



What happens when...

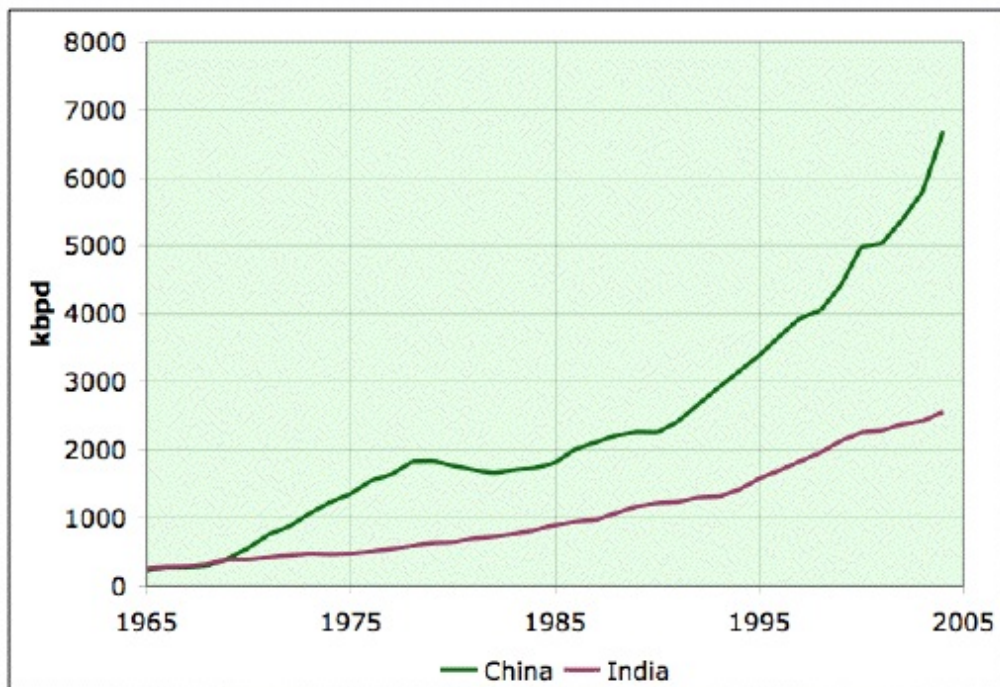
Posted by [Stuart Staniford](#) on December 7, 2005 - 5:06am

Topic: [Demand/Consumption](#)

Tags: [china](#), [hubbert peak](#), [india](#), [oil prices](#), [peak oil](#) [[list all tags](#)]

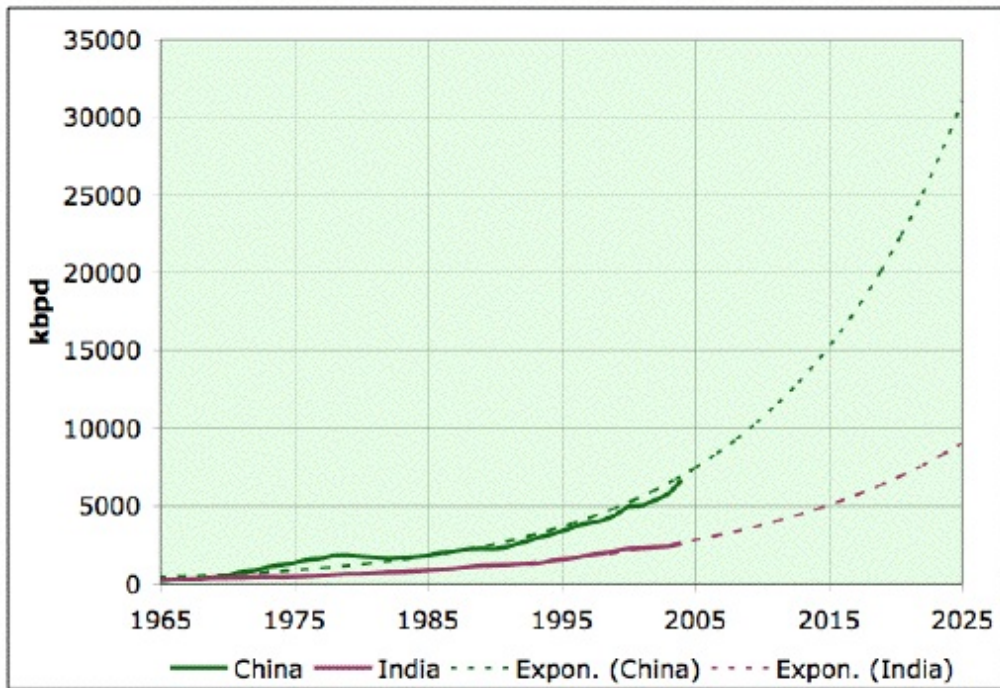
... the irresistible force meets the immovable object?

Which is mightier: the logistic equation with it's [stern command](#) that production shall increase no more? Or these two-and-a-half billion people with their exponential desire to drive?



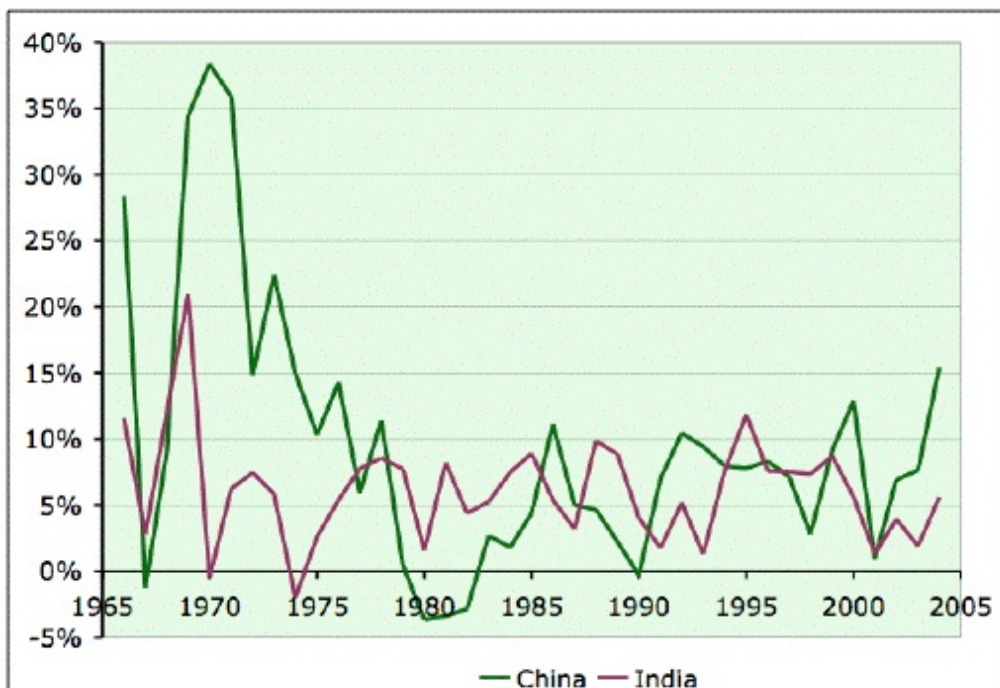
Oil consumption of China and India as reported by [BP Statistical Review of World Energy](#).

Here's the same data with exponential fits (which capture the trends quite nicely) extrapolated out to 2025. By then Chinese consumption would be roughly similar to that of the US, if the latter continued to grow at historical rates (unlikely).



Oil consumption of China and India as reported by [BP Statistical Review of World Energy](#), together with exponential fits to the data extrapolated to 2025.

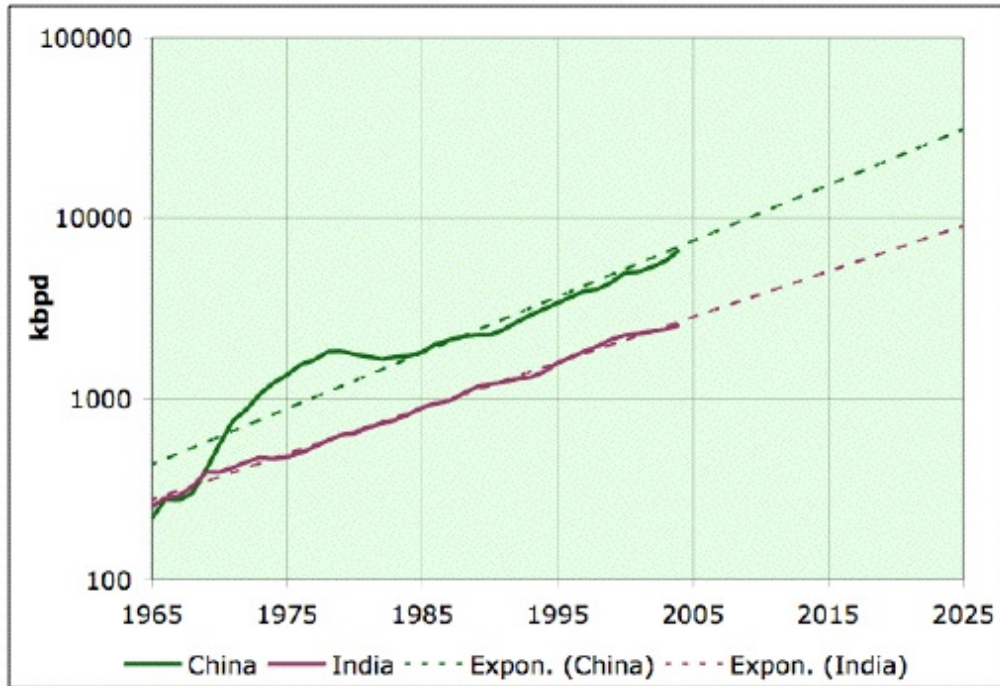
For good measure, here's the year-on-year growth rates.



Annual percentage changes in oil consumption of China and India as reported by [BP Statistical Review of World Energy](#).

As you can see, the long term growth rates aren't that different. The eye is fooled in the first two graphs. If we replot the second one on a logarithmic scale we can see the similarity in slope. The two countries had similar usage in the 1960s, but then the Chinese got a leg up starting in the middle of the [Cultural Revolution](#) of 1966-1976. Quite striking that this incredibly repressive

period of turmoil should have coincided with major increases in oil usage. Anyway, the Indians have never caught up since.



Oil consumption of China and India as reported by [BP Statistical Review of World Energy](#), together with exponential fits to the data extrapolated to 2025. Logarithmic scale on the y-axis.

To put flesh on the abstractions for once, here's the scene in China:

□

And here it is in India:



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