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Overview: New Results on Poverty, Inequality, and Growth in the Era of Globalization

According to received wisdom in the international community, we are told that during the past 20 years, the period of globalization, there has been a large increase in world inequality. I find the opposite to be true. Not only has inequality not increased, it has actually fallen, and by the end of 2000 was at its lowest level in 50 years. Moreover, by the end of this decade, the level of inequality is likely to be equal to that prevailing 100 years ago.

We are also told by the World Bank[1] that instead of convergence, or even conditional convergence, there has been divergence in the world economy. Translated, this means that poor countries have grown at a slower pace than rich countries. I reach the opposite conclusion. As a group, poor countries have grown more quickly. Further, if the unit of observation is not the poor country but the poor *individual*, then the growth rate has been considerably faster than ever before, and considerably higher than the growth rate in industrialized economies. The globalization period has been the golden age of development.

We are told that global poverty reduction has stagnated—that it was about 33 percent in 1985, 28 percent in 1987, 24 percent in 1998, and 23 percent in 1999. Thus, over 14 years (1985-99), when the per capita incomes of poor countries[2] grew by 51 percent, the percentage of poor people

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1. The World Bank is the major source of information on levels and trends in absolute poverty. What is described as received wisdom on poverty has often been conveyed in, or by, World Bank documents. See *World Development Report*, 1980, 1990, and 2000.

2. The classification followed throughout the text is as follows: the industrialized world includes high-income Western nations and other high-income countries; and the developing

declined by only 10 percent. In the earlier preglobalization period of 1960 to 1975 (which included the oil-shock year of 1973), poverty declined by 13 percentage points, from 51 to 38 percent, and this at a time when per capita income increased by 47 percent. According to this view, then, the globalization period witnessed higher growth and a smaller decline in poverty—so there is no chance that globalization has been good for poverty reduction.

The reality is the opposite. Poverty not only declined from 1985 to 2000, but did so at a faster pace than at any time in world history. Using the popular $1-a-day poverty line, the percentage of poor people in the developing world declined by 25 percentage points from 1985 to 2000—from 37.4 to 13.1 percent.[3] From 1960 to 1975, the decline was considerably lower, at 8 percentage points.[4] During the previous *50* years, from 1910 to 1960, the decline was a comparable 22 percent.[5]

Can the World Bank's results on marginal poverty decline during the era of globalization—and especially marginal given the high growth rates in per capita income—be possible? Surely not. Yet the conventional wisdom is so called because it has passed several tests of credibility, and because the facts have been vetted at distinguished forums by international experts. Because prominent economists and other researchers have come to believe that the so-called globalization period of the past 20 years was not good for equality, growth, or poor people, these views have achieved the status of wisdom.[6] In this book, I claim that this "wisdom" is not only wrong, but manifestly so. At this point, the reader may say,

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world, or poor countries, are those that do not belong to the industrialized world or are not part of the former Soviet Union or in Eastern Europe. Four countries of Central Asia—Kazakhstan, Kyrgyz Republic, Mongolia, and Uzbekistan—are included in the "developing world" classification.

3. The World Bank estimate of 23 percent in 1999 is for a *lower* poverty line of $1.08 a day at purchasing power parity 1993 prices, from survey data; the estimates presented here are for a 39 percent higher poverty line of $1.50 a day, at 1993 prices, from national accounts data for consumption expenditures.

4. It should be emphasized that the closer one gets to the floor of poverty (0 percent), the more effort it takes. In other words, a 10-percentage-point movement from 50 to 40 percent requires considerably less per capita growth than a movement from 20 to 10 percent. See Bhalla (1988) and Asian Development Bank (2002) for the details and further discussion.

5. See Bourguignon and Morrisson (2001, table 1.0).

6. For an extended, and extensive, exposition of the antiglobalization view by a prominent economist and policymaker, see Stiglitz (2002). Some excerpts: "It has become clear not to just ordinary citizens but to policymakers as well, and not just to those in the developing countries but those in developed countries as well, that globalization as it has been practiced has not lived up to what its advocates promised it would accomplish. . . . In some cases it has not even resulted in growth, but when it has, it has not brought benefits to all . . . the net effect of the policies set by the Washington Consensus has all too often been to benefit the few at the expense of many, the well-off at the expense of the poor." (p. 20).

Table 1.1 Some new and different results for poverty, inequality, and growth in the era of globalization, 1980-2000

Topic	Previous results	New results
World poverty (head count ratio)	Level estimated to be 28 percent in 1987, 29 percent in 1990, and 23 percent in 1999	Level estimated to be 44 percent in 1980, 30 percent in 1987, 25 percent in 1990, and 13 percent in 2000
Millennium Development Goals (head count ratio)	Target of half the ratio observed in 1990 or 15 percent head count ratio to be reached by 2015	2015 target of less than 15 percent poor already reached, and exceeded, in 2000
World individual income inequality	Somewhat flat in the 1980s; significant worsening in 1988-1993	Large improvement in individual inequality; by end 2000, world individual inequality was at its lowest level in the post-World War II period
Intracountry inequality	Broadly constant as measured by change in quintile shares or inequality indices like Gini; one study (Cornia-Kiiski 2001), however, finds a significant worsening	Overwhelming evidence that intracountry inequality worsened
Growth (per capita income)		Developing-country average annual growth almost double that experienced by the industrialized world: 3.1 percent versus 1.6 percent
Propoor growth		If poor defined as fraction of population in 1980, then for each 10 percent rise in consumption by the nonpoor, consumption by the poor rose by 18 percent

''Surely, he can't be right.'' But I just might be. The facts that are presented, analyzed, and interpreted below speak for themselves. (See table 1.1 for a brief summary of some of the different results).

The Issues

Poverty, inequality, and growth are three subjects of major interest to development economists and policymakers in developing countries. These three subjects are studied in different orders by different people, with differing emphases. One's emphasis is perhaps an indicator of research interests, or the results obtained, or, for lack of a better word, ideology. My ordering is growth first, poverty second, and inequality a distant third. Many (including Marx) have it in exactly the reverse order.

But then came globalization, and the threesome became a foursome. What affects what? And did this new force represent good, or evil, especially where the already dismal fortunes of poor people were concerned? This book is about the evolution of policy concerns with respect to the threesome for the period after World War II, from 1950 to 2000, with special emphasis on the role of globalization.

But what is ''globalization''? For many, it is an undesirable force; for many others, it is a process that has been good for rich countries and terrible for poor nations. Above all, globalization is a phenomenon, a sequence of events, a pattern of technological progress. In the main, this progress has meant a stupendous decline in transportation costs; a massive reduction in costs of communication; a lowering of production costs;[7] a large increase in intercountry competitiveness; and a breaking down of barriers between countries—barriers of protection, of the flow of knowledge, and of the transfer and absorption of culture. Of major interest to many, and myself, are the consequences of this process. This book is about the economic fallout; the examination of cultural consequences (e.g., the proliferation of McDonalds) is best left to anthropologists and pop psychologists.

But when did globalization happen? Obviously, it is happening continuously, so giving it a precise date is empiricism gone bad, if not mad. For purposes of analysis, however, a ''structural'' break point is needed, not least because an assessment is needed to measure what happened during the periods before and after globalization. Most researchers time the advent of the new phase of globalization to the 1980s. Two favorite turning points are the beginning of the Uruguay Round of trade talks in 1983, and the fall of the Berlin Wall in June 1989. Another important candidate for dating this worldwide event is Mikhail Gorbachev's perestroika starting in 1984. No matter what criteria are used, the mid-1980s is the ''last'' date for the advent of globalization. This means that 1980 is a conservative starting point for the new ''era of globalization.''[8]

However, the following (as quoted in Beck 2000) should temper any exaggerated claims about the newness of globalization:

> [The] exploitation of the world market has given a cosmopolitan character to production and consumption in every country. . . . All old-established national

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7. This is why there has been very little world inflation for the past decade and why there will be very little for the next decade or so. As long as there are 1.3 billion Chinese and 1 billion Indians playing catch-up, it is a bit difficult to visualize world inflation.

8. See Rodrik (1997); Friedman (1999); and Clive Crook, ''Globalisation and Its Critics,'' *The Economist*, 2001. These are all excellent, and very different, studies of globalization. Both Rodrik and Friedman correctly point out that globalization is a long, ongoing phenomenon that got interrupted by the Cold War.

> industries have been destroyed or are daily being destroyed. They are dislodged by new industries, whose introduction becomes a life and death question for all civilized nations. . . . In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal interdependence of nations. And as in material, so also in intellectual production. The intellectual creations of individual nations become common property. National one-sidedness and narrow-mindedness become more and more impossible. (Karl Marx and Friedrich Engels, *Communist Manifesto*, 1848)

The Framework and the Data

Once globalization is situated chronologically, a framework for its analysis naturally suggests itself. The control time period before globalization consists of the years before 1980. It is convenient to use periods of equivalent length, so the years from 1960 to 1980 form a 20-year period when globalization as we know it was *not* present. There is a period of the same length after the advent of globalization, from 1980 to 2000.

With both control and event periods set, one can begin to evaluate the effects of globalization. Among its many different consequences, three types of changes are of major interest: changes in growth rates, changes in inequality, and changes in poverty (the head count ratio of poverty, and the number of poor people). Note that these three types of changes cover practically all areas of interest to an economist, either directly or indirectly. That is why they constitute an all-important triad.

Several pressing questions are explored in the following chapters. Has globalization made the world grow at a faster rate? Has it made rich countries relatively better off? Has inequality in the world worsened during this period? Has poverty been reduced at a faster pace during globalization? If yes, why? If not, is it because the growth rate was lower, or inequality worsened, or both? Who precisely gained from globalization? Was it elites, in both the industrialized and developing worlds? Besides poor people and elites, how did the middle class benefit (or lose) from globalization?

Framing questions is easy. But how can they be answered? By definition, answers to questions involve numbers, and lots of data. At a minimum, consistent data are needed for at least three variables: income, consumption, and population. These data would be easy to find. But data are needed for the 50-year period from 1950 to 2000.[9] Now that is a bit more difficult. And data are needed not only in local currency terms, but also in purchasing power parity (PPP) terms that are equivalent across nations. That is considerably more difficult—but doable. But the availability and

9. As is documented in appendix A, the data for the period 1950-60 are not as accurate as the other data. Hence, though most of the important data are for the entire period, 1950-2000, most of the analysis is for the 40-year period 1960-2000.

processing of such data cannot answer any question pertaining to "who benefits"? Is it rich people? Rich people in rich countries? The middle class in rich countries? Elites in the developing world?

For such questions, one needs data on the distribution of income within countries—both at a point in time and, because intertemporal questions are being asked, across time. Now things get very problematical, especially if questions on absolute poverty also need to be answered—for absolute poverty is defined in consumption terms. And what happens if both income and consumption distribution data are not available for the same country, let alone available for the same country at least once during the preglobalization period and once during the globalization period itself?

This is where the work really begins. And this book is the outcome of an extensive research effort. Appendix A documents how, for all the countries of the world, data have been assembled on population, per capita income, per capita consumption (in both PPP and local currency terms), and their distributions (when available) for 1950 to 2000. Although many numbers are presented, the emphasis is always on presenting the big picture of what happened before and after globalization. And the big picture is at some variance with received wisdom.

A Bird's Eye View

This book is organized in three parts: the received findings, methodological considerations (an examination of assumptions, data, and methods), and new results. Part I, chapters 1 through 4, reports (in as detailed a manner as possible) the received wisdom on the triad of growth, inequality, and poverty. Part II begins with chapter 5, a critical summary of the state of knowledge today. The rest of part II, chapters 6 through 8, discusses this knowledge; data and methodological issues pertaining to the analysis of the triad; and the development of a system of analysis, the simple accounting procedure (SAP). Part III, chapters 9 through 13, presents new results based on the SAP methods.

Chapters 6, 7, and 9 explain how it has come about that the two estimates of world poverty—the one in the marketplace and the one estimated using SAP—vary so much, and vary especially during the period for which explicit results of conventional wisdom are available, the 12-year period from 1987 to 1999.[10] Chapter 8 is concerned with the methodological

10. Just as the final draft of the book was being readied for publication (the end of April 2002), the World Bank, after an unprecedented gap of 3 years, released preliminary data for world poverty in 1999. (Estimates for 1998 had been released as early as 1999.) These data showed that the stagnation had continued; as a fraction of the population, poverty declined by 1 percentage point in 1999; the number of poor people declined by only 50 million. And this occurred during what is generally acknowledged as a sharp recovery year in developing countries, a year for which the official Government of India estimates of poverty recorded a decline of 160 million. In contrast, the World Bank estimates for 1999

issues of how to estimate the distribution of income from limited data. The chapter explains why detailed distribution data (at the percentile rather than quintile level) are necessary for generating credible estimates of world poverty, inequality, and convergence or divergence and for assessing how the world and poor people have fared during the globalization era.

Part III looks at the same issues, but within an integrated framework made possible through the assembling of a "new" dataset on poverty, inequality, and growth. Methods, assumptions, and definitions are revisited and reexamined. This part presents estimates according to SAP—on inequality, on poverty, on the middle class, on catch-up, and on living standards.

A More Detailed Overview

Chapter 2 discusses the pattern of growth (according to several classifications of countries) during the past 50 years. Chapter 3 assembles the available evidence on inequality, and chapter 4 does the same for poverty. Chapter 5 summarizes the available evidence—data and conclusions that supposedly "prove" that something was markedly wrong with the world during the globalization period. According to this view, growth in developing countries slowed down, inequalities (measured according to several dimensions) increased, and poverty reduction stagnated. Perhaps the anti-globalization forces, from Seattle to Washington to Western Europe, were right all along—capitalism had failed to deliver growth, especially to those most in need of high growth in incomes and improvement in living standards. Perhaps the policies of the Washington Consensus,[11] "forced" on the developing world by such international organizations as the International Monetary Fund and the World Bank, had not proved to be correct.

A new look, with the same (but larger) dataset, is warranted, and this integrated, rigorous methodological framework is described in chapter 8. (Actually, not much is new in this method, as is revealed by its name, again, simple accounting procedure.) The chapter documents the attributes of this dataset and methodology. In particular, it explains why the study of inequality should be conducted at an individual, rather than a country, level. It also explains how the conventionally estimated relationship between poverty reduction and economic growth is heavily flawed. Because correction for this misspecification leads to an estimated elasticity

suggest a decline of only 32 million for *all of South Asia*. Thus, all of the book's conclusions pertaining to the questionable nature of the available world poverty estimates remain.

11. See Williamson (1990) for the details on the content of this evocative phrase. There is little discussion of development policy in the world that does not at some point have to explain its differences, or similarity, with the Washington Consensus.

that is often more than *double* what the literature documents, it is not surprising to obtain the conclusion (contrary to chapter 4) that the globalization period witnessed a large reduction in poverty, and not stagnation.

Throughout the book, the evolution of world poverty is the subject of concern—especially in chapters 6, 7, 9, and 10. Chapters 6 and 7 examine the consensus on the triad of issues with both a broad brush and a microscope. Although backed by authoritative research and institutional credibility, the research findings to date on divergence in per capita incomes, inequality change, and stagnation in poverty levels during the high-growth globalization decades do not pass a test of credibility.

Results on Absolute Poverty

Chapter 6 documents how the conventional-wisdom estimates of poverty (provided by the World Bank) are based on recently released PPP exchange rates for consumption for only one year, 1993.[12] The sine qua non of any proper analysis of poverty is that there be an accepted definition of how to convert individual country currencies into a global currency, and that there be an accepted, and constant, poverty line. Neither attribute is present in the results communicated by the World Bank.

This book uses *published* annual estimates of PPP exchange rates, exactly the same definition of poverty (a poverty line equal to a daily income of $1.08), the same data, and the same method (survey distribution and survey means)—in short, an exact replication of the World Bank's methods—to reach the finding that there were 400 million *fewer* poor people in 1999 than what the bank estimated. Thus, there were 766 million poor people, not 1.15 billion (a World Bank estimate based not on official PPP exchange rates but on recently published ''consumption'' PPP exchange rates). And using this book's data and methods (see chapters 6-9), the head count ratio of poverty, rather than being 23 percent, is shown to be 14 percent in 1999 and 13 percent in 2000. The number of poor people in 2000 is estimated to be 650 million. The 2000 head count number of 13 percent is put in perspective by noting that the famous Millennium Development Goal is to halve poverty by 2015 (compared with the early 1990s), that is, to reach 15 percent.[13]

12. This PPP consumption exchange rate has only very recently been published on the World Wide Web (and so far not in the World Bank's *World Development Indicators*), and that also for only 1993. In contrast, the PPP income exchange rates have always been published in *World Development Indicators*, and are available for every year, for every country, after 1960.

13. Regarding social indicators like infant mortality, school completion rates, etc., it is documented (see Asian Development Bank 2002) that it is virtually impossible to reach the targets set for 2015. The reason for this ''impossibility'' is that such indicators follow a highly decreasing returns profile—e.g., it is much easier to reduce infant mortality from 100 to 50 than it is to decrease it from 50 to 25. What appears to have happened is that the

Chapter 7 discusses the major source of differences in poverty estimates between those of the World Bank after 1990 and those of other researchers (including ones at the World Bank before 1990). (This difference is independent of, and in addition to, the problem of the use of consumption versus official PPP exchange rates mentioned above.) The source pertains to a megamethodological, almost philosophical, difference. There is only one source for distribution data: the national household surveys of income and expenditure. But there are two different sources for data on the *means* of these distributions. The World Bank, since the late 1980s, believes in using only survey data; but before then, the bank believed in using the national accounts system estimates for the means. How great a difference this change in data source makes is revealed by the estimates of global and regional poverty, made in chapter 9 for a 50-year period, 1950-2000.

Results on Propoor Growth

The lower than expected reduction in poverty led to an emphasis on identifying policies that would enhance the poverty reduction yield. The methodological issue is one of isolating the poverty reduction component of a given amount of growth (e.g., if observed growth in incomes is 10 percent, and if this growth is neutral, then how much reduction in the head count ratio should one expect—10 percentage points, less, or more). Chapter 10 offers a method to translate income[14] growth, ceteris paribus, into declines in the head count ratio of poverty.

To date, economists have inferred a ''trickle-down elasticity'' (i.e., the percentage change in poverty that is expected to occur, given a percentage change in average incomes) from a simple model relating observed change in poverty to observed change in incomes. Typically, this elasticity has been estimated to be between 1.5 and 3, with the most-preferred, central estimate being 2;[15] that is, a 10 percent increase in average income is expected to result in a 20 percent decline in the head count ratio. This might appear large, but it is not; the reason is that the change in poverty is measured as the percentage change in the head count ratio (the percentage of poor people). A decline in the percentage of poor people from 40

target setters used simple Club of Rome extrapolations without taking diminishing returns into account.

14. The terms ''income'' and ''consumption'' are sometimes used interchangeably, even though calculations on poverty change always pertain to consumption levels. As is well known, a preferred measure of income welfare is revealed by consumption (more related to permanent income, and therefore permanent welfare) rather than by income. For various reasons, discussions of country welfare are always done in terms of changes in income (GDP per capita) rather than consumption (private final consumption expenditure per capita).

15. See Ravallion and Datt (1999), Collier and Dollar (2000), and Kakwani and Pernia (2000).

to 20 percent is a 69 percent (log) change, so such a decline would typically require per capita income to increase by (log) 35 percent.

As was indicated in a report on Malaysia from the World Bank (1991),[16] and further developed in Bhalla (2000b) and Bhalla (2001a), such methods are plagued with statistical and specification errors. The shape of the income distribution, and the incidence of the poverty line (at the tails or in the fat of the curve) relative to the incomes of the poor, are critical parameters in the estimation of the trickle-down elasticity. The correct estimation of this elasticity shows it to be about twice as high as the incorrect estimates of 2 found in the literature. The theoretical correction has, therefore, a very large empirical impact. Once these corrected elasticities are available, it is a relatively simple procedure to forecast poverty levels in 2015, given assumptions about region-specific per capita economic growth.

The world has already achieved the 2015 goal of less than 15 percent poverty; in 2015 itself, only about 10 percent of the developing world is expected to be poor. This forecast is for a poverty line that is almost double the one in use today ($2 a day vs. the $1.08 a day commonly accepted by international agencies).

Has Globalization Worsened Inequality?

Chapter 11 discusses most of the cross-sectional evidence on country inequality. It uses the method outlined in appendix B, which helps to break down five quintile shares of income (data that are most often reported by official household survey agencies) into 100 percentile levels of income.[17] This expansion allows a much more refined construction of global income inequality. Of course, the expansion may contain significant errors.

The chapter provides evidence that the method is exceedingly accurate, however. This evidence is based on comparing the SAP estimate of the Gini coefficient with official published estimates ostensibly based on the entire sample of households (rather than five quintiles) contained in close to 1,000 surveys. The chapter estimates inequality in several regions of the world, as well as the world itself, and concludes that inequality actually decreased in the 1980s and 1990s—and that world inequality today, with a Gini index of 65.1, is at its lowest ever, or at least since 1910.

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16. This report primarily involved Homi Kharas and myself on the chapters pertaining to poverty and inequality—and the report was the first to document the importance of "where the poverty line is" relative to the distribution of income for obtaining estimates of the effect of growth on poverty reduction. Chapter 10 fleshes out this hypothesis.

17. This procedure is essentially an extension of the method outlined in Kakwani (1980).

Has Globalization Been Good for Poor People?

Chapter 12 presents data on several aspects of development and growth for both the preglobalization era and the past 20 years. Data on educational attainment, infant mortality, monetary poverty, and so on are all aspects of living that show a larger improvement during the globalization period. The chapter discusses the consequences of globalization for convergence, and the consequent effect on global inequality and poverty. It is observed that the forces of globalization have immensely benefited both poor people and elites in developing countries, and have led to a fair amount of convergence—which means that large numbers of individuals from poor countries are now competitive with the middle class (the 30th to the 80th percentiles in the income distribution) in the industrialized world. Hence, it is not surprising that the middle class (e.g., union members) in industrialized countries may be leading the antiglobalization charge.

Chapter 13 concludes that there seems to be little doubt that living standards of poor people have increased during the past 20 years at a pace faster than average living standards; and that globalization has been a force for higher growth and prosperity for most—especially for those in the bottom economic half of the world's population. That this is not conventional wisdom is discussed in terms of methodological roads not taken, and of the forks in the methodological roads that have led to false conclusions.

Research and Monopolies

To date, the generation of poverty estimates has been a monopoly of quasi-governmental organizations, and primarily of the World Bank. This has been a natural monopoly because of the large effort involved in the generation and collection of household data—an effort aided by the reluctance of most governments to release such data to individuals who are not from quasi-governmental organizations. The monopoly has been partly vindicated by the tremendous number of research and policy initiatives that the World Bank has undertaken on the important issues of economic development and poverty alleviation. Former World Bank president Robert McNamara's initiative, and the leadership of economists like Hollis Chenery and Montek Ahluwalia, allowed the bank in the mid-1970s to initiate, sponsor, and fund research on the then-new issue of poverty and inequality.[18] What had been an almost exclusive concern of economists in India became an international obsession: How much poverty is there? How can it best be reduced? And so on. Tomes of (non-

18. At that time, the World Bank was exclusively a project-financing and technical assistance institution.

Indian) research and extensive international policy concern owe a great deal to that first effort.

This monopoly had its predictable effects. There is some evidence that the monopolists got sloppy; that results (on convergence, on poverty, on inequality) that have been disseminated, and accepted, do not pass the test of credibility. The story of the nature of research, of monopoly aspects of funding this research, and so on, is even more involved than the debate on trends in inequality and poverty.[19] Like all monopolies, however, even this one is ending. Until 2 years ago, there was only the World Bank estimate of world poverty. Then, the *first* alternative to the World Bank's estimate of world poverty was presented by Bhalla (2000d), an estimate indicating that there was substantially less poverty in the world than the "official" World Bank figures.[20]

19. See Bhalla (2002b) for an exploration.

20. Revised Bhalla estimates are presented in chapter 8.