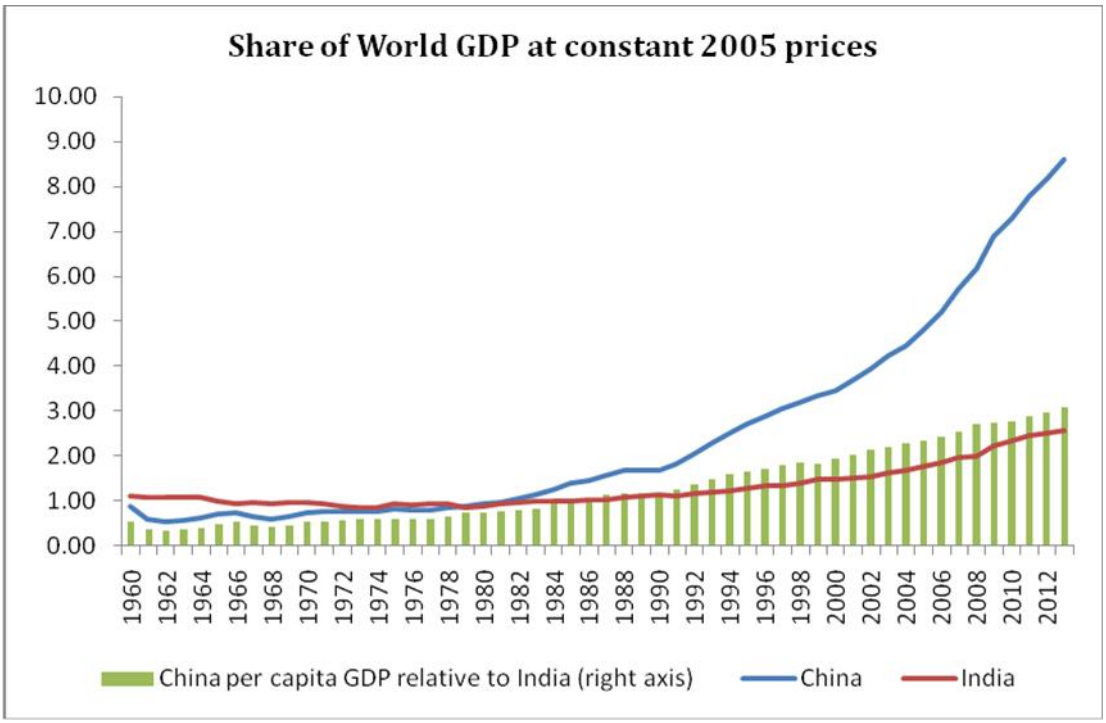
China and India in the World Economy*

C.P. Chandrasekhar and Jayati Ghosh

Indian media – as well as several official representatives of the government – are full of excitement at the possibility that in the coming year India's rate of growth of economic activity might actually be higher than that of China. It is not just that the extremely rapid growth of the giant Asian neighbour is slowing down substantially, but also that India's GDP growth is projected to be higher than before, and the CSO's latest revisions to the GDP estimates suggest that the recent deceleration was less sharp than generally perceived.

Chart 1: China overtook India in terms of share of world GDP only from 1979 onwards



But as it happens, over the past two decades the differential performance of the two economies has been such that – even with the recent slowdown – China is still likely to account for a larger contribution to global GDP growth than India for some time to come, simply because of its much greater size. Chart 1 describes the share of China and India in global GDP (according to World Bank estimates). This shows that until the late 1970s, the Indian economy was actually larger in size and accounted for a slightly bigger share of world GDP (although it must be borne in mind that Chinese data for that period are notoriously unreliable).

It was only in 1979 – just after the agricultural reform in China that unleashed the productive forces of the peasantry in the context of a relatively egalitarian countryside – that China overtook India in terms of global income share. Thereafter, and particularly in the 2000s, the gap grew by leaps and bounds, to the point that in 2013 the size of the Chinese economy was around 3.3 times that of the Indian economy when measured in terms of US dollars at 2005 prices. This means that, if India is even to equal the output contribution of China in the coming year, its growth rate must exceed three times the growth rate of the Chinese economy.

The difference in GDP growth is also obviously reflected in differences in per capita GDP. Taken once again in terms of 2005 US$ prices, per capita GDP in China was only around half that of India in 1960. China exceeded India in per capita GDP only in 1985, but thereafter the

divergence was dramatic, because of the combination of faster aggregate output growth and lower population growth in China compared to India. In 2013 Chinese per capita GDP was more than three times that of India.

These estimates consider GDP as estimated in terms of nominal exchange rates, in constant US$ prices for 2005. This is one way of considering the relative size of the two economies. But a more popular way of comparing per capita GDP is the use of deflators based not on nominal exchange rates but on Purchasing Power Parity (PPP) exchange rates that seek to establish the relative purchasing power of each currency in terms of prices of a common basket of commodities. This has become the preferred way of comparing cross-country incomes and even poverty within countries, in much of the international discussion.

However, the use of PPP exchange rates can be quite dubious, as they are based on prices of a basket of average representative consumption goods in the United States, which may not be so relevant to consumption elsewhere, especially the poor in much of the developing world. They are unchanging over time, even though consumption patterns tend to shift with technological change and evolving preferences. PPP exchange rates are also notoriously imperfect because of the infrequency and unsystematic nature of the price surveys that are used to derive them, which can make them quite dated or even misleading.

There is a less talked about but possibly even more significant conceptual problem with using PPP estimates. In general, countries that have high PPP, that is where the actual purchasing power of the currency is deemed to be much higher than the nominal value, are typically low-income countries with low average wages. It is precisely because there is a significant section of the workforce that receives very low remuneration, that goods and services are available more cheaply than in countries where the majority of workers receive higher wages. Therefore, using PPP-modified GDP data may miss the point, by seeing as an advantage the very feature that reflects greater poverty of the majority of wage earners in an economy.

There is another concern: that the use of PPP estimates may also be misleading because in effect the World Bank tends to use a simple multiple to derive the data across a long period of years, on the basis of a price survey for a particular year, without considering the significant volatility in prices that may affect genuine purchasing power. This is particularly the case with respect to China and India, two countries for which the PPP data have fluctuated wildly over time depending upon the changing nature of price surveys and other factors. The most recent revision of the PPP index has increased the income estimates for both countries.

Charts 2 and 3 show the estimates of per capita income in US dollar terms for China and India in PPP (based on 2011 surveys) and nominal (based on 2005 prices) exchange rates. It appears that the gap between nominal and PPP per capita income has been widening, but that is really an optical illusion: in fact, the World Bank in its latest estimates based on price surveys for 2011 has simply used the multiplicands of 3.22 for China and 4.5 for India to derive the PPP estimates for all the previous and subsequent years!

Chart 2: PPP estimates inflate actual income growth in China

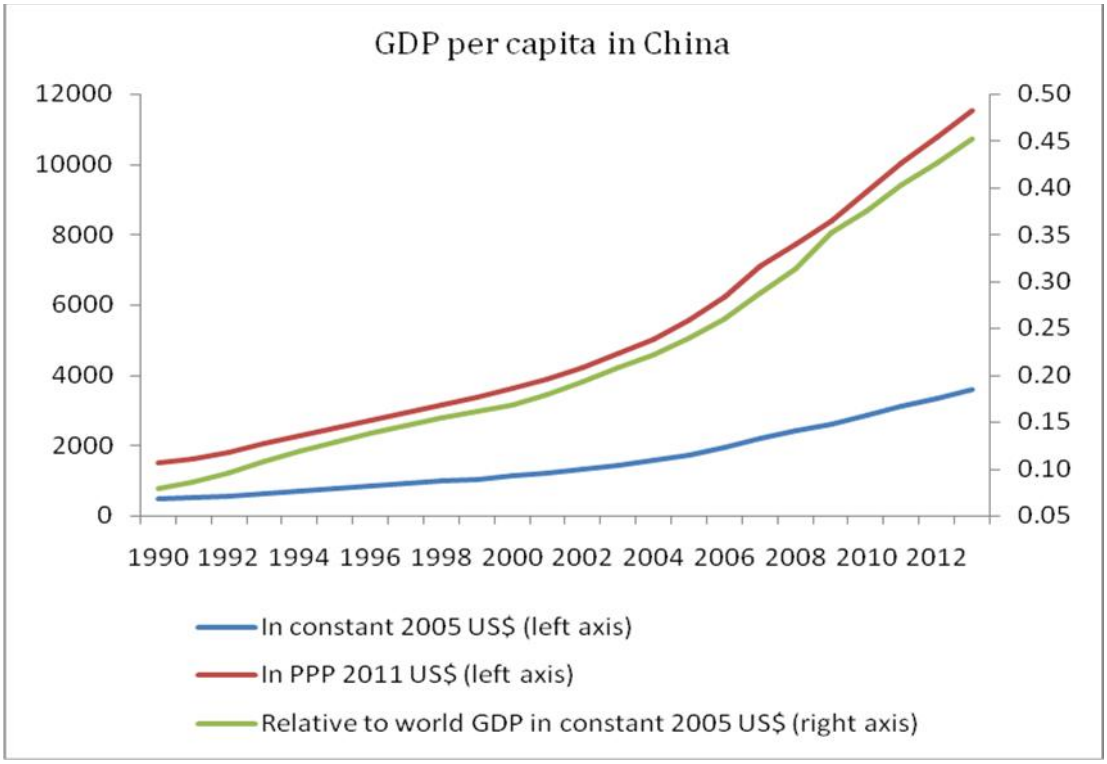
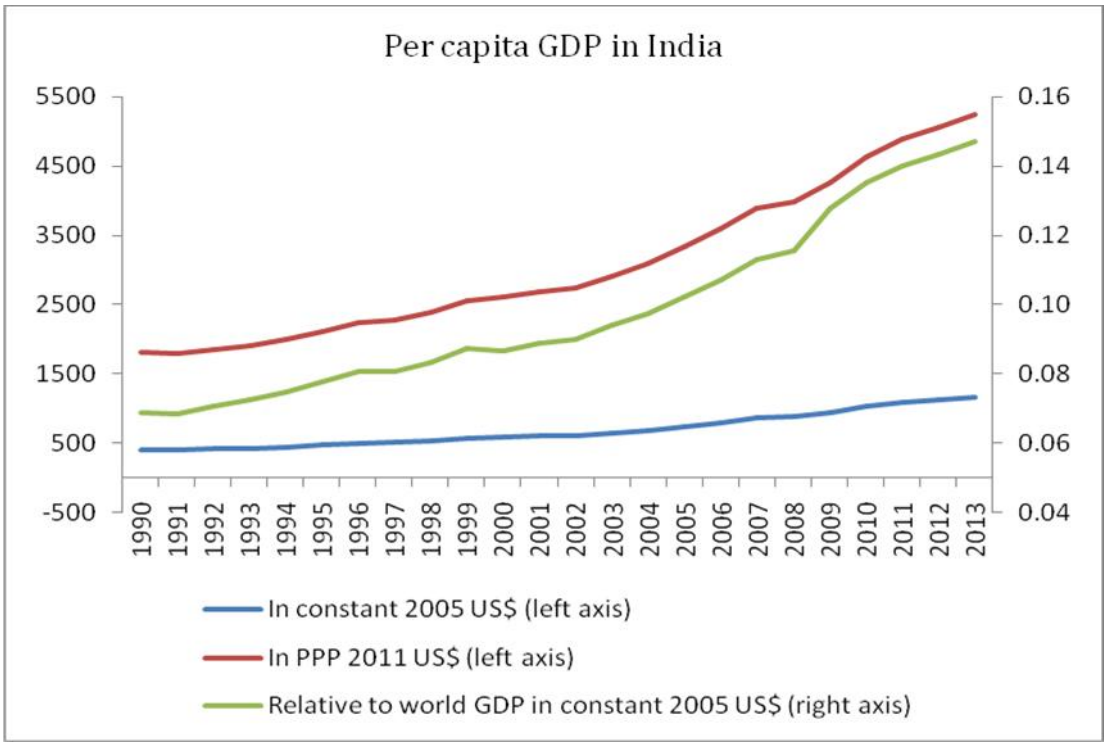


Chart 3: in nominal exchange rates, Indian growth has not been so impressive



This explains why the per capita income estimates in PPP terms appear to move broadly in consonance with the per capita GDP of either country relative to the world average (with the differences mainly due to the change in the denominator). This tendency would otherwise be hard to explain in economic terms, but not so hard to explain if it is simply the result of a statistical artefact!

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