## TRENDS IN INCOME INEQUALITY: GLOBAL, INTER-COUNTRY, AND WITHIN COUNTRIES

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Over the last three decades, inequality between countries has decreased while inequality within countries has increased. Global inequality, which is the sum of inequality between and within countries, has declined modestly but remains high. Latest estimates put the Gini coefficient of global income distribution at around 0.7.

Global inequality rose for much of the period between the Industrial Revolution and the early part of the twentieth century (Figure 1). Both between-country and within-country inequalities widened. The dominant contribution to the rise in global inequality during this period came from rising inequality between countries. Gaps in national mean incomes widened as the economies of Western Europe and North America, spurred by the Industrial Revolution, increasingly pulled away from the rest of the world.

Global inequality continued to rise for much of the post-war period in the twentieth century but at a slower pace. Inequality between countries widened further and then stabilized. However, within-country inequality declined in the industrialized economies, starting with the impact of the wars and depressions on higher incomes and then helped by rising demand for labor as economic growth strengthened, improved education, more progressive fiscal regimes and the creation of welfare states.

Global inequality peaked around 1980 and has since shown a modest decline. This decline reflects the balance of two opposing trends. First, inter-country inequality reversed course and has been declining as economic growth picked up in the developing world (Figure 2). Average per capita economic growth in developing and emerging economies has exceeded that of advanced economies for most of the period since the early 1980s, allowing their mean incomes to begin to converge toward those of advanced economies (Figure 3). Second, within-country inequality started to rise following several post-war decades of decline and this rising trend has continued for most major economies in the past three decades. Several factors have contributed to the rise in within-country inequality, including globalization, technological change favoring higher-level skills and capital, structural changes in labor markets, the rising importance of finance, the emergence of winner-take-all markets, and policy changes such as shifts toward less progressive fiscal regimes. While the trend of rising within-country inequality during this period has been most consistent among advanced economies, several major emerging economies, including notably China, also experienced a rise in inequality, especially in the latter part of this period.

Economic reform and the take-off of growth in East Asia was the initial trigger for the reversal of the long rising trend in inter-country income inequality. The pick-up of growth in China was an especially important factor given the large weight of the country's population. The decline in inter-country inequality accelerated after 1990, and especially 2000, as further progress on economic reforms led to rising growth in a broader group of developing economies, including other populous countries such as India. The positive gap between average growth in emerging

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market and developing economies and advanced economies widened further after the global financial crisis in 2007 as growth in the former group of countries held up much better than in the latter.

While economic growth in the developing world strengthened and became more board-based in the post-1980 period, with a growing number of developing countries emerging as dynamic market economies, trend growth in economic productivity and output in advanced economies began to slow from the levels seen in the post-war period. Concurrently, within-country income inequality in advanced economies started to rise. This pattern of a slowing trend in productivity and economic growth coupled with a rising trend in income inequality in advanced economies became stronger in the latter part of the post-1980 period.

The main story in the rising global inequality from the time of the Industrial Revolution until about 1980 was rising inequality between countries. During this period, the share of global inequality attributable to inter-country inequality rose from around 20 percent to 80 percent (Figure 4). Rising inequality within countries has played a larger role in the global inequality story since 1980. The share of inter-country inequality in global inequality peaked around 1980 and has been declining since then. The declining trend in inter-country inequality looks set to continue in the period ahead. While economic growth in emerging market and developing economies has also slowed since 2012, average growth in these economies is likely to continue to exceed that in advanced economies. Convergence in mean incomes between advanced economies and the developing world until now has been driven predominantly by Asian emerging economies, but continued convergence could draw increasingly from other regions as well if their growth performance improves, including Africa that so far has achieved little convergence. However, with overall growth in emerging market and developing economies declining in the past few years, the pace of convergence could be slower than in the 1990-2012 period

Reflecting these recent trends, rising income inequality within countries has much greater salience in the debate on inequality today. Not only has inequality risen sharply in some major economies, prompting an increased focus on within-country inequality. Most politics is national, and rising inequality within countries commands political attention.

The interplay of inequality between and within countries since the 1980s has meant that the largest gainers from economic growth over this period have been at the middle and at the top of the global income distribution (Figure 5). Between 1988 and 2008, the largest gains in income accrued to the global middle class (roughly those between the 40th and 60th percentiles in the global income distribution) and the very rich (the top 1 percent). The former represents the middle classes in rapidly growing emerging economies, in particular China, while the latter represents top earners predominantly in advanced economies. Those at the very bottom of the global income distribution, mainly the poor in the developing world, did less well proportionally but rising incomes delivered by economic growth were still instrumental in substantially reducing extreme global poverty. Those around the 80th–90th percentiles did the least well and experienced practically stagnant real incomes. These principally are the working and middle classes of advanced economies.

The stark disparity between the income gains of the 80th–90th percentiles and the top 1 percent of the global income distribution implies not only a rise in income inequality in advanced

economies but also a high concentration of income at the very top. Indeed, the concentration of income at the top is likely even greater than that revealed by household survey data, on which Figure 5 is based, as such data tend to underestimate top incomes. According to one estimate, the share of the top 1 percent in global disposable income was as high as 29 percent in 2010 when corrected for underestimation, compared to 15.7 percent based on household surveys. The obverse of the increased concentration at the top in advanced economies has been the hollowing out of their middle classes. In the U.S., for example, the share of the middle class (defined as people with disposable incomes between 25 percent below and 25 percent above the median) fell from one third of the population in the early 1980s to 27 percent in 2010, with most having been pushed down. Over the same period, the share of the middle class in total income in the U.S. fell from 26 percent to 21 percent.

In sum, the story of income inequality over the past three decades is that the world as a whole is becoming modestly more equal but most countries, especially the high-income ones, are becoming less equal. If the world's poor and middle classes are doing better, thanks to growth successes in emerging and developing economies, that is indeed a positive development. But the sharply rising inequality within many countries, including the extreme concentration of income at the top and the shrinkage of the middle class in advanced economies, also is a matter for great concern. Not only does high income inequality raise moral issues, large and persistent increases in inequality within countries can undermine their economic performance and threaten sociopolitical stability. They can also produce a backlash against globalization that many see as an important factor behind the recent dynamic of income distribution, stoking national populism and protectionism (as currently being witnessed in many advanced economies, including the U.S., and as reflected most recently in the Brexit vote in the U.K.).

Also, the modest decline in global inequality may not endure. With inter-country inequality declining at a slower pace if the recent weakening of growth in emerging and developing economies persists, continued increases in within-country inequality could tilt the balance again toward a rise in global inequality. A companion note looks at the rising inequality within countries in more detail.





Source: Milanovic (2016).

Note: B-M series is from Bourguignon and Morrisson (2002), the L-M series is from Lakner and Milanovic (2016), and M refers to Milanovic's unpublished results for 2011. The B-M series uses 1990 international dollars and the L-M and M series use 2005 international dollars; hence the break in the graph.



Figure 2: Global income inequality between countries, 1960-2013

Source: Milanovic (2016).

Note: The graph shows inequality between countries (measured by Gini values estimated from countries' real per capita GDP) using two different measures: the unweighted Gini where each country counts equally; and the weighted Gini, where countries are weighted by the size of their population.

# Figure 3: Real per capita GDP growth in advanced economies and emerging market and developing economies, 1980-2014



Source: Calculated from the World Bank's World Development Indicators.



Figure 4: Share of between-country component in global income inequality, 1820-2011

Source: Milanovic (2016).

Note: The graph shows the percentage of global inequality that is accounted for by between-country inequality, i.e., by the gaps between national per capita incomes.

Cumulative gain in real income (%) Ventile/percentile of global income distribution

### Figure 5: Relative gain in real per capita income by global income level, 1998-2008

Source: Lakner and Milanovic (2016).

Note: The graph shows percentage gain in real household per capita income (measured in 2005 international dollars) between 1988 and 2008 at different points of the global income distribution. A recent update of data to 2011 shows essentially the same story as above except that income gains in the middle are even more pronounced and the gain at the top is somewhat less pronounced, reflecting the effects of the global financial crisis that saw advanced economies hit much more severely than emerging economies. The post-crisis period for which data are now available is still too short to determine whether the crisis produced a lasting break in the trends seen over the previous two decades or so.

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