

4. Global versus national inequality

François Bourguignon

This contribution analyses the evolution of the global inequality of individual living standards, and discusses whether the fall of global inequality witnessed over the past decades, largely based on a decline of inequality between countries, is likely to be permanent or temporary, in view of the opposite evolution in a number of countries.

The concept of the global inequality of living standards that is so often heard in international circles is ambiguous. Sometimes it refers to inequality between the nations of the globe, and at other times to inequality within nations. Yet such an expression should clearly relate to the whole human population as a single community – rich Americans, poor Ethiopians or middle-class Brazilians alike.

But why should global inequality be studied? Don't people tend to compare themselves with people close to them and with whom they share characteristics, in particular their geographical location, citizenship and major societal values, rather than with people living on the other side of the planet? There is a national and possibly local component to the way people feel about inequality.

If global inequality may not be a big concern to the citizens of a specific country, it matters as soon as we adopt global values. The Millennium Declaration of the United Nations, which launched the Millennium Development Goals (MDGs) fifteen years ago, started with the following sentences (my emphasis):

*We, heads of State and Government, have gathered at United Nations Headquarters in New York, at the dawn of a new millennium, to reaffirm our faith in the Organization and its Charter as indispensable foundations of a more peaceful, prosperous and **just** world. We recognize that, in addition to our separate responsibilities to our individual societies, we have a collective responsibility to uphold the principles of human dignity, **equality and equity at the global level.***

The resolution of the United Nations that launched the Sustainable Development Goals (SDGs) as the successor of the MDGs in September 2015 reaffirmed this commitment to improved global equality.

In that context, this article analyses the evolution of the global inequality of individual living standards of recent decades. It stresses several important facts. First, global inequality is much higher than the level of inequality most commonly observed in individual countries. This is to be expected, as global inequality combines the average inequality within countries, for example between poor and rich Americans, and the average inequality between countries, for example between the average American and the average Vietnamese person. Second, global inequality has substantially declined since the turn of the millennium, possibly marking a dramatic reversal of historical trends. Third, this reversal appears to be essentially due to lower inequality between countries, rather than to lower average inequality within them. Fourth, however, it is also true that the available statistics contradict this generally accepted view and suggest that inequality within nations has tended to increase without neutralizing the overall fall in global inequality. As there are reasons to believe that this rise in within-country inequality is underestimated, it is quite possible that the lower global inequality is less pronounced than it appears. If so, we would be witnessing a partial substitution of inequality within countries for the inequality between countries, which is a concerning perspective.

This contribution begins by outlining the way global inequality is measured. The analysis then focuses on the level and evolution of global inequality over the past two decades and its decomposition into between-country and within-country inequality, going over the four preceding points. It will also allude to globalization as a possible major cause of these changes in global and national inequality, before some concluding comments.

Difficulties in measuring global inequality

Global inequality is estimated by merging household survey samples regularly taken in individual countries, in order to estimate the distribution of living standards in that population. In this way, a sample of the global population is obtained that can be used to estimate inequality among world citizens. In some countries, surveys are unavailable or unreliable, which means there is less than full coverage of the world population, but most available estimates cover more than 95 per cent of it.

Problems arise when trying to compare national survey data. Three issues are particularly important. First, standards of living in national surveys are reported in the local currency and need to be converted to a common currency, say the US dollar. But a US dollar converted to currencies such as rupees or pesos at the official exchange rate does not buy the same quantity of goods in New York, Delhi or Mexico City. 'Purchasing power parities' (PPP) obtained from an international price comparison programme are used to make that correction, but disparities among household consumption baskets are ignored, as is the consequent inequality in the comparison between them.

Second, individual standards of living are not measured in the same way across countries. Some countries use household disposable income, while others use consumption expenditure; some divide the corresponding amounts by the size of households to approximate individual living standards, while others adjust the amount for the composition of the household. Rough approximations are needed to make national data more or less homogeneous, but the results are far from perfect.

Third, there are differences in the coverage of national surveys. When comparing surveys with national accounts, a sizeable gap generally appears in the total income or consumption expenditure recorded in surveys. It is generally the case that property income is underreported and/or that wealthy people are undersampled. It is therefore most likely that surveys tend to underestimate the actual degree of inequality and that the degree of underestimation varies between countries.

One way of reducing heterogeneity across countries is to proportionally scale up all personal income or consumption figures in national surveys in order

to fit the aggregate amounts reported in national accounts, and to keep the survey distributions unchanged. Such a normalization of something as arbitrary as national accounts may not be more precise than household surveys, and often relies on income or consumption definitions that cannot fully be compared with surveys.

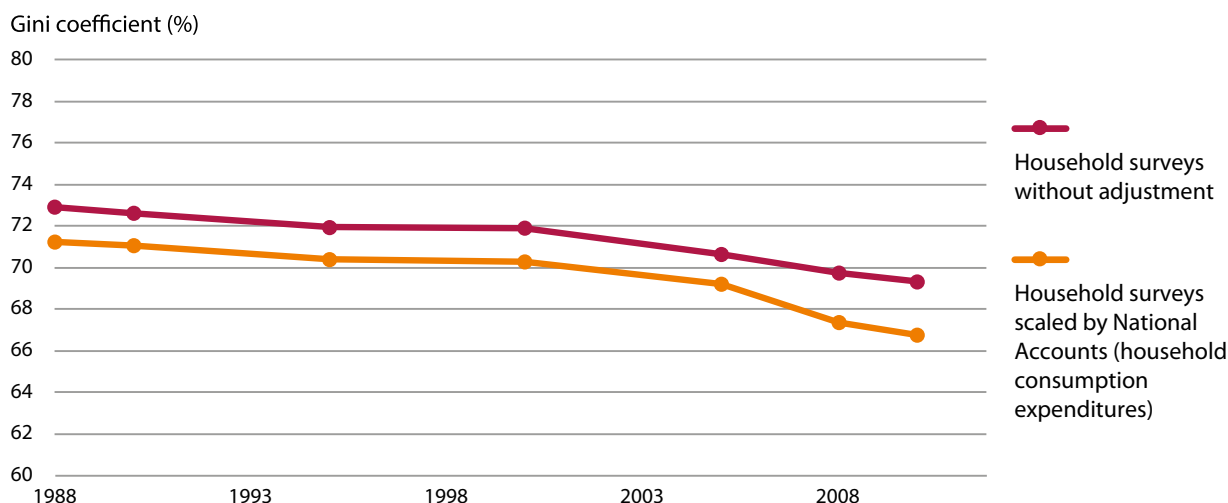
Although somewhat technical, these remarks about the disparities in measuring individual living standards across countries, and of missing income and people in household surveys, are important. They make it clear that estimates of global inequality may vary among authors, depending on the choices they have made to ensure maximum comparability across countries, and point to a negative bias in the estimation of both national and global inequality.

Various estimates of shifts in global inequality over recent decades are available in the literature (e.g. Anand and Segal, 2014; Bourguignon, 2015; Lakner and Milanovic, 2015). They essentially differ in the databases that are used, as various sources may be available for the same country, and in corrections applied to the original data aimed at making them as comparable as possible across countries, for instance through normalizing them to national accounts. Fortunately, they paint a uniform picture.

Figure 4.1 shows the movements in global inequality between the late 1980s and the late 2000s, as obtained from averaging and interpolating three recent sets of estimates. Global inequality is measured by the Gini coefficient. This most frequently used measure of inequality varies between 0 (no inequality) and 1. Actually, it currently ranges from between 0.25 and 0.30 in continental Europe to slightly below 0.40 in the USA and slightly above 0.60 for the most inegalitarian countries in the world, for example South Africa.

As expected, the Gini coefficient of global inequality is even higher, being above 0.70 at the beginning of the period under review, a level rarely witnessed at the country scale. The most noticeable feature of the chart is the fall in global inequality over the past two decades, mostly during the 2000s. This is substantial, as it amounts to 3 or 4 percentage points depending on whether we scale national household survey data by national accounts. The other remarkable aspect is that this fall occurs after a roughly continuous rise that lasted from the industrial revolution in the early nineteenth century in Europe until the last quarter of the twentieth century (Bourguignon and Morrisson, 2002).

Figure 4.1 The evolution of global inequality of living standards from 1988 to 2010
(average of various recent estimates*)



* Averaging requires interpolation across estimation years in various cases. Only the last two references provide estimates after 2008.

Sources: Anand and Segal (2014), Bourguignon (2015), Lakner and Milanovic (2015).

A decomposition of this downward shift in global inequality shows that it essentially comes from a decline in inequality between countries. In contrast, the inequality within countries increases slightly over the period.

The asymmetry between these two components of global inequality is easily understood. The dominant factor in the fall in inequality between nations is the dramatic catching-up process between the developed and the developing world over the past twenty to thirty years. The outstanding growth performance of China and India played a major role. However, it is quite remarkable that the accelerated fall of inequality in the 2000s is to a large extent due to better growth performances in other developing regions, for example sub-Saharan Africa and Latin America.

The roots of the increase of the within-country component of global inequality are in the rise of inequality observed in several countries with a significant weight in the global economy: the USA in the first place, but also China and India, and to a lesser extent several European countries. On the basis of the available estimates, this effect pales in comparison with the decrease in between-country inequality.

A first key question about this evidence is whether we are indeed witnessing a historic trend reversal, or whether the decline in global inequality will be temporary.

Looking at the giant Asian emerging countries, China and India, there are reasons to believe that this change will be permanent. Both will most likely continue to catch up with developed countries thanks to the growth potential of their huge domestic market. Things are less clear for smaller countries, whose development relies primarily on commodity exports. World commodity prices may be low for some time and growth perspectives may be much less favourable for these countries than in the first decade of this century. A prudent forecast is that global inequality may indeed keep declining in the coming decades, but at the slow pace of the 1990s rather than the high speed of the 2000s.

A second important question concerns the issue of underestimating top incomes, and therefore national inequality, in household surveys. Tax data sources in developed countries suggest that top earners are underrepresented in income surveys, and the rising share of the top 1 per cent observed in such data over the last twenty years or so in several countries has attracted a lot of public attention (e.g. Atkinson and Piketty, 2010).

As no comparable change was observed in the household surveys, it may be that standard survey data underestimate the rise in inequality in a number of countries. By ignoring top incomes, the preceding estimates would tend to overestimate the fall in global inequality. In one of the papers cited above, a simulation was undertaken where the observed

gap between the mean income or consumption expenditure per capita in household surveys and in national accounts was ascribed to underreporting of the top income decile in each country in the global sample. This correction leads to global inequality estimates that are higher than in the preceding chart, and to a less steep fall at the end of the period.¹

This possible overestimation of the size of the fall in global inequality because of the likely imprecision of survey data raises an important issue: the possibility that a partial substitution is taking place between the within-nation and between-nation components of global inequality. The underestimation of national inequality, and the possible recent rise in this form of inequality, do not affect the conclusion that the inequality between countries has fallen substantially over recent decades. But it does suggest that the increase in within-country inequality might not be as minor as it appeared to be in available estimates, and might partly compensate for the fall due to between-country inequality. In other words, part of the inequality between the rich average American and the poor average Chinese person would be replaced by an increasing inequality between rich and poor Americans and between rich and poor Chinese people. Some inequality between countries would thus be transferred to national inequality, and this is a concerning perspective if such a process persists.

Globalization might be the main mechanism for this substitution, as it has facilitated the catching-up of Asian emerging countries with the developed countries at the same time as it has tilted the functional distribution of income in favour of capital and against labour in most countries. Of course there are many other reasons why inequality may have increased throughout nations, including technical change in favour of skilled labour and, in a number of countries, a shift towards liberal policies, even though those two factors may not always be independent from the globalization process itself.

At this stage, the magnitude of the substitution of between-country by within-country inequality is quite uncertain, and it must be viewed more as a hypothesis to be investigated than as a fact. Even under rather extreme assumptions to correct survey data for missing top incomes, the substitution is incomplete and global inequality keeps falling.

Concluding comments

To conclude this short review of global inequality issues in our globalizing world, three basic points may be stressed.

First, in line with objectives to which the global community has repeatedly committed, it is essential that the inequality in individual living standards across countries keeps falling. From that perspective, the priority for global poverty action now clearly lies in sub-Saharan Africa, where global poverty will tend to concentrate in the coming decades.

Second, to keep global inequality falling, national inequality must be prevented from rising and must be cut down in countries where it is high. Failure to do so in major economies could endanger not only their functioning and efficiency, but also the positive aspects of globalization, by increasing resistance to further progress by those who are hurt by it.

Third, there is the issue of whether global inequality can be further reduced without increasing national inequality, contrary to what may have happened in recent decades. In theory, both objectives can be pursued independently through policies aimed at controlling national levels of inequality. Redistribution is essential, but redistributive instruments seem to be impaired by the enhanced mobility of capital and income associated with globalization. From that point of view, international agreements such as the recent G20 one about the transparency of bank accounts held by non-residents, and the operations of multinationals, are encouraging initiatives that may help countries to recover some autonomy in this key policy area.

Note

1. Lakner and Milanovic (2015) p. 25. Anand and Segal (2014) reach analogous results with another type of correction for underrepresented top incomes.

Bibliography

Anand, D. and Segal, P. 2014. The global distribution of income. A. Atkinson and F. Bourguignon (eds), *Handbook of Income Distribution*, Vol. 2. Amsterdam, Elsevier, pp. 937–79.

Atkinson, A. and Piketty, T. (eds). 2010. *Top Incomes: A Global Perspective*. Oxford and New York, Oxford University Press.

Bourguignon, F. 2015. *The Globalization of Inequality*, Princeton, N.J., Princeton University Press.

Bourguignon, F. and Morrisson, C. 2002. Inequality among world citizens: 1820–1992. *American Economic Review*, Vol. 92, No. 4, pp. 727–44.

Lakner, C. and Milanovic, B. 2015. Global income distribution: from the fall of the Berlin Wall to the Great Recession. *World Bank Economic Review*. <http://wber.oxfordjournals.org/content/early/2015/08/12/wber.lhv039> (Accessed 9 June 2016.)

■ **François Bourguignon** (France) is professor of economics and emeritus chair at the Paris School of Economics, France. He is a former World Bank chief economist and senior vice-president. He was director of studies in the Ecole des hautes études en sciences sociales (EHESS). He has written widely on issues of poverty and income distribution and on the globalization of inequality.