Bhalla Versus the World Bank: An Outsider’s Perspective

Jeromin Zettelmeyer

Surjit Bhalla
Imagine There’s No Country—Poverty, Inequality and Growth in the Era of Globalization

NOTWITHSTANDING Joe Stiglitz’s tenure as Chief Economist of the World
Bank, few would accuse the Bank of
aiding and abetting the antiglobalization
movement. Surjit Bhalla, a Delhi-
based economist and former Bank
researcher, does just that. His new book is a frontal attack on the Bank’s
research on poverty, growth, and
income inequality, particularly its mea-
urement of absolute poverty around
the world. Not surprisingly, the Bank’s
poverty guru, Martin Ravallion, has
issued a blistering response to Imagine,
triggering an equally blistering rejoin-
der from Bhalla.

Bhalla makes five significant claims.
• First, while the Bank’s World Development Report 2000/2001:
Attacking Poverty states that the per capita incomes of the richest and poor-
est countries have significantly diverged over the past three decades, Bhalla
claims that the income “ratio of richest
to poorest countries declines markedly
between 1960 and 2000—from 23 to
9.5. This is not divergence.”
• Second, he argues that growth is
accompanied by a deterioration in
income distribution within countries,
whereas conventional wisdom says that
inequality within countries has stayed
about the same.
• Third, Bhalla claims that world-
wide inequality peaked in 1973 and
has since declined. According to con-
ventional wisdom—at least as inter-
preted by Bhalla—the worldwide
distribution of individual incomes
since 1970 has deteriorated.
• Fourth, he estimates a sharp
decline in absolute poverty (the pro-
portion of people living on less than
$1 a day in terms of 1993 purchasing
power), from 30 percent in 1987 to
13.1 percent in 2000. The World Bank
estimates a much milder decline, from
28.7 percent in 1987 to 22.7 percent in
1999.
• Finally, Bhalla argues that growth
in the developing world has a much
greater impact on poverty than previ-
ously estimated. While the Bank’s posi-
tion is that growth is good for the poor
but that eradicating extreme poverty
will require extra measures, Bhalla
concludes that “growth is sufficient,
period.”

So who is right? Or, less categorically,
how can Bhalla’s and the Bank’s claims
be reconciled? In the remainder of this
review, I look at each claim, except for
within-country equality, which is not
central to Bhalla’s overall message.

Converging global incomes?
The first point of contention—
divergence or convergence—is easy to
resolve. The World Bank uses the term
divergence to describe the trend in the
distribution of unweighted per capita
incomes across countries. This is the
standard use of the term, and there is
no doubt that, by this definition, coun-
try income levels have diverged.
Bhalla’s numbers refer to population-
weighted per capita income levels,
which yield completely different results
because developing Asia—the world’s
fastest-growing region for the past
40 years—is home to over half of the
world’s population.

Should country growth rates be
weighted by population to determine if
international income levels diverge or
converge? It depends. If the purpose is
to study economic growth, the natural
units are countries (or sometimes
regions), and not individuals or
population-weighted countries.
However, if one is studying conver-
gence or divergence in global individ-
ual incomes, population-weighted per
capita incomes are certainly more
informative than unweighted per
capita incomes. Changes in global
inequality can be attributed to within-
country, pure cross-country, or aggre-
gation effects that result from the fact
that some countries are much larger
than others. Population-weighted
income averages merge the last two.
Bhalla is right to emphasize that aggre-
gation effects matter, but his use of the
term convergence, usually understood
to refer to the pure cross-country
effect, is misleading.

This brings me to the next point of
contention—namely, Imagine’s find-
ings on world income inequality. On
closer inspection, these turn out to be
less contentious than Bhalla suggests.
Several previous studies support his
claim that population-weighted mea-
sures of global income inequality, such
as the variance of population-weighted
log GDP per capita, have improved
since the 1970s. Bhalla’s contribution is
to point out that this improvement
extends to world individual income
inequality, which takes into account
changes in within-country inequality.
This mildly contradicts previous find-
ings by François Bourguignon and
Christian Morrison, who found that
world individual income inequality
after 1970 was roughly unchanged,
with some measures showing a slight
increase and others a slight decrease.
(It also contradicts a paper by Branko
Milanovic, who compared worldwide
individual income inequality in 1988
and 1993 and found a sharp increase;
hower, the standard errors around

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According to Surjit Bhalla's poverty estimates, by 2000, we would have overshot the UN Millennium Development Goal of halving the 1990 poverty rate 15 years ahead of schedule. His estimates are so high that they are consistent with no change in inequality. To be fair, the World Development Report 2000/2001 highlights the one indicator in Bourguignon and Morrisson that shows an increase in this period, so Bhalla can perhaps be forgiven for dramatizing the difference between his finding and “conventional wisdom.”

Bhalla’s finding on world individual income inequality has recently been corroborated in a study by Xavier Sala-i-Martin. It is not entirely clear what explains the difference between Bhalla’s and Sala-i-Martin’s results on the one hand, and Bourguignon-Morrisson’s on the other. All three papers use income and distribution data from similar sources.

How fast has world poverty declined? The one truly dramatic difference between conventional wisdom and Imagine is in the poverty estimates. One implication of Bhalla’s results is that we would not have to worry about attaining the UN Millennium Development Goal of halving the 1990 poverty rate by 2015 because the target of 14.5 percent would have been overshot by 2000—15 years ahead of schedule! The Bank sharply disagrees.

What accounts for this difference? There seem to be two main factors. The first is the way individual incomes are converted into U.S. dollars. The Bank uses a set of consumption-based purchasing power parity (PPP) exchange rates (the local cost of a representative bundle of consumption goods divided by the cost of the same bundle in the United States) estimated by Bank staff for 1993. Bhalla uses PPP exchange rates for GDP from several published sources. These data differ for some countries—in particular, India, which looks about 17 percent richer in U.S. dollars when GDP PPPs are applied. India has a huge population, with many people living close to the poverty line, so this difference has an appreciable effect on the global poverty count.

The second and more significant discrepancy stems from the use of national account data (Imagine) rather than survey mean data (the Bank). Expenditure and income distributions obtained from surveys are typically expressed in quintile shares (for example, the share of total consumption consumed by the poorest one-fifth of the population). To determine the consumption and income levels for each quintile, one needs a consumption or income total, which can be obtained either from the survey itself or from the national accounts. But the survey figures for mean income and consumption tend to be substantially lower than their national account counterparts. The reasons include somewhat different definitions of consumption, the fact that household consumption in the national accounts is often estimated as a residual, and data collection problems—for example, the refusal of wealthy households to participate in surveys.

From the perspective of measuring poverty reduction, the discrepancy between national account numbers and their survey counterparts is not a problem as long as their ratio is unchanged over time. Unfortunately, the discrepancy has been growing in many countries, particularly in developing Asia, where consumption growth since the mid-1980s has been 25-40 percent lower when measured by survey data than by national account data (see Ravallion, 2001). Since Asia was home to about three-fourths of the world’s poor in the late 1980s, the choice of data has a large impact on the measured reduction of worldwide poverty in the past 15 years.

The discrepancies between the Bank’s and Bhalla’s poverty numbers thus reflect methodological choices. Angus Deaton, a highly respected expert in poverty measurement, looked at these choices in a recent paper on monitoring progress toward the Millennium Development Goals. Deaton’s views carry weight not just because of his academic stature but also because he has, in the past, complained about lack of external access to the data underlying the Bank’s calculations (see his article in F&D, June 2002) and taken the view—rather like Bhalla—that the World Development Report 2000/2001 “was much influenced by nongovernmental organizations and groups opposed to globalization.” On the critical methodology issues, however, he ends up siding with the Bank, particularly in favoring the use of survey mean data.

The key idea is that surveys are likely to underestimate consumption associated with higher income levels. In that case, surveys will overstate the share of the poor in total income but underestimate mean consumption. If the latter is
used to compute the income levels of the poor, the two errors will tend to cancel each other out. In contrast, applying the national account mean to a survey-based distribution of consumption will overstate the incomes of the poor, even if the national accounts get private consumption exactly right (see Ravallion’s reply to Bhalla for a nice arithmetic example on this point).

At any given time, one could perhaps offset this bias by adjusting the poverty line upward, as Bhalla proposes. But this does not help if the gap between survey mean and national account mean widens over time, as one would expect if the error in the survey is income-elastic. In addition, growth as measured by national account data may, in fact, be biased upward in many developing countries because errors that cause GDP to be underestimated—for example, the failure to count informal activities—are likely to decline as economies become richer.

How “pro poor” is growth? Finally, Bhalla claims, on the basis of two empirical exercises, that growth is much more “pro poor” than suggested by previous estimates. The first exercise involves regressing changes in the poverty head-count ratio on income growth multiplied by a factor, which he calls the “shape of the distribution elasticity,” that captures the density of the income distribution at the poverty line. Bhalla estimates a regression coefficient of about unity. But this regression is almost meaningless because the true regression coefficient is unity by construction. (Changes in the poverty ratio can be decomposed into poverty changes attributable to average income changes for a given distribution of income and poverty changes resulting from changes in the income distribution. Bhalla regresses the change in the poverty ratio on the first of these two terms. The fact that the estimated coefficient is approximately unity tells us merely that the unobserved portion of the identity, which winds up in the error term, is not highly correlated with the right-hand-side term.) Nor is it surprising that Bhalla gets a larger coefficient than previous researchers who estimated the average impact of growth on the poverty head-count ratio. These regressions amounted to estimating the average shape of the distribution elasticity, which Bhalla constructs directly from individual income distributions and which he shows to be lower than unity on average.

Bhalla’s second exercise is to ask whether the incomes of the population that was considered poor in 1980 (that is, the bottom 44 percent) grew faster between 1980 and 2000 than the incomes of the rest of the population (that is, the top 56 percent). This exercise is much more meaningful: it amounts to looking at changes in the distribution of world income from an angle that is relevant to absolute poverty. Despite great variation among countries and regions, growth in the developing world as a whole has definitely been pro poor by this standard. According to Bhalla, consumption by the world’s poor in 1980 had doubled by 2000—driven largely by China and India—while consumption by the non-poor had risen by only about 40 percent. But, again, these numbers come from consumption growth data from the national accounts and are thus subject to the same criticism as Bhalla’s poverty declines. If surveys exaggerate the proportion of consumption that goes to the poor and if this bias worsens over time, as Deaton argued, then applying national account growth rates will make it look as if the incomes of the poor rose faster than they really did.

There are thus good reasons to doubt Imagine’s key claims on poverty measurement and on the link between growth and poverty reduction. Some sections seem confused, particularly in the chapter on pro-poor growth. And although some of Bhalla’s methodology battles are critical, others are mostly spurious, involving arguments that were well understood by previous researchers—for example, that population weighting is important to assess how cross-country growth trends affect world inequality, that the shape of the initial income distribution matters for the effect of growth on the poor, and that survey and national accounts data should not be mixed in pro-poor regression exercises.

To read or not to read?
This is not to say that Bhalla’s book is without merit. Most important, it highlights the uncertainty and potential lack of robustness of poverty estimates. It may well be that the Bank’s methodology is preferable to that proposed by Bhalla. Nevertheless, one hopes that, in the future, the Bank will explain how its results are affected by methodology and data choices, on which there can be reasonable disagreements. As to choosing between survey data and national account data, one can prefer the former but still recognize that the arguments are not all on one side, as Deaton himself did in an earlier article on poverty measurement. It is important to acknowledge that national account data yield different results and to show the extent of the differences, perhaps after correcting for upward biases in the national accounts when there is an academic consensus that they exist.

There is also merit in Bhalla’s repeated warnings on methodological pitfalls. While they do not apply to much of the academic literature he criticizes, they do apply to the way the
results from that literature are sometimes interpreted. For example, in a well-known paper available on the World Bank’s poverty monitoring website, Shaohua Chen and Ravallion discuss the “disappointing” rate of poverty reduction in the 1990s in a manner that comes strikingly close to Bhalla’s cliche. National accounts numbers on consumption growth are used to interpret survey-based poverty trends. A sharp global rise in individuals’ income inequality is accepted as fact and attributed to rising inequality between countries based on trends in unweighted per capita income across countries. To be fair, in the published version, Chen and Ravallion substantially revised this section of their paper. Nevertheless, the example goes to show that Bhalla is not just pursuing a straw man, as claimed by Ravallion in his response to Imagine.

In sum, Bhalla’s Imagine is both problematic and useful. It will irritate those with a taste for dispassionate, balanced arguments and delight those who admire gutsiness (this reviewer falls into both categories).

After the methodological dust has settled, the overall picture on global growth, poverty, and inequality that emerges from the debate between Bhalla and the Bank seems fairly clear. Per capita income and consumption growth in the past two decades has been close to zero in all regions of the developing world except Asia, which has grown very quickly. Because Asia housed more than three-fourths of the world’s poor, the world poverty rate has fallen substantially (by about 0.7 of a percentage point a year since 1990, according to conservative Bank estimates). For the same reason, world individual income distribution has probably improved. But the lack of regional growth outside Asia is disturbing, and even the most optimistic projections predict large and stagnating poverty levels in Africa in the foreseeable future.

References


providers, the active role of the media in highlighting the findings, and the confidence this process gave to other civil society organizations in demanding improvements in public agency performance. The book points to the potential of citizen monitoring of services and of appropriate information in setting performance benchmarks and creating competition, even between the providers of monopoly municipal services.

What did the Bangalore report cards achieve? Paul provides both a candid assessment of their immediate impact on service quality (there were improvements, though they were not easy to attribute solely to the report cards) and insights into their potentially more important, longer-term impact on citizen voice and agency interest in becoming more accountable. Citizen groups are more likely to take collective action if they have information that is credible and hard to dispute (in Bangalore, none of the concerned public agencies disputed the findings). Independent media can be crucial in this process. Report card findings can bolster reform-minded bureaucrats and politicians wanting to change institutional incentives, improve motivation for frontline providers—for example, doctors, nurses, teachers, and road construction crews—and promote service innovations.

But the book also hints at how political leaders ultimately hold the key to service improvements. In Bangalore, citizen feedback sometimes had less impact than it might have had because reform-minded agency directors were transferred to different jobs. On the positive side, a new state chief-minister formed a public-private partnership—the Bangalore Agenda Task Force—to respond to sharply rising concerns about the city’s eroding infrastructure. With high-level political backing, he began to change incentives within government for improved local service delivery. Some of India’s political parties have shown considerable interest in the findings of a more recent survey of public services in 24 Indian states carried out by the Public Affairs Centre because the results show that states (with different ruling parties) are clearly performing differently on a number of services (these “millennial” surveys are not covered in this book, but information on them is available on the center’s website, www.pac.india.org). Citizen report cards can make election agendas more specific so that political promises become more credible. And they can support those in civil society wanting to change the political incentives for improved service delivery.

Shekhar Shah
World Bank
World Development Report

Book notes

Robin Blackburn

Banking on Death, or Investing in Life
The History and Future of Pensions

In this comprehensive and wide-ranging study of pensions, Blackburn offers a panoramic view of the history and future of pension provision. In this important and disturbing book, he writes that the impact of rising longevity and a falling birth rate is only now beginning to be felt on a global scale: at the close of the twentieth century, 69 percent of the world’s population was 65 or older. Although the aging society will generate increased costs, he believes that all age groups will gain if the new life course is properly financed. Drawing on the ideas of John Keynes and Rudolf Meidner, Blackburn proposes a public regime of asset-based welfare that could ensure secondary pensions for all and improve the pattern of economic development.

William C. Hunter, George G. Kaufman, and Michael Pomerleano (editors)

Asset Price Bubbles
The Implications for Monetary, Regulatory, and International Policies

The past two decades have been characterized by prolonged buildups and sharp collapses in stock, housing, and exchange markets in both developing and industrial countries. This asset market volatility has sparked intense debate in academic and policy circles over the appropriate policy response. This volume, which grew out of a conference jointly sponsored by the Federal Reserve Bank of Chicago and the World Bank Group, examines the causes, characteristics, and behavior of asset price bubbles. It attempts to offer policymakers a more complete picture of how they can be identified and what can be done to avoid them or, at least, minimize the havoc they wreak on the financial system and economy. Contributors include government officials, regulators, and academics and represent a wide range of views on the subject.