children in a household increasing from 10% to about 20%

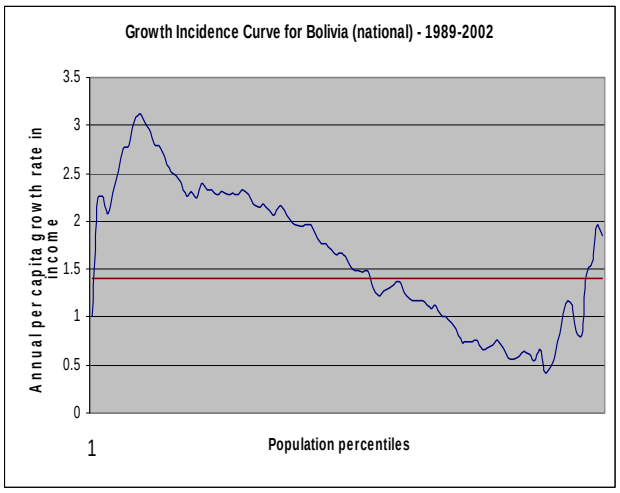
Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
Vietnam	1993: **58.1** 2002: **28.9** Urban: 1993: **25.1** 2002: **6.6** Rural: 1993: **66.4** 2002: **35.6** $1/day: 1993: **39.9** 2002:**13.6** 2$/day 1993: **80.5** 2002: **58.2**	Food rate: 1993: **24.9** 2002: **10.9**	1993: **18.5** 2002: **6.9**	1993: **8.3** 2003: **2.6**	

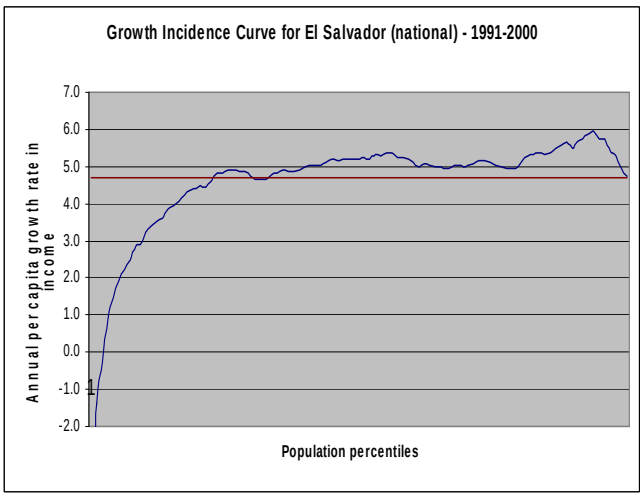
Country	Head-count (%)	Extreme poverty line (Usually is 'food pov line')	Poverty Gap (P1)	Poverty Gap Squared (P2)	Non-income indicators and description of poverty and poorest
Zambia	1991: **68.9** 1998: **75.4** Urban: 1991: **46.0** 1998: **58.3** Rural: 1991: **88.0** 1998: **85.6**	1991: P0: **56.5** P1: **32.4** P2: **23.2** 1998: P0: **59.8** P1: **27.6** P2: **16.2**	P1 1991: **41.7** 1998: **40.0**	P2: 1991: **30.6** 1998: **25.6** Urban: 1991: **9.7** 1998: **12.7** Rural: 1991: **47.9** 1998: **33.3**	

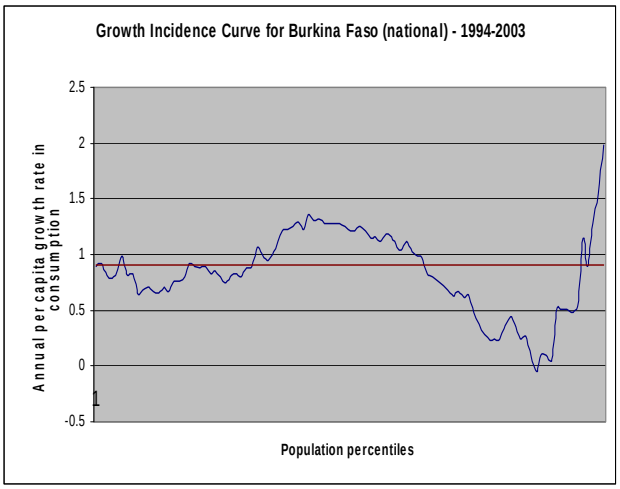
National growth incidence curves

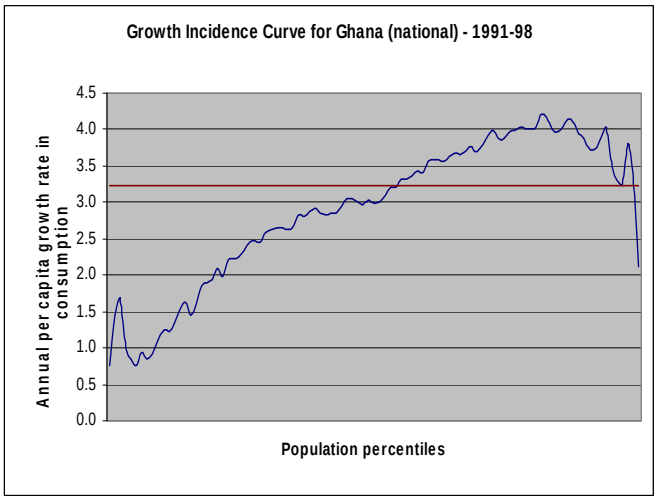


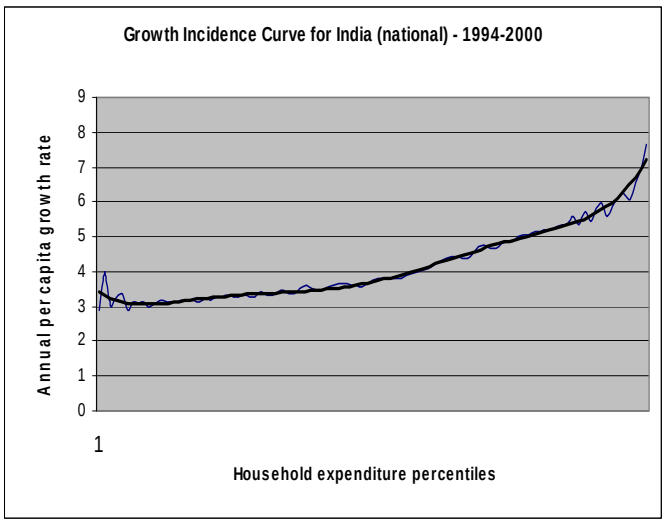


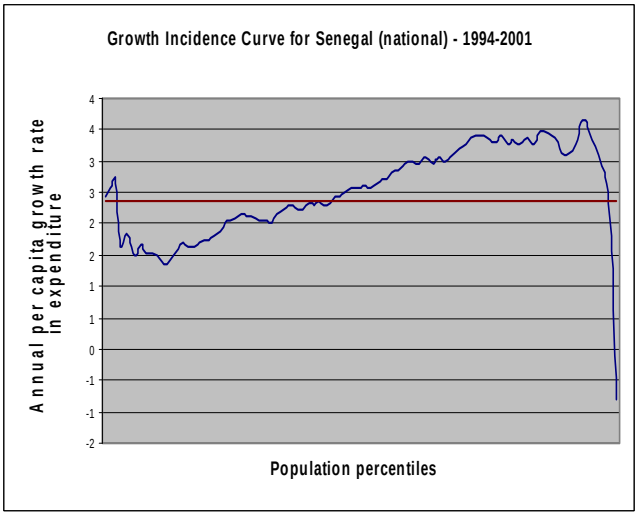

Growth Incidence Curve for Bolivia (national) - 1989-2002
Annual per capita growth rate in income
3.5
3
2.5
2
1.5
1
0.5
0
1
Population percentiles

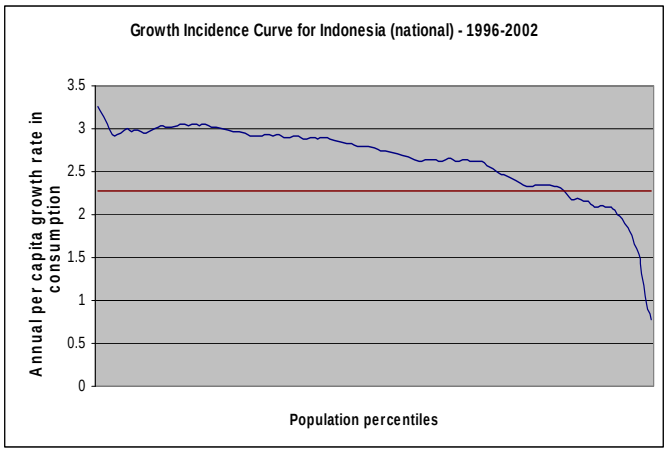

Growth Incidence Curve for El Salvador (national) - 1991-2000
Annual per capita growth rate in income
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
1
Population percentiles

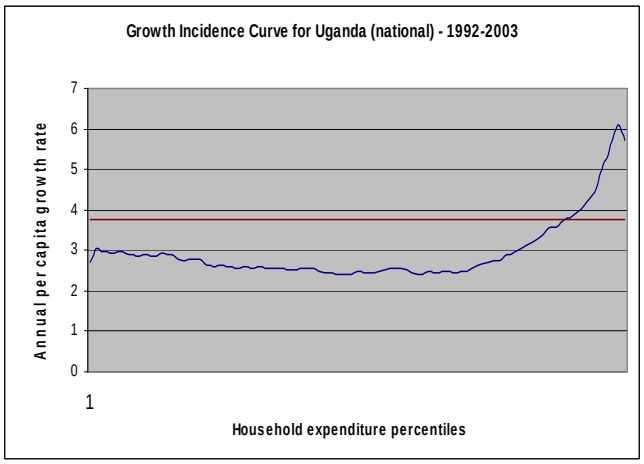

Growth Incidence Curve for Burkina Faso (national) - 1994-2003
Annual per capita growth rate in consumption
2.5
2
1.5
1
0.5
0
-0.5
1
Population percentiles

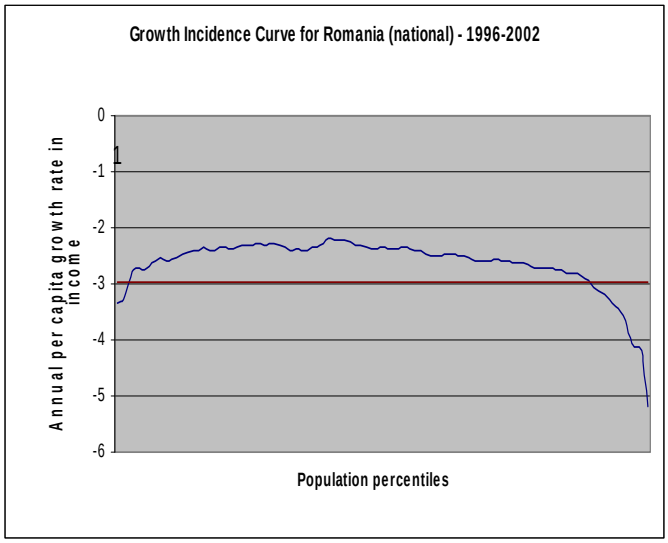

Growth Incidence Curve for Ghana (national) - 1991-98
Annual per capita growth rate in consumption
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Population percentiles

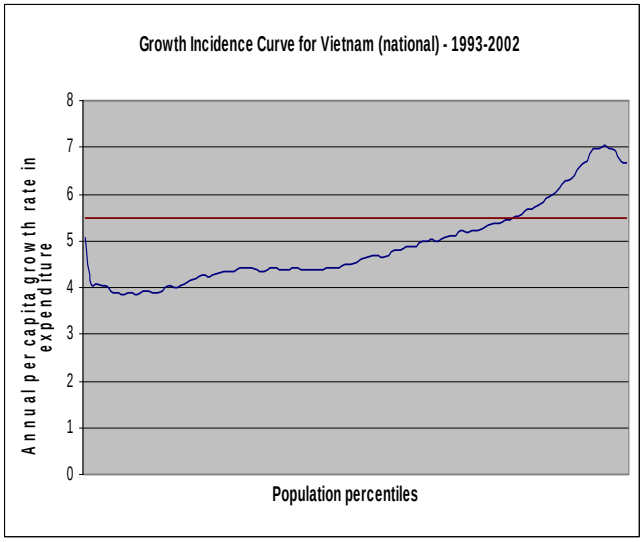

Growth Incidence Curve for India (national) - 1994-2000
Annual per capita growth rate
9
8
7
6
5
4
3
2
1
0
1
Household expenditure percentiles


Growth Incidence Curve for Senegal (national) - 1994-2001
Annual per capita growth rate in expenditure
4
4
3
3
2
2
1
1
0
-1
-1
-2
Population percentiles


Growth Incidence Curve for Indonesia (national) - 1996-2002
Annual per capita growth rate in consumption
3.5
3
2.5
2
1.5
1
0.5
0
Population percentiles


Growth Incidence Curve for Uganda (national) - 1992-2003
Annual per capita growth rate
7
6
5
4
3
2
1
0
1
Household expenditure percentiles


Growth Incidence Curve for Romania (national) - 1996-2002
Annual per capita growth rate in income
0
-1
-2
-3
-4
-5
-6
Population percentiles


Growth Incidence Curve for Vietnam (national) - 1993-2002
Annual per capita growth rate in expenditure
8
7
6
5
4
3
2
1
0
Population percentiles

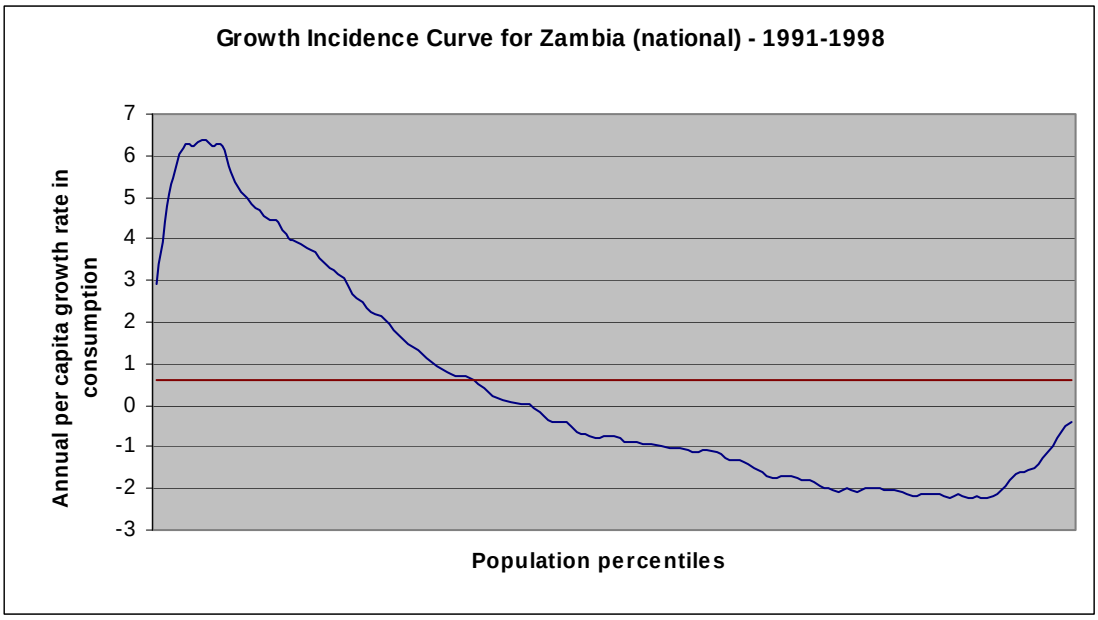


Table A 2: Pro-poor and pro-poorest growth rates

Country and date	**Rate of pro-poor growth**	**Pro-poorest growth**	**Mean growth rate**
Bangladesh 1991/2 - 2000	0.9		2.4
Bolivia 1989-2002	1.7 Dept capitals 0.7 Other urban: 3.8 Rural: 1.7	2.2	Overall 1.4 Dept capitals 1.2 Other urban: 1.8 Rural: 0.9
Brazil 1981-2001	1.0		2.7
Burkina Faso 1994-2003	1.0	0.8	0.8
El Salvador 1991-2000	4.14 urban 5.05	10^{th} percentile 0.87 urban 5.18	?

	rural 1.33 1991-1995 4.74 urban 8.42 rural -0.73 1995-2000 3.77 urban 2.3 rural 3.15	rural -0.74 20th percentile 2.37 urban: 5.22 rural: -0.37	
Ghana 1991-1998	2.1	1.3	3.2
India 1993 – 2000:	Rural: 2.8 Urban: 3.9	Rural: 2.5 Urban : 3.3	?
Indonesia1965-1990	6.56		?
Romania	1996-1999: -6.8 1999-2002: 1.80	Extreme poverty: 1996-1999: -7.41 1999-2002: 1.67 At 10%: 1996-1999: -7.14 1999-2002: 1.69 [At 20% 1996-1999: -6.79 1999-2002: 1.73	1996-199: -7.3 1999-2001: 2.31
Uganda 1992-2003	2.7	2.77	3.0

	Rural: 2.57 Urban: 3.45 1992-1997: 3.94 1997-2000: 4.87 2000-2003: -1.67	Rural: 4.36 Urban: 3.30	Rural: 3.57 Urban: 4.05 1992-1997: 3.57 1997-2000: 35.96 2000-2003: -0.86
Vietnam 1993-2002	4.9 1993-1998: 5.73 1998-2002: 2.24	Lowest quintile 4.03 Food poverty line: 4.06 Lowest quintile: 1993-1998: Urban 8.79 Rural: 4.92 1998-2002: Urban: 2.06 Rural: 2.20	5.5
Zambia 1991-1998	1.1 Rural: 4.0 Urban: -1.8 1991-1996: -1.1 1996-1998: 2.2		0.4

Table A 3: Estimated growth elasticities of poverty

OPPG country	Growth elasticity of poverty		
	Headcount index	**Poverty gap index**	**Poverty severity index**
Bangladesh	Urban: 1991 -2.1 2000: -2.0 Rural: 1991: -1.8 2000: -1.9	Urban: 1991: -3.0 2000: -2.9 Rural: 1991: -2.6 2000: -2.8	Urban: 1991: -3.9 2000: -3.9 Rural: 1991: -3.2 2000: -3.7
Bolivia			
Brazil	Indigence line: -0.89 - poverty line[2]: 0.52	-1.02 (indigence) -0.71 (poverty line)	-1.16 (indigence) -0.844 (Poverty line)
Burkina Faso	National: 1994-1998: 0.9 1998-2003: -2.9 1994-2003: -0.8 Urban: 1994-1998: 5.8 1998-2003: -3.2 1994-2003: 1.6 Rural: 1994-1998: 0.7 1998-2003: -2.7	National: 1994-1998: 1.9 1998-2003: -1.3 1994-2003: -1.3 Urban: 1994-1998: 7.2 1998-2003: 0.6 1994-2003: 0.8 Rural: 1994-1998: -4.0 1998-2003: -3.7	National: 1994-1998: 2.1 1998-2003: -1.6 1994-2003: -1.5 Urban: 1994-1998: 8.1 1998-2003: 0.6 1994-2003: 0.8 Rural: 1994-1998: -4.5 1998-2003: -4.4

[2] Indigence line = R$65,07; Poverty Line = R$131,97

	1994-2003: -0.8	1994-2003: -3.8	1994-2003: -4.4
El Salvador	1991-2002: -1.1 Extreme pov: -1.5		
Ghana	1991-1998: -0.98		
India	National: -0.65 Rural: -0.60 Urban: -0.85 Bihar: -0.3 Kerala: -1.2 Maharashtra: -0.4 Uttar Pradesh: -0.6 West Bengal: -1.2	National: -1.09	National: -1.42
Indonesia	1993-96: -1.2 1996-99: -3.0 1999-2002: -3.3 Average: -1.75		
Romania	2002: -1.11 Extreme poverty -0.87	2002: -0.83 Extreme: -0.64	2002: -0.72 Extreme: -0.24
Uganda	1992-2003: -1.83 Extreme poverty: -2.52	1992-2003: -2.32 Extreme poverty: -3.41	1992-2003: -2.8 Extreme poverty: -4.18
Vietnam	1993-1998: -0.86	1993-1998: -1.11	1993-1998:-1.24

	1998:2002: -1.19 1993-2002: -0.77 Food poverty line: 1993-1998: -1.21 1998:2002: -1.35 1993-2002: -0.97	1998:2002: -1.35 1993-2002: -0.92 Food poverty line: 1993-1998: -1.32 1998:2002: -1.70 1993-2002: -1.05	1998:2002: -1.53 1993-2002: -1.00 Food poverty line: 1993-1998: -1.39 1998:2002: -1.98 1993-2002: -1.10
Zambia	1991: -0.5 1998: -0.5	1991: -0.7 1998: -0.9	1991: -0.7 1998: -1.1

Table A 4: Summary of Datt-Ravallion composition

Country and dates	**Growth component (residual)**		**Redistribution component (residual)**		**Residual**	
	Headcount index	**Extreme Poverty**	**Headcount index**	**Extreme Poverty**	**Headcount index**	**Extreme Poverty**
Bangladesh						
Bolivia	1989-2002 moderate: -6.4 Urban: -7.4 Rural: -3.9		1989-2002 moderate: -3.5 Urban: -5.8 Rural: -2.5		0.0	
Brazil	1981-2001: -0.1 Rural -13.4 Urban -5.8	-8.9	1981-2001: 0.01 Rural: 0.2 Urban: 3.4	-1.8		0.0

Burkina Faso	1994-2003: -3.2 Urban: 4.2 Rural: -7.5		1994-2003: -4.5 Urban: -0.2 Rural: -1.7		1994-2003: -0.6 Urban: 1.6 Rural: -1.0	
El Salvador						
Ghana 1993-2000	1991-1998: -13.1 Rural Urban-0.18	Rural -0.19 Urban -0.2	1991-1998: 0.9 Rural -0.04 Urban -0.03	Rural 0.02 Urban 0.04		
India	1993–2000: Rural: -0.09 Urban: -0.18 Kerala (1.04), Punjab (1.01) West Bengal (0.56) Bihar (-0.76), Rajasthan (-0.50) Assam (-0.49)	Rural: -0.19) Urban: -0.20	1993-2000: Rural: -0.04 Urban: -0.03 Haryana (0.25) Punjab (0.22), Bihar (-0.25), Maharashtra (-0.11) Assam (-0.10)	Rural: 0.02 Urban: 0.04		
Indonesia						
Romania	1996-1999: 0.162 1999-2002: -0.050	1996-1999: 8.3 1999-2002: -0.023	1996-1999: -0.027 1999-2002: 0.006	1996-1999: -0.9 1999-2002: 0.006	1996-1999: -0.004 1999-02: 0.001	1996-1999: -1.1 1999-2002: 0.001

Uganda	1992-2003: **-26.3** Rural: **-23.1** Urban: **-22.8**		1992-2003: **8.3** Rural: **5.1** Urban: **7.2**		1992-2003: 0.0	
Vietnam	1993-2002: **-34.7**	1993-2002[3]: **-28.1**	1993-2002: **4.9**	1993-2002: **5.9**	1993-2002: 0.0	
Zambia	1991-1998: 5.9 1991-1996: 9.8 1996-1998: -4.4	P2: 1991-1998: 4.0 1991-1996: 7.0 1996-1998: -3.5	1991-1998: -0.4 1991-1996: -0.5 1996-1998: 0.8	P2: 1991-1998: -9.8 1991-1996: -8.2 1996-1998: -1.3	1991-1998: 0.9 1991-1996: 1.0 1996-1998: -0.2	P2: 1991-1998: 0.8 1991-1996: 1.2 1996-1998: -0.1

[3] Food poverty rate