

Response to Adam Corlett’s “Examining an elephant: globalisation and the lower middle class of the rich world”

By CHRISTOPH LAKNER AND BRANKO MILANOVIC*

I. What is the argument about?

It is important to be clear about what are the key disagreements between us and Adam Corlett: they are not about the data and the facts, nor that we argue that globalization alone is to blame for low income growth of rich countries’ middle classes (as Corlett, and commentators discussing his work, sometimes seems to imply). They are about perception and focus. But before we come to that, let us briefly review the facts and the explanation of the facts.

A. The facts

It is empirically incontrovertible that during the past 20-25 years, the middle classes in Asian countries have had a high rate of income growth. That is true even if China is excluded. It is also incontrovertible that the middle and lower middle classes in rich countries have had a relatively low rate of income growth.

Table 1, based on our data (also used by Corlett) shows this by contrasting annual growth rates of the average incomes of the third, fifth (close to the median) and eighth deciles in selected Asian countries with the third and the fifth deciles in large Western economies plus Sweden which we use as an example of a Nordic welfare state. (We do not show the eighth decile in Western economies because our focus is on the lower parts of rich countries’ distributions—but the inclusion of the eighth decile would not alter the picture).

The results shown in Table 1 are so well-known that they are almost unnecessary to discuss. Western middle classes did not go into a decline, nor did they stagnate throughout but the growth rates of 1-2 percent per annum (with the exception of the United Kingdom) were not remarkable, especially when contrasted with Asian growth rates. The table does not include Japan for which

* Respectively, World Bank, Research Department, clakner@worldbank.org; Graduate Center City University of New York, bmilanovic@gc.cuny.edu. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

the household survey data are not fully reliable but which has had a long period of near zero growth. The three largest rich world’s economies by population and total GDP, the United States, Japan and Germany, have thus had rates of per capita income growth among the lower parts of their distributions of around 1 percent per annum or less. This is approximately 1/4th of Asian middle classes’ growth rates.

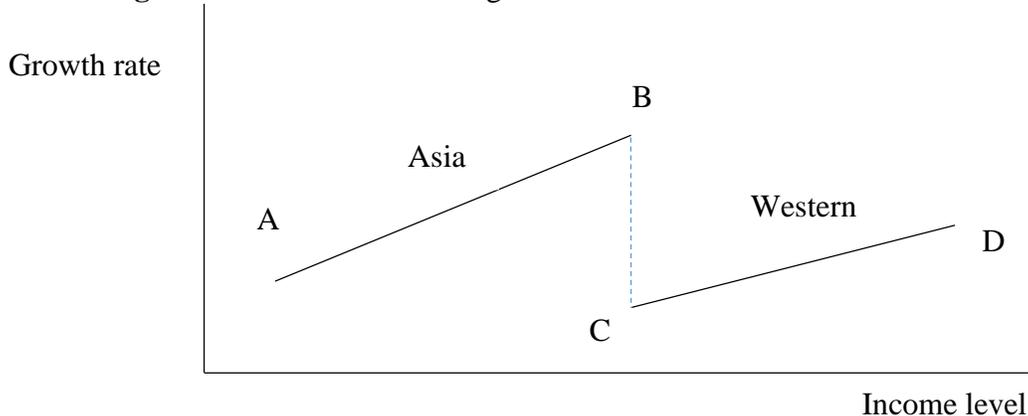
Table 1. Growth of selected Asian and Western country-deciles between 1988 and 2008 (annualized, percent)

Decile	China		Indonesia		Thailand	Vietnam*	USA	Germany	UK	France	Sweden*
	urban	rural	urban	rural							
Third	5.1	3.4	3.0	2.8	3.9	5.2	1.0	0.3	3.8	2.1	1.8
Fifth	5.5	3.9	3.2	3.0	3.8	5.3	1.2	0.3	3.8	1.9	1.6
Eighth	6.1	4.7	3.5	3.2	3.7	5.3	--	--	--	--	--

Note: * 1993-2008.

A simple graph can be useful to illustrate this. The horizontal axis shows income per capita in international dollars. The line AB shows the growth incidence curve (GIC) for Asian income deciles, and the line CD for Western income deciles. Both lines are upward sloping implying higher growth rates of nationally higher deciles. Asian deciles are all to the left of the Western deciles because their income levels are lower. But where income levels of the two parts come close together is at the point of relatively high domestic Asian deciles and relatively low Western income deciles. And it is precisely at that point—because of the upward sloping national GICs—that the gap between the two growth rates (B vs. C) is the greatest. This intuitively explains why in the “elephant graph” there is a sharp decline in the global growth incidence curve when one moves from the position around the global median and moves toward the higher global percentiles where the Western middle classes are located.

Figure 1. Asian and Western growth incidence curves illustrated



B. *Explanation*

So, if the argument is not about the facts, is it about their explanation? Not really because a monocausal explanation for the discrepancy between the two middle classes' growth rates that Corlett at times seems to ascribe to us is inaccurate. Nowhere do we claim that the low growth rate of Western middle classes is due to globalization alone. In fact, in our paper the issue is not even mentioned and in Milanovic's *Global inequality* it is discussed in conjunction with other factors which might have been responsible for the upward sloping GICs in rich countries and thus low growth rates of the middle: technological progress and economic policies. The evidence, mentioned by Milanovic, about the possible link between globalization and slow growth of middle class incomes in the West comes from other authors: Ebenstein, Harrison, McMillan and Phillips (2014), Ebenstein, Harrison, McMillan (2015), Feenstra and Hanson (1999).

However one cannot be entirely oblivious of the fact that the two developments did take place at the same time and that there is a reasonable narrative and empirical analysis linking them. *If* fast growth of middle class incomes in Asia and slow growth of middle class incomes in the West are caused by the same process, engendered by globalization, then the continuation of this process as it extends to poorer and populous countries (Nigeria, Sudan, Ethiopia, Burma) might imply a prolonged period of low income growth for the middle classes in the West. One cannot argue that it will be necessarily the case because the causal link is not established, but one cannot disregard it either. We remain open to the possibility that globalization is part of the reason for the low income growth of the Western middle classes. It is unlikely to be an entire explanation; and actually no single factor can be.

C. *Difference in focus*

The argument is thus neither about the facts nor (really) about the explanation of the facts. It is about the focus. For Corlett, who zeroes in on the differences in the incidence of growth among Western economies, the emphasis is naturally on domestic policies as a way to explain these differences. This is why he dedicates the second, and larger, part of his paper to the study of UK experience. And indeed if one's focus is not global, but is more narrowly centered on the rich economies alone, then the variability in the growth rates of their middle classes calls for a "domestic" explanation. But if one looks at these growth rates from a global perspective then there is much more of what they have in common—uniformly lower growth than Asia—than what separates them. One's attention is then naturally directed toward globalization or technological change as possible explanations.

In other words, if your key objective is to explain why UK third decile grew at 3.8% per annum while the French third decile grew at only 2.1% per annum, globalization is not going to be an

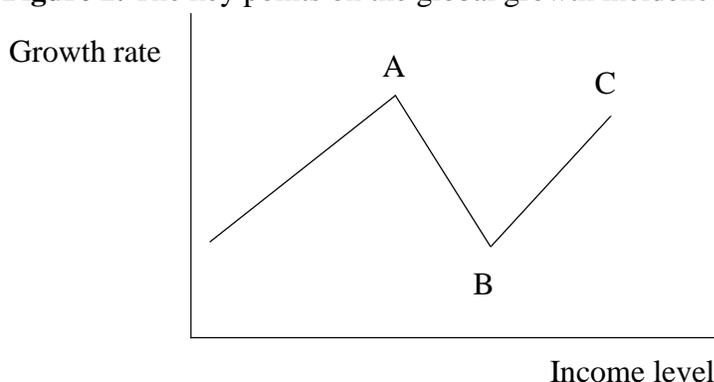
answer because both countries were exposed to the similar forces of globalization.¹ Domestic policies are likely to have mattered. But if your objective is to explain why Western countries' middle classes all had lower growth rates than their Asian counterparts, then you will pay much more attention to globalization.

II. Corlett's empirics

A. Demographics and quasi non-anonymous growth

The distinctive hump-shaped global GIC (“the elephant graph”) comes from the position of three points. They are (as illustrated in Figure 2), the high growth rate around the middle of the global income distribution (point A), the relatively low growth rate among the richer people, located around the 80th global percentile (point B) and a high growth rate among the top 1% (point C).

Figure 2. The key points on the global growth incidence curve



It is important to underline that this particular configuration: high A and C, low B, is present in all the variants of the graph for the period 1988-2008. It is present in the most popular variant, the so called anonymous GIC where we look only at the income changes at a given global percentile without worrying about who is in that percentile in 1988 and 2008. It is present whether we do this graph using international (PPP) dollars or national currencies converted at the official exchange rates. It is present if we include the adjustment for the likely underreporting of top national incomes. It is present when we keep the same countries in 1988 and 2008.

It is finally also present if we keep the 1988 country/deciles fixed, at their 1988 positions, and look at what growth rates they have experienced. This is what we call in our paper “quasi non-anonymous GIC”. It would be fully non-anonymous if we could keep the same people at their 1988 positions. Obviously, we cannot do that because our data come from national surveys that are random samples which include every year different people. But we can keep the same

¹ Put differently, one might also question why Corlett even includes an analysis of the global distribution. A comparison of within-country trends among Western countries would have sufficed.

country/deciles at their 1988 positions and then chart their growth rates. In other words, we keep say, the Chinese urban 3rd decile at its 1988 position (40th global percentile), American 5th decile at its own 1988 position (92nd percentile) and so forth.

Such a chart takes care of two “problems”: (i) it does not allow for churning of the country/deciles (i.e., does not allow for the movement of country/deciles up or down the global income distribution)² and (ii) it does not allow for changes in national population sizes. So, to repeat, both the churning and the demographic effects are adjusted for.

Figure 3. Quasi non-anonymous global incidence curve 1988-2008

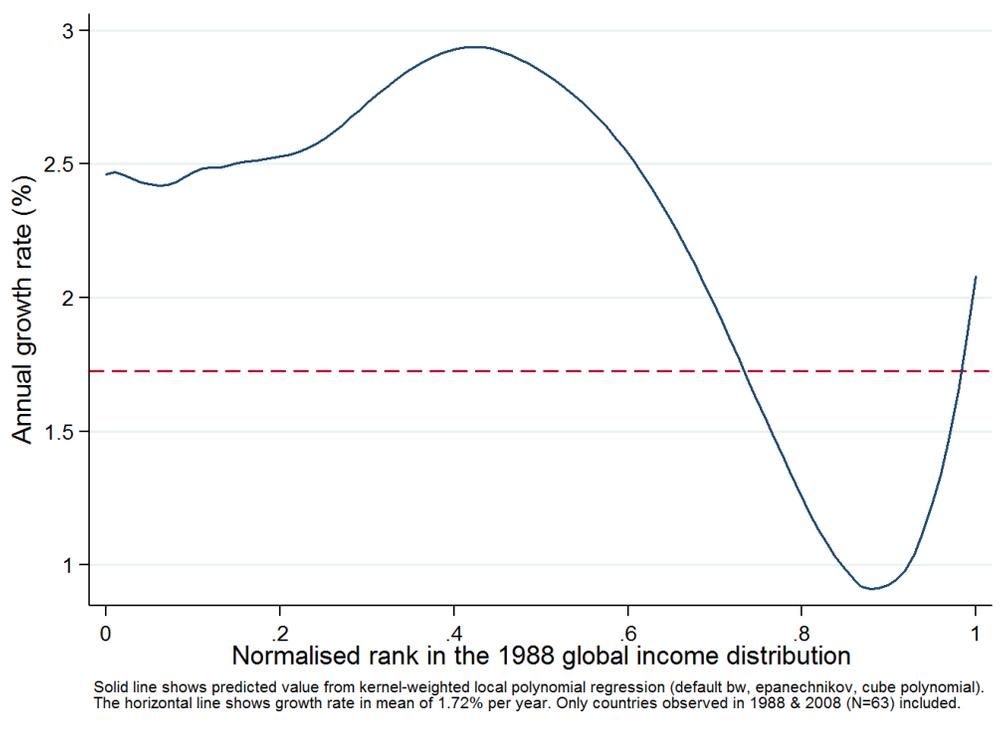


Figure 3 displays such a quasi non-anonymous GIC. It is taken from our 2016 *World Bank Economic Review* paper (Figure 5, p. 222). We show there such a chart also with 1993 as the base year, and in the presentations we have also used it with an extra adjustment for the top income underreporting (which makes the “trunk” around the global 1% higher).

It is apparent if one looks at this figure which controls for the churning and demographics that the growth rate takes a dip around the 80-85th global percentile. We can then ask, who were the people around that part of the global distribution in 1988? As Table 2 shows, there were some 207 million

² As is allowed in the anonymous GIC.

people, located between the 80th and 85th global percentile in 1988, and 172 million of them were from the mature economies (basically, today’s members of OECD).³ Even if one drops the former Communist economies, there are still 145 million people (or 70 percent) from the “old rich” economies. Here are some representative “rich world’s” deciles with their 1988-2008 annualized per capita growth rates: US 2nd decile (0.9%), German bottom decile (0 growth), French 2nd to 4th deciles (2%), Italian 4th to 6th deciles (about 2.1%), Spanish 5th to 7th deciles (about 2.3%), Greek 3rd to 5th deciles (about 0.4%), Finish 2nd to 3rd deciles (about 1%).

Table 2. Regional composition of the country-deciles between the 80th and 85th global percentile in 1988

Region	No. country deciles	Total population (in mio)	Population share (in %)
Mature economies	78	172	83
<i>of which “old rich” (incl. Japan and Korea)</i>	46	145	70
Middle East and North Africa	2	3	2
Latin America	13	27	13
Russia, Central Asia, SE Europe	4	5	2
Total	97	207	100

Now, Corlett pays quite a lot of attention to the role of demographic factors and to the fact that higher population growth of poor countries will, without anything else changing, tend to push the rich countries’ deciles into higher global income positions. His introduction of demographics is a welcome addition to the analysis and it is something that we have not explicitly addressed in our paper. So we appreciate that Corlett does it. But, contrary to what a reader of his paper might conclude, we do adjust for the effects of demographics, as just explained here. The reader of Corlett paper may never realize this because the existence of our quasi non-anonymous GIC is mentioned by him, oddly and only once, in the note to Figure 11 (p. 24).

B. Dropping off of countries

The second part of Corlett’s empirical analysis that deserves attention is his dropping off of the countries and regions. There is nothing wrong in that. We have often dropped China precisely in order to highlight how important China is. David Rosnick has recently done the same thing (Rosnick, 2016). Figure 3 (p. 218) from our 2016 paper shows one such detailed decomposition where the regions are placed atop each other until the full world is included.

³ Table 2 includes all the country-deciles observed in 1988, which is consistent with the ranks used in Figure 3 (the horizontal axis). Not all these country-deciles are observed in 2008.

So Corlett’s showing of GICs for mature economies excluding “Japan, ex-Soviet satellites/Baltics” and then “the world excluding China” and finally “Japan and (the incongruously named) ex-Soviet satellites/Baltics” is absolutely fine, but obviously such new sub-global classifications are not going to reproduce an elephant shaped curve (since that curve crucially depends on having the whole world included).⁴ They also illustrate what we mentioned before, namely Corlett difference in focus. He emphasizes that the mature economies (excluding Japan and “ex-Soviet”) display more or less flat GIC with only an upward kink toward the top of the distribution. This reflects the well-known increase in inequality in mature economies and lower growth rates (than around the top) for most of the Western countries’ distributions. There is thus nothing particularly novel or controversial here. It is, to repeat, the juxtaposition of these relatively low Western growth rates with middle class (but poorer) deciles in Asia that produces the distinctive hump-shaped feature of the global graph.

III. What happened since 2008?

Two big things have happened since our paper was published, originally as a World Bank Policy Research Working Paper in 2013. First, the new PPP exercise has been completed and the new (2011) PPP exchange rates have shown most of Asian countries to have significantly lower price levels and thus higher PPP income levels than previously thought. This did not, of course, affect the growth rates of these country’s deciles but has affected the position of these deciles in the world income distribution and could thus affect the shape of the global growth incidence curve. We have addressed this issue in the Annex to our 2016 paper. The global GIC has changed but very slightly and all the main characteristics, obtained with 2005 PPPs, remain.

Second, we now have the data for up to 2011 and might soon have the global data for the period up to 2013. The tendencies present during 1988-2008 have become only stronger when we extend the analysis to 2011. (The new global GIC for the period up to 2011 and using 2011 PPPs is shown in Milanovic’s *Global Inequality*, Figure 1.3, p. 31.) Asian country/deciles have continued with high growth rates and even accelerated their growth whereas Western country/deciles have continued to grow at approximately the same or lower growth rates (see Table 3). Thus, the growth rate gap shown by points B and C in Figure 1 has widened.⁵ Now however Asian countries both because of the more favorable PPP incomes and because they have continued to grow fast have moved towards the right in Figure 1, that is toward the higher parts of the global income distribution.

⁴ These different GICs are also very difficult (if not impossible) to compare because dropping countries changes the ranking and thus the horizontal axis.

⁵ Recent data from the World Bank (2015) show that in the period 2007-2012 the income of the poorest 40% of the population in mature economies grew on average by -0.4% per year (or -0.1% when population-weighted) compared with 7.2% for China, 4.3% for other Asian countries, and 4.1% for Latin America and the Caribbean.

Table 3. Growth of selected Asian and Western country-deciles between 1988 and 2011 (annualized, percent)

Decile	China		Indonesia		Thailand	Vietnam*	USA	Germany	UK	France
	urban	rural	urban	rural						
Third	8.1	5.6	3.5	2.1	3.9	7.7	0.5	0.5	1.9	1.7
Fifth	8.4	6.2	3.7	2.2	3.9	7.9	0.6	0.5	2.1	1.6
Eighth	8.9	6.9	4.2	2.6	3.9	7.9	--	--	--	--

Note: * 1993-2011.

The only significant break in the trend that seemed to have happened after 2008 is a much slower growth of the global top 1%. The global top 1% is overwhelmingly composed of the “old rich” world’s top deciles (for example, some 12 percent of Americans are in the global top one percent) and these were the groups whose incomes were originally hit quite strongly by the financial crisis. The top Asian deciles are still not as rich, or there are in Asia not sufficient numbers of people that are very rich by western standards, for Asia to affect substantially what is happening to the global top 1%. So, if the elephant curve has changed in any ways after 2008, it is to have now a shorter “trunk”. But the distinctive Asia-West hump has become even more pronounced. Which means that the issue of what causes this gap, whether it will perdure and how it could be remedied will remain with us for the foreseeable future. Thus we expect and welcome more discussion of it.

REFERENCES

Corlett, Adam (2016), "Examining an elephant: globalisation and the lower middle class of the rich world", Resolution Foundation, London.

Ebenstein, Avraham, Ann Harrison and Margaret McMillan (2015), "Why are American workers getting poorer? China, trade and offshoring", National Bureau of Economic Research Working paper 21027, March.

Ebenstein, Avraham, Ann Harrison and Margaret McMillan and Shannon Phillips (2014), "Estimating the Impact of Trade and Offshoring on American Workers Using the Current Population Surveys", *Review of Economics and Statistics*, October 2014, Vol. 96, No. 4: 581–595.

Feenstra, Robert and Gordon H. Hanson (1999), "The impact of outsourcing and high-technology capital on wages: estimate for the United States, 1979-90", *Quarterly Journal of Economics*, vol. 114 (August). pp. 907-40.

Lakner, Christoph and Branko Milanovic (2013), "Global income distribution: from the fall of the Berlin Wall to the Great Recession", World Bank Policy Research Working Paper No. 6719, December.

Lakner, Christoph and Branko Milanovic (2016), "Global income distribution: from the fall of the Berlin Wall to the Great Recession", *World Bank Economic Review*, vol. 30, No. 2, pp. 203-232.; electronically published 12 August 2015.

Milanovic, Branko (2016), *Global Inequality: A New Approach for the Age of Globalization*, Harvard University Press.

Rosnick, David (2016), "The Incredible Story of Developing Country Income Growth: Was it Just China?" Center for Economic and Policy Research. Published 19 July 2016. Available at <http://cepr.net/blogs/cepr-blog/the-incredible-story-of-developing-country-income-growth-was-it-just-china>.

World Bank (2015), "Global Database of Shared Prosperity," Brief. Published October 6, 2015. Available at <http://www.worldbank.org/en/topic/poverty/brief/global-database-of-shared-prosperity>.