



5

Income Inequality

How does income inequality affect poverty and quality of life in a country?

To begin to understand what life is like in a country—to know, for example, how many of its inhabitants are poor—it is not enough to know that country's per capita income. The number of poor people in a country and the average **quality of life** also depend on how equally—or unequally—income is distributed.

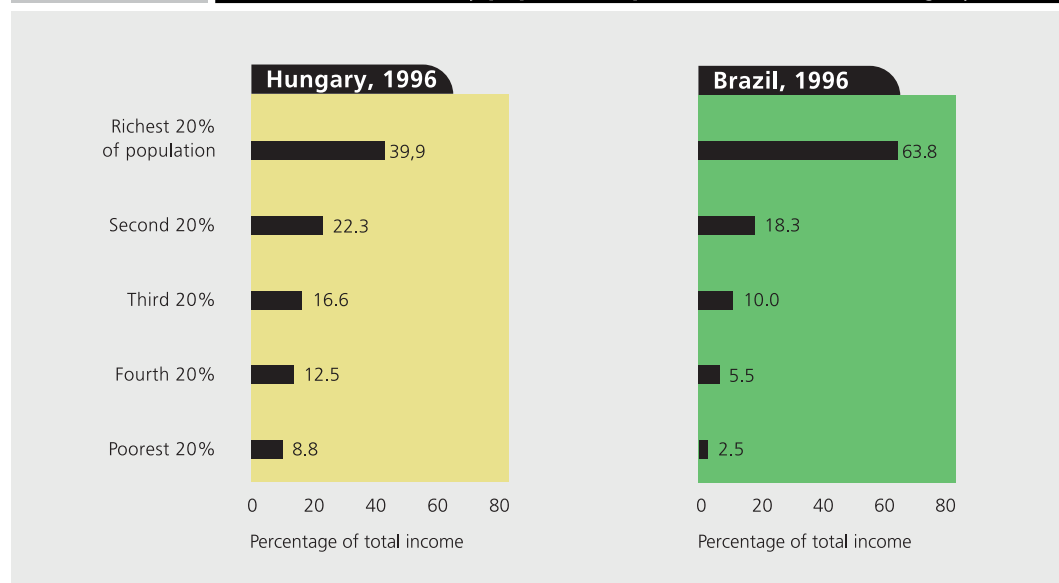
Cross-country Comparisons of Income Inequality

In Brazil and Hungary, for example, the GNP per capita levels are rather close, but the incidence of poverty in Brazil is higher. The reason for this difference can

be understood with the help of Figure 5.1, which shows the percentages of national income received by equal percentiles of individuals or households ranked by their income levels.

In Hungary the richest 20 percent (quintile) of the population received about 4.5 times more than the poorest quintile, while in Brazil the richest quintile received more than 30 times more than the poorest quintile. Compare these ratios with an average of about 6:1 in high-income countries. In the developing world income inequality, measured the same way, varies by region: 4:1 in South Asia, 6:1 in East Asia and the Middle East

Figure 5.1 Income distributed by population quintile in Brazil and Hungary



and North Africa, 10:1 in Sub-Saharan Africa, and 12:1 in Latin America.

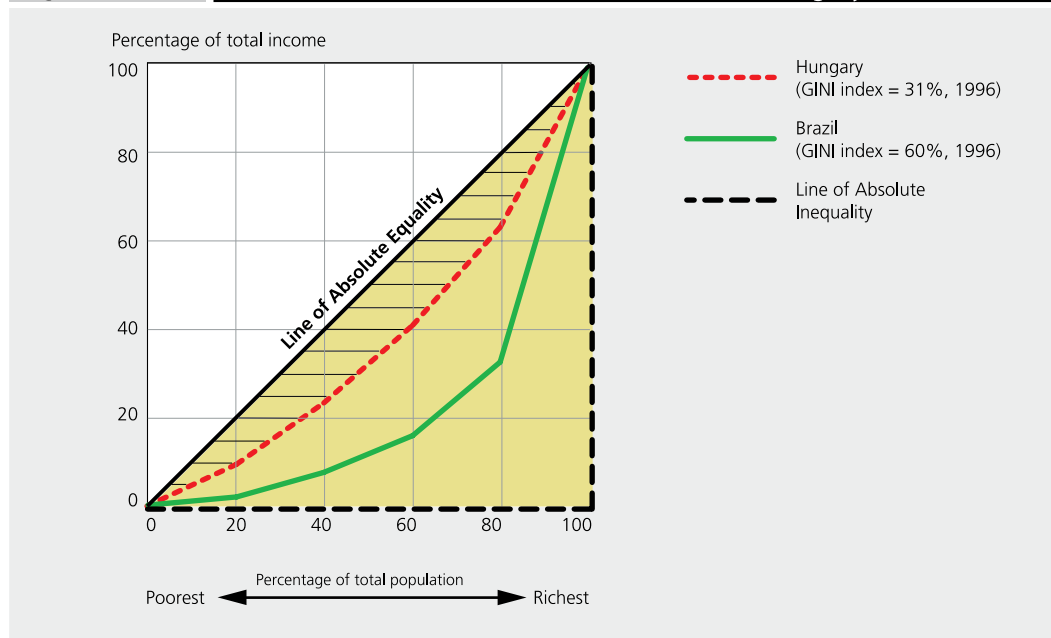
Lorenz Curves and Gini Indexes

To measure income inequality in a country and compare this phenomenon among countries more accurately, economists use Lorenz curves and Gini indexes. A Lorenz curve plots the cumulative percentages of total income received against the cumulative percentages of recipients, starting with the poorest individual or household (see Fig. 5.2). How do they construct the curve?

First, economists rank all the individuals or households in a country by their income level, from the poorest to the richest. Then all these individuals or

households are divided into 5 groups, 20 percent in each, (or 10 groups, 10 percent in each) and the income of each group is calculated and expressed as a percentage of GDP (see Fig. 5.1). Next, economists plot the shares of GDP received by these groups cumulatively—that is, plotting the income share of the poorest quintile against 20 percent of the population, the income share of the poorest quintile and the next (fourth) quintile against 40 percent of the population, and so on, until they plot the aggregate share of all five quintiles (which equals 100 percent) against 100 percent of the population. After connecting all the points on the chart—starting with the 0 percent share of income received by 0 percent of the population—they get the Lorenz curve for this country.

Figure 5.2 Lorenz curves and Gini indexes for Brazil and Hungary



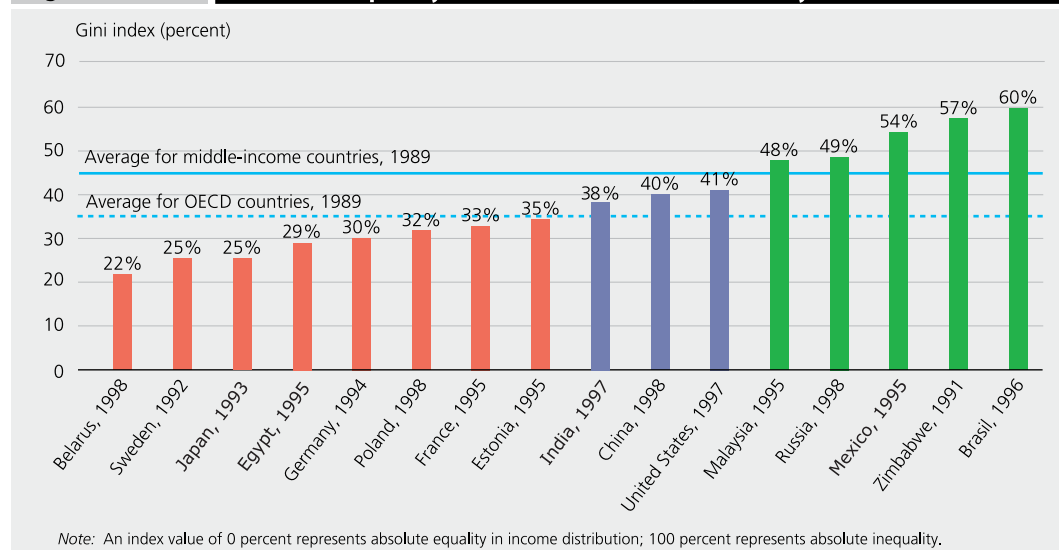
BEYOND ECONOMIC GROWTH

Is a more equal distribution of income good or bad for a country's development?

The deeper a country's Lorenz curve, the less equal its income distribution. For comparison, see in Figure 5.2 the "curve" of absolutely equal income distribution. Under such a distribution pattern, the first 20 percent of the population would receive exactly 20 percent of the income, 40 percent of the population would receive 40 percent of the income, and so on. The corresponding Lorenz curve would therefore be a straight line going from the lower left corner of the figure ($x = 0$ percent, $y = 0$ percent) to the upper right corner ($x = 100$ percent, $y = 100$ percent). Figure 5.2 shows that Brazil's Lorenz curve deviates from the hypothetical line of absolute equality much further than that of Hungary. This means that of these two countries Brazil has the higher income inequality.

A Gini index is even more convenient than a Lorenz curve when the task is to compare income inequality among many countries. The index is calculated as the area between a Lorenz curve and the line of absolute equality, expressed as a percentage of the triangle under the line (see the two shaded areas in Fig. 5.2). Thus a Gini index of 0 percent represents perfect equality—the Lorenz curve coincides with the straight line of absolute equality. A Gini index of 100 implies perfect inequality—the Lorenz curve coincides with the x axis and goes straight upward against the last entry (that is, the richest individual or household; see the thick dotted line in Figure 5.2). In reality, neither perfect equality nor perfect inequality is possible. Thus Gini indexes are always greater than 0 percent but less than 100 percent (see Fig. 5.3 and Data Table 1).

Figure 5.3 Income inequality in selected countries, various years



Costs and Benefits of Income Inequality

Is a less equal distribution of income good or bad for a country's development? There are different opinions about the best pattern of distribution—about whether, for example, the Gini index should be closer to 25 percent (as in Sweden) or to 40 percent (as in the United States). Consider the following arguments.

An excessively equal income distribution can be bad for economic efficiency. Take, for example, the experience of socialist countries, where deliberately low inequality (with no private profits and minimal differences in wages and salaries) deprived people of the incentives needed for their active participation in economic activities—for diligent work and vigorous entrepreneurship. Among the consequences of socialist equalization of incomes were poor discipline and low initiative among workers, poor quality and limited selection of goods and services, slow technical progress, and eventually, slower economic growth leading to more poverty.

In many high-income countries relatively low inequality of incomes is achieved with the help of considerable **transfer payments** from the government budget. However, economists often argue that mitigating inequality by increasing the burden of government taxes tends to discourage **investment**, slow **economic**

growth, and undermine a country's international competitiveness.

On the other hand, excessive inequality adversely affects people's quality of life, leading to a higher incidence of poverty, impeding progress in health and education, and contributing to crime. Think also about the following effects of high income inequality on some major factors of economic growth and development:

- High inequality reduces the pool of people with access to the resources—such as land or education—needed to unleash their full productive potential. Thus a country deprives itself of the contributions the poor could make to its economic and social development.
- High inequality threatens a country's political stability because more people are dissatisfied with their economic status, which makes it harder to reach political consensus among population groups with higher and lower incomes. Political instability increases the risks of investing in a country and so significantly undermines its development potential (see Chapter 6).
- High inequality may discourage certain basic norms of behavior among economic agents (individuals or enterprises) such as trust and commitment. Higher business risks and higher costs of contract enforcement impede economic growth by slowing down all economic transactions.

BEYOND ECONOMIC GROWTH

- High inequality limits the use of important market instruments such as changes in prices and fines. For example, higher rates for electricity and hot water might promote energy **efficiency** (see Chapter 15), but in the face of serious inequality, governments introducing even slightly higher rates risk causing extreme deprivation among the poorest citizens.

These are among the reasons why some international experts recommend

decreasing income inequality in developing countries to help accelerate economic and human development. But the simple fact that high levels of income inequality tend to strike many people as unfair, especially when they imply starkly different opportunities available to children born in the same country, also matters for sustainable development. After all, how can people care about the needs of future generations if they don't care about people living today?