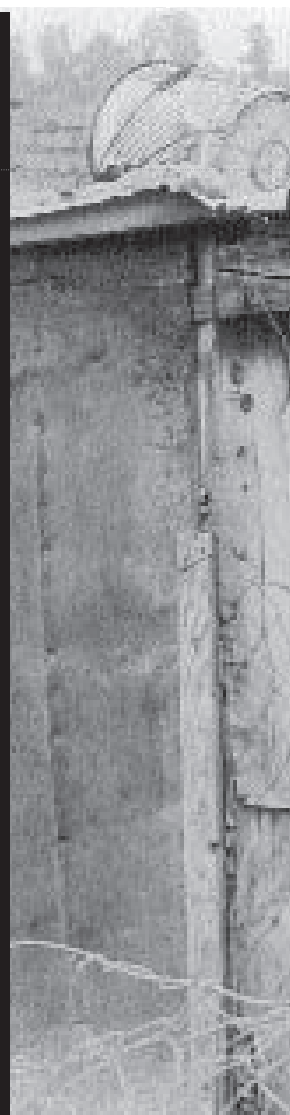


COVER STORY

Growth, inequality and poverty

Some hard questions

*Developing a deeper understanding of the complexities of finding a policy to deal with poverty and inequality is critical. **Ravi Kanbur** poses a number of key questions in attempting to analyse the relationship between poverty, inequality and growth and concludes there is no easy solution.*



Kipling wrote: 'There are nine and ninety different ways, of interpreting tribal lays... and every single one of them is right!' He could have been describing the arguments on the economics of growth, inequality and poverty as analysts rush to add their (sometimes esoteric) calculations to the policy debate with jargon such as '... our cross-country regression analysis establishes conclusively that lower tariffs lead to higher growth...' or 'Nobel Prize winning economist X has argued in favour of Y.'

In the economics of growth, inequality and poverty, and especially where the effects of 'globalisation' on these is concerned, the meeting of

academic analysis and government policy has brought an uneasy mix of simple (in principle) answers to some questions and a tendency to slide over, or ignore, difficult ones. But it is important that we recognise the hard questions for they often lie at the heart of the matter and without recognition of the fundamental basis of disagreement between analysis and policy there cannot be solutions.

Defining poverty and inequality

I am going to confine myself to growth, inequality and poverty defined over income, or monetary value of consumption, following standard practice in economics. It so happens that this is also the focus of the first of

the United Nations' 'Millennium Development Goals' (MDG)¹ – to halve the incidence of poverty as defined above, by 2015. I'm focusing on 'income poverty' to show that hard questions arise even within this narrow economic perspective. The questions can only get harder as we broaden the frame.

Consider the distribution of 'real' income across individuals (correcting for price variations, allowing for non-market provision of goods and services, household size, distribution of resources within the household, etc). There are of course conceptual and empirical problems galore in arriving at this distribution, and much of the analytical literature centres on these



issues,³ but let us even leave these to one side for the moment, to get at the 'truly' hard questions.

Given the distribution of income we can calculate its mean and the change in this mean over a given time period is the growth in per capita income, or simply 'growth'. A measure of the dispersion in this distribution, such as the coefficient of variation or the Gini coefficient, can and usually does serve as a measure of inequality. Finally, poverty focuses on the lower tail of the distribution. The most common measure is simply the fraction of population below a given poverty line income (the 'head count ratio', also known as the 'incidence of poverty'), although in recent years measures

which incorporate the depth of poverty have also been used.

Easy questions

Here are some mechanical properties of growth, inequality and poverty as defined above. First, holding inequality constant, an increase in per capita income (in other words, growth) reduces poverty. Second, holding per capita income constant, an increase in inequality increases poverty.⁴ If the objective was to reduce poverty, then obviously growth is a plus for poverty reduction and increased inequality a minus. Let us then pose the first question, prominent in policy debates. 'Is growth good for the poor?' The answer is easy and clearly 'Yes' if we

view growth in isolation. But if growth is accompanied by increased inequality, then the net effect on poverty is no longer clear – it all depends on the relative magnitudes of two opposing forces.

Here then is another question – 'What is the empirical association between changes in per capita income and changes in inequality?' The answer to this question is in principle relatively easy to arrive at, and there are many studies that try to provide an answer. The consensus is easily stated – there is no statistical correlation between changes in per capita income and changes in inequality, taking countries as the unit of observation.⁵ On average, therefore, there is no change

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in inequality as per capita income changes. If this average behaviour is interpreted as guaranteed constancy of inequality as growth proceeds, it is easy to make sense of assertions like 'Growth is good for the poor'.⁶

But this is pretty much the end of the line for easy questions and answers. It is clear that if this was all there was to it, we would not see the raging debates we see. The debates continue because the hard questions are not addressed, indeed they are obscured, by the above line of argument.

Hard questions

Empirically, the lack of an association between growth and inequality change could mean that there is literally no change in inequality as per capita income changes. In fact, in reality the average is an average of points 'above and below the line'. Actual data show considerable variation, with cases where inequality goes up with growth, and cases where inequality goes down with growth. Consider a policy maker who is pursuing policies that are leading to growth but also increases in inequality. This increase in inequality is at the very least dissipating some of the effects of growth on poverty reduction, and in the extreme may be so great as to overturn the beneficial effects of growth altogether. It is cold comfort to this policy maker to be told that on average there is no association between growth and inequality change, so (presumably) the country should carry on doing what it is doing!

This line of thinking leads to the recognition that changes in per capita income and inequality are *outcome* variables, not *policy* variables. Policy

makers cannot simply will an increase in per capita income or a decrease in inequality. Rather, they have to select and implement policies that they hope will lead to these (or other) outcomes. Identifying policy variables that will lead to equitable growth is the first level of hard questions that analysts and policy makers face on growth, inequality and poverty.

I want to illustrate the difficulties of a search for 'equitable growth policy variables' by looking at the issue of trade and openness. I focus here on physical trade, and leave to one side the issue of financial flows and capital account openness. Most mainstream economists, perhaps because of their training, are instinctive 'free traders', believing that open trade confers general benefits in terms of higher productivity and growth. The difficulty lies in actually demonstrating this link empirically. The measure of 'openness' that often does the trick, in the sense of being associated with higher growth, is the 'trade ratio' (imports plus exports divided by GDP). Now the trade ratio is surely a reasonable measure of openness. The problem is that it is not of itself a policy variable.

It is in fact determined by a number of other variables in the economy, including 'true' direct policy variables such as tariffs. It could well be that a third feature of the economy, for example institutional climate for investing, leads to both growth and more trade, irrespective of tariffs. Indeed, when tariffs are tried as an explanatory variable for growth, they do not turn out to be statistically significant.⁷

Many have made the leap from an

association between the trade ratio and growth to a policy recommendation to reduce tariffs, but this is across a chasm that is not easily bridged methodologically. A similar chasm awaits those who try to relate greater openness to lower inequality. If the argument were true, that trade policy variables were causally related to higher growth and greater equality, the policy conclusion would be clear, if the objective is to reduce income poverty. But establishing these links remains a hard question.⁸

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The economics literature is in two minds on this one. Theorists have developed many arguments to support this conjecture. Suppose, for example, that there are threshold effects in the (private and social) return to human capital – the returns only start to kick in, in a big way, after a critical threshold is passed. Suppose further that the 'capital' market is not perfect so that, to some extent, human capital acquisition has to be self-financed. Then the very poor will not find it worthwhile to acquire human capital (they do not have enough financial resources to take them over the threshold). With few more assumptions, it can be shown theoretically that greater inequality will lead to lower overall human capital accumulation, lower productivity and lower growth. This is one of many ways



in which a causal link between higher inequality and lower growth can be generated from theoretical models.⁹

However, the relationship between initial and subsequent growth remains a hard question and the jury is still out¹⁰ as the literature swings between factions. Even if one could show an association between inequality and subsequent growth a third factor could be affecting both!

Faced with these difficulties, the economic literature has fallen back on 'institutions,' as the basis of success in handling growth, inequality and poverty.¹² But this also raises hard questions – what types of institutions lead to success? Corporate governance, law or family or others?¹³ And what about the political economics of building and maintaining institutions and selecting and implementing policies? That takes us to the second level hard questions.

Harder questions

Difficult as they are, the first level hard questions are being tackled. Presumably 'normal science' will, little by little, illuminate the various relationships discussed in the previous section.¹⁴ But the second level of hard (harder) questions that may not be quite so amenable to conventional economic methods and it is often these that lie at the heart of analytical and policy disagreement. I want to pose five:

How do 'good' policies and institutions come to be adopted?

Suppose normal economic science does in the end manage to solve the first level hard questions and provide an account of the policies and (more problematically) institutional structures that promote equitable growth. This still leaves open the question of how and why some countries 'do the right thing' and others do not. This also relates to

the influence, if any, that outside agencies like the IMF and the World Bank can have on domestic political economy through the device of 'conditionality' of assistance.

Economists would point to the burgeoning field of rational choice political economy as their contribution.¹⁵ These models do provide insights into many issues including distributional consequence such that losses are greatly concentrated among the few while gains are diffused widely among the many. What it does not do very well is to allow us to distinguish between cases where these factors were equally balanced, but outcomes were very different. Issues of leadership, ideology, use of state power, tipping points between support for institutions and withdrawal of this support: these are relatively lightly explored in the economics literature.

The first of the five hard(er) questions, discussed above, is still in the realm of positive analysis, asking how growth and poverty reduction come about. The remaining questions I wish to highlight are all related to the concept of poverty itself.¹⁶

If the total number of the poor goes up but, because of population growth, the percentage of the poor in the total population goes down, has poverty gone up or down?

The World Bank's calculations show that from 1990 to 1999, the number of people in the world surviving on less than two dollars a day increased from 2.7 billion to 2.8 billion. But the world's population was increasing sufficiently fast that the incidence of poverty, the percentage of people below the poverty line, fell from 62.1% to 55.6%. This latter trend has been proclaimed as a victory for 'globalisation', the former as a defeat.

The phenomenon occurs at regional



level as well. In South Asia the number of poor increased by more than 100 million people, while the incidence of poverty fell by 5.0 percentage points. In sub-Saharan Africa, where both numbers and incidence rose, absolute numbers rose by 24.4% while incidence rose by a bare 1.7%.¹⁷ I have argued elsewhere that the 'total' view should at least be given some weight and not shut out altogether by analysts and policy makers, but how much weight exactly is a hard question.¹⁸ The problem is made more severe by the fact that, as noted earlier, the first Millennium Development Goal of the United Nations is to halve, between 1990 and 2015, the global *percentage* of population living in poverty.

Suppose the incidence of poverty (and/or the number of poor) goes down because the poor die at a faster rate than the non-poor – is this a legitimate 'decrease' in poverty?

This too is real. The international community has chosen the change in the incidence of poverty between 1990 and 2015 as the number one indicator for self assessment. Yet the fact of the matter is that the incidence of poverty falls when a poor person dies because of poverty.¹⁹ As the AIDS epidemic spreads among poorer nations, and as even within these nations, preventive measures have a greater impact on rich rather than poor, if the first MDG is met we will surely have to temper our assessment with an account of the missing poor people, whose death contributed, perversely, to a reduction in poverty.²⁰

One answer to this is of course to have mortality rates and life expectancies as part of the assessment. This is what the MDGs do. Further down the MDG list, we have a goal for reducing by two thirds the mortality rate among children under five. Still further down is the general goal of attacking HIV/AIDS and malaria. This is good, but at least three issues arise. First, it seems clear that the first MDG is 'primus inter pares'. Second, reducing child mortality does not handle the issue of adult mortality and its impact on measured income poverty. Third, it is not clear how exactly the different goals are to be weighed relative to each other, in order to provide guidance for resource allocation to achieve those goals. This leads to the next hard question.

Which outcomes other than income should be included in the assessment of 'success', and how should they be weighed relative to income and relative to each other? The MDGs give one answer to this question. They have eight goals, the first of which is reduction of income poverty. Primary education, gender

equality, child mortality, maternal health, HIV/AIDS/malaria, environmental sustainability, and global partnership for development are the other seven. But these immediately raise questions. The eighth goal is not an end but a means. Of the first seven goals, two questions can be asked. Why these and just these? How are resources to be allocated to the different goals – what is the weight given to each?

A central policy question is how public resources should be divided between, for example, primary education, maternal health and supporting informal sector income generating activities. Simply listing the MDGs, important as it might be as a political and communication device, gives us no guidance on such policy issues. But, then, it is a hard question.²¹

Suppose poverty (in whatever dimension, and however measured) goes down, but this is composed of a fall in poverty for some but an increase in poverty for others – is such aggregation across poor individuals ethically permissible?

One of the dirty little secrets of policy reform is that it pits not only rich against poor (the usual case considered in the analytics), but also some poor against other poor. The poor who are engaged in activities that are favoured by the reform, for example exports, will benefit, but those engaged in activities that are not, will be hurt. From the late 1980s to the mid-1990s, income poverty in Mexico as a whole fell as the economy recovered from the debt crisis of the mid-1980s. But this national decline was composed of a fall in areas like Mexico city, and a rise in rural areas like Chiapas.

Our aggregated national measures gloss over these fine patterns and pronounce 'a reduction in poverty'.

This is of little comfort to those who have been impoverished by the economic trends – an issue of some ethical and political significance. How to address this type of aggregation, if at all, is a hard question. At the very least, we should carry with us a disaggregated account of how many have crossed the poverty line in either direction, and what socioeconomic groups they belong to – any aggregation, or ‘cancelling out’, being a further step to be taken in full view of its ethical assumptions.

Conclusion

My goal in this commentary has been to pose what I consider to be some hard questions in the analysis of growth, inequality and poverty. I have by no means covered all the hard questions. And the questions I have covered are not particularly new; it is just that (at least to me) they seem particularly hard. Given the space constraints, I have only been able to cover a small number, and perhaps in too staccato a fashion. Each of the issues raised is worthy of a paper, indeed a literature, by itself. The footnotes show that economists have made a good start in addressing these questions. But I believe that these are the questions that need to be in the forefront of the analytical and policy discourse in the years to come.

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Footnotes

2 See <http://www.un.org/millenniumgoals/>.

Accessed 1/1/2004.

3 A standard reference is Deaton (1997). See also Deaton (2003).

4 This is only true as a general tendency. There are technical conditions under which for specific measures of poverty and in specific circumstances, the opposite can happen.

5 There is a large literature on this relationship, known as the ‘Kuznets curve’. An early refutation of a systematic relationship in cross-country data is in A nand and Kanbur (1993). The recent literature starts with the data compilation in Deininger and Squire (1996). See for example, Li Squire and Zou (1998).

6 This was the title of a paper that got much coverage in the press when it came out as a World Bank paper. The published paper, Dollar and Kraay (2002) does not have the italicised ‘Is’.

7 The best statement of the methodological problems highlighted here is in Rodrik (2000), made on a paper which was subsequently produced in revised form as a World Bank Working Paper, Dollar and Kraay (2001).

8 Similar difficulties in demonstrating the link between other economic policies and growth are covered in Easterly (2001b).

9 Some papers are reviewed in Kanbur (2000) and Kanbur and Lustig (2000).

Political economy considerations are another route to linking inequality and growth causally. Banerjee and Duflo (2003) review some papers and present a stylized model for each of these causal links.

10 This is the phrase used in the review by Kanbur and Lustig (2000).

11 A selection of these papers would include Barro (2000), Forbes (2000) and Banerjee and Duflo (2003).

12 See, for example, Easterly (2001a) and Rodrik et al. (2002).

13 Rodrik (2003b) argues powerfully against a ‘one size fits all’ policy prescription on institutions.

14 Excellent examples of such progress are the compilation of papers in Bourguignon and Pereira Da Silva (2003), and in Rodrik (2003a).

15 The field is very large by now so a few recent references will have to suffice. See Besley and Case (2003), Case (2001), Persson and Tabellini (2000, 2003), Drazen (2000), Besley and Coate (2003).

16 Some of these questions are raised in Kanbur (2001, 2002).

17 These numbers are taken from World Bank, <http://www.developmentgoals.org/Poverty.htm>. Accessed 1/1/2004.

18 See Chakravarty, Kanbur and Mukherjee (2002).

19 For further discussion of this for more general poverty measures, and an attempt to develop a poverty measure that takes into account mortality, see Kanbur and Mukherjee (2003).

20 Various paradoxes of social assessment when the population changes (because of births or deaths) are well known in the economic and philosophical literature. Parfit (1984) famously critiqued Utilitarianism by deriving his ‘repugnant conclusion’ – that a society in which every individual was worse off than in another could still be pronounced to be better by the Utilitarian criterion simply because there were more individuals in the first society. The route of ‘average utilitarianism’, i.e. focusing on per capita well being, skirts the repugnant conclusion but only by preferring the deaths of those below the average, since this will raise the average of those who remain. These and other issues are discussed further in Kanbur and Mukherjee (2003).

21 Of course the different components, such as health and income, may affect each other. This is another analytical complication. See Case (2002).