

A RESPONSE TO MAX ROSER: HOW NOT TO MEASURE GLOBAL POVERTY

February 6, 2019

Max Roser and Joe Hasell have [written a post](#) defending the methodology behind their long-term poverty graph. It is not addressed to me, but it was written in response to my critique (which you can read [here](#)).

Unfortunately, their response doesn't engage with most of my substantive arguments. They do not address the evidence on how the \$1.90 line is too low to be meaningful. They call \$1.90 "extreme", which it is – and that is precisely why it should not be used in public communication. Remember, the World Bank has repeatedly pointed out that it is too low to inform economic policy. Why then should it be acceptable for Gates, Pinker and Roser to use it to inform public discussion about economic policy (i.e., whether the global economy is working for the world's majority or not)? As I see it, Roser should stop using \$1.90 in his flagship graphs.

Roser and Hasell also do not address the critique, made by Sanjay Reddy and many others, that the PPP baselines that underpin the \$1.90 line overstate the purchasing power of the poor. Nor do they address my argument that progress against global poverty is actually worsening, when poverty is measured against our capacity to end it.

Roser and Hasell imply that I claimed poor people are getting poorer. I have never said that; that is a straw man. Indeed, I pointed out that the incomes of the poor are going up in aggregate, but – crucially – not enough to raise them out of poverty. That's what's at stake. My actual claim was that that the number of people living under \$7.40 per day has increased since 1981, and now stands at 4.2 billion people, 58% of the world's population. It's not clear to me why this fact has stirred such controversy.

Roser and Hasell also take pains to remind us that global GDP is going up. But here again this is a straw man. Of course global GDP is going up! That's not what keeps me up at night. What troubles me is the *distribution* of global GDP. In per capita terms, virtually all of it gets sucked straight into the global North, driving a wide and growing gap between the global North and South, as we can see here.



Now, to the important bit. The real point of Roser and Hasell's post is to defend their choice to merge two very different datasets for their long-term graph: Bourguignon and Morrison (2002) for the period 1820-1970, and World Bank data for 1981 and following.

I pointed out earlier that these two datasets measure different things, and cannot be united into a single trend. The B/M data is based on the Maddison database, which was never intended to measure poverty, but rather GDP ("income") through national accounts. B/M try to estimate the share that goes to households, and then estimate the national distribution, but they are clear (they state it over and over) that this is basically a shot in the dark. The World Bank data, by contrast, is based on household surveys of income *and* consumption of non-monetary goods and services (including everything from domestic production to gifts to hunting), at least where consumption data is available.

I initially characterized this distinction as one between income and consumption. This is a simplification, to be sure – but is commonly used shorthand to describe the difference. Roser and Hasell pounced on it. In defending their use of both measures, they have argued that the Maddison data includes *not only income* but *also* non-monetary goods. It might seem that this settles the argument about the long-term trend. But in fact Roser and Hasell have significantly misrepresented the Maddison data.

Let's dig in here. The underlying data that Bourguignon and Morrison use is listed online and available for free at [Maddison \(1995\)](#). There are two important things that stand out.

First, coverage. The data on global North countries is rich and robust. Not so for the South. Only 7 pages of this appendix pertain to the three continents of the global South (pages 93 to 99, at the very end). For Asia and Latin America, data for prior to 1900 exists for only three countries each. For Africa there is no data at all prior to 1900, and data for prior to 1950 exists for only three countries.

It doesn't take a statistician to recognize that this is not an adequate empirical basis on which to draw conclusions about long-term global poverty during the period of colonization. The data just isn't there. There's no getting around this critique, yet Roser and Hasell have ignored it. Sure, one might speculate on long-term trends in a text intended for academics, while foregrounding the uncertainty and lack of data, as B/M have done. But to create a shiny graph for lay consumption on social media while mentioning *none* of the uncertainty whatsoever (as in the graph that Gates tweeted) is irresponsible.

The World Bank's PovcalNet suppresses results when survey coverage is too low to be meaningful, so as not to mislead people. So too should Roser. That would be a responsible move.

Second, it's simply not true that the Maddison data counts all non-monetary consumption in the global South, as Roser and Hasell imply. Now, it does count non-monetary *GDP* – for example, national accounts of grain production, or production from some other industries (typically only those that colonizers were interested in), including when that production happened domestically. But it does not include goods and services gained from commons: game and fodder from communal forests, water from communal irrigation systems, chickens and vegetables raised for domestic consumption, help from neighbours, etc... in other words, nothing that is not normally captured in national accounts (or any official accounts of commodity production).

In this sense, the Maddison data is fundamentally different from the data that is gathered from household surveys. There's no getting around it. Roser and Hasell try to muddy this distinction, misleading people into believing that the two datasets are basically the same. They are not. Branko Milanovic, the world expert on this question, makes this clear [here](#).

This is important when it comes to measuring long-term poverty, because the period 1820-1950 covers a period of enclosure and mass dispossession under colonialism across the global South.

Take the case of India, for example. In the 19th century, the British went about enclosing communal forests (which they used to build their navy), privatizing communal waterways, destroying communal granaries, etc. The goal of these policies was explicit: to put farmers at the mercy of hunger so that that they would have no choice but to intensify agricultural production for export (to London) if they wanted to survive. And it worked: grain production went up, exports rose. This is reflected in the national accounts.

But during this very period, from 1876-1902, 30 million Indians starved to death as a result of British policy. Life expectancy collapsed by 20% from 1870 to 1920. Why? Because people had been stripped of commons they had traditionally depended on. Think about it this way. If you enclose a forest and sell it for timber, GDP goes up. But this accounting tells us nothing of what the local community loses in terms of their use of that forest. Nothing. The loss is swept under the statistical rug.

That's what gets left out of Roser's graph. The story of colonization and the impact it had on the livelihoods of the colonized is elided, repackaged as a narrative of progress.

Roser is not really to be blamed for this. He works with statistics, and none of this is captured by statistics. But there are disciplines that do speak to this question. Economic anthropology, in which I am trained, has for more than a century described how pre-capitalist economies work – describing how people have managed commons, how they have organized gift exchange and systems of reciprocity, etc. If we want to understand what happened – and what was lost – during the forced transformation from subsistence economies to capitalist ones, we need to pay attention to that research.

A final thought. Roser and Hasell imply that I have "dismissed" the hard work of studious researchers. I have done no such thing. I respect the work they have done; I know how difficult it is. My argument, rather, is that the results of that research are simply not robust enough to draw the conclusions that Roser draws, and which Gates and Pinker have trumpeted. Indeed, they were never intended for that purpose. We don't need to be afraid of this critique just because it threatens a long-familiar story. What we need is to tell better, more accurate stories. That's how science progresses.

So, this is my plea. Take the graph down. It's time to stop using it.

Or, if it must be kept up, this is what needs to change (and I have stated this to Roser and Hasell directly). Every time the graph appears, it needs to foreground (a) that the two underlying methods are different and not comparable; (b) that the data for prior to 1950, and specifically prior to 1900, is extremely thin for the global South and not robust enough to draw strong conclusions; and (c) that the data does not capture the impact that colonization had on people's livelihoods. That shouldn't be too difficult.

LATEST POSTS

A RESPONSE TO MAX ROSER: HOW NOT TO MEASURE GLOBAL POVERTY

Feb 6, 2019

A LETTER TO STEVEN PINKER (AND BILL GATES, FOR THAT MATTER) ABOUT GLOBAL POVERTY

Feb 4, 2019

THE SCANDAL OF BRITISH AID

Jan 25, 2019

INEQUALITY AND THE ECOLOGICAL TRANSITION

Jan 14, 2019

IS INEQUALITY WITHIN COUNTRIES GETTING BETTER OR WORSE?

Dec 13, 2018

HERE'S A SIMPLE SOLUTION TO THE GREEN GROWTH / DEGROWTH DEBATE

Nov 1, 2018

DEGROWTH: A CALL FOR RADICAL ABUNDANCE

Oct 27, 2018

THE CASE FOR REPARATIONS

Oct 13, 2018

SOOTHING NOAH SMITH'S FEARS ABOUT A POST-GROWTH WORLD

Sep 21, 2018

WHY GROWTH CAN'T BE GREEN

Sep 14, 2018

THE MORAL EGREGIOUSNESS OF POVERTY IS WORSE THAN EVER BEFORE IN HISTORY

Aug 30, 2018

THE PROBLEM WITH THE HUMAN DEVELOPMENT INDEX IN AN ERA OF ECOLOGICAL BREAKDOWN

Jul 5, 2018

ECOMODERNISM AND THE SACRED SHIBBOLETH

May 15, 2018

THE MAGICAL THINKING OF ECOMODERNISM

Apr 4, 2018

THIS ISN'T JUST ABOUT PENSIONS ANYMORE - THERE'S A REVOLUTION AFOOT

Mar 15, 2018

A LETTER TO MY STUDENTS ABOUT THE UCU STRIKE

Feb 14, 2018

HUMAN FLOURISHING DOESN'T REQUIRE ENDLESS GDP GROWTH

Dec 23, 2017

FM4 REALITY CHECK

Dec 21, 2017

DE-GROWTH IS FEASIBLE: PEOPLE WANT A NEW ECONOMY

Nov 22, 2017

WHY BRANKO MILANOVIC IS WRONG ABOUT DE-GROWTH

Nov 19, 2017

