## Dani Rodrik August 2005

Dan Trefler's paper is full of valuable nuggets, but the core of the paper rests on two assertions: (1) by the very logic of comparative advantage, it is impossible for China, India, and other newcomers to take over everything that the U.S. and other advanced countries are currently producing; and (2) the weakness of institutions in these newcomers will necessarily retard the rate at which they converge with technology levels in the West. The first of these points is unassailable in its logic, and is hardly controversial (at least in a roomful of economists). The second seems also on target, and serves as a useful reminder that China and India remain by and large very poor countries with lots of work still ahead of them, despite their prowess in certain tradable activities. But putting the problem this way somehow minimizes the ability of these countries (and their emulators) to compete head-on with the U.S. in global markets. I would like to suggest a somewhat different angle on this question.

I have been doing some work recently (together with my colleague Ricardo Hausmann) which attempts to measure the "quality" of the export baskets of different countries. We basically quantify the income level that is associated with each country's exports, which we call *EXPY*. Without going into too much detail, we do this first by identifying the average income level of countries that are the main exporters of any 6-digit level product. This gives us the income level associated with each traded product. Then we calculate *EXPY* as the weighted average of these values for each individual country. Figure 1 below shows how *EXPY* stacks up against per-capita GDP. As expected (and almost by construction), rich countries tend to export goods that other rich countries export. But upon closer look, two things are important in this figure. First, the range of *EXPY* is a lot narrower than the range of per-capita GDPs. Country export baskets exhibit considerably greater similarity than the underlying aggregate productivity of individual countries. Second, some of the key countries associated with outsourcing/offshoring have *EXPY* levels that are very high, in fact several times higher than their GDPs per capita.

	GDP per capita (US\$)	EXPY (US\$)
U.S.	35,484	15,977
China	4,726	13,575
India	2,732	10,701

Consider for example the following three countries: the U.S., China and India. Their respective values are shown below.

Note: Values are for 2003.

Overall productivity in the U.S. is about 7.5 times higher than that in China, and about 13 times higher than that in India. Dan is right that these huge gaps will not close until institutional quality in China and India come to resemble that of the U.S., which is unlikely to happen in our lifetime. But now look at the second column of numbers

(*EXPY*), which shows the productivity level associated with each of these countries' exports. Here the differences are actually tiny compared to the previous gaps. The income level associated with US exports exceed that of China's exports only by 18 percent, and that of India's exports by about 50 percent. Furthermore, India's software exports are not included in this comparison, since the *EXPY* are calculated for commodity exports only.

The important lesson is that the nature of the competition that the U.S. faces (and will face in the future) is determined by the productivity not of the average foreign producer, but of the very best among them. What is special about international trade today is that the very best producers in these poor but huge economies are very good indeed. To the extent that one worries about such things (and it is not at all clear that one should), there is less reason to be complacent than what Dan's paper would lead us to believe.

My other disagreements with Dan, to the extent that there are any, also relate to differences in emphasis. For example, I think Dan underestimates the role played by industrial policy in most of the success cases, and he downplays the need to think about intelligent industrial policies. As I have argued elsewhere (Rodrik 2004), the trick in successful industrial policy is not to "pick the winners" (an impossible task if there ever was any), but to know how to "let the losers go" (a much less demanding standard). I also would have liked to see greater exploration of the circumstances under which the reduction in the value of job-specific human capital (due to outsourcing and offshoring) has an efficiency (as opposed to a purely distributional) consequence. After all, the key question in this debate is whether competition from China and India undermine technological dynamism in the U.S. A plausible channel, to an economist at least, would be through the reduction in the incentive to invest in specific human capital. Dan talks about this possibility, but leaves us guessing as to how seriously we should take it.

## <u>REFERENCE</u>

Rodrik, Dani, "Industrial Policy for the Twenty-First Century," unpublished paper, Harvard University, September 2004 (http://ksghome.harvard.edu/~drodrik/UNIDOSep.pdf).

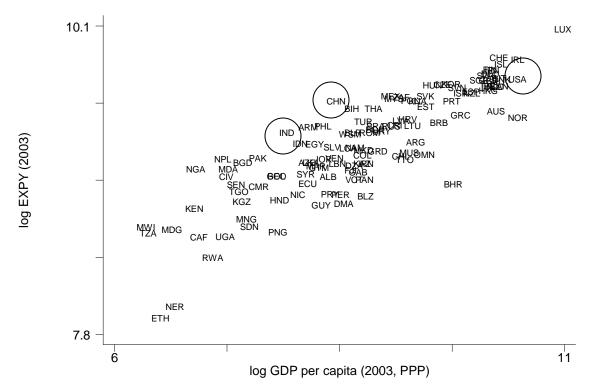


Figure 1: Relationship between per-capita GDP and income level associated with exports Source: Author's calculations.