

Why Inequality Matters for Poverty

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1. Introduction

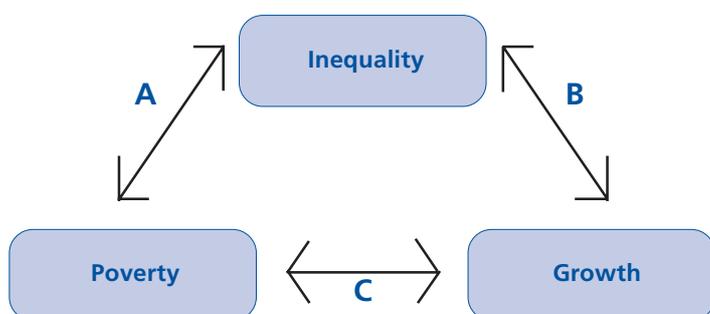
After around twenty years of neglect, inequality has been brought out of the cold. Inequality has re-entered the mainstream development policy agenda by featuring prominently in the World Bank's World Development Report 2000/01. Inequality matters in its own right (see Inequality Briefing No 1) and it is key to reducing poverty. This paper draws on recent research to explore in what ways inequality matters for poverty, and how important it is relative to economic growth.

Inequality and poverty affect each other directly and indirectly through their link with economic growth. Section 2.1 explores the (direct) sensitivity of poverty to distribution changes, as well as the magnitude of possible changes in inequality. Section 2.2 discusses the dynamics of the triangular relationship between distribution, poverty and growth. Poverty can be reduced through increases in income, through changes in the distribution of income, or through a combination of both. Section 2.3 introduces what the latest research tells us about the relative importance of growth and inequality in reducing poverty, while section 2.4 shows how distribution affects the capacity of growth to reduce poverty. Poverty and inequality have often been separated conceptually both in research and in operational work. Using the links between absolute and relative measures of poverty, section 3 shows why it is not possible to dissociate poverty from inequality. The main conclusions are summarised in the last section.

2. Relationships between Poverty, Inequality and Growth

Poverty, inequality and growth interact with one another through a set of two-way links. Some of these links (A, B and C in Figure 1) can be explored separately, but often one influences another causing indirect effects. For instance inequality can indirectly influence poverty as inequality affects growth (B) and growth in turn influences poverty (C). Section 2.1 discusses how inequality and poverty affect each other directly (A). Section 2.2 shows how they interact indirectly through growth by discussing links (B) and (C).

Figure 1 The Poverty, Inequality and Growth Triangle



2.1. Links between Inequality and Poverty

2.1.1. Poverty is Very Sensitive to Distribution Changes: The Theory

Small changes in income distribution can have a large effect on poverty. A simple arithmetical example can help visualise this. Imagine a country where the share of national income that goes to the poorest 20% of the population increases from 6% to 6.25%. A change in income distribution of one quarter of one percent would barely affect the Gini coefficient, but for the poor this represents a 4% increase in their total income. Such a small redistribution would have the same effect on poverty as doubling the annual growth of national income from 4%, which is the projected growth rate of many African countries, to 8%, which is necessary to achieve the income poverty Millennium Development Goal (MDG)¹ - example from White and Anderson (2001).

Changes in income distribution have even larger effects on measures of the depth and severity of poverty, as confirmed by evidence from Cote d'Ivoire and Bangladesh (Wodon, 1999). Again, a numerical example helps to show the importance of distribution for poverty. In Table 1, distribution 1 has only half the headcount of 2, and compares favourably with 3, but its poverty gap and gap squared are higher than those in either 2 or 3. This is only because its Gini coefficient is marginally higher. Similarly, distribution 2 has lower poverty gap and poverty gap squared measures than 3, although its headcount is considerably higher. Again this is due to very marginal changes in the Gini coefficient.

Table 1 The Effect of Small Changes in Distribution on Poverty Measures

	Headcount (Incidence)	Poverty Gap (Depth)	Poverty Gap Squared (Severity)	Gini
1	0.20	0.10	0.052	0.324
2	0.40	0.08	0.018	0.312
3	0.30	0.09	0.029	0.318

Source: Creedy, J. (1998).

These examples highlight that the distribution of income is important not only for making progress towards the income poverty MDG and the headcount, but even more so when considering the depth and severity of poverty.

2.1.2. Distribution Changes in Practice

What then is the scope for changes in inequality in practice? Cross-country studies have argued that, on average, within country

¹ See Halving World Poverty by 2015: Economic Growth, Equity and Security Target Strategy Paper (DFID, 2000) for further details on internationally agreed targets (now known as goals).

inequality is stable over time, or changes too slowly to make a significant difference in poverty reduction (Deininger and Squire, 1998; and, Bruno *et al.*, 1996). Recent country and regional studies have looked beyond the 'average' and refuted the initial cross-country evidence. Large distributional changes can occur even over relatively short periods of time - for example, in sub-Saharan Africa; in Latin America where income distribution improved during the expansion in the 1970s and deteriorated during the recession of the 1980s; in China; and, in the transition economies of Eastern Europe and Central Asia over the 1990s. While the rapid increase in inequality in the latter region is a special case, it very much confirms the importance of distribution changes for poverty reduction. Gini coefficients for the majority of these countries increased by between 5 and 20 percentage points, in some by even more than that, greatly exacerbating the effects of negative growth on poverty (Kanbur and Lustig, 1999).

Past changes in distribution have clearly been large enough to make a substantial difference to the speed of poverty reduction (White and Anderson, 2001). Policies and growth patterns that improve distribution are, therefore, a potentially significant additional tool in the fight against poverty. Past changes in distribution occurred without active policy intervention, as the focus of development policy and research was on growth, rather than distribution issues. If, in future, development policy makes inequality an explicit target, it will greatly enhance the poverty reducing effect of growth (see section 2.2.). Of course the big question is how best to improve the distribution of income (see Inequality Briefing No 3)?

2.2. Links between Poverty, Inequality and Growth

2.2.1. From Inequality to Growth

In addition to its direct effect on poverty, inequality also affects poverty indirectly through its impact on growth (links B and C in figure 1). A resurgence of work on inequality in the 1990s has reconfirmed the classical view that distribution is not only a final outcome, but also a determinant of economic growth.

Initial cross-country studies, including Birdsall *et al.* (1995), found that greater initial income inequality actually reduces future growth even after controlling for initial levels of GDP and human capital. The robustness of these findings has been the subject of much debate, however recent analysis using an updated and more comparable inequality data reconfirms the negative effects of inequality on growth (Knowles, 2001).

So what is the bottom line? Evidence predominantly suggests that inequality is bad for growth. The World Development Report 2000/01 concludes that better distribution is possible without a reduction in economic growth. In other words there is no inevitable trade-off between equity and efficiency. On the contrary, lower inequality can create faster growth. Low inequality can, therefore, benefit the poor in two ways: by increasing overall growth and average incomes, and by letting them share more in that growth. Conversely, countries which would be on a high growth path if income distribution was equitable may experience slow growth and even slower poverty reduction if inequality is high (see, for example, Ravallion, 1997). Either way the level of inequality in a country greatly affects the impact of growth on poverty (see also section 2.4. of this paper).

However, this does not mean that all policies to improve distribution are good for growth. One key distinction here is between removing *functional* inequalities (for example due to greater personal effort and risk taking) which can reduce growth and tackling *redundant* or *dysfunctional* disparities (for example, political connections or inherited wealth) which can boost growth (see Inequality Briefing No 3 for definitions). Even if there are potential trade-offs between growth and distribution, redistribution may still be the most effective

way of reducing poverty, namely in the significant number of countries where redistribution has proven more important for poverty reduction than growth (White and Anderson, 2001). Trade-offs or not, distribution matters and policy makers should consider it, if the aim is to maximise poverty reduction.

Box 1 Asset Inequality

Further evidence in the studies cited suggests that income inequality acts as a proxy for asset inequality. When including measures of asset distribution, such as land and human capital, the relationship between income distribution and growth disappears. Asset distribution, however, has a clear negative effect on economic growth and the effects are almost twice as large for the poor than for the rest of the population (see, for example, Deininger and Olinto, 2000; and, Birdsall and Londono, 1997). Complementarities between growth and progressive redistribution are particularly strong where credit and insurance markets do not function perfectly (see Box 2 of this briefing paper; and, Kanbur and Lustig, 1999).

The importance of asset distribution for poverty reduction also highlights the need to avoid crises, if possible, and prioritising crisis responses when they do occur. Instability and crises increase the level of inequality of income as well as assets. Evidence from Latin America during the 1970s and 1980s suggests that rises in inequality during recessions are not eliminated by subsequent recoveries.

Box 2 Why does Inequality Reduce Growth?

Economic theory does not tell us why or how inequality may affect growth (Atkinson, 1997). As a result research on this relationship tends to be *ad hoc*, and the evidence conjectural. The links have mainly been explained either in terms of political economy, economic or social factors. The following highlights a few explanations.

Political economy. Inequality can be thought of as the difference between the mean and the median voter. The median voter will lobby for higher taxes on the rich, leading to a disincentive to save and invest, and thus reduce growth. This earlier political economy line of argument, while commonly cited, is not well supported through evidence. A more recent argument suggests that inequality creates political instability which leads to lower investment (Alesina and Perotti, 1993) and more resources being wasted bargaining over the distribution of rents (Rodrik, 1997). Instability also reduces government's ability to react to shocks, and - in its more extreme form - leads to direct and opportunity costs due to violence (Bourguignon, 1998).

Economic factors. Economic factors of why inequality reduces growth centre around capital market imperfections and on the role of the poor, not only as beneficiaries but also as contributors to economic growth. Due to credit rationing, the poor often cannot afford the minimum initial investment in education or other investments, or cannot get insurance for their investments, even if they are profitable, since they lack collateral. Initial asset distribution has a negative effect on subsequent economic growth. Birdsall *et al.* (1996) find that the poor's savings rate is exceptionally high if they can expect higher returns for their labour and investment. If the poor face greater incentives to invest/work their income will rise, national income will increase, and inequality will fall.

Social factors. Social inequality may create self fulfilling expectational equilibria with lower growth. If workers are paid according to social class, gender or ethnicity, rather than by what they achieve, this reduces the incentive to work/earn more (Bourguignon, 1999).

2.2.2. From Growth to Inequality

Is there any inherent link in the other direction: from growth to inequality? The seminal Kuznets hypothesis predicted increases in inequality during early periods of growth and reduction in inequality during subsequent periods (Kuznets, 1955). However, virtually all recent evidence has rejected this pattern. Deininger and Squire (1996; 1998), for example, detect no statistically significant link between income and distribution in 80% of cases, with the rest being evenly split between a positive and a negative effect. They confirm their findings using a larger cross-country data set. Fields (2000) rejects the Kuznets hypothesis for a number of African countries. Ravallion and Chen (1997), Demery and Squire (1996), Bruno *et al.* (1996) and Ravallion (2001) find no evidence of a systematic relationship between growth and income distribution. Dollar and Kraay (2000) famously conclude that on average the poor benefit from growth "one-for-one".² Only in Eastern Europe and Central Asia has there been a significant positive correlation (though not necessarily causality) between incomes and inequality, but this was during a period of negative growth coinciding with increasing inequality – the structural transformation in this region clearly makes it a special case (Ravallion and Chen, 1997).

The consensus is that inequality is no more likely to rise than it is to fall in periods of economic growth and increasing inequality is not an inevitable consequence of early growth. It is not the rate of economic growth or the stage of economic development but the kind of economic growth which affects inequality. The finding of no correlation between growth and distribution does not mean there is no impact. Conclusions reached on the basis of averages can hide opposite effects within countries. Imagine two countries, one where controls guarantee income to the rich and keep inequality high, and one where controls protect the poor and keep inequality low. Reforms and subsequent growth would result in changes in distribution in both countries – but in opposite directions, although on average there is no effect of growth on inequality. What does this mean for policy? Overall, there is no trade-off *per se* between growth and inequality, so distribution can be pursued as an additional policy objective to enhance the poverty reducing effect of growth. In countries where distortions are causing inequalities, distribution policies would have a doubly beneficial effect on poverty reduction. However, in other countries where distortions have kept inequalities low there is likely to be a trade-off between distribution and growth. There is a gap in current knowledge about which countries fall into which category and, where appropriate, about how to make trade-offs to maximise poverty reduction.

2.2.3. Non-income Inequalities, Poverty and Growth

Knowledge about the links between non-income inequality and poverty remains very limited. Partly this is because research to date has not yet resolved certain fundamental issues, for example, finding an appropriate measure for inequalities in health (Leon and Walt, 2001). The studies that do exist generally focus on the effect of non-income inequality on income rather than other dimensions of poverty.

The distribution of productive assets, especially of human capital, emerges as central to achieving economic growth and poverty reduction. The insufficient level and the very skewed distribution of human capital is a major constraint to reducing poverty in high inequality countries in Latin America and sub-Saharan Africa (Birdsall *et al.*, 1996). Inequalities in schooling are negatively correlated with

economic growth, for example, in Latin America (Birdsall and Londono, 1997). Also, inequality in education determines inequality in income distribution (Inter-American Development Bank 1999).

There is also an economic efficiency argument for improving the distribution of human capital. Physical capital can be traded, so that its marginal product will be equalised through the market. Human assets, such as education, however, are only partially tradable, and their marginal product is not equalised. Therefore, maximising a country's income depends not only on the aggregate level of human capital but also on its distribution (Thomas *et al.*, 2001). Again, this confirms the recurring theme in this briefing paper that growth and better distribution are complementary, rather than competing objectives in the fight against poverty.

2.3. Relative Importance of Growth and Inequality in Reducing Poverty

It is now clear that income distribution and economic growth both matter for poverty reduction. But what is their relative importance (i.e. links A and C in Figure 1)? This has been the subject of much recent research. Some stylised facts are emerging:

- Overall the growth effect dominates. However, this is not true in all cases or for all groups of countries. Inequality has been more important in reducing poverty than growth in a quarter of the case studies cited in White and Anderson (2001). The dominance of growth overall may also be partly due to the growth focus of policies over the last 20 years and the weight given to cross-country studies looking at average effects across countries (the lack of time-series analysis has largely been due to insufficient data over time). Arguably there is unused potential for reducing poverty in implementing distribution policies.
- Growth is less effective in reducing poverty in high inequality countries (McKay, 1997; and, Hanmer and Naschold, 2000). This should come as no surprise as what matters for poverty reduction is not the rate of growth, but the distribution-corrected rate of growth (Ravallion, 2001).³ In some high inequality countries, particularly those with low rates of growth, this means that changes in income distribution may be more effective in reducing poverty than growth (Hanmer and Naschold, 2000).
- Growth is less effective in reducing poverty in the least developed countries than in other developing countries (Naschold, forthcoming). This may be because the effect of growth on poverty reduction increases with average income (Heltberg, 2001). As the effect of inequality does not vary with the level of income, the relative importance of inequality for reducing poverty is greater in the poorest countries.
- Sub-Saharan Africa and least developed countries will not be able to get close to meeting the income poverty MDG through growth alone (Hanmer and Naschold, 2000; and, Naschold, forthcoming). Improvements in distribution are needed in addition.
- The effects of income distribution on increases in poverty in Africa may have been understated. Overall in sub-Saharan Africa, greater inequality may have increased poverty more than the lack of growth.
- There is also some evidence that growth has a larger effect in rural areas, while distribution has a larger effect in urban areas (Ali and Thorbecke, 2000).

The relative effects of growth and distribution also vary depending on what measure of poverty is used. Distribution effects are much larger when using relative poverty indicators (Ali and Thorbecke, 2000), whereas growth effects tend to dominate changes in absolute poverty. Also, constant poverty lines overstate the growth effect and inflation adjusted ones understate it. As a result using different poverty

² Of course the Dollar and Kraay conclusion does *not* mean that growth raises the income of the poor by as much in absolute terms as the income of everyone else. Since income is unequally distributed this means that distributionally neutral growth will increase the absolute gap between poor and rich. In India, the richest 10% will gain 4 times more than the poorest 20%, in Brazil they get 19 times more (Ravallion, 2001). Again this raises the question of what is pro-poor growth or how much should the poor benefit in growth. It also yet again underlines that it is hard to overestimate the importance of inequality for any growth-based poverty reduction strategy, particularly in high inequality countries.

³ Defined as (Economic Growth * (1-Gini coefficient))

measures can radically change policy conclusions. Hence, this should serve as a reminder for any analysis to be clear and explicit about the poverty measure used. (See Inequality Briefing No 1).

Box 3 Methodologies to Assess the Relative Importance of Growth and Inequality for the Income Poverty MDG in a Particular Country

Three methodologies are commonly used to assess the relative importance of any changes in income and distribution for achieving the income poverty MDG in a particular country:

- Basic econometric modelling (easily computed using Excel's data analysis tool). Typically use a double log functional form for poverty such as:

$\ln(\text{Poverty Measure}) = a + b \cdot \ln(\text{Consumption}) + c \cdot \text{Gini} + \epsilon$. Where b and c are the income and distribution elasticities of poverty, respectively. At country level this method should use time series data, if available. It is, however, also possible to use cross section data, for example, for poverty headcounts for different regions. Data is required for consumption per capita (in real terms), poverty headcounts and/or gaps, and a measure of inequality (for example, the Gini coefficient). The elasticities on their own offer few immediate insights. To judge the relative effects of income and inequality on income poverty it is necessary to use the results in extrapolations. Experimenting with a range of potential income and inequality trends enables a comparison of the relative effect of distribution and income changes.

- POVCAL. Analytic estimation using the World Bank's POVCAL software which measures the income and inequality elasticities at the point where the poverty line meets the income distribution function. Data requirements are: distribution data (preferably at least deciles), mean income and the level of the poverty line. Again simulations are required to assess the relative importance of growth and inequality.

- Decomposition analysis (see also Inequality Briefing No 1). This method decomposes changes in poverty over time into a growth and an inequality component. It requires data for a poverty measure (usually the headcount), income/consumption per capita, and inequality for both a start and an end year, preferably from two comparable household surveys. This involves slightly more effort in calculating the coefficient but does not require simulations to assess the relative importance of growth and inequality.

Results of elasticities vary slightly, though the different estimation techniques yield fairly similar values for the total elasticity of poverty (Naschold, forthcoming). The methodologies differ (a) in their ability to explain the poverty elasticity by more than just growth, and (b) in the extent to which poverty changes are explained by each factor (for example, POVCAL tends to result in smaller inequality effects than the econometric method). Ideally, all methods should be combined at country level, to improve confidence in the results through triangulation.

Essentially the discussion on the relative importance of growth and distribution for poverty reduction is a discussion on what constitutes pro-poor growth, or put differently, a debate on how much the poor (should) join in economic growth. There is no doubt that growth is good for the poor. Sustained poverty reduction is only possible when national income is rising. The more interesting and relevant question is how much should they benefit: according to their current share in income⁴ or more, and if so, how much more? The answer to this depends partly on subjective personal and cultural values, and partly on objective criteria. If maximising national income through economic growth is the prime goal, then some improvements in distribution can enhance economic efficiency (see section 2.2.). This would be the orthodox base case. If, however, poverty reduction is the main objective of development policy, then redistribution efforts should go further in those countries where

the distribution effect on poverty dominates the growth effect. Either way, distribution matters for poverty.

2.4. Inequality as a Determinant of the Poverty Elasticity of Growth

The poverty elasticity of growth measures the effectiveness of growth to reduce income or consumption poverty (see Box 3). Increasing the elasticity therefore has a large effect on the prospects for reducing poverty. For example, doubling the elasticity has the same positive effect as doubling the rate of economic growth. The level of the poverty elasticity of growth can make the difference between meeting the income poverty MDG or falling well short of it.

Box 4 How Can We Increase the Poverty Elasticity of Growth?

This is a very difficult question, to which we only know some of the answers. What is clear is that the poverty elasticity of growth depends on the following factors:

- The level of inequality
- The quality of growth, including its instability, sectoral composition, and labour intensity
- Macroeconomic factors, such as inflation, and depreciation of the exchange rate
- Structural factors, such as the share of agriculture in GDP, and the average level of education (i.e. the distribution of assets)

Inequality is one of the strongest of these factors, and will be the focus in this paper. The last three points are beyond the scope of this paper, but feature in Inequality Briefing No 1.

Inequality influences the propensity of growth to reduce poverty in a variety of ways. The following stylised facts emerge from recent research:

- The initial level of inequality affects the poverty reducing capacity of growth, as a more equitable distribution of income and assets provides the poor with more means and opportunities to improve their standard of living.
- The income poverty elasticity varies systematically with the level of inequality (Hanmer and Naschold, 2000). Higher levels of inequality lower the income elasticity of poverty. This is intuitive, as the worse the distribution of income, the lower the share of current and additional income going to the poor, and therefore, the smaller the poverty reducing effect of growth. Differences can be dramatic. High inequality countries may need as much as three times the amount of growth to reduce poverty than low inequality countries (Hanmer and Naschold, 2000). Similarly, changes in distribution determine the capacity of growth to reduce poverty, for example, in Bangladesh (Ravallion and Sen, 1996). Between 1987 and 1998, developing countries with rising incomes and improving distributions reduced poverty seven times as fast as growing countries with worsening inequality (Ravallion, 2001).⁵
- Periods of recession or rapid inflation tend to worsen inequality, and thereby reduce the poverty elasticity of growth (see also Inequality Briefing No.3 for the effects of inflation on inequality).
- The income poverty elasticity varies with the level of income, the higher the level of income, the greater the elasticity. This

⁴ This is implicit in Dollar and Kraay (2000) 'Growth is good for the poor', and means that, for example, a 4 percent rise in national income leads to a 4 percent increase for the poor as well as the rich, which of course increases the absolute gap between rich and poor.

⁵ However, assigning this effect purely to the rise in inequality only holds if there is no trade off between inequality and growth (i.e. that countries with rising inequality could have achieved the same growth rate with improving distribution).

variation is larger the more equally income is distributed (Heltberg, 2001), suggesting yet another mechanism through which lower inequality helps to reduce poverty.

- The specific poverty measure being used affects the poverty elasticity. It increases (a) with the weight the poverty measure gives to the poorest, and (b) the lower the poverty line is set. For instance, poverty elasticities tend to be consistently higher for the poverty gap measure than for the poverty headcount index. For evidence from Cote d'Ivoire, see Kakwani (1993).
- The distribution of assets, primarily of land and education, has an even stronger effect on the poverty elasticity than the distribution of income, as shown for many Latin American countries (see Box 1; and, Birdsall and Londono, 1997).
- Poverty elasticities have a spatial dimension and can differ within a country. In sub-Saharan Africa rural poverty is more responsive to growth than urban poverty, while urban poverty is more responsive to changes in income distribution (Ali and Thorbecke, 2000). In Tanzania, rural poverty elasticities are around four times higher than those in urban areas.

These findings demonstrate that inequality has a large effect on the poverty elasticity of growth. Pursuing better distribution should therefore be an integral component of any growth-based poverty reduction strategy.

3. Conceptual Problems of Separating Poverty and Inequality: Absolute and Relative Measures of Poverty

In practice a distinction is often made between absolute and relative measures of poverty. Sometimes absolute poverty lines are portrayed as measures of poverty which are independent from inequality, while relative poverty measures are said to contain elements of distribution. This section will show that this distinction is misleading, as all measures of poverty contain an element of distribution, differing only in the extent to which they do so.

The decision whether to use absolute or relative poverty lines is ultimately a value judgement dependent on the main purpose for which the poverty measure is to be used. An absolute poverty measure is commonly used and considered most appropriate in developing countries, where the prime concern is often pure survival (in other words, the ability to afford a nationally defined basic standard of living).

Relative poverty measures tend to be more widely used in developed countries, where differences between standards of living and social exclusion⁶ are taking on greater importance, as absolute poverty is becoming a smaller issue. This is not to say relative poverty is not also a large concern in developing countries. Relative measures are better at measuring dynamic improvements in distribution, and therefore important for the design of redistributive policies. However, they can lead to perverse results, for example, when higher absolute poverty may be consistent with lower relative poverty (Duclos, 2000).

For all the apparent delineation of absolute and relative poverty in practice, they actually cannot be separated, both in a social-philosophical sense, as well as in a purely technical sense. Socially, an individual's perception of poverty depends on his/her relative position in their environment. Sen (1999) argues that 'relative deprivation can mean absolute deprivation, if it means that an individual is unable to participate in society'. Further, it may often not make sense to arbitrarily separate absolute and relative poverty, especially in those countries which have significant absolute poverty as well as large social/relative poverty (for example, Latin America).

⁶ Relative poverty over time is the same as social exclusion, if it means that people not only cannot do what other people do today, but if they also will not be able to do so in the future (Bourguignon, 1999) since they lack the set of capabilities to move out of relative poverty (Sen, 1999).

Box 5 A Note on Terminology: Absolute versus Relative

In the context of poverty and inequality the use of the terms 'absolute' and 'relative' can be confusing. Some of this confusion arises from the sometimes inadequate distinction between poverty concepts and poverty measures. A poverty line can be absolute or relative. But a measure of say an absolute poverty line can also be relative, if it is expressed as a percentage of the population, rather than the number of people in poverty (which would be an absolute measure). More confusions can arise from different definitions of absolute and relative, resulting in terms such as 'relative inequalities', although of course all inequalities are relative. Even standard measures of poverty measure can lead to misinterpretations of poverty and inequality, if they incorporate elements of absolute poverty as well as inequality. Examples include the poverty gap squared and Sen's index which includes the Gini coefficient among the poor (Sen, 1976; and, Litchfield, 1999).

Technically, one cannot strictly separate absolute and relative poverty measures. An element of relativity enters absolute poverty measures when these take into account inequalities and relative deprivation of the poor (for example, the poverty gap and gap squared ratio), or when absolute poverty indicators are normalised by poverty lines that differ in real terms across countries (for example, due to tastes, climate, time, space, relative prices, etc.). This normalisation, almost by stealth, can bring absolute poverty measures quite close to measures of inequality (Duclos, 2000). As a result no commonly used measure of poverty is entirely absolute. Even the commonly used absolute headcount ratio is to some extent relative since it relies on adult and household equivalence conversions which make the poverty of one household partially a function of the reference household.

The difference between poverty indicators lies in the extent to which they incorporate relative measures. This realisation has potentially large practical implications for the way we think about poverty and inequality and, hence, for setting a poverty line which is linked to a greater or smaller extent to income distribution. If we accept that the exact level of the poverty line is effectively arbitrary, the real policy challenge is to decide not on the level, but on the concept of the poverty line, and, hence, the extent to which a poverty measure should be relative. In many ways these concerns mirror the debate around the extent to which the poor should share in any economic growth.

4. Main Conclusions

- Poverty and inequality are intrinsically linked. Poverty reduction – especially for the poorest – can be greatly enhanced through distributional policies. All the evidence confirms that distribution is central to fighting poverty. Distribution objectives, particularly for assets, should be an integral part of the poverty reduction agenda.
- There is no inevitable trade-off between equity and efficiency. On the contrary growth and better distribution are complementary, rather than competing objectives in the fight against poverty. More equal distribution of income and assets can foster growth, whereas high inequality can retard it. Thus, reducing inequalities can be doubly beneficial for the poor.
- Distribution policies should be pursued (a) where they remove redundant/dysfunctional inequalities, and (b) in countries where the inequality effect on poverty is greater than the growth effect.
- The relative importance of growth and distribution varies across countries. The growth effects dominates in the majority of cases, but in a significant number of cases distribution can have a larger

impact on poverty. The level of, and changes in, inequality are key determinants of whether countries, especially in Sub-Saharan Africa, will meet the income poverty MDG.

- Small changes in distribution can have a very large effect on poverty reduction. There are cases where inequality levels have changed relatively quickly. Moreover, the lack of knowledge of the determinants of inequalities and the relative neglect of distribution issues in recent decades may mean that there is untapped potential for reducing poverty through distribution changes.
- It is not possible to separate poverty and inequality. No commonly used measure of poverty is entirely absolute. The difference lies in the extent to which they incorporate relative measures. The choice of poverty measure, therefore, makes an implicit judgement about how much the poor should benefit from increases in national income. Development policy could make this explicit, even if it stops short of an internationally accepted standard for income distribution.
- Knowledge of the effects of non-income dimensions of inequality is very limited and the evidence somewhat anecdotal. Even the determinants of income inequality are insufficiently understood. There is a need for further country-based work on the nature, extent and determinants of various dimensions of inequality, and their effects on different dimensions of poverty.

5. References (** denotes key reference)

Alesina, A. and Perotti, R. (1993). Income Distribution, Political Instability and Investment. NBER Working Paper No 4486.

Ali, A. and Thorbecke, E. (2000). The State and Path of Poverty in sub-Saharan Africa: Some Preliminary Results. *Journal of African Economies* 9, 9–41.

Atkinson, A. (1997). Bringing Income Distribution in from the Cold. *Economic Journal* 107, 297–321.

**Birdsall, N. and Londono, J. (1997). Asset Inequality Matters: An Assessment of the World Bank's Approach to Poverty Reduction. *American Economic Review* 87, 32–37. [On the importance of asset distribution for development].

Birdsall, N., Pinckney, T. and Sabot, R. (1996). Why Low Inequality Spurs Growth: Savings and Investment by the Poor. Washington, D.C.: Inter-American Development Bank.

Birdsall, N., Ross, D., and Sabot, R. (1995). Inequality and Growth Reconsidered: Lessons from East Asia. *World Bank Economic Review* 9, 477–508.

Bourguignon, F. (1998). Crime as a Social Cost of Poverty and Inequality: A Review focusing on Developing Countries. Paris: DELTA.

Bourguignon, F. (1999). Absolute Poverty, Relative Deprivation and Social Exclusion. Berlin: DSE.

**Bourguignon, F. (2000). The Pace of Economic Growth and Poverty Reduction. Washington, D.C.: World Bank. [On the link between inequality, growth and the poverty elasticity of growth].

Bruno, M., Ravallion, M. and Squire, L. (1996). Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues. Washington, D.C.: World Bank.

Creedy, J. (1998). The Dynamics of Inequality and Poverty: Comparing Income Distributions. Cheltenham: Northampton, MA.

DFID (2000). Halving World Poverty by 2015: Economic Growth, Equity and Security Target Strategy Paper.

Deininger, K. and Squire, L. (1996). A New Data Set Measuring Income Inequality. *World Bank Economic Review* 10.

Deininger, K. and Squire, L. (1998). New Ways of Looking at Old Issues: Inequality and Growth. *Journal of Development Economics* 57, 259–287.

Deininger, K. and Olinto, P. (2000). Asset Distribution, Inequality, and Growth. Washington, D.C.: World Bank.

Demery, L. and Squire, L. (1996). Macroeconomic Adjustment and Poverty in Africa. *World Bank Research Observer* 11, 39–59.

Dollar, D. and Kraay, A. (2000). Growth Is Good for the Poor. Washington, D.C.: World Bank.

Duclos, J. (2000). Comments on 'The Dynamics of Poverty, Inequality and Economic Well-being: African Economic Growth in Comparative Perspective'. *Journal of African Economies* 9, 79–82.

Fields, G. (2000). The Dynamics of Poverty, Inequality and Economic Well-being: African Economic Growth in Comparative Perspective. *Journal of African Economies* 9, 45–78.

**Fields, G. (2000). Distribution and Development: A New Look at the Developing World. MIT Press. [For an overview including summaries of country research].

Hanmer, L. and Naschold, F. (2000). Attaining the International Development Targets: Will Growth be Enough? *Development Policy Review* 18, 11–36.

Heltberg, R. (2001). The Poverty Elasticity of Growth. Institute of Economics, University of Copenhagen.

Inter-American Development Bank (1999). Facing up to Inequality in Latin America: Economic and Social Progress in Latin America, 1998–9 report. Baltimore: Johns Hopkins University Press.

Kakwani, N. (1993). Poverty and Economic Growth with an Application to Cote d'Ivoire. *Review of Income and Wealth* 39, 121–139.

**Kanbur, R. and Lustig, N. (1999). Why is Inequality Back on the Agenda? Washington, D.C.: World Bank. [On why inequality should be an integral part of development analysis].

Knowles, S. (2001). Inequality and Economic Growth: The Empirical Relationship Reconsidered in the Light of Comparable Data. Helsinki: WIDER.

Kuznets, S. (1955). Economic Growth and Income Inequality. *American Economic Review* 1955, 1–28.

Leon, D. and Walt, G. (2001). Poverty, Inequality and Health: An International Perspective. Oxford: Oxford University Press.

Litchfield, J. (1999). Inequality: Methods and Tools. Washington, D.C.: World Bank.

McKay, A. (1997). Poverty Reduction through Economic Growth: Some Issues. *Journal of International Development* 9, 665–673.

Naschold, F. (forthcoming) Growth, Distribution and Poverty Reduction: LDCs are Falling Further Behind. UNCTAD: Geneva.

Ravallion, M. (1997). Can High Inequality Developing Countries Escape Absolute Poverty? Washington, D.C.: World Bank.

Ravallion, M. (2001). Growth, Inequality and Poverty: Looking Beyond Averages. *World Development* 29, 1803–1815.

Ravallion, M. and Chen, S. (1997). What Can New Survey Data Tell us about Recent Changes in Distribution and Poverty. *World Bank Research Observer* 11, 357–382.

Ravallion, M. and Sen, A. (1996). When Method Matters: Monitoring Poverty in Bangladesh. *Economic Development and Cultural Change* 44, 761–792.

Rodrik, D. (1997). Where Did All the Growth Go? External Shocks, Social Conflict and Growth Collapses. Harvard: Harvard University.

Sen, A. (1976). Poverty: An Ordinal Approach to Measurement. *Econometrica* 44, 2, 219–231.

Sen, A. (1999). Development as Freedom. Oxford: Oxford University Press.

Thomas, V., Wang, Y., and Fan, X. (2001). Measuring Education Inequality: Gini Coefficients of Education. Washington, D.C.: World Bank.

**White, H. and Anderson, E. (2001). Growth versus Distribution: Does the Pattern of Growth Matter? *Development Policy Review* 19, 267–289. [On relative importance of growth and inequality for poverty reduction].

Wodon, Q. (1999). Growth, Poverty and Inequality: A Regional Panel for Bangladesh. Washington, D.C.: World Bank.

World Bank (2001). Attacking Poverty: World Development Report, 2000/2001. New York: Oxford University Press.

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