Comments on Dani Rodrik's paper, "The past, present and future of economic growth"

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I enjoyed Dani's paper very much. It is a first-rate review of economic history and factors that have led to the development of the North-Western corner of Eurasia and then spread the development to the Western offshoots, and parts of Asia and Latin America. Dani weaves extremely well and persuasively the grand narrative of economic history with his own empirical findings on growth-promoting factors and policies. In the end, he also looks at what the implications could be for the future.

In my review I would like to focus on three issues: (1) components of global inequality and their political significance, (2) the shrinking space for policy autonomy, and (3) the technological frontier and its implication for the development of poor countries.

1. Global inequality and global democracy

Both Dani in his paper, and Kemal Derviş in his comments, are right re. The role of the between-country component in global inequality (even if they seem to disagree).

Dani looks at the historical evolution of between- vs. within-component from the early 1800 (i.e. from when we have Maddison's GDP per capita data and Bourguignon-Morrisson estimates of income distributions) and rightly shows that the between component has increased by leaps and bounds. This is also something that I find in Milanovic (2011) using different data for the late 1800's and pushing the contemporary period up to 2005. The level of the between component is very high, and whatever inequality measure and decomposition we use (Theil or Gini or Kakwani), the between-country component today accounts for at least ¾ of total inequality.

In other words, it is indeed the place where one is born that determines a huge chunk of one's income. Using 2008 country percentile data (100 income percentiles per country), I find that running a regression with percentile income levels for 117 countries as a dependent variable on country dummies alone, explains between 65 and 75 percent of income variability. That is, where you are born, which for 97% of mankind is equivalent to where you live, determines tremendously your life-chances. This is what Dani argues in his section 2.

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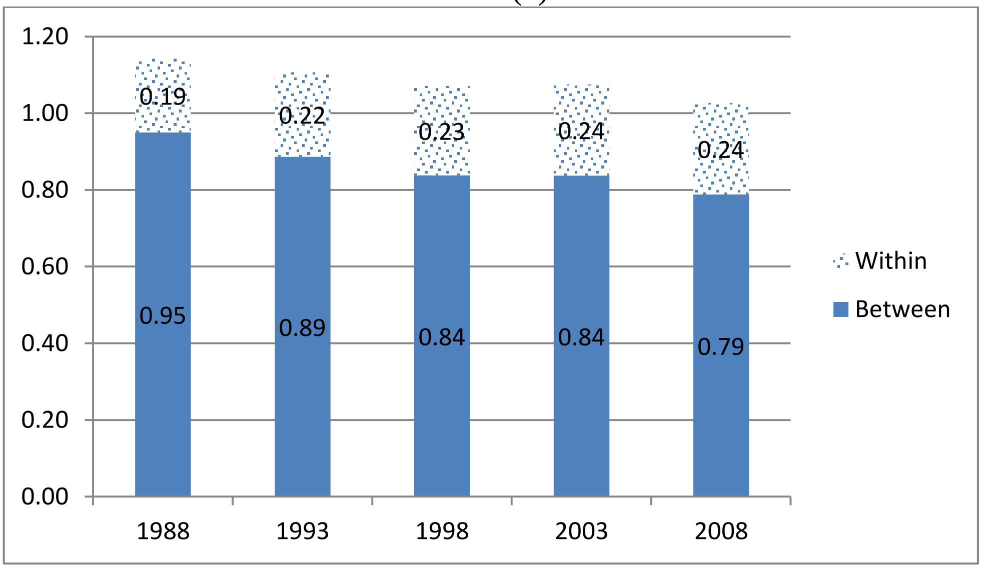
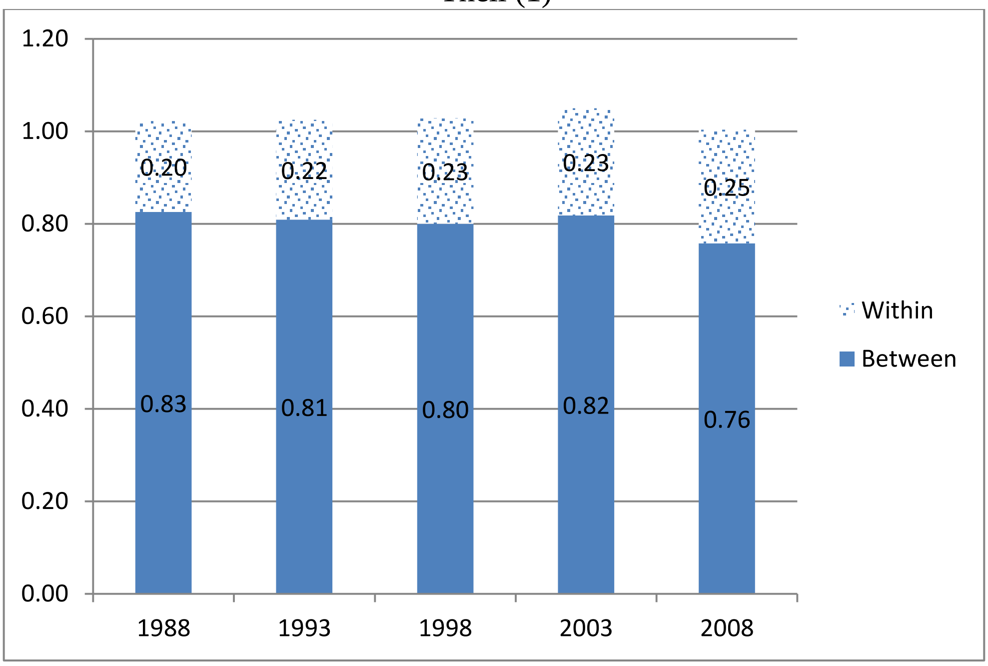
Now, where Kemal is right, is what I just said is in the process of getting somewhat less important thanks to the phenomenal growth rates of China and India, in particular, but also thanks to the re-emergence of the global South as a strong economic actor. Thus, between 1988 and 2008, the (population-weighted) between-country Gini has decreased from 68 to 66 points driving down the overall global inequality from 72 Gini points to 70. If we use Theil (0) and Theil (1), which are exactly decomposable, we find that the level of between-country inequality has gone **down** by 16 and 7 Theil points respectively, while the level of within-country inequality has **increased** by 5 Theil points (see Figure 1).

Figure 1. Global inequality and its components, 1988-2008

Theil (0)



Theil (1)



The share of between country inequality in total has gone down from around 80 percent to 75 percent. There is no doubt that it is still by far the dominant factor in "explaining" inequality between world citizens.

But the question can be asked, and Kemal asks it, what are the prospects for the future if this trend of diminishing between-country inequality continues while inequality within counties continues to increase? If we project these trends over the next 30 years or so, we should find:

1. Significant decreases in the level of global inequality,

2. Readjustment in the component parts with the between-country inequality shrinking perhaps to 50-60 percent of the total, [2]

3. Economic readjustment between Europe-North America and Asia.

Now, everyone will recognize here the pattern which existed before 1870. The re-emergence of China and India just brings these countries back to the relative positions they enjoyed around mid-19th century, and the composition of global inequality resembles strongly the one that existed around the same time. (China, according to Maddison, was the largest economy until 1870 when it was overtaken by the United States. Currently, and depending on the results of the 2011 ICP exercise, China may already be the largest economy. If one uses Maddison 1990 PPP data, on which the 1870 results are based, China is already now ahead of the US.)

The geographic readjustment implies, as we have just seen, a between- vs. within-national inequality readjustment. The political counterpart of the decreasing importance of where one is born is a formation of supranational economic elite, a process which we already witness now. Not to be too politically correct, we can call this process a **plutocratic globalization**. As inequalities within nations increase and those between nations decline, members of the elite will have much more in common with each other, regardless of the country where they are from, than with people with whom they nominally share the citizenship. Chrystia Freeland (2012) recently and a couple of years earlier David Rothkopf (2009) have documented this process of creation of a transnational global elite. Davoses and Bilderbergs have not arisen spontaneously and for no reason.

[2] This is a back-of-the envelope calculation. It should be (and can be) done more carefully.

This is a process that, from the point of view of global citizenship and of those who would like to see eventually some form of global democracy, may be welcome. If the ultimate objective of mankind is to reach some kind of global democracy, a plutocratic globalization seems to be the most realistic way to go about achieving it. But the problem is that such plutocratic globalization will inevitably create tensions with the exercise of democracy at the national level. Rich minorities in their own countries will not only feel more estranged from the relatively poorer co-citizens but the gutting out of the middle class which such increased within-national inequality and polarization imply threatens the maintenance of national democracies. Again this is also a process that we are already witnessing. Whereas democracy, as a form of government, has in the last quarter century become much more widespread globally, it has also become less "real" or meaningful in both old and new democracies as moneyed elites have bought their way to power and the choice between two or more ostensible options presented to the electorate has become vacuous.

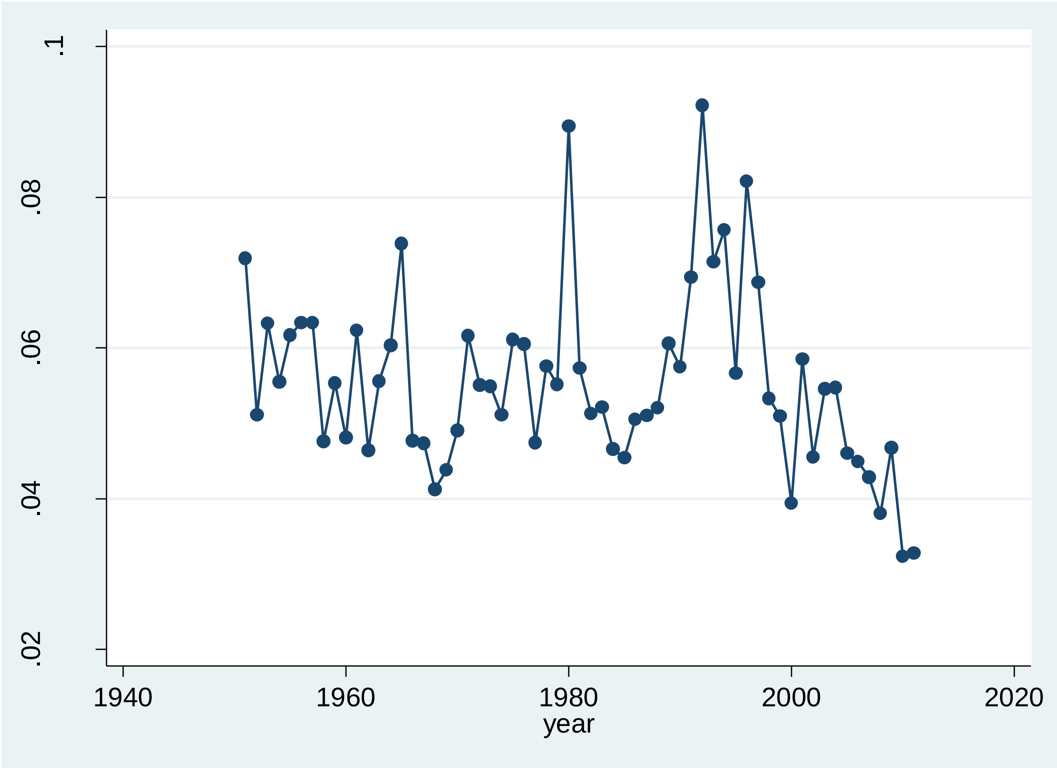
The implication of a seemingly technical or arcane fact that the composition of global inequality is likely to change in the next 30 to 50 years has profound implication on political processes. One needs, I think, to acknowledge a potential tension between "realization of the human dream of global governance" and increasing meaninglessness or subversion of national democracies which the rise of a global plutocracy may bring about.

2. Policy autonomy

A paper that Dani does not mention in his review, and which I really liked very much, is a paper that Dani wrote with Sharun Mukand in 2002 ("In search of the holy grail"). It is a gem of a paper which shows that big time success countries, like the ones that Dani displays in his Figure 4.1, depend on being far enough from the ruling economic hegemon (or ruling economic policy paradigm) to be able to tinker with policies so that they find the best policies that suit their institutions. Quality of governance becomes key in such instances because one has to "break free" from the dominant paradigm and find the exact policy mix that suits country's institutions. But to do that one needs "policy autonomy". China is of course a poster case for such an approach.

Now, as world gets more globalized, it becomes clear, I think, that the space for policy autonomy will get smaller and smaller for all countries, big and small. Tinkering with different policies will become harder. Thus the superstar countries will also be fewer in numbers, as policies and growth rates will tend to be more similar. In Figure 2, I show the standard deviation of countries' growth rates in the past 60 years. The number of countries has over that period risen from less than 60 (in my sample) to more than 160; however, from around 1960s, the sample size is about the same.[3] What is remarkable is that in the past 20 years the standard deviation of countries' growth rates has been more than cut in half, from around 8 percent to less than 4 percent. Growth rates are indeed getting more similar.

Figure 2. Standard deviation of countries' annual growth rates, 1951-2011



If this line of reasoning is correct, the implication will again be profound; we are not likely to encounter any more superstars like Japan, Korea or China; notice that in Dani's graph they are all shown to have had long-term average growth rates 3 to 4 times greater than the corresponding world growth rates. This is indeed a bad news for all of Africa and other underdeveloped areas. They are unlikely to pull off the feat of almost catching up with the rich world in one or two generations.

3. Production possibility frontier for the poor countries

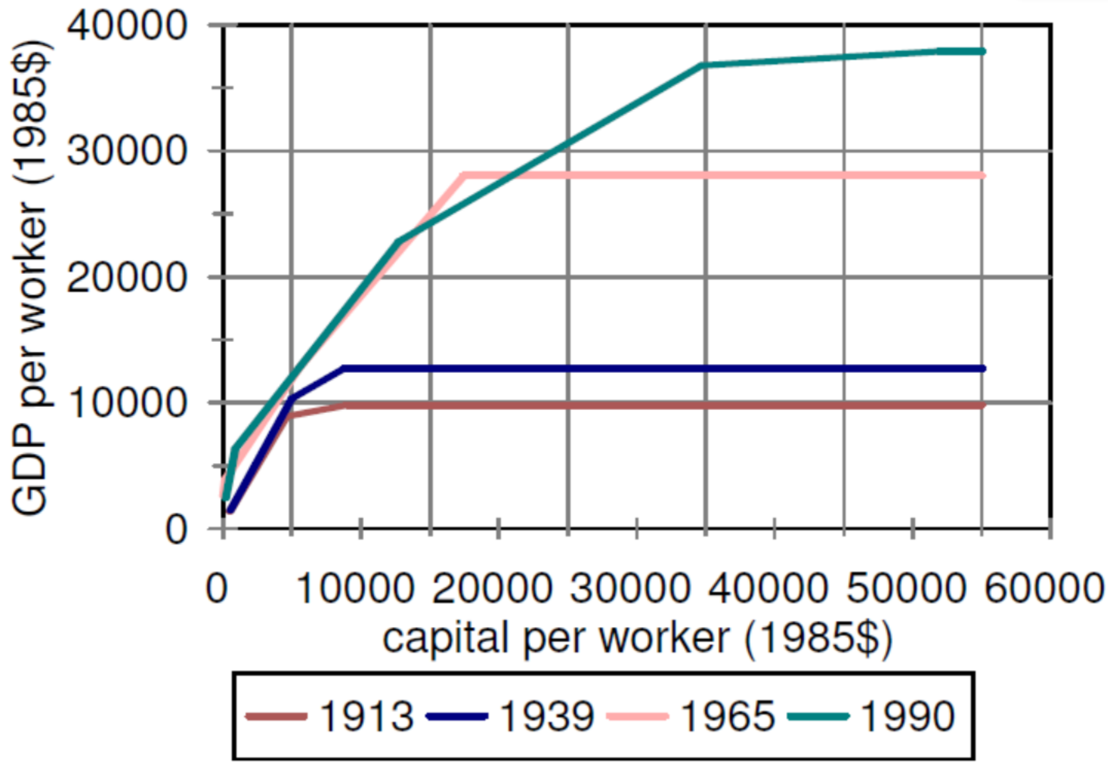
[3] Countries that did not exist as independent entities then (e.g. Ukraine., Croatia, Bangladesh) do have their own growth rates (as distinct from the broader entities of which they were a part) and are included in the sample.

Finally, I want to bring in a recent finding by Bob Allen (2009 and 2011). Bob creates a long-term historical series of capital per worker, matching (and using the same prices) Maddison's series of historical GDPs per capita. He estimates the relationship between capital per worker and GDP per capita at seven cross-sections, from 1820 to 1990. This relationship defines, for each date, what could be considered a world production possibility frontier (PPF). A striking finding is that for poor countries (that is, for countries with a low K/L ratio and low price of labor) the PPF is at about at the same point today as it was a century ago (see Figure 3).

In other words, if you are an African country today with capital/labor ratio under $PPP $3000 you have access to no more productive technologies than a county with the same K/L ratio had in 1913. This is explained by the fact that technological inventions are made by countries that are at any given point of time rich, and inventions reflect their specific labor/capital prices. Since by definition this ratio has to be high for developed countries, technological frontier moves up only at ever higher labor/capital price ratios and has not moved up over the last two centuries at low labor/capital price ratios at all. Allen explains it by arguing that the incentive to innovate exists only when the cost of labor is high (that is, when a country is relatively developed). [4] Thus technological innovations, pushing the frontier outward, took place around the level of capital per worker of $10,000 in 1965 and $PPP 20,000 in 1990s, that is, among the richest countries at each particular point in time.

[4] By the way, the same argument was made, in a different context, to explain the startling lack of technological progress in Roman times despite a pervasive air of economic "modernity"; Moses Finlay and Aldo Schiavone both thought that it was due to the abundance of cheap slave labor.

Figure 3. World production possibility frontier, 1913-1990



Source: Allen, "Technology and the great divergence", 2009, Figure 13.

If this is true, then another melancholic finding for the growth prospects of the poorest countries follows: they are unlikely to benefit from a century of technological progress so long as they remain poor. This is, in an interesting twist, the poverty trap: in order to become richer, you have to cease being poor.

4. Combining it all

If we now combine points (1) to (3), the result is one of a world where readjustment between Europe-North America and Asia brings into existence many more relatively well-off people (who may be even called a "global middle class"), creates a strong supra-national plutocratic elite, creates tensions between the requirements of national and global democracy, and leaves vast areas of today's poor counties still very poor. Since their populations will remain smaller than the population of the "resurgent Asia" (to use Maddison's term), the between-component of global inequality might still, for a while, continue its downward slide, but eventually the population dynamics are such that the weight of the excluded regions would increase, reversing the downward trending between-country inequality.

The future world would be a trilateral world composed of: (1) a small segment of nationally mixed elite, (2) about half of world population with (what would be considered today) a middling income level, and (3) perhaps as many as a third of world population at an income level under 4 international dollars per day. Global poverty may even be driven down to 5% of world population, but it would be nevertheless a very unequal world and unequal in a different way than now and certainly than as recently as two decades ago. Would it be a better world?

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