

Poverty In Focus

International Poverty Centre

June 2007



The challenge of
Inequality

FROM THE EDITOR

Poverty in Focus is a regular publication of the **International Poverty Centre (IPC)**. Its purpose is to present the results of research on poverty and inequality in the developing world.

IPC is a joint project between the United Nations Development Programme and Brazil to promote South-South Cooperation on applied poverty research. It specialises in analysing poverty and inequality and offering research-based policy recommendations on how to reduce them. IPC is directly linked to the Poverty Group of the Bureau for Development Policy, UNDP and the Brazilian Government's Institute for Applied Economic Research (IPEA).

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Inequality is a major challenge for poverty reduction and a crucial obstacle for achieving the Millennium Development Goals. There are both intrinsic and instrumental reasons why inequality matters, such as social justice and morality, putting the poor first, growth and efficiency, political legitimacy, and public policy goals (see page 13).

More rapid income poverty reduction requires both a more rapid pace of growth and a more pro-poor pattern, which implies a reduction of the inequalities that limit the prospects for poor people to share in the opportunities created by economic growth. The poverty impact of growth has been shown to be more than 10 times higher in those countries that combined growth with falling rather than rising inequality.

However, all forms of inequality may not necessarily be harmful. While inequalities in opportunities are clearly both inefficient and unfair, it can be argued (see pages 20 and 23) that income differences reflecting varying degrees of effort—and that provide incentives—in education, work and risk-taking entrepreneurship, are helpful for the living-standards of the poor over time. On the other hand, such "good" inequalities arising in one generation may lead to "bad" inequalities for the next, which will still be unacceptable for all the above-mentioned reasons.

This issue of *Poverty in Focus* highlights inequality as one of IPC's priority areas of research. It provides some of the most important recent research results on the extent of inequality in the distribution of wealth and incomes at both the global and national levels, on analytical aspects of causes and patterns, and on policy conclusions and recommendations.

UNU-WIDER first presents a summary of a new study of the global distribution of household wealth, which is seen to be even more unequal than that of incomes.

Branko Milanovic analyses the concepts of global income inequality and its component factors, including the role of globalisation, with a proposal for global redistribution.

José Gabriel Palma reveals and analyses a fact that has been missing in the inequality discourse: while income distributions vary a lot at the top and bottom across countries, they are remarkably similar for the middle classes.

Michael Kremer shows why globalisation tends to increase inequalities in poor countries, contrary to the standard economic textbook model. Outsourcing is one major reason.

Kevin Watkins discusses the five main reasons why inequality is bad for growth, democracy, social justice and cohesion, and for the MDG prospects. Hence UNDP stresses the need for public policies to focus more on reducing inequalities.

Elizabeth A. Stanton outlines how the UNDP Human Development Index could, and should, be adjusted to make it more sensitive to multidimensional inequalities.

Frances Stewart stresses the need to measure and monitor horizontal inequalities among groups in order to promote efficiency, growth, peace and poverty reduction.

Marcelo Medeiros puts the inequality issue on its head by focusing on the rich, who should provide the resources for the necessary redistribution of income.

Francisco Ferreira underlines the policy importance of distinguishing analytically between "good" and "bad" inequalities, using cholesterol as a metaphor.

Shubham Chaudhuri and *Martin Ravallion* apply this distinction to the recent patterns of unequal growth in China and India that may threaten future growth and stability.

Björn Gustafsson, *Li Shi* and *Terry Sicular* summarise a forthcoming book on inequality and public policy in China, concluding that changes are necessary in the balance between the processes that affect inequality.

Joana Costa, *Marcelo Medeiros* and *Rafael Guerreiro Osório* consider inequality of people's time use, including unpaid work, across social classes and the gender divide.

This collection of articles is meant to contribute to a better understanding of the importance of reducing inequalities in its various forms, and thus to policies and programmes that will more effectively reduce poverty and social injustice.

Dag Ehrenpreis

The Global Distribution of Household Wealth

by James Davies¹, Susanna Sandström², Anthony Shorrocks² and Edward Wolff³

While the richest 10 percent of adults in the world own 85 percent of global household wealth, the bottom half collectively owns barely 1 percent. Even more strikingly, the average person in the top 10 percent owns nearly 3,000 times the wealth of the average person in the bottom 10 percent. These are some of the results that emerge from a new UNU-WIDER study of the distribution of household wealth.

We estimate the level and distribution of wealth across all countries in the world using a comprehensive concept of household wealth. In everyday conversation the term 'wealth' often signifies little more than 'money income'. On other occasions economists interpret the term broadly and define wealth to be the value of all household resources, both human and non-human. Our study assigns wealth its long-established meaning of net worth: the value of physical and financial assets less debts. In this respect, wealth represents the ownership of capital. Although capital is only one part of personal resources, it is widely believed to have a disproportionate impact on household wellbeing and economic success, and more broadly on economic development and growth.

The estimates of wealth levels are based on household balance sheets and wealth survey data which are available for 38 countries. Fortunately, these include many of the rich OECD countries as well as the three most populous developing countries, China, India and Indonesia; so the data cover 56 percent of the world's population and 80 percent of household wealth. Careful analysis of the determinants of wealth levels in these countries allows imputations to be made for countries without data.

The estimates of wealth distribution are based on household asset distribution

data for 20 countries. For countries without this type of direct information, the degree of wealth concentration was estimated from income distribution data (where available), using the relationship observed between income and wealth inequality in countries with both kinds of data. The remaining countries, covering only a few percent of world population, were assigned the average wealth distribution pattern for their region and income class.

Household wealth is more concentrated, both geographically and in size distribution when official exchange rates are employed rather than purchasing power parity (PPP) valuations. Thus a somewhat different perspective emerges depending on whether one is interested in the power that wealth conveys in terms of local consumption options or the power to have influence on the world financial stage. Since a large share of global wealth is owned by people who can readily travel and invest internationally, it is more appropriate to use official exchange rates when studying the global distribution of wealth than when looking at the global distribution of income or poverty.

Global household wealth in the year 2000 amounted to \$125 trillion, equivalent to roughly three times global GDP or to \$20,500 per citizen of the world, by official exchange rates. In terms of PPP dollars, the corresponding world value was PPP\$26,000 per capita, roughly the same as the average level in Poland or Turkey.

Wealth levels vary widely across nations. Among the richest countries, mean wealth was \$144,000 per person in the USA and \$181,000 in Japan. Lower down among countries with wealth data are India, with per capita assets of \$1,100, and Indonesia with \$1,400 per capita.

Global wealth is even more unequally distributed than income.

The richest 2 percent of adults in the world held more than half of global wealth.

The average person in the top decile owns nearly 3,000 times the wealth of the average person in the bottom one.

The concentration of wealth within countries varies significantly, but is generally high.

These are some key facts in a new UN study on global wealth distribution, which is summarised here.

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3. New York University.

The regional pattern of asset holdings shows wealth to be heavily concentrated in North America, Europe, and high income Asia-Pacific countries which together account for almost 90 percent of global wealth. Although North America has only 6 percent of the world adult population, it accounts for 34 percent of household assets. Europe and high income Asia-Pacific countries also own disproportionate amounts of wealth. In contrast, the overall share of wealth owned by people in Africa, China, India, and other lower income countries in Asia is considerably less than their population share, sometimes by a factor of more than ten.

Comparing per capita wealth and per capita GDP across countries shows that wealth is distributed even more unequally than income. High income countries tend to have a higher share of world wealth than of world GDP because their wealth to income ratios are above the world average. The reverse is true of middle and low income nations.

Wealth to income ratios are especially high in the UK, Italy, and rich Asian nations. Lower than expected values are recorded for eastern European countries like the Czech Republic and Poland, along with the Nordic countries and South Africa. Eastern European countries are a heterogeneous group with many different features. In this region, private wealth is on the rise, but has still not

reached very high levels. Assets like private pensions and life insurance are held by relatively few households. In the Nordic countries, the social security system provides generous public pensions that may depress wealth accumulation. South Africa is rich in resources and has well-developed financial institutions; but the fact that the country has a large low-income population and exhibits some of the characteristics of less-developed countries, may account for the low wealth-income ratio.

Estimation of the world distribution of wealth requires information to be combined on wealth differences between countries and within countries. The concentration of wealth within countries varies significantly, but is generally high. The share of the top decile ranges from around 40 percent in China to 70 percent and beyond in the United States and certain other countries. Typical Gini coefficients for wealth lie in the range 0.65-0.75, and some are above 0.8. In contrast, the mid-range of income Ginis is 0.35 to 0.45.

Wealth inequality for the world as a whole is higher still. Expressed in terms of the adult population of the world, we estimate that net assets of \$2,160 per adult in the year 2000 was sufficient to place a household in the top half of the world wealth distribution. At least \$61,000 per adult was needed to belong to the richest 10 percent of households, while membership of the top 1 percent

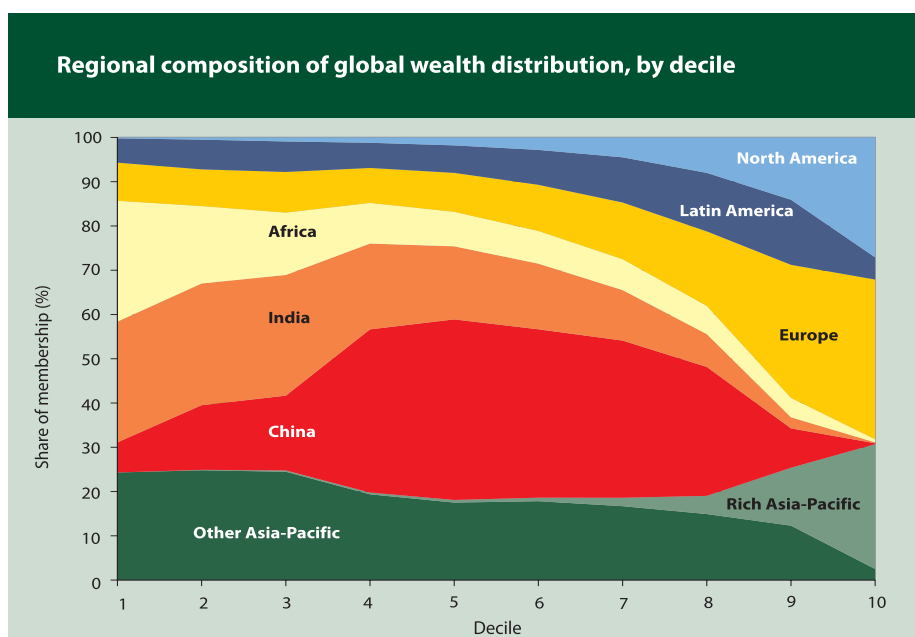
required a little over \$500,000 per adult. The latter figure indicates that a family need only be moderately wealthy in Western terms to be among the top percentile of world wealth-holders.

Our results show that the top wealth decile owned 85 percent of global wealth in the year 2000. The richest 2 percent of adults in the world held more than half global wealth, and the richest 1 percent of adults alone accounted for 40 percent of all household assets. In contrast, the bottom half of the world adult population owned barely 1 percent of global wealth. The Gini value for global wealth is estimated to be 89 percent; the same Gini value would be obtained if \$100 were shared amongst 100 people in such a way that one person receives \$90 and the remaining 99 get 10 cents each.

Given the high concentration of wealth in North America, Europe, and rich Asia-Pacific countries, it is not surprising to discover that almost all of the world's richest individuals live in these countries. The breakdown of the global wealth distribution in the chart shows that the Americas, Asia and Europe contribute about one third of the members of the world's wealthiest decile. China occupies much of the the middle third of the global wealth distribution while India, Africa and low-income Asian countries dominate the bottom third. For all developing regions of the world, the share of population exceeds the share of global wealth, which in turn exceeds their share of people who are among the wealthiest in the world.

Major differences are observed across countries in the composition of asset holdings, a result of different influences on household behaviour, such as market structure, regulation and culture. Real assets, particularly land and farm assets, are more important in less developed countries. This reflects not only the greater importance of agriculture, but also immature financial institutions.

The types of financial assets that are owned also show striking differences across countries. A breakdown between savings accounts, shares and equities, and other financial assets, shows that savings accounts feature strongly in transition economies and in some rich



Asian countries, while share-holdings and other types of financial assets are more evident in rich countries in the West. Part of the explanation is poorly developed financial markets in transition countries, while savings accounts are favoured in Asian countries because there appears to be a strong preference for liquidity and a lack of confidence in financial markets.

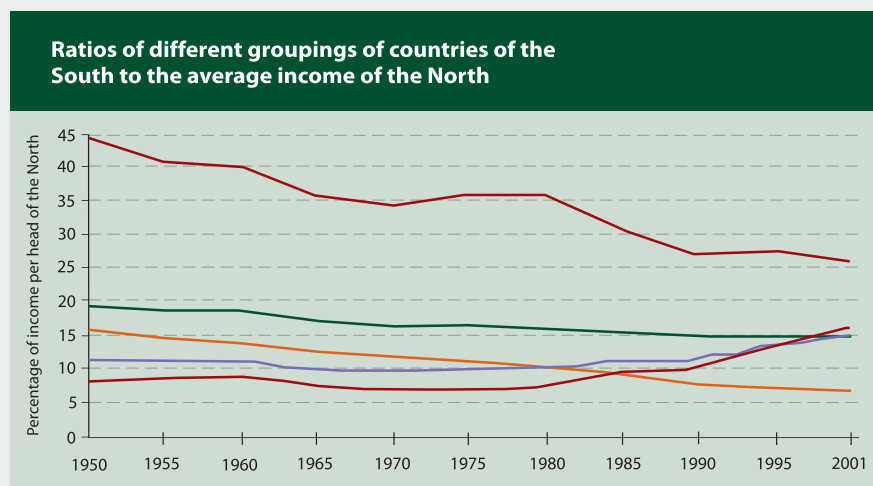
Finally, and perhaps surprisingly, household debt is relatively unimportant in poor countries. While many poor people in poor countries are in debt, their debts are relatively small in total. This is mainly due to the absence of financial institutions that allow households to incur large mortgage and consumer debts, as is increasingly the situation in rich countries. Many people

in high-income countries have negative net worth and—somewhat paradoxically—are among the poorest people in the world in terms of household wealth. ■

J. Davies, S. Sandström, A. Shorrocks, E. N. Wolff: *The Global Distribution of Household Wealth*. WIDER Angle No. 2, 2006. UNU-WIDER. <http://www.wider.unu.edu/newsletter/newsletter.htm>

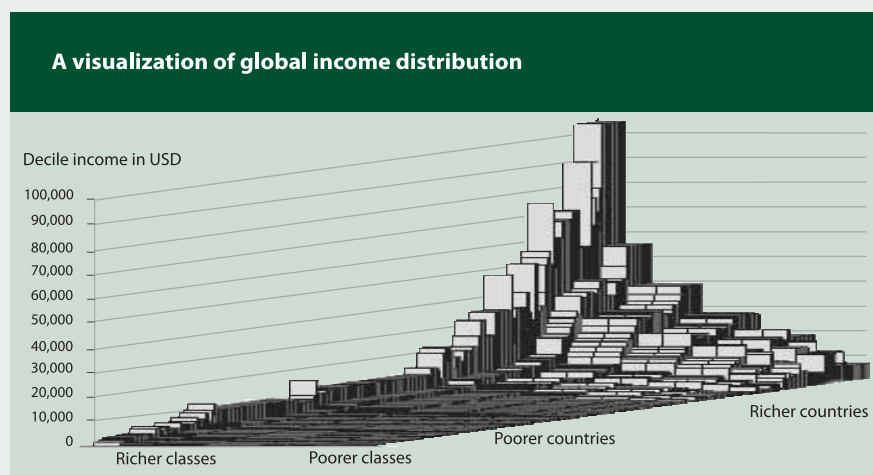
Convergence and divergence between North and South

The gap between the North and the South widened continuously from 1950 to 1990, as is clear from the following chart. For Africa and Latin America, the gap has continued to grow until the present; but since 1980, Asia, and China in particular, has been closing it. After 1990, the faster growth of Asia as outweighed the relative decline of Africa and Latin America, and so, the relative position of the South as a whole has very marginally improved. The contrast between these two opposed tendencies is a central feature of world distribution during the last two or three decades.



Source: Author's calculations based on data in A. Maddison: *The World Economy: A Millennial Perspective*, OECD, 2003. Note: The North = Australia, Canada, Japan, New Zealand, USA and Western Europe; The South = the rest of the world except for Eastern Europe and ex-USSR; Asia includes China, but not Japan.

The global income distribution is represented in the following graph, in which each vertical column represents the implicit income of one decile of one country. The tallest building in the city, so to speak, in the rear corner of the graph, represents the income of the richest decile of the population of the USA, while the scarcely visible column in the nearest corner of the graph represents the income of the poorest decile of the population of Sierra Leone. The graph illustrates extreme global inequality, in particular of the very steep ascent from the poorer majority of the world to its richer minority.



Data source: World Development Indicators, 2005. Online version. World Bank, Washington D. C.

Bob Sutcliffe: *A Converging or Diverging World? DESA Working Paper No. 2*, UN, New York 2005. http://www.un.org/esa/desa/papers/2005/wp2_2005.pdf

by Branko Milanovic,
the World Bank

Global Income Inequality

What is meant by global inequality?

How large is it?

Is it increasing?

Why does it matter?

What can be done about it?

How much is due to differences between countries and how much to within-country gaps?

Is there a link between globalisation and global inequality?

There are three main concepts of global inequality that need to be clearly distinguished, but are often confounded: 1) inequality among countries' per capita incomes, unweighted or 2) weighted by countries' populations, and 3) inequality between world individuals.

Concept 1 importantly deals with convergence and divergence of countries' average incomes, but not with income inequality among all people in the world. Economic growth in a small country will not have the same effect on global inequality as growth in a poor and populous country. Concept 2 inequality takes this into account by weighting each country by its population. This implicitly assumes that each individual within a country receives the per capita income. Thus, it does not take into account within-country inequalities. Concept 3 includes inequalities both between and within countries.

Research using different techniques indicates general agreement about the size of Concept 3 inequality, but general disagreement about its recent direction of change. All Gini values for the 1990s lie within a relatively narrow range between 63 and 68, with the exception of the two extremes (61 and 71), and most of these estimates are within one standard error of each other.

How big is a Gini of around 65? It is larger than inequality found in any single country including South Africa and Brazil, two of the most unequal countries in the world with Ginis around 60. The Gini value however does not give an intuitive feeling of how large global inequalities are. A better way to look at it is to consider how global income is distributed across different fractiles of the distribution. Thus, the top 5 percent of individuals in the world receive about one-third of total world (PPP-valued) income, and the top

10 percent one-half. If we take the bottom 5 and 10 percent, they receive respectively 0.2 and 0.7 percent of world total income. This means that the ratio between the average income received by the richest 5 percent and the poorest 5 percent of people in the world is 165 to 1. The richest people earn in about 48 hours as much as the poorest people earn in a year.

Some studies find declining values from the 1980s, others increasing. My own findings are of zigzag movements, with an increase of 3 Gini points 1988-93 followed by a decline of 1 point by 1998, and then a 1 point increase by 2002. This is explained first, around 1990, by the slow growth of rural incomes in India and China and economic collapse of Eastern Europe, both of which contributed to global inequality. When both developments reversed in the next five-year period, global inequality decreased. But these are zig-zags caused by specific economic events in large countries, not a trend.

Is there a link between globalisation and global inequality? This is a very contentious issue. Most agree on the association of openness with enhanced global growth but not on its distribution between rich and poor countries. Rapid growth in huge poor countries like China and India is clearly reducing Concept 2 inequality and—although to a large extent offset by increasing national inequalities—probably also Concept 3 inequality, at least in some periods.

Globalisation's impact on global inequality varies with the position of countries with different attributes along the international income distribution at a given point in time. The effect will depend on where in the income hierarchy populous countries are at a given point in time. If they are poor, globalisation will reduce global inequality; if they are rich,

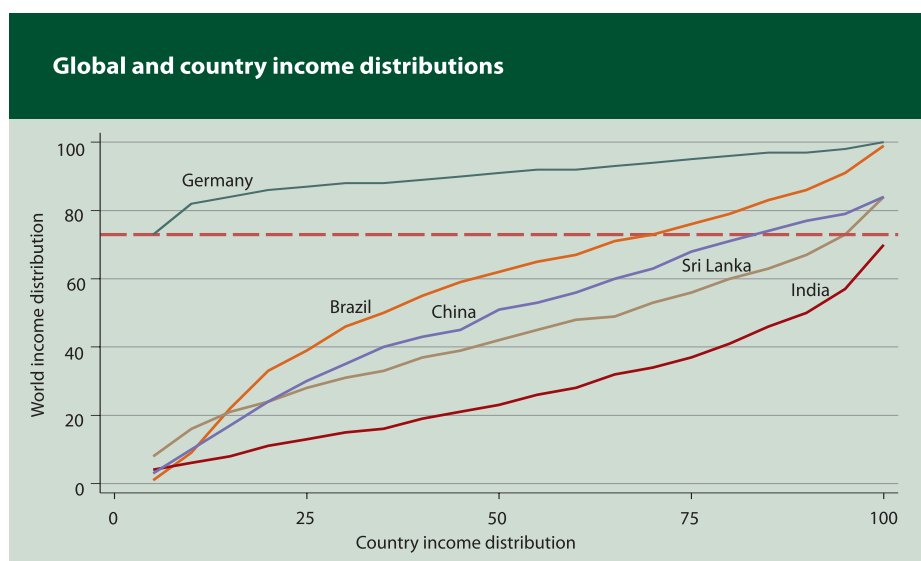
the opposite may happen. The relationship between globalisation and global inequality is not generally valid, but highly time-specific and contingent on past income history.

How much of global inequality is due to differences in mean incomes of countries and how much to income differences within countries? Some 70 percent of present global inequality is due to differences in countries' mean incomes. This is a sharp reversal from a situation which existed around the time of the Industrial Revolution when more than half of the rough estimate of global inequality was due to income differences within nations.

Yet, some people in a poor country can be better off than some people in a rich country. The chart plots five countries' distributions within the world one. The top curve shows that the poorest 5 percent in Germany have a mean income at the 73rd percentile of the world income distribution; the richest 5 percent are in the top percentile of the world. For India, the span is from the 3rd to the 71st percentile in the world. These two distributions do not overlap at all. But if we compare Brazil and Germany, nearly a third of all Brazilians are richer than the poorest 5 percent of the Germans, and so are over 200 million Chinese. The rich Brazilians are about as rich as the richest Germans, and much richer than the richest 5 percent in India, on average.

The chart illustrates not only the considerable inequality due to within-country distributions, but also the practical implications for global transfers. Transfers from mean-income rich (OECD) to mean-income poor countries, when we do not a priori know who the beneficiaries are, need to take recipient countries' income distributions seriously. The risk that money from a German taxpayer will benefit someone richer is higher if German aid goes to Brazil than to India.

Global inequality matters, for various reasons. From an ethical perspective, distributional justice within a nation and in the world as a whole is the same thing. And pragmatically, globalisation increases the awareness of other people's income and thus the perception



Note: World population along vertical axis by percentile from poorest to richest.

Country populations along horizontal axis from poorest to richest, mean income by ventile (5% group) in PPP dollars. Source: Calculated from World Income Distribution (WYD) data at: <http://econ.worldbank.org/projects/inequality>

of inequalities among both the poor and the rich. Even if globalisation were to raise everybody's real income, it could exacerbate, rather than moderate, feelings of despondency and deprivation among the poor.

Thus, globalisation is just like the process which led to the creation of modern nation states out of isolated hamlets. National income distribution was similarly an abstraction for the people who did not interact with each other, and almost ignored each others' existence and way of life. However, once nation states came into existence, national inequality became an issue because people were able to observe income differences. If the process of globalisation would lead toward decision-making processes at the global level, then global inequality is indeed relevant.

Large income differences in the world are due, as we have seen, mostly to the large differences in countries' mean incomes. Since the early 1980s, many countries of the world, viz. the poorest ones, have witnessed a systematic growth failure. Thus, to reduce income differences among individuals, increasing the growth rate in poor countries is of paramount importance. Still, there will be a need to reduce income disparities through global redistribution.

Three basic progressivity rules should guide global income redistribution. Funds should flow from: (i) rich to poor

countries; (ii) a tax-payer who is richer than the beneficiary of the transfer; and (iii) tax payers who are relatively rich within their own country to relatively poor people in the recipient country, so that inequality decreases in both donor and recipient countries. This requires consideration of national income distributions with preference to poor and egalitarian countries, since transfers to them are unlikely to be globally regressive.

This calls for the creation of a global agency to be financed by taxing rich people in rich countries and that would transfer funds to poor people in poor countries. If empowered to raise its own funds, it should eschew governments that have often wasted foreign aid. Instead, it should deal directly with national NGOs and individual citizens in poor countries and distribute collected funds in the form of cash grants.

Vesting some modest tax-raising authority for the first time in history into a global agency would be a huge political challenge. However, globalisation is rendering the economic gaps more obvious and the fairness of the existing global distribution more questionable. Opponents will ultimately realise that their self-interest lies in supporting some form of global action to deal with both poverty and inequality. ■

Branko Milanovic: *Global Income Inequality. A review. World Economics, Vol. 7, No. 1, Jan-March, 2006. See also http://www.un.org/esa/desa/papers/2006/wp26_2006.pdf*

by José Gabriel Palma,
University of Cambridge

Why is Inequality so Unequal across Countries?

An important stylised fact has been absent from the distributional analysis, which only reflects what happens at the very top and at the bottom of the distribution.

The other half—in the middle and upper-middle of the distribution—offers a very different picture of a remarkable homogeneity.

Reducing inequality within countries requires transfers from the top to the bottom of the income distribution.

One of the oldest political economy controversies is about why countries have such different income distributions. At one end of the range of hypotheses the focus is on anonymous market forces and optimum equilibria that generate efficient distributive outcomes; at the other end, the focus is on different forms of exploitation and power relations based on specific types of structures of property rights and incentives that favour some and disadvantage others in a systematic way.

This short essay contributes to this debate by highlighting a remarkable stylised fact that has been absent from the analysis around distributive diversity. This is that the picture of the distributional diversity across the world as measured in Gini coefficients only reflects what happens within *half* the world's population—those at the very top and those at the bottom. The other half is characterised by a remarkable distributional *homogeneity*.

The graph below suggests four 'layers' of inequality across countries. First, a more equal layer containing Central Europe and the non-Anglophone OECD; a second layer contains a great variety of regions, with more than three-quarters of the world's population; a third one includes Sub-Saharan Africa and the 'second-tier' NICs; and a fourth, Latin America.

However, as discussed in detail in Palma (2006), one has to look 'inside' this Gini-picture to be able to properly understand cross-country distributional diversity, in particular the remarkable difference between income distribution in one half of the world population (those at the very top and at the bottom in each country) and in the other (those in the middle).

Figure A (page 9) shows a particularly close correlation between regional Ginis and the income-shares of the top 10 percent; this is mainly the result of the way the Gini index is calculated. In turn, Figure B shows that the regional distributional structure of the bottom 40 percent is the mirror image of that of the Ginis and decile 10. Therefore, the Gini indices are perfectly reflected both at the very top and at the bottom of the distribution of income.

However, when one looks at the other 50 percent of the world's population, Figure C, the 'middle and upper-middle income groups', which are located between deciles 5-9, the regional distributional picture changes completely: from huge disparity to remarkable similarity. Furthermore, as Figure D indicates, this distributive-homogeneity is even more remarkable in the 'upper middle' (the 30 percent located between deciles 7-9). This contrast is clearly shown by the coefficient of variation; those of decile 10 and deciles 1-4 are nearly four times greater than that for deciles 5-9 and seven times larger than that for deciles 7-9.



LA=Latin America; AF=Sub-Saharan Africa; EA1='first-tier' NICs; EA 2='second-tier' NICs; SA=large South Asia and low-income Southeast Asia; NA=North Africa; CA=Caribbean countries; OECD 1=English-speaking OECD; OECD 2=non-English-speaking OECD; ex-c 1=ex-communist countries of Central Europe; ex-c 2=ex-communist countries of the former Soviet Union.

Regional figures are median values, based on a sample of 90 countries. The width of the X-axis corresponds to the actual range of income per capita of the sample (from Ethiopia to Switzerland).

Source: World Bank's WDI data set.

Thus, the half of the world population belonging to the 'middle classes' seems to be able to appropriate about half their respective national incomes. The apparent paradox is that—often through very different distributive mechanisms—they seem to be able to acquire a similar 'property right' over half their national incomes. They apparently do so regardless of per capita incomes, political settlements, institutional structures for rent-seeking, the structure of property rights and incentives, economic policies, or whether their countries managed to get their prices, institutions or social capital 'right'!

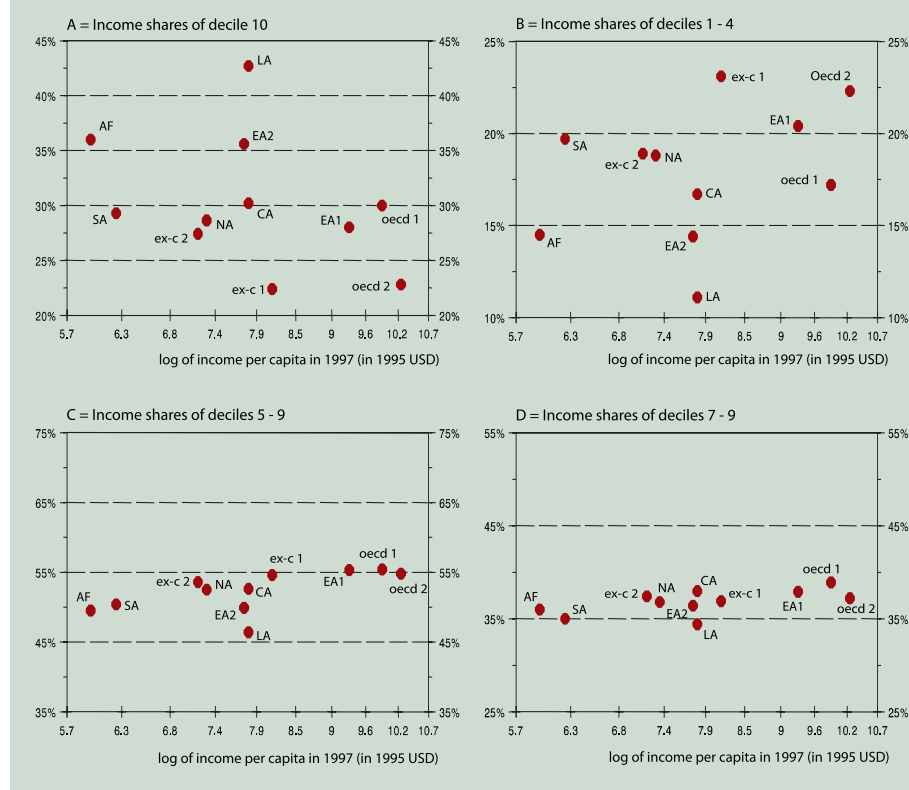
No such luck for the bottom 40 percent of the population. For them, such political economy issues can make the difference between getting as much as one-quarter of national income (as in the non-Anglophone OECD, or Central Europe), or as little as just over 10 percent (Latin America). As far as the top income decile is concerned, the sky is (almost) the limit.

Thus, the regional distributional structure suggested by the Gini indices only reflects the income disparities at the very top and at the bottom, but does not reflect the remarkable distributional homogeneity found in middle. This phenomenon raises serious questions regarding how useful the Gini index is as an indicator of *overall* income inequality.

There are also major analytical implications deriving from this phenomenon. In particular, that recent political and economic developments (including globalisation) seem to have been associated with two very different distributional movements: a (better known) 'centrifugal' one in terms of the income-shares of the top and bottom deciles, and a (lesser known) 'centripetal' movement in terms of the income-share of deciles 5-9.

Regional distributional homogeneity in the middle and upper-middle of the distribution also casts doubts on many theories trying to explain the diversity of income distributions across the world. For example, mainstream theories tend to emphasise the role of 'human capital' in the determination of income distribution; according to them, the level of education is a crucial variable (if not *the* most crucial variable) in the determination of income

Regional income shares



inequality. However, in all regions of the world the top income decile is made up of individuals with relatively high levels of education, while those in the bottom four deciles have relatively low levels of formal education—in terms of either relatively little schooling, or (in the more advanced countries), schooling of rather doubtful quality.

So why is it that in the most *homogeneously*-educated group (the top income decile) one finds the greatest distributional diversity? In turn, why is there extraordinary *similarity* in the shares of national income of the educationally highly *heterogeneous* population of deciles 5 to 9 (heterogeneous, for example, in terms of the share of the population with secondary and especially tertiary education)?

Obviously, more research needs to be done on the forces shaping the national income shares of these two halves of the world population along such different paths, particularly in such opposite 'centrifugal' and 'centripetal' directions. Remarkably, this simple

observation does not seem to have been emphasised before.

Finally, following this analysis, it seems rather obvious that countries really wishing to improve their income distribution should focus their efforts on how to transfer income from the very top to the bottom of the income distribution.

One such policy, of course, would be to strengthen workers' property rights over human capital—the strengthening of workers' property rights over basic skills was one of the main mechanisms by which most industrialised economies transferred income from the top to the bottom of the distribution (and encouraged the accumulation of human capital). In turn, the reversal of this policy has been one of the main mechanisms by which most developed countries managed to increase their income inequalities since the early 1980s. ■

Palma, J. G. (2006): *Globalising Inequality: the 'centrifugal' and 'centripetal' forces at work*. DESA Working Papers No. 35. http://www.un.org/esa/desa/papers/2006/wp35_2006.pdf

by Michael Kremer,
Harvard University

Globalisation and Inequality within Countries

Under a standard textbook model, globalisation should benefit the poor and reduce inequality.

However, recent research finds that trade liberalisation is associated more with increased inequality in poor countries.

Outsourcing by multinationals increased the relative demand for skilled labour, increasing the pay gap to unskilled labour.

This article summarises a model of globalisation as cross-border production.

Supporters of the anti-globalisation movement argue that globalisation has increased inequality between and within nations and in particular that it has marginalised the poor in developing countries and left behind the poorest countries. Meanwhile, more moderate mainstream politicians argue that the poor must invest in education to take advantage of globalisation.

However, under a standard textbook model, globalisation should benefit the poor and reduce inequality, and the poorest countries and least educated workers should have the greatest opportunity to benefit from globalisation.

The argument goes as follows. Suppose there are two countries, the North, with a high ratio of skilled to unskilled workers, and the South, with a low ratio. Suppose also high-skill and low-skill workers are complements. Under autarky the wage of skilled workers will be relatively low in the skill-abundant North and relatively high in the skill-scarce South. Opening trade will equalise factor prices in the two countries. Hence, the wage of skilled workers will rise in the North and fall in the South, while the wage of unskilled workers will fall in the North and rise in the South.

Thus inequality will rise in the rich country and fall in the poor country. The extent of, and gains from, trade will typically be greater the scarcer are skills in the South. Similar results obtain in a model with capital and labour as the two inputs, assuming labour is equally distributed within each country while capital is not.

There are, however, at least two empirical problems with this model. First, it predicts that bilateral trade will be greatest when factor endowments are most different; in fact, there is little trade between

advanced countries such as the U.S. and very poor countries such as Chad. Second, evidence from specific developing countries following trade liberalisation and from cross-country studies does not suggest that trade liberalisation generally reduces inequality in poor countries and in fact frequently suggests that trade liberalisation is associated with increased inequality.

For example, after Mexico embarked on a broad liberalisation of trade and foreign investment, the return to schooling increased; white-collar real hourly wages increased by 13.4 percent 1984-90, while blue-collar wages fell by 14.0 percent. The biggest rise in inequality was observed in firms engaged in export industries. Rising wage inequality in Mexico is linked to capital inflows from abroad. Outsourcing by Northern multinationals shifted production towards skill-intensive goods, increasing the relative demand for skilled labour. Multinational firms and joint ventures pay higher wages, with or without adjustment for observable correlates of skill.

Increased openness is associated with reduced wage inequality in the Asian Tiger economies in the 1970s and 1980s but with increased inequality in Latin America in the 1990s. Limited evidence available for other countries indicates that liberalisation tends to be followed by increases in inequality, but causality is doubtful. In several large countries, e.g. India, China, Russia and Indonesia, liberalisation had been only partial. In the case of China global integration has proceeded further in coastal than in hinterland regions; this coincides with increased coastal-hinterland wage inequality, while Chinese regions that experience a greater degree of openness in trade also tend to have greater declines in rural-urban income inequality.

Most recent research finds either that trade liberalisation is associated with increased inequality in poor countries or finds no strong association. The relationship between openness and inequality appears positive for low-income countries and negative for high income countries, with the turning point occurring somewhere in a GDP per capita range of \$6000-\$13,000.

In sum, the evidence does not support the expected theoretical effects of globalisation consistently reducing inequality in poor countries. In basic trade theory, two countries trade produced goods with one another. However, recently globalisation has to a large extent also involved the *production process*. A single product can be manufactured out of components made and assembled in different countries, or designed in one country and manufactured in another.

Workers in poor countries not only produce labour-intensive products, but also jointly produce with workers in rich countries. This process is modelled in the end-reference paper. In particular, we model globalisation as cross-border production; a product is designed in one country, manufactured in a second and customer services provided by a call centre in a third country.

The model involves production by workers of different skill-levels and is consistent with (i) the small scale of trade between countries with very different factor endowments and (ii) the possibility that globalisation may increase inequality in both rich and poor countries.

Our analysis assumes two countries and just one consumption good. The *rich* country has workers of two skill levels, A and B. The *poor* country has workers of skill levels C and D. We assume that the A-D skill levels are in alphabetical order. In a stylised two-type model this may be a reasonable assumption. The lowest quartile of the U.S. skill distribution may well be higher than the highest quartile of the Indian distribution; the presence of small numbers of very high skill workers in India or very low skill workers in the U.S. makes little difference to our results.

The model implies that it is efficient (a) for a firm to assign a higher-skill worker to the managerial task and a lower-skill worker to the assistant's role, and (b) to use *cross-matching*, i.e. workers with *different* skill levels working in the same firm, than *self-matching*, i.e. workers with the *same* skill level working together.

Before globalisation, A- and B-workers could be cross-matched, although not necessarily, and the same for C- and D-workers. But international matches were not possible: for example, B- and C-workers could *not* be cross-matched. By contrast, after globalisation, all cross-matches are in principle possible. Workers from different countries can work together in the same firm.

We assume that D-workers are of low enough skill so that it is not efficient for them to be cross-matched with any worker in the rich country. That low-skilled workers in poor countries have difficulty participating in cross-border matching is consistent with the evidence. For example, call centres in India tend to employ middle-class Indians who can speak with an American accent with which U.S. customers are familiar. Multinationals and exporters in developing countries typically pay manufacturing wages substantially above the norm for the country.

Globalisation potentially allows efficiency gains through cross-border production. If skill levels in the rich and poor countries are sufficiently disparate, then it is inefficient for any rich country workers to match with any poor country workers. Therefore the model offers a clear explanation of why very little trade is observed between the U.S. and Chad, for example.

Furthermore, in this model globalisation causes inequality in the poor country (the gap between the wages of C- and D-workers) either to increase or to remain the same. The basic reason behind the increase in inequality in poor countries is the additional potential matches that globalisation brings to each type of worker. For C-workers, globalisation opens more possible matches; for D-workers it does not. In this sense D-workers can be *marginalised* by globalisation in this model

if before globalisation they matched with C-workers but are afterwards forced to self-match.

The assumption that D-workers are so low skilled that it is inefficient for them to be involved in international matching is important. For example, if before globalisation C- and D-workers match, while afterwards A- and C-workers match and B- and D-workers match, then globalisation has added new matching possibilities for both C- and D-workers and so no conclusion can be drawn about inequality changes without considering the exact values of A, B, C and D and the numbers of workers of each type.

Similarly, without making stronger assumptions, we cannot pin down what effect globalisation has on inequality in the rich country other than to say that the wages of the A- and B-workers cannot both go down; all other combinations are possible.

Finally, observe that our model makes no clear prediction on trends in *global* inequality, even in the cases where inequality increases within both rich and poor countries. Precise results depend on the relative numbers of A-, B-, C-, and D-workers as well as on the relative skill levels. However, if people measure their status relative to others in their own society, then they will perceive inequality as increasing. This analysis corresponds to the view of many anti-globalisation protestors that globalisation benefits elites in both rich and poor countries.

Of course, while joint production may be a good model of some types of trade, the product trade model may be appropriate in other cases. Low-end shoe factories in poor countries may hire relatively low-skill workers. Still, the presence of some industries in which foreign investors typically hire medium-skill workers who are high-skill relative to others in their country may help explain why there is not a clear equalising effect of trade in poor countries. ■

Michael Kremer and Eric Maskin:
Globalisation and Inequality.
http://www.economics.harvard.edu/faculty/kremer/papers/GlobalizationInequality_Oct06.pdf

by Kevin Watkins,
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Development Programme

Inequality and Human Development

Inequalities based on wealth, region, gender and ethnicity are bad for growth, democracy, social justice and cohesion, and for the MDGs.

The disparities hampering progress towards the MDGs are systemic—transmitted across generations; and they reflect public policy choices.

This should have important implications for MDG and poverty reduction strategies.

There are five main reasons—intrinsic and instrumental—why inequality matters for human development.

Inequality is a fundamental issue for human development. Extreme inequalities in opportunity and life chance have a direct bearing on what people can be and what they can do—that is, on human capabilities. Children facing a higher risk of death because they are born into a poor household or because they are girls clearly have less opportunity to realize their potential. Inherited disadvantage in opportunity is wrong for intrinsic reasons: it violates basic precepts of social justice. There are also strong instrumental reasons for a concern with inequality. Deep disparities based on wealth, region, gender and ethnicity are bad for growth, bad for democracy and bad for social cohesion.

They are also bad for the Millennium Development Goals (MDGs). The MDGs do not directly address inequality. In this sense they are distribution neutral. Progress is measured by aggregating and averaging change at a national level. In theory, the MDGs could be met even if, say, households with low incomes were falling behind on the income poverty and health targets, or if the rate of reduction in child deaths among boys was sufficient to compensate for a slower rate of reduction among girls.

The distributional blind spot of the MDGs is a weakness on two counts. First, the MDGs themselves are rooted in ideas about global justice and human rights. They are universal entitlements, not optional or discretionary allowances. It follows that progress should be for all, regardless of economic status, gender, parents' wealth or location in a country.

Yet the MDGs do not remind governments that success in advancing towards the MDGs should be measured for all of society and not just in the

aggregate. The disparities hampering progress towards the MDGs are systemic. They reflect complex hierarchies of advantage and disadvantage that are transmitted across generations—and they reflect public policy choices.

Secondly, poor people are being left behind across many of the MDGs; progress among the poorest 20 percent of the population is far below the national average in a large group of countries. Apart from being unjust, this is suboptimal from the perspective of MDG attainment. People who are poor account for a far larger share of deprivation than people who are not. It follows that accelerated progress among poor people is one of the most effective routes to faster national progress. Current patterns are slowing the overall advance because the smallest gains are being registered among the households that account for the biggest part of the problem.

These considerations have important implications for the design of MDG strategies. The evidence shows that a “trickle down” approach to reducing disparities and maintaining overall progress will not work. The MDGs set quantifiable targets that lend themselves to policy responses rooted in technical and financial terms. Ultimately, however, the real barriers to progress are social and political. They are rooted in unequal access to resources and distribution of power within and among countries. Unless these inequalities are corrected, the first principles of the Millennium Declaration—commitment to social justice, equity and human rights—from which the MDGs are derived will not be translated into progress in human development at the required rate. From a human development perspective there are a range of mutually reinforcing intrinsic and instrumental reasons why

inequality matters. These can be broadly summarized under five headings:

Social justice and morality. The view that there are limits to tolerable deprivation is fundamental to most societies and value systems. All major religions express concerns with equity and place obligations on their adherents to address extreme deprivation as a moral duty. Public ideas reflect wider normative concerns. Surveys show strong opinions in many countries that the gap between rich and poor is too large, thus indicating an underlying perception of social justice.

Putting the poor first. More weight should be given to improvements in the well-being of the poor and disadvantaged than to the rich and privileged. National income is not a good measure of welfare, because it ignores the distribution of income. Beyond income, many of the same arguments apply. For example, an additional unit of public spending directed towards reducing child deaths or extending access to primary school would be preferable on social grounds to a similar amount spent on transfers to services for high-income groups.

Growth and efficiency. Extreme inequality is not just bad for poverty reduction—it is also bad for growth. Long-run efficiency and greater equity can be complementary. Poor people remain poor partly because they cannot borrow against future

earnings to invest in production, the education of their children and assets to reduce their vulnerability. Insecure land rights and limited access to justice can create further barriers to investment and pro-poor growth.

Political legitimacy. Extreme inequalities also weaken political legitimacy and corrode institutions. Inequalities in income and human capabilities often reflect inequalities in political power. Poor people (especially women), rural populations and indigenous communities are disadvantaged partly because they have a weak political voice, and vice versa. Where political institutions are seen as perpetuating unjust inequalities or advancing the interests of elites, democracy and stability can be undermined.

Public policy goals. Most societies see reducing poverty and removing unjust inequalities as important goals for public policy. Extreme disparities undermine the pursuit of these goals, and limit the rate at which growth can be converted into poverty reduction. Similarly, extreme disparities in health and education reduce the scope of disadvantaged groups to take advantage of opportunities for improving welfare.

The appropriate response is to ensure that inequality and the measures to overcome disparities in life chances figure more prominently in the design of poverty reduction strategies.

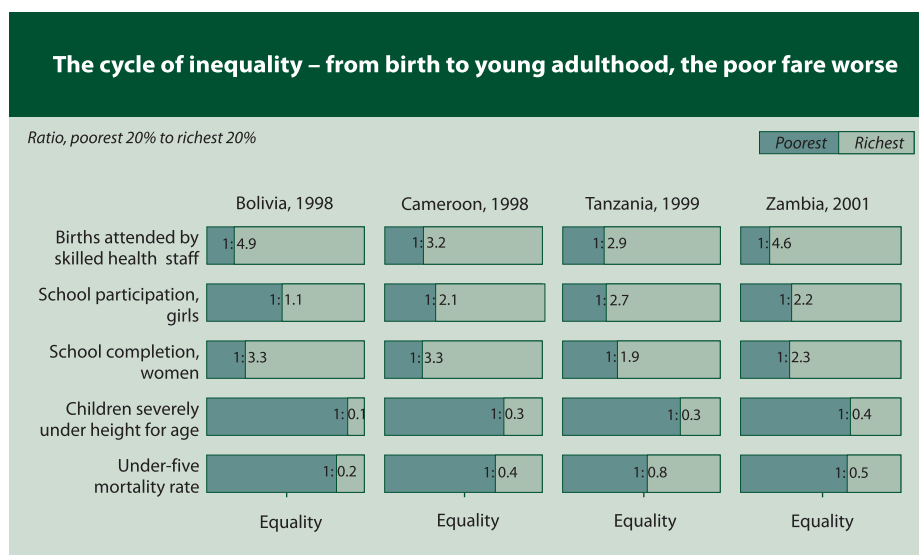
Inequalities in income reflect the distribution of assets and opportunity and the operation of markets. But they are influenced by government taxation and spending. In many countries fiscal transfers are already narrowing extreme inequalities. In Chile, for example, they narrow the gap between the income ratios of the richest and the poorest 20 percent of the population from 20:1 to 10:1. From a human development perspective the fiscal transfers with the highest returns are investments that build capabilities and provide protection during periods of acute vulnerability

An obvious requirement for meaningful fiscal transfers to alleviate poverty is the willingness—and capacity—of the state to mobilize revenue. In much of Latin America aversion to taxation restricts this condition. Mexico raises only 13 percent of GDP in revenue—less than Senegal does. India's capacity to redistribute the benefits of higher growth through the fiscal system is similarly constrained by a tax to revenue ratio of only 10 percent. After two decades of growth that ratio has not increased.

Fiscal transfer is one mechanism for raising the income of the poor above the level dictated by current growth and distribution patterns. More broadly, pro-poor growth requires a public investment focus on the markets in which poor people operate. In many countries the challenge is to shift the policy focus to the smallholder producers and to the more marginal areas that account for the bulk of poverty.

Control over assets is critical. It is sometimes argued that there is a potential trade-off in agriculture between greater equity through land reform and greater growth. Here too the trade-offs are more apparent than real. Redistributive reforms in agriculture have proven results in reducing poverty, leading to major advances in many countries. In West Bengal, India, agricultural output and incomes rose following tenancy reform and recognition of the land rights of the poor. ■

Inequality and Human Development. Chapter 2 of UNDP Human Development Report 2005. http://hdr.undp.org/reports/global/2005/pdf/HDR05_chapter_2.pdf



Source: UNDP Human Development Report 2005, page 57.

by Elizabeth A. Stanton,
Tufts University

Adjusting the Human Development Index for Inequality

Both per-capita income and HDI are based on national averages, thus ignoring distributional inequalities.

The correlation across countries between the three components of HDI are very weak.

Inequalities in each component may have corrosive effects on social well-being and social cohesion.

An inequality-adjusted HDI could incorporate several new elements that make HDI more sensitive to inequality.

A first test of such an IHDI shows significant differences from the HDI country rankings.

Inequalities in health, education, and income—key components of human development—matter deeply to social well-being. Yet the best-known measures of well-being either ignore distributional inequalities altogether or at best account for only some of their effects. Per capita income, the most common measure, is a simple average. Its main alternative, the UNDP Human Development Index (HDI), is likewise based on national averages, albeit for a wider set of welfare indicators.

The practice of identifying averages with national well-being ignores potential trade-offs between increasing averages and decreasing differences in distribution. For example, as the rich get richer, average income may increase, but income inequality simultaneously may increase so sharply that the incomes of the poor decline, arguably resulting in a decrease in well-being. More generally, measures based solely on national averages record unambiguous changes in well-being in circumstances made ambiguous by changes in inequality.

HDI is derived from three component indices: health, as proxied by average life expectancy; education, as proxied by a weighted average of literacy and school enrollment rates; and income per capita,

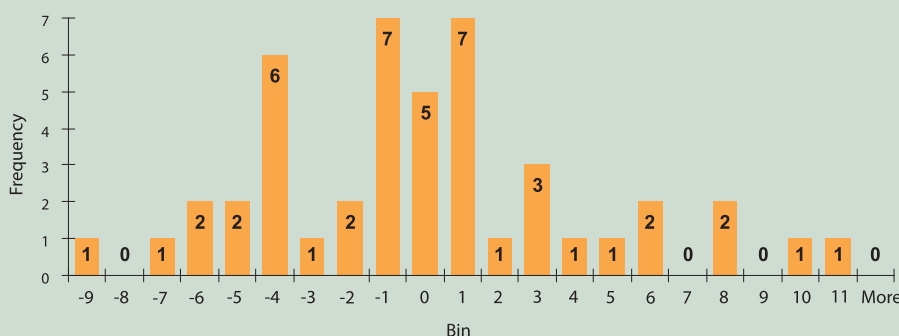
using the natural logarithm in order to account for the diminishing marginal utility of income. The rationale for HDI is that average health and education are not simple functions of average income per capita. There are two reasons for this.

First, health and education have a substantial public goods component; they are not private goods, distributed entirely according to income. Publicly provided goods and services may be unequally distributed as well, because access to them is politically driven and affected by discrimination on the basis of race, ethnicity, religion, or gender. Because inequalities in the distribution of health and education have negative effects on human well-being, and are not simply a function of income inequality, they too should enter into measures of social welfare.

Second, if privately-provided goods and services for health and education purposes diminish on the margin as income rises (i.e. when the relationship between individual income and individual health/education is concave in mathematical terms), then countries with the same average income but different income distributions will have different levels of average health and education; the country with greater income inequality will have lower average health and education levels, and hence a lower HDI. This is called the “aggregation effect” of income inequality on health and education. It implies that a redistribution of income would change the average level of health and education.

Thus, HDI’s inclusion of average health and education goes some way toward capturing the effects of income inequality on well-being. But it fails to account for other well-being effects of income inequality, as well as for relevant effects of inequalities in the distribution of health and education outcomes. For example, inequalities in all three components of HDI may have corrosive effects on social well-being through their association with decreasing social

Comparing HDI and IHDI rankings for 46 countries



This histogram shows all rank changes from HDI to IHDI; five countries kept the same rank, 22 had worse ranks by IHDI, and the remaining 19 had better ranks. The average absolute change in rank was 3.3, which is quite large for only 46 countries.

cohesion, increasing violence, or increasing environmental degradation. Moreover, there is evidence that many, if not all, people put some intrinsic value on limiting inequality as an end in itself.

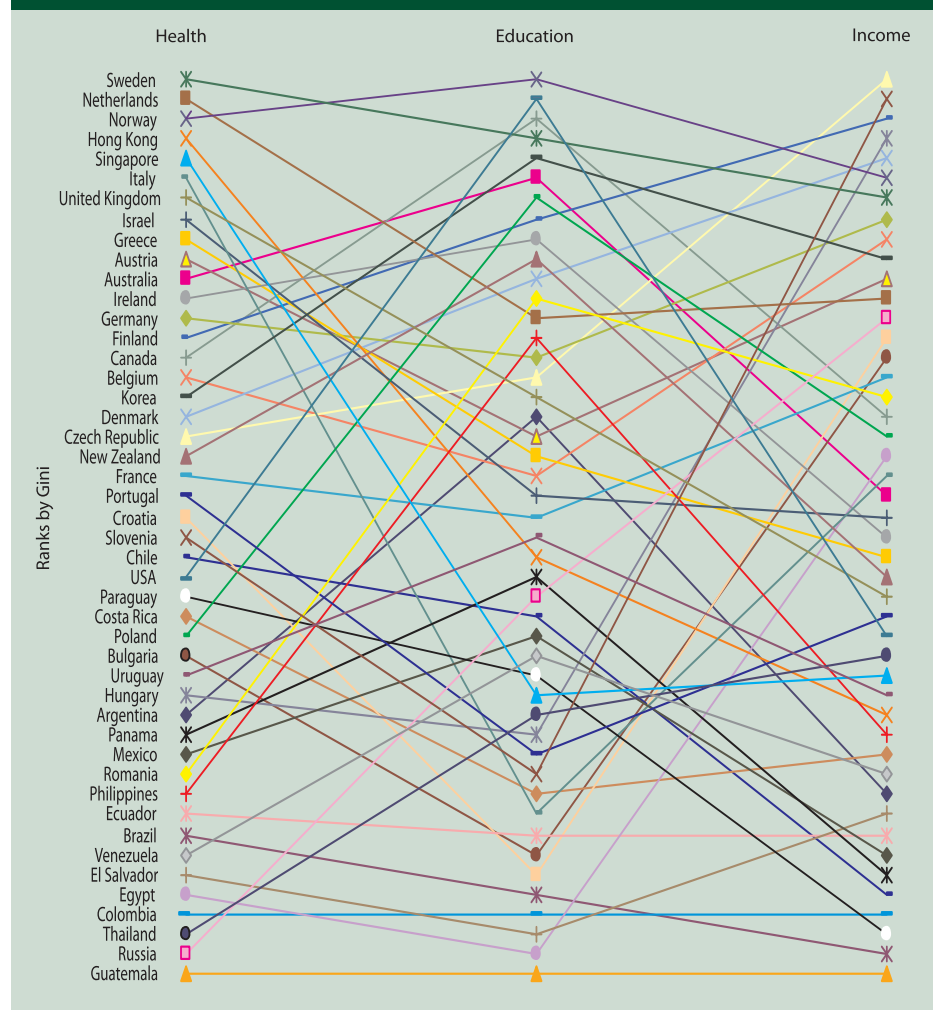
With the exception of gender disparities, the inequality measures sporadically reported in the UNDP *Human Development Report (HDR)* have been restricted exclusively to income distribution, and none have been incorporated into the HDI itself. The first *HDR* stated that all three average measures of human development “conceal wide disparities in the overall population,” but that compared to income inequality, the “inequality possible in respect to life expectancy and literacy is much more limited: a person can be literate only once, and human life is finite.” Although health and education inequalities are quantitatively more limited than income inequality, the replacement of binary variables, like literacy and school enrollment, with continuous variables, like years of schooling, allows for the detection of more inequality.

A ranking of countries by HDI differs from ranking by per capita income, because (i) average life expectancy and education register the effects of income distribution, and (ii) health and education levels are determined in part by non-income factors, in particular public provision of social services. While these effects make HDI a better measure of social welfare than per capita income, three additional ways in which inequality can affect well-being are missing from HDI:

- The aggregation effects of inequality in *health and education* on individual welfare (as opposed to the aggregation effects of inequality in income on health and education);
- Shifts in the way individual well-being is related to personal income, health and education, due to the effects of inequality of other welfare-relevant factors that are not included in the HDI; and
- Inequality's intrinsic negative effects on social well-being.

For these reasons, it is both desirable and feasible to reformulate the HDI to push the boundaries of well-being measurement beyond national averages. An Inequality-adjusted Human Development Index (IHDI) can incorporate several new elements that make HDI more sensitive to inequality.

The weak correlation between health, education and income Gini ranks



Source: Author's calculations using data from the reference study.

First, in IHDI, social welfare functions with respect to health, education, and income are modeled with diminishing marginal returns to individual welfare to capture the aggregation effects of inequality. Second, IHDI can vary the weights of individuals in calculating social well-being so as to reflect the degree of emphasis on equality. Third, Gini coefficients are used to adjust the resulting composite indices—in a way that maintains balance between the components—to take into account further instrumental and intrinsic costs of inequality beyond the aggregation effect.

GDP per capita and HDI are commonly used as measures of social welfare to indicate which countries' policies have been the most effective in providing the best quality of life. When social welfare is measured without reference to inequality, these rankings incorporate conceptual flaws. HDI thus ranks some countries, like

South Korea, too unfavourably, and others, like Brazil, too favourably.

Because distributional inequalities are omitted from HDI, progress in improving social welfare may be overlooked—as may certain kinds of deterioration of social welfare. IHDI can both provide a better ranking of countries at any given time and better illuminate changes in social welfare over time. While the data necessary to calculate IHDI are not yet available for the full set of countries covered in the *HDRs*, the IHDI proposal provides a roadmap to a more robust measure of social welfare for use in international and inter-temporal comparisons. ■

Stanton, Elizabeth A.: *Accounting for Inequality: A Proposed Revision of the Human Development Index*. Working Paper No. 119, November, 2006. PERI: Amherst, Mass. http://www.peri.umass.edu/fileadmin/pdf/working_papers/working_papers_101-150/WP119.pdf

by Frances Stewart,
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Why Horizontal Inequalities Matter

Horizontal inequalities are important because they affect well-being and can lead to violent conflict.

Group inequality provides powerful grievances that leaders can use to mobilise people to political protest.

It should be measured and monitored. When acute, policies are needed to counter such inequalities.

This may help achieve several objectives, including efficiency, growth, peace and poverty reduction.

Horizontal inequalities (HIs) among culturally defined groups encompass economic, social, political and cultural dimensions. They are important because they affect well-being and can lead to violent conflict. Yet almost all economic analysis and measurement of inequality, e.g. the Gini coefficient, concerns vertical inequality among individuals, while group inequality tends to be ignored.

People can be grouped in many ways, and most people are members of many groups including national, racial, ethnic, religious, gender and age categorisations. These may emerge from self-identification, legislation, and/or as a result of categorisation by others. There are also many groups of which membership is short-lived—such as social clubs, or producer networks, and so on.

Some group affiliations are clearly more important than others in terms of people's identity, their permanence and the impact on access to resources. While group boundaries are to some extent arbitrary, socially constructed and fluid, nonetheless some group affiliations are salient, affecting people's sense of self, their welfare and their political affiliations. The group forms part of a person's identity, and relative impoverishment of the group increases perceptions of members that they are likely to be permanently trapped in poverty.

In addition to being important in itself, reducing HIs may help achieve other objectives. One is efficiency: discrimination is likely to lower efficiency, since a number of talented people will be held back while resources and high positions go to less talented people in the favoured group. Also, poverty reduction may require tackling the

position of the group. For example, programmes to advance credit to poor producers, or to promote universal education, may not be achievable so long as group inequality remains, e.g. in attitudes towards women's rights and girls' education.

Group inequality provides powerful grievances that leaders can use to mobilise people to political protest, by calling on cultural markers (a common history or language or religion) and pointing to group exploitation. This is especially likely where there is political as well as economic inequality, so that the leaders are excluded from political power, for example Côte d'Ivoire, Rwanda, Northern Ireland, Chiapas, and the Sudan.

HIs are an important source of grievance and potentially of instability, *independently of the extent of vertical inequality*. Whether HIs lead to political violence or not depends on a number of factors, e.g. the nature of the HIs, which can be categorised into four areas: political participation, economic resources, social services, and cultural recognition.

While these categories are applicable to *every* society, the elements that are relevant in a particular case depend on the nature of the society, its political system, economy, and social structure. For example land is clearly of paramount importance in the rural economies of Africa but not in modern urban societies, while employment seems to be important in most countries. In natural resource rich economies, the control over such resources, either directly or via the state, is an important source of group rivalry. Access to housing is of critical importance in more developed economies, such as Northern Ireland, but less so where people mostly construct their own homes, e.g. in Africa.

Strong causal connections between different HIs cause and perpetuate HIs. For example, HIs in political power often lead to similar social and economic inequalities through biased access to government jobs and services. There are also mutual linkages between economic and social elements, e.g. education and economic opportunities, thus reinforcing cycles of privilege and deprivation.

HIs may be spatially distributed, which can lead to separatist claims where resource rich provinces seek autonomy, resenting the redistribution of local resources to other parts of the country (for example, Biafra in Nigeria, or Aceh in Indonesia). Yet, sometimes the poorer regions feel exploited by the richer areas (for example, in Bangladesh and Eritrea).

Different types of conflict emerge where people from competing groups live in the *same* geographic area. In such cases, the deprived may seek political and economic rights or control over government institutions. Similarly, there may be attacks on particular groups and pressure for ethnic cleansing without direct government involvement.

The violent conflict in Cote d'Ivoire, the long war in Guatemala and the genocide in Rwanda are examples where deep political and socio-economic HIs were an important cause of the group violence. However, in Malaysia and Northern Ireland effective policies were introduced to reduce HIs, in each case contributing to peace.

While the existence of HIs, especially when consistent in political and economic dimensions, is likely to lead to political mobilisation on group lines,

whether there is conflict or not depends on other factors, including cultural, demographic, economic and political conditions (especially the nature of the state).

The potential strength of any violent movement depends on the relative size of the population in different groups. At one extreme where there are many small groups they find it difficult to mobilise collectively, while if the population is homogeneous violence may be less likely. In between there are many possibilities. Where an underprivileged group is a small minority, any violent protest is likely to be readily suppressed or may not occur (as in the northern part of Kenya or among the Roma people in Europe). Where there is small privileged group and a large underprivileged one, the majority can be mobilised against the privileged—the Jews and the Chinese and the Lebanese, for example, have been subject to such attacks periodically over many centuries.

Another important factor is the cohesion of the group; strong cohesion and hence mobilisation potential may be the outcome of cultural unity, or of political leadership emphasising group unity. However, cohesion is inherently easier in some contexts. For example, where there is cultural fragmentation (e.g. many languages being spoken), mobilisation behind some overarching identity may be less likely, and geographic dispersion may also make cohesion less likely. Thus, in Peru, an overarching affiliation could be an 'indigenous' identity which would bring together about half the population—a clearly powerful political entity. Yet differences within the indigenous population as to language, history,

location may mean that such an overarching identity is not strongly felt and hence political action on the basis of indigeneity may be unlikely.

The nature of the economy is another type of conditioning factor which helps determine the outbreak (or not) of violent conflict. Impoverished societies seem to be more prone to violence according to econometric investigations. This may reflect lack of viable occupations among poor populations, who therefore find war an attractive proposition; or lack of state resources which means that the state offers little to its citizens which might lead them to respect their civic obligations; or that weak states that are unable to repress violence effectively. Low growth economies seem to be more violence prone than high growth. This is probably because with higher growth all groups benefit, and so inequalities seem to matter less.

Another factor is the presence of natural resources which has been shown to make conflict more likely. Natural resources often lead to quite acute HIs—often geographic—between those with access to the resources and those without.

General investigation of country cases shows that HIs are important both as a source of conflict and because they reduce welfare. They should be measured and monitored and, where they are acute, policies introduced to counter them. But caution is needed. Countering HIs can itself provoke conflict from the groups whose privileges are being reduced—as seems to have been one factor behind the conflict in Sri Lanka. Moreover the political conditions for the sort of comprehensive and systematic policies needed are rare. But leaving HIs to fester is dangerous, in Northern societies as well as in Southern. Monitoring and tackling HIs should be part of the development agenda, along with other development objectives including growth and poverty reduction.

Stewart, F.: *Horizontal Inequality: a Neglected Dimension of Development*. Helsinki: WIDER Annual Development Lecture 2002.

Stewart, F., G. Brown and A. Langer (2007): *Policies towards HIs*, CRISE Working Paper 42, www.crise.ox.ac.uk

Tackling horizontal inequalities in Malaysia

Malaysia faced large economic HIs between the Chinese and Malay (Bumiputera) populations. Following anti-Chinese riots in 1969, the government introduced reforms to reduce HIs and thus secure national unity. Policies included expanding the Malay share of capital ownership through low-interest credit allocations; settling Malays on 95 percent of new lands; and quotas in access to education. Inequalities were thus reduced in incomes, capital ownership and education. Conflict was avoided, even after the 1997 financial crisis when other countries in the region faced anti-Chinese violence. Moreover, there was high growth and rapid poverty reduction. Political HIs favoured the majority Malays, facilitating the comprehensive and effective policy reforms.

by Marcelo Medeiros,
International Poverty Centre

Now, the Rich

Growth alone will not be sufficient to eradicate income poverty within a reasonable time frame of two or three decades.

Eradicating poverty will require reducing inequality through direct redistribution.

It is not a matter of choosing between labour and transfer strategies, but of recognising them as complementary.

We know a lot about the poor but little about the rich, who should provide the resources for redistribution.

Learning more about the rich is important for improving the lives of the poor.

Economic growth is a very tempting strategy to combat poverty. After all growth can be good for everyone. At least in theory, with growth both the poor and the rich can win, thus avoiding any serious distributive conflicts. And even if growth comes accompanied by increases in inequality—as seems to be the most common case with accelerating growth—it can still improve the life of everyone. However, what is a possibility has become almost a mantra: growth is good for the poor.

If it is good for the poor, it is welcome. But good does not mean best and the fact is that in many countries realistic growth rates will not be sufficient to eradicate income poverty within a reasonable time frame of two to three decades. If middle-income countries like South Africa, Peru and the Philippines do not reduce inequality, they may double their GDP and still have more than 10 percent of their population living below a \$2/day income threshold; low-income countries like Kenya would have such poverty ratios above 20 percent and India would be above the 30 percent level. The calculation here is simple: if the economy grows without changes in inequality, the headcount ratio for the extreme poverty threshold of a \$1/day will be the share of the population under the \$2/day poverty line after the duplication of the domestic product.

Where increasing the average level of income is not sufficient, it is necessary also to better distribute the existing resources. For many developing countries income poverty is not a problem of generalized scarcity of resources but mainly a matter of skewed distribution of national income. Much of the poverty in the world could be reduced if there were less inequality in these countries. This is particularly true in

highly unequal middle income countries in Africa and Latin America, such as South Africa, Botswana, Colombia, Brazil, Chile or Mexico, in which 5 percent of the income of the richer decile of the population is sufficient to double or even quadruplicate the income of the poorest decile, according to the HDR 2005 data on poverty and inequality.

It is not just a matter of having less inequality. Destroying the wealth of the rich reduces inequality but it is hard to see how this would help the poor. The type of inequality reduction these countries need is the one that results in increases of the income of the poor. There are countless ways to do it and of course there is no “one-size-fits-all” solution to this problem, but basically such increase can be obtained by raising the labour earnings of the poor and raising social transfers.

Urban and rural land reforms, better access to credit and markets, labour market regulation, production subsidies and the remodelling of control agencies and bureaucracies can and should be used to increase labour earnings. But not all the poor would be benefited by these measures. In some cases they have limited scope and affect only certain occupational groups or regions. In other cases they have to be complemented by so many structural changes in the production and distribution of commodities that in practice isolated policies are of little use.

Moreover, changes in the demand for labour will hardly be sufficient to eradicate poverty if they are not accompanied by changes in the supply, which involves increasing the skills of the poor workers and allowing them to freely migrate to areas and countries where they can find better jobs.

Improving the labour earnings of the poor requires not only a good effort, but also some time. Not all alternatives to reducing inequality by increasing the labour income of the poor will bring substantial results in the relatively short period of twenty or so years. For example, it takes more than ten years to educate a cohort of children and even countries that may accomplish a large expansion in their educational systems will have to wait many more years until the new generations of educated workers become a majority in the labour market. Parallel to that, these countries will also have to change the production and occupational structures to reduce segmentation and absorb new waves of educated workers. This may take a long time as well.

The poor cannot wait that long. If the idea of eradicating poverty in a reasonable time frame of two to three decades is to be taken seriously, direct redistribution will be inevitable. Improving the labour earnings of the poor is crucial but for the present generations it will hardly be enough to drastically reduce poverty; as a consequence, income has to be directly redistributed to the poor via social transfers. It is not a matter of choosing between labour and transfers but of recognizing they are complementary strategies.

Redistribution means to take income from one group and give it to another. In the last twenty years there was an impressive progress in terms of knowledge about the group that will be benefited by this redistribution, the poor. Ethnographers, statisticians, sociologists, economists and a multitude of other professionals have visited, mapped and described the poor, analysing their habits and even testing their behaviours experimentally. However, little is known about the group that preferably should provide the resources for redistribution, i.e. the rich.

Indeed, the rich receive so little attention from researchers that even operational definitions of the group need to be better developed. Take, for instance, the ever increasing sophistication in the debate about poverty lines. Drawing such lines allows the stratification of the

population and is one of the first steps in any statistical study of poverty. There is much in the literature about the methods do draw absolute, relative, objective, subjective, uni- and multidimensional poverty lines but not so many attempts to draw richness or affluence lines having redistribution in mind.

Many years ago the first studies of the poor had to overcome huge obstacles. But thanks to the ingenuity of a large number of scholars, today there are several tools that allow us to identify and aggregate the poor, analyze the determinants of poverty and estimate the possible impacts of public policies on poverty. The study of the rich can benefit from these previous efforts. With few adaptations, the tools used to study poverty can be easily applied on the research about the rich.

Data, however, is still a problem. In the developing countries the existing survey questionnaires were not designed to correctly collect data on the wealth and income of the richest groups of the population, although many of these surveys have very long and detailed sections on the income and assets of the poor. This limitation, however, does not prevent research in these countries.

Even underestimating incomes and assets, the existing household surveys can bring us useful information about the rich. For instance, they allow us to seek answers to questions that are extremely important for theories of justice and, therefore, for egalitarian public policies: How fluid is the transition between the non-rich and the rich strata? Does regular education open to everyone the opportunity to become rich? How strong is the role of dynasties for generational mobility? What is the composition of the income of the rich? What are their consumption and saving patterns?

Most of these questions can be explored using data that is already available. Although not perfect, this data should be used because, as in any other field of research, a growing number of studies may justify improvements in data collection and lead to the development of better theories to understand social

inequality. And, of course, surveys are not the only source of data to study the rich. There are studies that lay hold of tax information, some government administrative records and data from companies, but most of them refer to highly developed countries. Similar studies in developing countries are still in their infancy.

Different from the “positive-sum game” promised by growth, redistribution has winners and losers and consequently is associated with conflicts of interest. Because of the interests it affects, it can hardly happen without imposition by the state. Therefore, redistribution has also a political dimension, in addition to the economic one. The rich have power and use it to gain or maintain economic advantages. However, what seems an obvious fact actually requires more detailed analysis so the mechanisms that link political power to wealth can be fully understood. The approach used by a large number of studies about social networks and social capital of the poor seem to be a promising path to understand where the political power of the rich comes from, how it relates to their wealth and how it can block redistribution initiatives.

It is true that there is some discomfort among economists about approaching the rich—surprisingly, since the study of *elites* has been consolidated as a field of political science for almost a century. But the fact is that to better understand inequality and what can be done to reduce it, the rich must be increasingly put on the research agenda of development studies. There is a need for information about who they are, what makes them rich, how they use their wealth, what happens with their consumption and investment when they are taxed, what are the relations they have with the state, how much political power they have and use, how they benefit from public policies and so on. By knowing more about the rich we will be better prepared to improve the life of the poor. ■

M. Medeiros: Poverty, inequality and redistribution: A methodology to define the rich. IPC Working Paper No. 18, 2006. <http://www.undp-povertycentre.org/newsletters/WorkingPaper18.pdf>

by Francisco H. G. Ferreira,
the World Bank

Inequality as Cholesterol

Like cholesterol, inequality can be either good or bad.

“Good” inequality rewards effort and leads to better performance, while “bad” inequality wastes human potential.

Credible decompositions of inequality into “opportunity” and “effort” components are increasingly feasible.

Clarity about different kinds of inequality might create some political common ground between the extreme modes of public opinion.

Outside Latin America, where most people view it as an unambiguously bad thing, there is no universal consensus that all inequality is unjust. This is true in academic and policy circles, as well as in the broader popular opinion. The World Values Survey once asked people in 69 countries whether incomes should be made more equal or, instead, whether larger differences were needed as incentives for individual effort. Answers could take any one of ten values, between those two “extreme” views. The distribution of responses was bipolar: 40 percent of respondents were evenly divided between the two extremes with no pattern in between.

The phrasing of the survey question itself was revealing. A positive view of inequality is usually associated with rewards and incentives for the application of *effort*. On the other hand, negative views tend to be stronger if the inequalities in question involve *opportunities*. Many people might be less offended by inequality they see as caused by differences in work habits and personal responsibility, than by inequality attributed to differences in initial life chances, due to factors such as gender, race or family wealth.

The concept of inequality of opportunity has a long and distinguished history. Franklin D. Roosevelt once stated that “We know that equality of individual ability has never existed and never will, but we do insist that equality of opportunity still must be sought.” Economists like John Roemer have suggested that equal opportunities would be attained in a situation where individual *advantage* is independent from circumstances—exogenous attributes over which individuals have no control, such as family background, place of birth, etc. In the words of Vito Peragine:

“according to the opportunity egalitarian ethics, economic inequalities due to factors beyond the individual responsibility are inequitable and to be compensated by society, whereas inequalities due to personal responsibility are equitable and not to be compensated.”

Such a decomposition of observed inequalities into a component due to pre-determined circumstances and another due to individual effort might be helpful in a number of ways. Clarity about the different kinds of inequality might create some political common ground between the extreme modes of public opinion. It might also help shed new light on the muddled debate about the relationship between inequality and growth. Perhaps one reason why the empirical evidence on the causal effect of past income inequality on subsequent economic growth is so ambiguous is that there really are two offsetting effects: while “good” inequality rewards effort and leads to better performance, “bad” inequality wastes human potential by denying certain groups the opportunity to invest in themselves. Like cholesterol, there may be more than one kind of inequality.

The distinction may even help policymakers choose between more and less efficient forms of redistribution: policies that reduce inequality of opportunity affect the premia to different *predetermined* circumstances, and so should give rise to fewer incentive problems. Policies that attack outcome inequalities by taxing the fruits of effort, rather than by leveling the playing field, are likely to be costlier. On the other hand, there may be a danger in overstating the conceptual differences. Today’s outcomes clearly affect tomorrow’s circumstances. Large

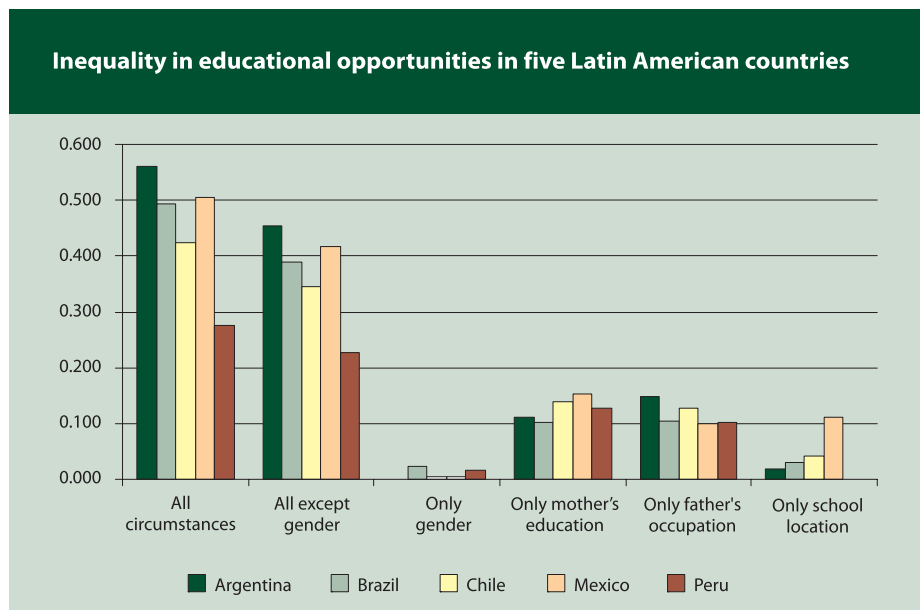
permissible inequalities arising from differences in efforts in one generation may lead to morally unacceptable inequalities in opportunity for the next.

Be that as it may, a practical problem with this concept is that inequality of opportunity could not be measured until recently. Given the perils and pitfalls of household surveys, it seemed challenging enough just to get the measurement of income inequality right. How was one to capture the distribution of “opportunities”, which by definition are potential, rather than actual, in nature?

Roemer’s distinction between circumstances and efforts as determinants of advantage has helped considerably. Recent studies have attempted to quantify the share of inequality that might be attributable to economically exogenous circumstances. Most of these studies share the same basic approach: they select a number of observable circumstance variables like gender, race, place of birth and family background; divide the population into groups that have identical circumstances; and calculate the share of total inequality which is accounted for by inequality between the groups. This share is a measure of inequality of opportunity.

Two challenges come immediately to mind: (i) researchers do not observe all income determinants—some inequality is always due to unobserved efforts and circumstances, and there is no way to distinguish between those; (ii) these unobserved variables may be correlated with their observed counterparts, making it difficult to identify the true individual effects of each observed circumstance. A study of male earnings inequality in urban Brazil uses a simulation approach to help address the second problem; it measures the opportunity share of inequality corresponding to the effect of five observed circumstances, namely race, place of birth, father’s occupation, mother’s education and father’s education. Between 10 and 37 percent of observed earnings inequality could be attributed to differences in opportunities, driven solely by these five characteristics.

The same study recognizes two channels though which circumstances can affect



Note: Each bar corresponds to the between-group share of total inequality for each partition, using a measure of test-scores in the PISA 2000 mathematics examination. NB: Peru lacks school location data.

outcomes. There can be a direct impact, as when two equally productive workers receive different pay, because of race or gender differences. But there can also be an indirect impact, as when a person from a disadvantaged background exerts less effort, often as a result of the rational expectation of future discrimination. On average, the study found that 40 percent of the overall effect of circumstances on earnings inequality operates indirectly—through differences in the distribution of efforts conditional on circumstances.

Earnings and incomes are not the only advantages a person might enjoy. Cognitive achievement arising from education is another example of an important outcome that is affected both by individual effort and by initial circumstances. An ongoing study of student achievement in standardized math tests for five Latin American countries finds that a sizable proportion of variation in educational achievement can be associated with unequal opportunities. For the four countries with complete data (Argentina, Brazil, Chile and Mexico), 43-56 percent of total variation is due to inequality between groups defined by the gender of the child; the location of the school; mother’s education and father’s occupation. When individual attributes are considered separately, the family background variables (father’s occupation and

mother’s education) play the larger role. Consistent with what we know about gender and schooling in Latin America, the gender of the student is of almost no relevance. Spatial differences are still important, particularly in Mexico.

A cross-country comparison is also informative. There is no direct correspondence between the overall levels of inequality in test scores and their opportunity shares. Mexico, for instance, has approximately half of Brazil’s inequality in test scores, but a greater opportunity share. There are also differences in the salience of specific circumstance variables: whereas mother’s education is the most important in Mexico, father’s occupation dominates in Argentina.

While the findings for education are preliminary, taken together with the earlier results on earnings, they do suggest that credible decompositions of inequality into “opportunity” and “effort” components are increasingly feasible. Just as distinguishing between good and bad cholesterol is important in choosing the best policy for your heart, this distinction may become relevant for choosing what inequalities to combat, and how best to do so. ■

F. Bourguignon, F. Ferreira and M. Menéndez (2003): *Inequality of Outcomes and Inequality of Opportunities in Brazil*, World Bank Policy Research Working Paper 3174. <http://econ.worldbank.org/docsearch>

by Shubham Chaudhuri and
Martin Ravallion, the World Bank

Good and Bad Inequalities in China and India

Both China or India have been influenced by and have generated both “good” and “bad” inequalities.

Inequality is rising, but India has not yet had the same trend rise in inequality as China.

Poverty in both countries is now less responsive to economic growth and is becoming more responsive to rising inequality.

If the problem is not addressed, the high growth rates may not be maintained, affecting trade and growth elsewhere.

Addressing it may involve some short-term costs to growth, although redressing the bad inequalities would actually be good for growth.

Aggregate economic growth is rarely balanced across regions or sectors of a developing economy, and neither China nor India is an exception. The post-reform pattern of growth has not been particularly pro-poor in either country. It has been uneven geographically, sectorally and across households. Because the more rapid growth of both countries has been so uneven in these dimensions, it has sometimes brought disappointing outcomes in terms of progress against income poverty and other dimensions of well-being.

In China, growth in the primary sector (primarily agriculture) did more to reduce poverty and inequality than growth in either the secondary or tertiary sectors. In India, with higher initial inequality in access to land than China, agricultural growth was less important than tertiary sector growth. In both countries, there has been a marked geographic unevenness in the growth process, with numerous lagging regions, including some of those that started off among the poorest.

Income inequality is rising, although India has not yet experienced the same trend increase in inequality that China has seen. The Gini index of income inequality for China rose from 28 percent in 1981 to 41 percent in 2003, though not continuously, and more in some periods and provinces. In the case of India, one finds that the Gini index rose in the 1990s, although the increase was less pronounced than in China. However, it is too early to say if India is undergoing a trend increase in inequality similar to what China has experienced. As can be seen from the figure, rising inequality in India is seen to be a recent phenomenon. Indeed, there is no statistically significant trend increase in consumption inequality in India up to the early 1990s.

Perceptions “on the ground” that inequality is rising markedly in India do not appear to sit easily with the impression given by the figure. Popular opinion can be mistaken, but nor are the data perfect. The survey-based numbers may well understate the relative gains to the rich, and that is consistent with the evidence from tax returns. The visible changes in consumption patterns and lifestyles that the rich have achieved may well not be reflected properly in the survey-based inequality measures. Also, and possibly more importantly, the perception of sharply rising inequality in India may well reflect rising absolute inequality, as reflected in the absolute gaps between the rich and the poor, as distinct from the proportionate gaps. There is evidence that many people view inequality in absolute terms rather than relative terms

Poverty in both countries is not becoming any more responsive to aggregate economic growth and is becoming more responsive to rising inequality. India’s poor did not start the reform period with the same advantages as China’s poor, in terms of access to land and education.

Persistent inequalities in human resource development and access to essential infrastructure within both countries, but probably more so in India, are clearly impeding the prospects for poor people to share in the aggregate economic gains spurred by reforms. The geographic dimensions of their inequalities and the associated disparities in fiscal resources and governmental capabilities loom large as policy concerns for both countries.

In the future, it will be harder for either country to maintain its past rate of progress against poverty without addressing the problem of high and

rising inequality. However, it is not particularly useful to talk about “inequality” as a homogeneous entity in this context. Policy needs to focus on the specific dimensions of inequality that create or preserve unequal opportunities for participating in the gains from future economic growth.

We make a crucial distinction between good and bad inequalities—drivers and dimensions of uneven growth that are good or bad in terms of what they imply for how the living standards of poor people evolve over time. We argue that the post-reform development paths of both India and China have been influenced by and have generated both types of inequalities.

Good inequalities are those that reflect and reinforce market-based incentives that are needed to foster innovation, entrepreneurship and growth. Scattered evidence suggests that the rise in inequality with the introduction of market reforms in both India and China is at least in part a reflection of newly-unleashed market-based incentives at work, in contrast with the earlier period of artificially low levels of inequality brought about by regulatory distortions and interventions that suppressed incentives for individual effort and innovation.

There are two key dimensions of bad inequalities. The first relates to location in the presence of externalities, impediments to mobility and heavy dependence of local states on local resources. These features can generate geographic poverty traps whereby living in a well-endowed area entails that a poor household can eventually escape poverty, while an otherwise identical household living in a poor area sees stagnation or decline. This is one possible reason why initially poorer provinces have often seen lower subsequent growth.

The second dimension of undoubted importance relates to inequalities in human resource development—often linked to credit market failures on the demand side but also reflecting governmental failures in service delivery. The rising returns to schooling and increasing dispersion of wages represent



good inequalities because they reflect freer labor markets with increased incentives for work and skill-acquisition. But naturally, those with relatively little schooling and few assets, or little access to credit are less able to respond to these incentives and are less well positioned to take advantage of the new opportunities unleashed by market-oriented reforms. And thus, inequalities in human capital are ‘bad inequalities’ in that they have retarded poverty reduction through growth in both countries.

While both countries need to be concerned about the bad inequalities, we suspect that it is China where the near-term risk that rising inequality will jeopardize growth and poverty reduction is greater. Arguably, the Chinese authorities have been able to compensate for rising inequality by achieving high growth rates; by this view, it is the rising inequality that fuels growth in China, through the political economy of maintaining social stability. However, the emerging bad inequalities in China will make it harder to promote the growth that will be needed to compensate for those inequalities. Maintaining sufficient growth will require even greater efficacy of the policy levers used to promote growth.

Whether or not the problem of rising inequality is successfully addressed, there are likely to be implications for the rest of the world. If the problem is not addressed, then there is a risk that the high growth rates will not be maintained, with spillover

effects for trade and growth elsewhere. If it is addressed, and depending on exactly how this is done, there may be some short-term costs to growth, although redressing the bad inequalities would actually be good for growth. There may also be consequences for the pattern of trade, such as through a change in the sectoral composition of growth; for example, in both countries there appears to be potential for cash crop expansion, which would attenuate one important source of concern about rising inequality, and it can be expected that a large share of this expansion in domestic cash-crop output would be exported.

The new initiatives underway in both countries are probably steps in the right direction, although continuous evaluative research will be needed on the efficacy of these approaches relative to alternatives. There are important but poorly resolved issues concerning the appropriate balance between types of interventions. But an even harder challenge remains, namely to improve governance—capacity, accountability and responsiveness—notably (but not only) at the local level. If this challenge is left unmet, the ultimate efficacy of any of these initiatives will be in doubt. ■

Shubham Chaudhuri and Martin Ravallion: “Partially Awakened Giants: Uneven Growth in China and India” in *Dancing with Giants: China, India, and the Global Economy*, edited by L. Alan Winters and Shahid Yusuf, World Bank, 2007. See also World Bank Policy Research Working Paper 4069, Nov. 2006. <http://econ.worldbank.org/docsearch>

by Björn Gustafsson¹, Li Shi²
and Terry Sicular³

Inequality and Public Policy in China: Issues and Trends

China's recent economic growth performance is outstanding, and average incomes have risen fast.

However, the speed of increased income inequality, and its current level is also striking.

Poverty declined between 1995 and 2002, reversing past trends, while inequality in the wealth distribution rose.

Public policy needs to change the balance between the processes that reduce inequality and those that increase it.

In recent decades China's economy has grown more rapidly and in a more sustained fashion than that of any other country. As a result, most people in China have higher incomes, consume more and better goods, and live in better housing than ever before. Between 1988 and 2002, household income per capita on average nearly tripled in real terms. Also, life expectancy has increased, and education levels continue to rise.

With growth, however, has come a significant widening of income differences among households and individuals. Income inequality has risen from a relatively low level in the early 1980s to a level that is now considered high by international standards. Although increased inequality often goes hand in hand with economic growth and development, in China the speed with which inequality has increased, and the level to which it has risen, is striking.

Inequality is not necessarily a problem. Most would agree that past policies in China had excessively compressed personal income differentials, so some increase was expected. Inequality reflecting differences in effort, experience, skills, investments, and risk can be justifiable from economic and social standpoints.

Concerns arise, however, when incomes differ excessively in ways that reduce efficiency or violate accepted views of fairness and justice. In such situations inequality can erode social cohesion, generate social and political instability, and hinder economic growth. Concerns also arise if segments of the population are left behind, with insufficient resources to meet basic needs or entitlements.

For most of the reform period, China's economic policies have placed highest priority on growth and tolerated

widening inequality. This approach was encapsulated in Deng Xiaoping's well-known statement that some people should be allowed to "get rich first." China's leaders have nevertheless been mindful of equity; the government has adopted a range of programmes for rural and regional poverty alleviation and for social insurance and welfare, mainly in urban areas, aimed at addressing particular distributional issues. These measures reflect concerns about the impact of income gaps on stability, as well as efforts by the Communist leadership to maintain political legitimacy.

Interest in China's income distribution extends beyond its borders. China is the most populous country in the world, and so changes in the level and distribution of its income hold implications for global inequality and poverty. When trying to understand changes in inequality and poverty on a global scale, then, knowledge of trends in China is essential.

China is also of general interest because its experience may provide evidence and insights relevant for understanding the relationship between inequality and development. The conventional wisdom suggests that rising inequality is a common phenomenon in early stages of development, but this relationship has been critically examined by economic researchers and is subject to ongoing debate. The experiences of formerly planned economies in Eastern Europe and Central Asia suggest that transition is also a major force at play. Some would argue that trade liberalisation is also a contributing factor.

The validity of concerns over inequality in China, and the sorts of policies appropriate to addressing those concerns, depends on the level and characteristics of that inequality. Empirical knowledge about the level and

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characteristics of inequality in China has improved greatly over time, but significant gaps remain. A lot is known about inequality among provinces and regions, but at the household and individual levels most studies examine inequality *within* urban areas or *within* rural areas. Studies on inequality nationwide are relatively scarce. Research on key facets of inequality, such as the distribution of wealth or the level of poverty, is spotty.

Gaps also exist in knowledge about particular groups, such as migrants, women, minorities, and the elderly. Most studies rely on data more than a decade old. In a rapidly changing environment like China's, effective policy requires more up-to-date information. Data remain an underlying constraint, limiting the scope and timeliness of available studies.

A major finding is that the level of income inequality in China remained relatively stable between 1995 and 2002. The forces generating more inequality have been offset by emerging equalising processes including: rising off-farm wage employment in rural areas, convergence in household per capita income among provinces in eastern China, and widely shared macroeconomic growth. Yet, disequalising forces continue. The large urban-rural income gap increased and became an even more dominant source of overall inequality. Education has emerged as an important factor underlying inequality.

Poverty, reversing past trends, declined between 1995 and 2002. This encouraging trend in poverty was accompanied by rising inequality in the distribution of wealth. The level of wealth inequality, however, was not overly high by international standards.

Including rural-to-urban migrants in the calculations changes measured levels of inequality and poverty in China, but the impact is relatively modest; inequality declines and poverty increases. Although their income falls between that of the urban and rural groups, migrants have the highest rate of poverty. Migrant poverty is higher than that of registered urban households. It is also higher than rural poverty, mainly because the urban poverty line is higher than the rural one.

China's path of economic reform and transition since the late 1970s has been marked by a wide range of significant reform measures, most aimed at promoting growth and development. A major theme of the reforms since the late 1980s has been to expand the role of markets. In the early reform period markets were encouraged to emerge alongside planning in what was known as the "dual-track" system, and the reform policies focused on markets for goods. Planning continued to replace markets for production factors—land, labour, and capital. The 1990s saw the continued dismantling of the system of administrative planning and pricing and the improved functioning of markets for goods and services. By the mid-1990s planned allocation had been eliminated for almost all consumer goods. In addition, at this time the government began to take steps to develop markets for production factors.

The urban labour market reforms have given enterprises more freedom to lay off and hire workers. This, together with the loosening of restrictions on rural-to-urban migration, has allowed labour markets to function more fully. Barriers to such migration were put in place during the planning period and embodied in the household registration system.

During the 1990s factor market development was also furthered by ownership reforms. Small and medium-sized state-owned enterprises were privatised, converted into shareholding operations, or leased; for larger state-owned enterprises the government initiated a programme of governance reform and corporatisation. Such measures have made enterprises in both rural and urban areas more market oriented, with implications for their employment and other behavior. The expansion of shareholding and private enterprise has provided an impetus for the expansion of financial and capital markets. The urban housing reforms are another aspect of factor market reforms in the 1990s. In a remarkably short time they have created, from scratch, markets for private real estate in urban areas.

In a market environment, earnings depend on households' endowments of

factors such as labour, entrepreneurial ability, education or skills, experience, and physical or financial assets, as well as on the prices or returns of these endowments and other factors. The expansion of markets during the 1990s thus led to greater differentiation of incomes on the basis of household endowments and characteristics. Also, with the expansion of markets for financial instruments and real estate, the importance of income from assets increased, although not necessarily equally among households.

The process of factor price equalisation, however, is as yet incomplete. Despite continued market reform in the 1990s and early 2000s, and while markets for most goods and many services are now well established, factor markets remain fragmented and incomplete. Thus, for example, worker mobility among urban residents in China is higher than before, but still much lower than in market economies. Unemployment and other forms of non-employment have emerged, reflecting frictions and lack of market clearing in urban labour markets. This has affected the urban income distribution; poverty is no longer a solely rural phenomenon.

Our findings warn against making simple predictions from one period to the next. We have found processes working toward more inequality as well as those working toward less. Public policy can influence both types of processes and alter the relative balance between them. Noteworthy here are policies affecting labour mobility, especially between rural and urban areas, education, public finance, and the provision of social insurance and social welfare programmes. In view of the rising importance of asset ownership, steps to strengthen property rights and factor markets will also be of crucial importance.

Finally, policies promoting broad macroeconomic growth remain important so as to promote further progress toward the stage of development where the benefits of growth spread from leading sectors to the broader population. ■

B. Gustafsson, L. Shi, T. Sicular (Eds.):
Inequality and Public Policy in China.
Cambridge University Press, 2007.

IN TIME

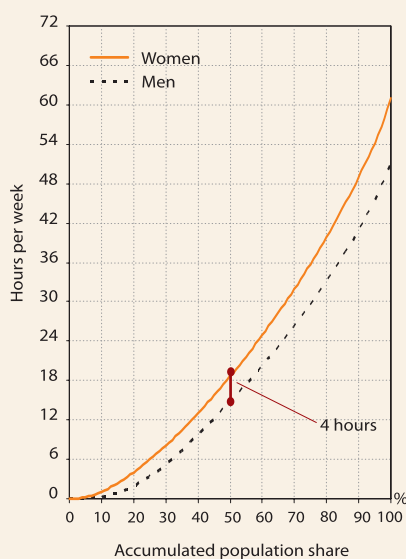
Studying individual time use can tell us much about the distribution of well-being among population groups, which is useful for public policy and poverty reduction strategies.

Women work more than men, but their labour is mostly unpaid; thus they do not achieve more economic power as a result.

However, most inequality in time use is located within, not between gender groups.

For poor people, escaping income deprivation often means increasing time deprivation.

Workload distribution by gender



Source: IPC Working Paper No. 34, page 6.

Time Use, Inequality and Well-being

by Joana Costa, Marcelo Medeiros and Rafael Guerreiro Osório,
International Poverty Centre

The way people use their time has direct implications for their well-being. Time is particularly important because it is a scarce resource and virtually all human activities are time consuming; allocating time to one activity requires restricting time for other activities. The study of the distribution of individual time allocations can tell us much about the distribution of well-being in a population.

Take, for instance, overwork, which has a clear impact on a person's life. Excessive work prevents people from living a reasonable family and social life and can even affect seriously the health of an individual when it does not allow for adequate rest. Work, here, does not mean only paid work but also unpaid domestic work. It is easy to imagine that excessive domestic work can negatively affect the schooling of children or the labour market participation of women.

One can always argue that there is no such thing as reduction of well-being due to excessive work or any other activities since time is allocated according to choices and rational individuals will always choose what is best for them. Nevertheless, for the moral judgments involved in the issue, what matters is not which choices are made but the restrictions affecting these choices. In order to understand these restrictions the distributional analysis is crucial.

The figure illustrates that time allocation is not only a matter of individual choice. It shows a generalized Lorenz curve—that is, a Lorenz curve in which the values were multiplied by the mean of the distribution—of time spent working, be it paid or unpaid work, by urban adult women and men in Bolivia, using data for 2001. As the populations are ordered according to the amount of total time spent at work, these curves should be interpreted as the cumulative workload along the population of each gender.

The first thing this figure shows is that the curves for men and women are very distinct. This means that there is a clear differentiation by gender in the patterns of allocation of time to work. It becomes hard to sustain that free choice prevails here since in a free allocation—free from social roles and other constraints—there would be no reason for such a clear group differentiation.

Second and perhaps more relevant is that the curve of women always lies above that of men. This dominance of the curves means that the workload of women is higher than that of men, regardless of the point of the distribution we assess it. Such a sustained difference gives no room to doubt: there is a clear gender division of labour in the Bolivian society leading women to work more than men. Some aspects of this division of labour have implications to other spheres of life. As shown in the bar chart (page 27), in many societies, particularly in the developing world, men systematically participate more in the labour market but less in unpaid domestic activities. This leads us to the conclusion that women work more than men but the fruits of this work do not necessarily translate in more economic power.

Using gender as an example of the relevance of studying inequalities in time allocation was not a random choice. Over the last twenty years feminist economists have correctly insisted on the need of incorporating time use information in the system of national accounts. Several non-market activities such as those related to the reproduction of the labour force—child care, the preparation of food, among others—are valuable for the

society but are not accounted as such. Knowing the time spent on them is a first step to evaluate this hidden contribution of women to economy and society. National accounts are based on market prices and there are obvious difficulties to give prices to non-market labour but despite the obstacles the fact is that the incorporation of time use in the accounts gives visibility to this important but often neglected part of the economy.

National accounts, however, focus on aggregates. Equally important is to fully understand the distribution among individuals and social groups underlying these aggregates. The concern with time brought about by the desire of giving women recognition for their non-market contributions can incorporate the concern with the reasons why some people work so much and others so little. As in the case of income distribution analysis, there are several reasons to look at time allocation inequalities and studying them can contribute to explaining inequalities in other spheres of life.

In fact, gender is not the single determinant of inequalities in time allocation. As depicted by the arc of the generalized Lorenz curves in the figure (page 26), much of the total inequality is located not between, but within gender groups. Indeed, in the Bolivian example, a decomposition of the total workload inequality shows that only a small fraction of it can be related to the differences between men and women. Most of it is inequality among males and among females because both are very heterogeneous groups in terms of factors such as family composition, class position, and so on. As an example, richer women can buy domestic services on the market, and therefore are less prone than poorer women to suffer from overwork due to a double-shift of market and non-market activities.

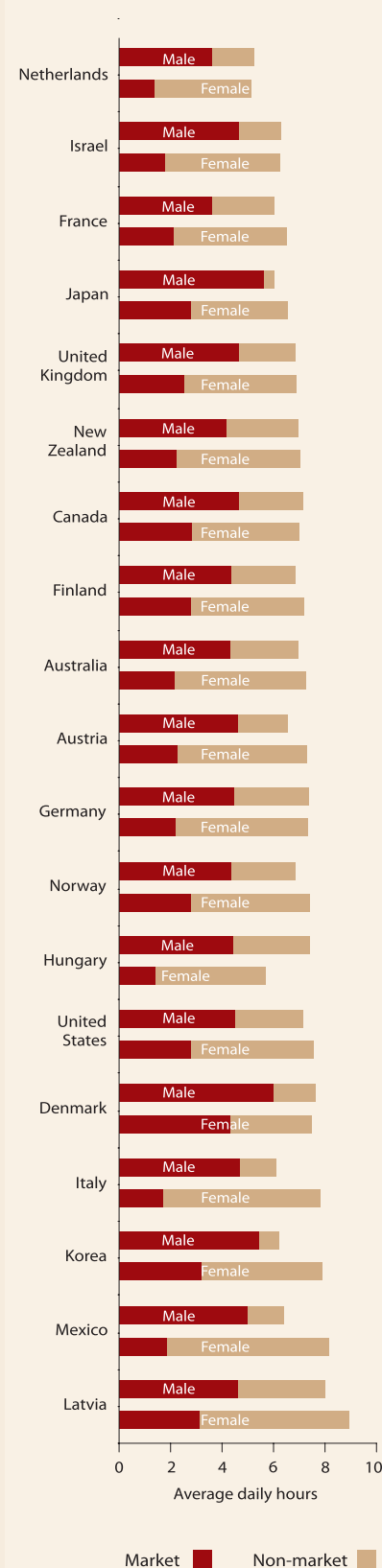
Besides gender, time use analysis can also contribute to a deeper understanding of poverty and other issues. For pragmatic reasons, a typical income poverty study equates higher income with more well-being. This seems to be the best feasible approach with limited data, but it should be noted that the gains in well-being from additional income may vary depending on how this income is earned. Earning income has costs and time is part of these costs. For the individuals more work means more welfare coming from the commodities their wages can buy but, on the other hand, less welfare coming from other sources, such as family activities. There is a trade-off between time deprivation and income deprivation; in other words, between time poverty and income poverty.

A simulation exercise using Brazilian data for 2004 shows how important this trade off can be. Using a simple decile-based threshold to define as poor those who belong to the two bottom deciles of the *per capita* household income distribution, we depart from an income poverty incidence (headcount ratio) of 20 percent of the entire population. This value ignores the amount of time spent in paid and unpaid work—that is, total work. However, reducing the amount of hours of unpaid work to limit total work to 60 hours per week increases the incidence to 21 percent. Going the other way around, reducing paid work hours to limit the total workload at 60 hours per week increases the incidence ratio even more, to 25 percent. Such simulations are always imperfect and depend on assumptions but, in rough terms, this means that about one fifth of the poorest people in Brazil are escaping income deprivation by falling into time deprivation.

A better understanding of the dynamics of time allocation can be very useful for public policies. It can be used to enhance strategies for reducing inequalities and achieving the MDGs. For instance, publicly run or subsidised *crèches* and pre-schools may contribute to releasing female labour force to the market, thus reducing poverty and increasing economic autonomy of women; they may also reduce overwork among both men and women. Similar benefits may be accomplished in poor countries, where women and children spend huge amounts of time on fetching water and firewood, by extending public water supply, rural electrification and fuel subsidies and/or improved fuel-efficient stoves. ■

Marcelo Medeiros, Rafael Guerreiro Osório, Joana Costa: *Gender Inequalities in Allocating Time to Paid and Unpaid Work: Evidence from Bolivia*. IPC Working Paper No. 34. April 2007.
<http://www.undp-povertycentre.org/pub/IPCWorkingPaper34.pdf>

Time use in 19 countries



Source: UNDP (2006). Human Development Report 2006, page 379. New York: UNDP. (Selected countries).



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