

What is behind the declines in global income inequality and poverty?



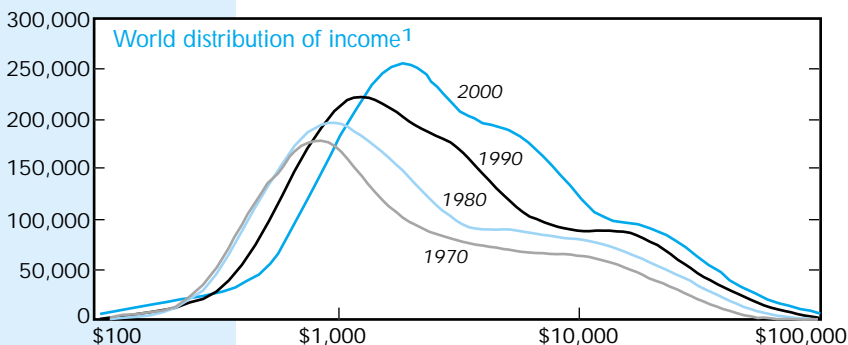
Xavier Sala-i-Martin

There has been a steady decline in global income inequality and a dramatic drop in poverty rates over the past two decades, according to Columbia University's Xavier Sala-i-Martin. Presenting revised estimates of the world distribution of income at a February 21 seminar at the American Enterprise Institute (AEI), he cautioned, however, that further gains in reducing inequality and poverty may well rest on Africa's ability to grow.

At the AEI seminar, Xavier Sala-i-Martin presented estimates of the world distribution of income that now include data for the countries of the former Soviet Union. He had been reluctant to include these in his

A global middle class is emerging

Thousands of people



Data: Xavier Sala-i-Martin
¹Annual income.

initial estimates, he said, because communist-era data are “complex—half real, half imaginary.” But he changed his mind because of “criticism from World Bank experts” about the biases from ignoring this large chunk of the world’s population, particularly one that underwent a large decline in its fortunes in the 1990s.

The inclusion of the new data does not, however, change Sala-i-Martin’s central finding: Global inequality in incomes has declined because of the robust growth in populous countries like China and India since 1980. This growth has “filled the hole in the middle of the world income distribution” that existed prior to that time. Global poverty rates have declined to somewhere between 5 percent and 15 percent, depending on the precise details of how poverty is measured.

Imagine there’s no country

Like the study by Surjit Bhalla (see *IMF Survey*, October 21, 2002, page 335), Sala-i-Martin’s work focuses on inequality of incomes between people rather

than between countries. Explaining the rationale for this choice, Sala-i-Martin said that “treating each country as one observation gives Lesotho and China the same weight” in the calculation of global inequality and global poverty rates. This does not make sense, he said, because “10 percent growth in China improves the welfare of 1.2 billion people, whereas 10 percent growth in Lesotho, while it would be welcome, would better the lives of, at most, a few million.”

This concept of inequality (from a line in John Lennon’s song “Imagine,” in which he says to imagine there’s no country) is easy to define but difficult to compute. “We do not know the income level of every person on the planet,” Sala-i-Martin said. Filling in the gaps in our knowledge requires a tremendous amount of guesswork (see box, next page). But the end product is a rendition of how the world distribution of income has evolved over time (see chart, this page).

The mean of the distribution has steadily shifted to the right since 1970; in other words, the global citizen has, on average, become richer. The distribution has also become more equal with the emergence of a global middle class, particularly in China and India.

Thanks to these income gains, poverty rates—measured using various common definitions of poverty—have fallen dramatically over time. Unfortunately, Africa has not shared in these gains. Per capita incomes in most countries there have stagnated or declined, with the result that the poverty rate for the continent as a whole has increased from about 35 percent in 1970 to almost 50 percent today (see chart, next page). Most of the decline in global poverty has occurred in Asia. Unless the trends in Africa are reversed, Sala-i-Martin noted, it is likely that world income inequality will widen in future decades and that global poverty rates will start rising again.

Countries matter

Commenting on Sala-i-Martin’s work, Catherine Mann of the Institute for International Economics (IIE) noted that there are three concepts of inequality, each having a place in the policy discussion on the subject. The most familiar is within-country inequality—the difference between the incomes of the rich and the poor within a country. The second is cross-country inequality, measured as the inequality between the incomes of the average person in each country. (This may be termed the United Nations (UN) definition in that it uses a one-country, one-vote approach—analogue to the voting rule in the UN General Assembly—to measure inequal-



Catherine Mann

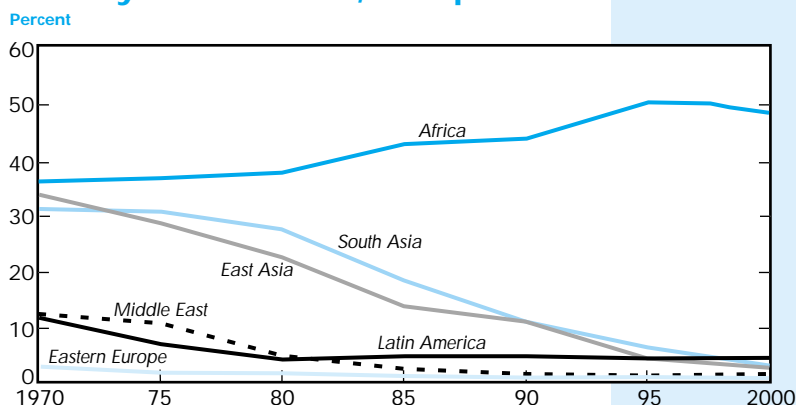
ity.) Measured in this way, inequality has clearly increased in recent decades; Mann noted that the Harvard economist Lant Pritchett has famously described this finding as “divergence, big time.” The third concept is the one-person, one-vote approach to measuring inequality of incomes that is used in the work of Bhalla and Sala-i-Martin. Mann noted that the main finding of their work has been succinctly described by Sala-i-Martin as “convergence, period.”

But Mann questioned whether the focus on people rather than countries is appropriate. The vast majority of people do not leave the country of their birth. What matters to them, therefore, is the living standard and inequality of income in that particular country. It is cold comfort to someone who cannot escape poverty in an African country to learn of the robust growth in China and the consequent reduction in global income inequalities. Moreover, economic policies are typically formulated at the country level. The cross-country inequality measure may thus be a better indicator of whether governments in poorer countries are adopting policies that would allow incomes in these countries to catch up with those in richer nations. That this measure has shown divergence over time suggests that many governments, particularly in Africa, have failed to adopt such policies.

Both rich and poor live longer

The second commentator, AEI’s Nick Eberstadt, said that income data could be so fragile that it was essential to corroborate Sala-i-Martin’s evidence using other socioeconomic indicators. One such indicator

Poverty has declined, except in Africa



is the measure of life expectancy. As an example, Eberstadt presented evidence showing how average life expectancy and the inequality between life expectancies of the rich and the poor have evolved in France since 1800: Life expectancy has increased from 30 years to over 75 years today, with a much faster rate of increase in the twentieth century than in the nineteenth century. Moreover, both rich and poor shared in the gains in life expectancy in France: Inequality between rich and poor has declined steadily, and at a particularly fast pace during the twentieth century. In other words, Eberstadt said, “it is much easier for the poor to buy extra years of life today” than it was 20 or 100 years ago. Evidence of this kind for other countries would be valuable, Eberstadt concluded. ■

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Nick Eberstadt

Conjuring up income distribution

Focusing on people rather than countries in analyzing the distribution of income immediately runs up against an immense practical problem: We do not know the income level of each person on the planet. But there are sources of information to help us piece together this information.

One source is countries’ national accounts data, which give per capita incomes. Another source—thanks to surveys that most countries conduct periodically—is snapshots of the income shares of various segments of the population. But they are deficient in two respects. First, they are not available for every year. Second, even in the years for which they are available, they provide the income level not of every person in the country but of those at particular income levels (for example, of quintiles—that is, five equal segments of the population, each representing 20 percent). Guesswork and number crunching are needed to transform the snapshots into a movie of how the distribution of income has evolved over time.

The first deficiency is not major in countries for which there are quite a few snapshots of income shares; it is easy

to fill in the gaps and conjecture what the income shares were in the missing (or nonsurvey) years. In countries where only a few snapshots are available, it is more difficult to picture the evolution of income shares over time. Sala-i-Martin paints in this missing data by assuming that countries in the same region have common patterns. For example, he fills in the missing income share data for, say, Paraguay by using the corresponding averages for the Latin American region as a whole. While this approach now provides income shares for each country over time, we are still a step away from computing the world distribution of income.

The income share data that Sala-i-Martin uses are for quintiles of the population. One could assume that every person within the quintile has the same income, but this is not a satisfactory assumption, particularly for populous countries in which each quintile represents several million people. Instead, Sala-i-Martin uses a variety of mathematical techniques to arrive at the income shares of people within each quintile.