
Globalization: A Second Look

Having considered the data, definitions, and methodology, it is now time to revisit some of the conclusions of received wisdom reported in chapters 2 through 4. Several (actually all) conclusions get overturned. There is strong evidence of convergence; there is also consistent and strong evidence that globalization is helping to equalize wages for similar productivity levels, and that the major beneficiaries are people in the developing world. There is even stronger evidence that global inequality is in a declining mode for the first time in 200 years.

There is plenty of reason to believe that all of this should have been “expected” or forecast. There is one major force: globalization. Neither national nor language boundaries matter anymore. The economics is the trend toward the law of one price and law of one wage—for goods, and all factors of production. Obviously, the world is not there yet, and the most important factor, labor, is differentiated by quality of education and differences in ability. But the trend is inexorable—and a leading indicator for this trend is the decline in worldwide inflation levels over the last decade or so—and induced primarily by productivity growth in China and India.

If movement is there toward one price, and if productivity growth in poor nations is large and in excess of growth in industrialized economies, then this is a manifestation not just of catch-up but of catch-up with a vengeance, or Convergence, Big Time. The prime beneficiaries of this convergence are poor nations, and as we saw in earlier chapters, poor people in poor nations. Several indicators of well-being (education, health, and political and civil liberties) point to the fact that the golden age of development has perhaps only just started.

It is not all a happy story, however. There has been stagnation in Latin America, at least in income growth. Partly, this is likely a result of the competitive forces of globalization. Countries that refused to let wages and incomes adjust (Argentina being the worst example) have had to allow employment and output to adjust; convergence for these countries has meant a stagnation, if not decline, in incomes. Yet those that have faced up to the challenge (Chile, and now Mexico) have benefited handsomely.

The genuine, and mostly self-inflicted, tragic story is that of sub-Saharan Africa. It is little realized, but in 1960 this region had more than double the per capita income of Asia. Today, Asia has double the income of Africa. The reasons for this stagnation are many. For the world community, this should be the major target of attention. On a positive note, there is no reason why the positive forces of globalization should not also catch up with Africa.

Income: Before and After

In chapter 2 it was noted that though the developing world lagged behind in terms of per capita income growth during the preglobalization period, it more than caught up during the globalization era. During the 50-year period 1950-2000, growth in the developing world exceeded that in industrialized countries by an aggregate of 27 percent or about 0.5 percent per year. This is a narrow margin, but it does mean that the developing world has gained both absolutely and *relatively*.

These figures help answer one noticeable anomaly in the discussion on globalization. At the risk of being politically incorrect, but with the accuracy of being factual, it is a reality that one does not witness any brown, or yellow, or black people in the vanguard of the antiglobalization debate, or in the attacks on the operations of international institutions.¹ All the leaders and operators are white, come from rich countries, and are fighting the cause “in the name of [nonwhite] poor people.”

Convergence: New Results

Did worldwide individual and country inequality worsen during the period of globalization? The contention of Pritchett (1997, 2001), the United Nations (*Human Development Report 1999*), the IMF (*World Economic Outlook*, November 2001), the World Bank (*World Development Report 2000*), and Stewart (2000) was that there was divergence in per capita output—though the simple data on per capita output in developing and industrial-

1. To be sure, one does witness nonwhite intellectuals articulating antiglobalization theses; why this is so is more a question for a psychiatrist to answer, rather than an economist.

ized countries indicated just the opposite, and did so in a convincing fashion. Are the divergent results a function of the time period chosen? No. Note that if one goes sufficiently far back, especially to before the Industrial Revolution, one will tautologically define and find divergence. Today, countries are rich and poor; back then, all countries were the same.

The real source of the difference between the distinguished divergent tribe and those that argue that there has been overwhelming convergence is not in terms of the time period but in the set of statistics chosen. In particular, the divergent calculation is often done in terms of the relative incomes of those residing at the technology frontier (the richest country, typically the United States) and those residing in the poorest country (one that is changing continuously over time).

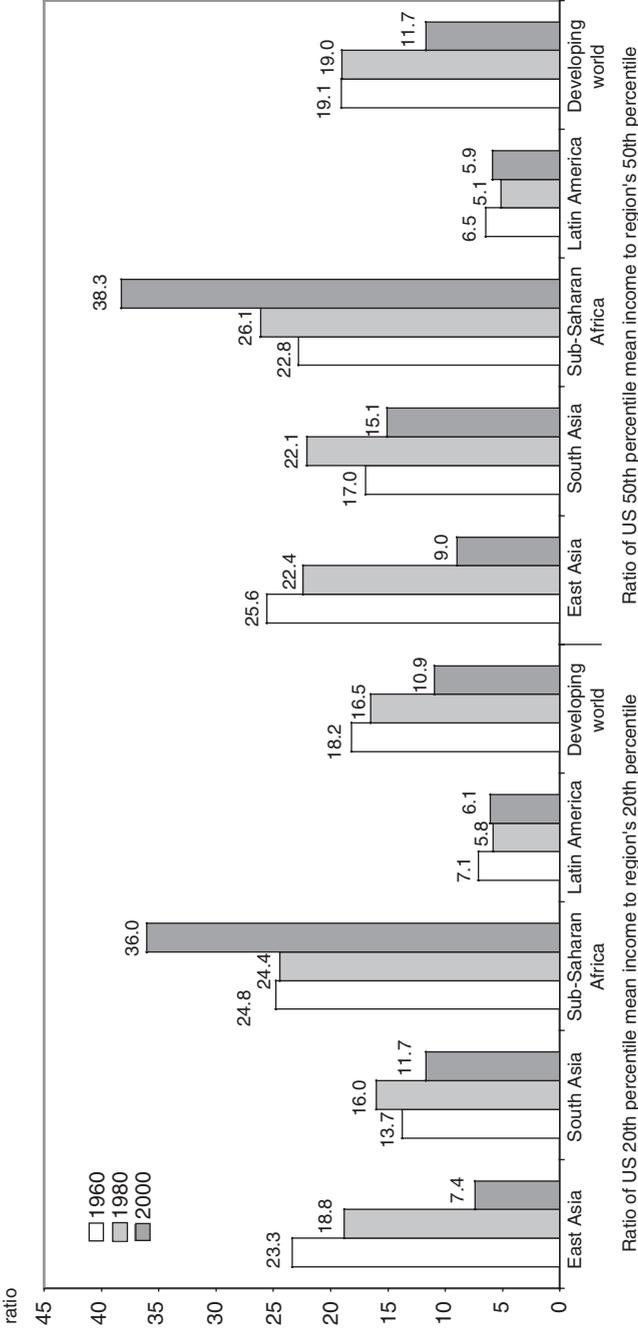
This ratio suffers from a severe self-selection bias and may be about as accurate as stating that there is convergence in looks because no one today comes even close to the beauty of Greta Garbo or Ingrid Bergman (but look at Aishwarya Rai of India, and you will get an example of convergence). Or that inequality has widened because the relative income of Bill Gates has gone up relative to you, me, or the poorest peasant in the world. The second and equally severe problem with this self-selection analysis is that its unit of analysis is the poorest country rather than the poorest *people*. And even if it were the poorest people, it should be the poorest *fraction* of people.

Figure 12.1 tries to rectify some of these deficiencies by reporting ratios for two different classifications. The nonconventional (but improved) statistics on the trend in convergence are indicated by the trends in income of the 20th and 50th percentiles in the United States, with corresponding percentiles in different regions of the world. The median American earned 26 times the level of his East Asian counterpart in 1960; today that ratio is down to only 9. For both Latin America and South Asia, the ratio has declined by about 10 percent; the picture is not as stark as in East Asia, but there is a definite trend (at least for the much more numerous millions in South Asia). Only sub-Saharan Africa has seen divergence—but one does not need complicated convergence calculations to tell us that development has *not* occurred there.

Catch-Up with Globalization

The tests reported in figure 12.1 are better than those in the literature, but only marginally. It is still not a like-with-like comparison. The *real* test of convergence, and one not published in the literature to date, requires the groups to be chosen on the basis of their skills, which should be approximately equal, and their incomes (wages), which are not. In particular, wages in catch-up countries should be substantially *below* those of residents (with similar skills) in comparator countries at an initial point

Figure 12.1 US income relative to that of developing regions, 1960-2000



Note: The figures above represent the ratio of incomes at the 20th and 50th percentiles, respectively, comparing US income with income in regions of the developing world. Hence, a (20th percentile) ratio of 11.7 for South Asia in 2000 indicates the US income at the 20th percentile was 11.7 times the income at the 20th percentile in South Asia. To obtain the distributions of income across the developing world, country data were pooled using the simple accounting procedure method.

Sources: Deininger and Squire (1996); World Income Inequality Database, available at www.wider.unu.edu/wiid; Asian Development Bank (2002); World Bank, *World Development Indicators*, CD-ROM.

in time, say 1960 to 1980. If globalization has helped convergence, then the relative gains for the poorer group should be larger in the past 20 years than in the previous 20.

The top 10 percent of developing countries constitute approximately 500 million people. These are the elites, and it is likely that elites always had the means to acquire education and training. In a converging world, developing-world elites should witness a narrowing of the gap between their incomes and those of a comparison group. But who are their comparators in the industrialized world? The size of this parallel group is known—it should be approximately 500 million. This rules out the top 10 percent (or the richest country!) as the comparator, because the total population of industrialized countries is less than a billion. Should the top 10 percent in the industrialized world be part of the comparator group? It would be unlikely, though additional data are needed for a precise calculation.

The following procedure was used to identify the comparator group. Per capita incomes in the industrialized world were computed for 5 deciles (approximately making up the population of elites in the developing world) on a sliding basis from the top; for example, the top 5 deciles, the next five (40th to 90th percentiles), and the next five (30th to 80th). This last group was finally chosen as the comparator—there were approximately the same number of people, and they had incomes about 35 percent above the developing-world elites (the top 10 percent). This group (30th to 80th percentiles) has a ring of plausibility. It contains the industrialized-world middle class, and it likely is a group with the same skills as elites in the developing countries—at least back in the preglobalization 1960s and 1970s.

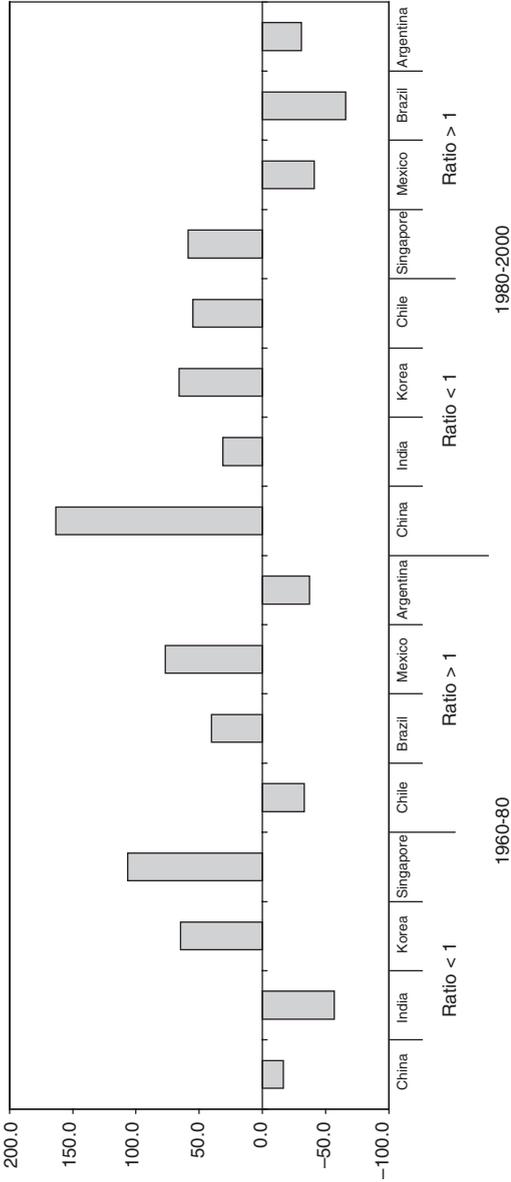
Some evidence that the skills of these two groups are comparable is yielded by Barro and Lee's (2001) data on educational attainment. In 1960, mean school attainment in the industrialized world (30th to 80th percentiles) was approximately 7 to 8 years; that for developing-world elites, 3.5 to 5 years; in 2000, the ranges were 9 to 12 years and 6 to 10.5 years, respectively. Not an exact match but not indicating incomparables, either.

Figure 12.2 provides convincing evidence about convergence and the angst of those losing out to globalization. Countries are organized according to the ratio of the incomes of elites relative to the industrialized-world middle class in 1960. A ratio of less than 1 would indicate competitive advantages, *ceteris paribus*. A ratio greater than 1 would indicate that there was no benefit to be derived from the competitive forces of globalization; that is, wages were too high (relative to the industrialized world) for comparable skills. Indeed, for such countries globalization should mean a *decline in the relative wage*. To an amazing degree, the forecast that globalization means convergence is accurate—for both countries with ratios less than 1 and those with initial ratios greater than 1.

From 1960 to 1980, elites in Asian countries had income (wages) relative to their comparators of approximately 41 percent; that is, the middle-class

Figure 12.2 Globalization and big-time convergence

log change in the ratio of mean income of the top 10 percent in each country to the industrialized world's middle 50 percent



Notes: For each time period, the graph above presents data for eight developing countries. A ratio of less than 1 indicates that the top 10 percent in each country (90th-100th percentiles) was earning less, at the beginning of the period, than the middle 50 percent (30th-80th percentiles) in the industrialized world; a ratio of more than 1 indicates the opposite.

The numbers above represent the log change in this ratio for each country. Positive values indicate a convergence between that country's top income earners and the middle 50 percent in the industrialized world; negative values indicate a divergence.

The two groups (top 10 percent in the developing world, middle 50 percent in the industrialized world) are chosen for their high level of comparability for many factors, including educational opportunities. To obtain the distributions of income across the developing world, country data were pooled using the simple accounting procedure method.

Sources: Deininger and Squire (1996); World Income Inequality Database, available at www.wider.unu.edu/wiidi; Asian Development Bank (2002); World Bank, *World Development Indicators*, CD-ROM.

people in the industrialized world had incomes approximately two and a half times those of Asian elites. During this golden age of the industrialized-world middle class, real incomes almost doubled, registering an annual growth of 3.2 percent. Aspirations are built on experience, and the experience was very good. Asian elites (constituting about three-fourths of developing-world elites *per se*) also matched the progress of their industrialized-world counterparts; their relative income had inched up to 43 percent from 40 percent.

The next 20 years turned out to be the golden age for Asia. While the growth in the absolute incomes of the industrialized-world middle class slowed down to a crawl—only 1.2 percent a year, a third of that experienced by their parents—that of Asian elites slowed down only marginally—to 2.9 percent relative to 3.5 percent in the 1960-80 period. However, the relative incomes of Asian elites (the one of concern for tests of convergence) *accelerated* to 60 percent of their counterpart incomes in 2000. This relative income, as mentioned above, was 43 percent in 1980.

This *is* the predicted effect of globalization. Firms cannot afford to be nationalistic or racist; if they are, they will lose out to the competition. The search for lower costs has meant looking for Indians, Chinese, Bangladeshis, and Malaysians to do the work, rather than middle-class Dutch people, Danes, Swedes, or Americans. This looking has meant a rise in the relative wage of developing-country, particularly Asian, elites. And firms have gone to wherever the wages are lowest, relative to the skills possessed. Thus, Latin Americans have not witnessed a surge in their relative wage—indeed, their relative incomes today (after globalization) are 70 percent of the preglobalization value in 1960.

One should be witnessing Latin Americans as the leaders of the anti-globalization brigade, but one does not. Perhaps they realize that in the uncompetitive world of the pre-1980s, they derived rents from their closeness to industrialized-world markets, and that with lower transaction costs (almost zero in the age of the Internet and instant communication) these rents have disappeared. One should not be seeing Asians in the antiglobalization camp, and one does not. One should be seeing middle-class people from industrialized countries disappointed with what globalization has brought them—more competition for their skills, a decrease in their rents, and a sharp fall in their expectations for future growth—and one does. These people are facing a collapse from 3.2 percent annual growth (or a doubling in real incomes in one generation) to an increase of only 1.2 percent a year (or a doubling in 58 years or three generations, and perhaps not even in one's working life).

There is an explanation for why there is a protest against globalization—only it does not have anything to do with the poor getting poorer, or the rich getting richer faster. The explanation is that because of globalization, the entire middle class in the industrialized world has had to lower its

expectations of a *better* life. It is the “poor elites” in the developing world (as well as the poor) who are getting richer at a faster pace than that experienced by almost any such large group of people (500 million) in history. The middle class in the industrialized world feels that this is at their expense, and they are at least partially right. Globalization is a democratic force; it is the ultimate leveler—a force not kind to those “unnaturally” at the top of the heap.

Is There a Poverty-Terrorism Connection?

The events of 11 September 2001 have made it fashionable, in some quarters, to suggest a link between poverty and terrorism, particularly Islamic terrorism. The data on incomes and distributions can be used, along with information about the percentage of Muslims in each country, to generate distributions for residents of Muslim and non-Muslim “regions” of the world. This is obviously an approximation, and requires the assumption that both the mean and distribution of Muslims in mixed societies are approximately the same as those of non-Muslims. If this assumption is made, and particularly if the high growth in mean incomes of China and India is excluded, then one can assess both mean incomes and poverty in the two “regions” from 1950 to 2000. The poverty line of \$1.30 per capita per day, at 1993 prices (equal to the popular \$1-a-day line) was chosen for this analysis; the choice of a particular line does not affect the results.

The results, given in table 12.1, suggest that the pattern of growth and poverty is virtually indistinguishable in the two “regions.” Indeed, predominantly Muslim nations show a slightly higher growth rate between 1980 and 2000 (2.3 percent) than predominantly non-Muslim nations (–4 percent). Muslim nations also show a decline in the head count ratio of 4 percent compared with a smaller decline of only 1.5 percent for non-Muslim nations. These data are suggestive at best—but what they do suggest is that non-Muslim Africans, Burmese, Cambodians, or North Koreans should be leading the terrorist charge if poverty were really related to terrorism.

The Evolution of Living Standards, 1960-2000

Tables 12.2 and 12.3 present summary data for various indices of living standards for the preglobalization and globalization periods, 1960-80 and 1980-2000. The data are given both for the world, in table 12.2, and for the developing world, in table 12.3. As has been mentioned throughout, the attempt here is not to identify causation; just association will suffice for the moment.

Table 12.1 Muslim and non-Muslim incomes in the developing world (DW), 1950-99

Year	Number of Muslims (millions)	PPP mean income, per capita per day, 1993 prices ^a				Head count ratio (percent) at \$1.30, PPP, 1993 prices ^b			
		Muslim DW, excluding China and India		Non-Muslim DW, excluding China and India		Muslim DW, excluding China and India		Non-Muslim DW, excluding China and India	
		DW	DW, excluding China and India	DW, excluding China and India	DW, excluding China and India	DW	DW, excluding China & India	DW	DW, excluding China and India
1950	539	2.59	4.37	2.92	5.28	62.8	35.5	45.4	33.8
1960	613	3.69	5.56	3.83	6.44	50.7	29.8	39.5	28.8
1970	815	4.82	7.52	5.29	8.54	37.1	21.3	27.4	22.5
1980	1,041	6.19	9.75	6.83	11.24	35.0	19.1	24.0	20.5
1990	1,312	7.07	9.69	6.80	10.48	18.2	16.5	19.9	19.7
1999	1,562	8.81	10.02	6.99	10.83	9.8	16.3	19.9	18.9

PPP = purchasing power parity

a. The mean incomes have been computed according to the expenditure distribution for a poverty line of \$1.00 a day at 1985 prices or \$1.30 a day at 1993 prices.

b. The head count ratio has been calculated on the basis of the total population of the region and not the world's population.

Note: The aggregation involves the computation of mean incomes in each country according to its Muslim and non-Muslim population. Within each country, no distinction is made between the incomes of the Muslims and non-Muslims. The proportion of Muslims today is close to 25 percent of the world's population; 32 percent of the developing world's population; and 60 percent of the developing world's population excluding China and India.

Sources: PPP and national accounts data from World Bank, *World Development Indicators*, CD-ROM; for the methods used and other variables, see appendix A.

Table 12.2 Indices of living standards for the world, 1960-2000

Measure ^a	Level			Change (percent)	
	1960	1980	2000	1960-80	1980-2000
Income					
Mean income	8.81	14.34	17.71	62.8	23.5
Share of 1st quintile	1.66	1.43	1.84	-13.9	28.7
Share of 5th quintile	70.57	72.83	70.33	3.2	-3.4
Consumption					
Mean consumption	5.56	8.54	10.83	53.6	26.8
Share of 1st quintile	2.11	1.61	2.50	-23.7	55.3
Share of 5th quintile	67.77	71.40	69.50	5.4	-2.7
Distribution					
Gini (income)	66.4	68.5	65.1	3.2	-5.0
Gini (consumption)	63.2	67.0	63.3	6.0	-5.5
Head count ratio, according to national accounts (percent)					
Country poverty line	64.9	58.0	39.9	-10.6	-31.2
\$2.00 poverty line	48.0	43.5	19.0	-9.4	-56.3
\$1.50 poverty line	38.4	33.8	10.5	-12.0	-68.9
\$1.08 poverty line	31.9	27.0	6.4	-15.4	-76.3
Poverty: Nonincome indicators					
Political and Civil Liberties Index ^b	3.8	4.0	4.1	5.5	1.3
Infant mortality (deaths per 1,000 births)	107.2	63.5	43.3	-40.7	-31.9
Life expectancy at birth (years)	51.2	62.7	66.4	22.4	6.0
Illiteracy (percent)	45.8	38.5	26.0	-16.0	-32.4
Middle schooling completed (percentage of adults)	8.9	13.2	18.3	49.3	38.3
Average educational attainment (years)	3.9	4.6	6.0	18.8	29.7

a. For computations of Ginis, shares of consumption, income, and the other variables, see the text and appendices A, B, and C.

b. The Freedom House Political and Civil Liberties Index ranks countries on a number of indicators, on a scale of 1 (worst) to 7 (best).

Sources: National accounts data, purchasing power parity exchange rates, living standards data: World Bank, *World Development Indicators*, CD-ROM, 2001; for data on average educational enrollment and middle-school completion: Barro and Lee (2001); Political & Civil Liberties Index: Freedom House data.

One can begin to identify causation only after one has identified association. The data suggest a strong association. No matter what the indicator, progress during the globalization period was greater. Infant mortality in the developing world declined from 140 to 80 deaths per 1,000 births in the preglobalization period; and declined further, to 52, by the end of 2000 (table 12.3). The table also reports on the (log) percentage changes,

Table 12.3 Indices of living standards for the developing world, 1960-2000

Measure ^a	Level			Change (percent)	
	1960	1980	2000	1960-80	1980-2000
Income					
Mean income	3.63	6.09	9.22	67.8	51.4
Share of 1st quintile	3.49	3.03	3.12	-13.2	3.0
Share of 5th quintile	64.05	68.51	59.55	7.0	-13.1
Consumption					
Mean consumption	2.60	3.81	5.54	46.5	45.4
Share of 1st quintile	3.90	3.20	4.38	-17.9	36.9
Share of 5th quintile	59.93	65.70	56.29	9.6	-14.3
Distribution					
Gini (income)	58.2	62.4	55.2	7.2	-11.5
Gini (consumption)	54.5	60.1	50.5	10.3	-16.0
Head count ratio, according to national accounts (percent)					
Country poverty line	68.1	60.1	28.0	-11.7	-53.4
\$2.00 poverty line	65.2	56.3	23.3	-13.7	-58.6
\$1.50 poverty line	52.5	43.5	13.1	-17.1	-69.9
\$1.08 poverty line	43.9	35.0	9.1	-20.3	-74.0
Poverty: Nonincome indicators					
Political and Civil Liberties Index ^b	2.9	3.4	3.6	13.9	6.3
Infant mortality (deaths per 1,000 births)	140.0	79.6	52.1	-43.1	-34.5
Life expectancy at birth (years)	43.3	59.4	64.2	37.0	8.0
Illiteracy (percentage of adults)	52.9	43.0	28.3	-18.8	-34.2
Middle schooling completed (percentage of adults)	5.1	7.1	13.8	39.6	94.4
Average educational attainment (years)	2.4	3.2	5.0	33.2	54.2

a. For computations of Ginis, shares of consumption, income, and the other variables, see the text and appendices A, B, and C.

b. The Freedom House Political and Civil Liberties Index ranks countries on a number of indicators, on a scale of 1 (worst) to 7 (best).

Sources: National accounts data, purchasing power parity exchange rates, living standards data: World Bank, *World Development Indicators*, CD-ROM, 2001; for data on average educational enrollment and middle-school completion: Barro and Lee (2001); Political & Civil Liberties Index: Freedom House data.

and it is observed that such changes were larger in the preglobalization period (i.e., 43 percent). As discussed in Bhalla (1988) and Bhalla and Glewwe (1985) and Asian Development Bank (2002), there is a problem with using log changes for variables with a ceiling (or floor). The move from, let us say, 100 to 50 is a lot easier than bringing about a decline in infant mortality from 50 to 0.

Independent of ceiling or floor considerations, there has been a larger decline in illiteracy in the past 20 years than possibly ever before. Compared with the period 1960-80, the decline has been at double the rate. Today, illiteracy in the developing world is down to 28 percent of adults, down from 43 percent in 1980 and 53 percent in 1960 (table 12.3).

All the countries of the world show a large improvement in political and civil liberties. These data are from Freedom House, and are available for most countries for every year since 1973. Part of the impact of globalization has meant increasing democratization in developing countries. This is revealed by an increase in Freedom House's Political and Civil Liberties Index (which is population weighted) from 2.9 in 1973 to 3.4 in 1980 and 3.6 in 2000. An index of 7 represents political and civil liberties as enjoyed in the industrialized world (e.g., the United States).

What these figures indicate, at a minimum, is that freedom has not brought about a decline in the rate of growth of living standards in developing countries. This reality is the opposite of those who argue (e.g., Quibria 2002) that the miracle of growth is associated with authoritarianism. This thesis was explicitly examined in Bhalla (1997a); there it was shown that there was a confusing Confucian hypothesis at play. East Asian economies had Confucianism, authoritarianism, and higher growth; democratic countries like India had plenty of liberties and democracy, but no growth. The convenient conclusion was reached by many. However, if freedom is decomposed into its separate political and economic components, then the mystery of both the slow growth in India and fast growth in authoritarian regimes is explained. The contribution of economic freedom was low in, for example, India and high in, for example, China; this large effect swamped the positive effect of political and civil liberties.²

It does not matter what index is chosen for poor countries: income growth, consumption growth, inequality change, health standards, educational attainment, or poverty decline. The past 20 years were a golden period for poor people. It was shown above that statistically speaking, the past 20 years were a clear outlier in terms of poverty decline. It is unlikely that the world's poor people will ever again witness such a large transformation in such a short space of time. It is, in fact, not only unlikely—it is almost impossible. What the world has witnessed is a miracle for poor people. The irony is that their champions—elites in the industrialized world—not only do not realize this simple fact, they believe the opposite has happened. If this book has helped to clarify this simple point—how poor people have fared in an era of globalization—it will have achieved its major objective.

2. See World Bank, *World Development Report 1991: The Challenge of Development*, for an early exposition of this thesis; Bhalla (1997a) for a detailed investigation; and Bhalla (1999) for a follow-up analysis.