

## Poverty and Inequality in China and India: Elusive Link with Globalisation

*The pro-globalisers are not correct in their claims that integration with the world market has worked wonders in reducing poverty in China and India. The critics who claim that globalisation has contributed to a widening of inequality are also off the mark. A close examination of the data suggests that a more nuanced understanding is called for.*

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Most people, I find, have a strong opinion on globalisation, positive or negative. The strength of their opinion is often in inverse proportion to the amount of robust facts they have. The question of how much impact globalisation has had on poverty and inequality in China and India in the last quarter century is an example of this. The pro-globalisers point out that global integration has worked wonders in bringing down the massive poverty that has afflicted these two countries for many decades. Those who are opposed, often point out the large rise in economic inequality that globalisation is supposed to have caused in both countries. In this essay we suggest that both sides are jumping to conclusions that are not warranted by a closer look at the data.

First, a clarification on the meaning of the term “globalisation” as will be used in this essay. Globalisation means different things to different people. Some interpret it to mean the global reach of new technologies (particularly in information and communication), some refer to the tentacles of corporate capitalism or US hegemony in military, economic and cultural matters. In the context of poverty and inequality in China and India, I shall interpret globalisation in the rather limited sense of openness to foreign trade and (long-term) investment. Over the last two decades both China and India have made major strides in these aspects of globalisation (China dramatically

so, with the merchandise trade ratio to GDP in 2005 exceeding 60 per cent, more than double that for India, and direct foreign investment of \$ 79 billion a year, about 13 times that for India).

### Chinese Experience

The standard argument by pro-globalisers has been that the opening up of the economy leads to dynamic benefits, which improve the growth rate, and the latter in turn reduces poverty. The static allocation effect may also be pro-poor as it expands job opportunities for unskilled labour, which is plentiful in poor countries. China has captured the world market in many labour-intensive manufactures, and this has led to a major transformation of the economy, improving the rate of growth and of poverty reduction. It is the case that the rate of growth and the rate of poverty reduction have been nothing short of dramatic in China. Total factor productivity in Chinese industry grew at an annual average of 3.1 per cent in 1978-93 and at double that rate in 1993-04 [see Bosworth and Collins 2007]. If one takes the admittedly crude World Bank poverty line of \$ 1 a day per capita (at 1993 purchasing power parity), the proportion of people below that poverty line in China fell from 63.8 per cent in 1981 to 9.9 per cent in 2004 [see Ravallion and Chen 2007b]. If instead one takes a national poverty line (of 850 yuan per year for rural China and 1,200 yuan for urban at 2002 prices), the National Bureau of Statistics data suggest

that the poverty proportion declined from 53 per cent to 8 per cent between 1981 and 2001 [see Ravallion and Chen 2007a]. Never before in history have so many hundreds of millions of people been lifted above the poverty line in such a short period. Since all this happened while the country had a phenomenal opening up of the economy, China has become a poster boy for the international financial press and free-trade economists when they wax eloquent about the poverty-reducing effects of globalisation.

Yet there is no convincing statistical demonstration of this, as no one has yet tested a causal model where, controlling for other factors and applying a suitable identification strategy, global integration has been found to be the main cause of the dramatic decline of poverty in China. In the absence of such a demonstration, a careful eyeballing of the data suggests that the more important reason for the large decline of poverty over the last three decades may actually lie elsewhere. The annual national poverty estimates as well as World Bank estimates referred to above show that the largest part of the decline in poverty already happened by the mid-1980s, before the big strides in foreign trade and investment in China in the 1990s and later. For example, in the former estimates the poverty percentage in 1987 is already about one-third (i.e., 16.8 per cent) that of 1981. In the World Bank estimates, of the half a billion people lifted above the \$ 1 poverty line between 1981 and 2004, about two-thirds got so lifted by 1987.

Much of the extreme poverty was concentrated in rural areas, and its large decline<sup>1</sup> in the first-half of the 1980s is perhaps mainly a result of: (a) the spurt in agricultural growth following de-collectivisation (agricultural output grew at 7.1 per cent per year on an average during 1979-84 compared to 2.7 per cent during 1970-78) [Lin 1992]; (b) land reform, which by an egalitarian redistribution, subject only to differences in regional average and demographic size, provided a floor to rural income; and (c) readjustment of farm procurement prices. These are mostly internal factors that had very little to do with global integration.

Some trade economists have pointed out to me that even in the 1980s, China

had a trade expansion in labour-intensive products. There was some expansion in the trade ratio to GDP in the 1980s, and the special economic zone (SEZ) of Shenzhen was in operation by the mid-1980s. But in much of the 1980s the most important exports of China were natural resource-intensive products; as late as 1985 the largest single export item was petroleum. (In fact because of dual track pricing it was profitable some years in the 1980s to export petroleum in one price and then to import it in another price!) Since export/import ratios are endogenous, one may look at the decline in (weighted) average tariff rates over the 1980s: the mean tariff rates went down only slightly, from 31.9 per cent in 1980-83 to 29.2 per cent in 1988-90.

In any case the proportion of the labour force in manufacturing in this period was small, so the large poverty decline in the first-half of the 1980s is unlikely to be attributable to manufacturing exports. It is also worth noting that the poverty percentage, after the sharp drop between 1981 and 1987, went up for much of the period between 1987 and 1994, even as exports of labour-intensive manufactures grew rapidly. This indicates that by 1987 the agricultural spurt has worked itself out and the effect of labour-intensive manufactures was still weak. It was only after the mid-1990s that the poverty percentage started declining again and labour-intensive exports may have played a significant role in it, although even in this period, one should not minimise the effect of (largely) domestic factors like easier migration from rural areas and higher agricultural procurement prices. So without more convincing evidence on the basis of a causal model, I am inclined to believe in the stronger influence of agriculture and land reform in the very large poverty reduction by the mid-1980s.

## In India

In India, the reduction of trade barriers since the 1990s seems to have been associated with an expansion of exports of mostly capital- and skill-intensive products (software and business services, pharmaceuticals, vehicles, auto parts, steel, etc), and a more vigorous and competitive corporate sector but most of the economy and workers are outside the corporate sector. Bosworth and Collins (2007) note a rise in the total factor productivity in industry, from 0.3 per cent in 1978-93

to 1.1 per cent in 1993-2004. The more significant rise in India is, of course, in the service sector; total factor productivity in that sector grew from an annual average of 1.4 per cent in 1978-93 to 3.9 per cent in 1993-2004. The Indian growth process has been described as service-sector-led growth, whereas in China it has been more manufacturing-centred. One immediately thinks of the widely acclaimed performance of Indian software and other information technology-enabled services. But it seems that in the economy's service sector growth in the period 1993-2004 not all of the growth can be explained by finance, business services or telecommunication where global integration may have made a difference.

A large part of the growth in the service sector, at a rate higher than that in manufacturing, has been in the traditional or "unorganised sector" services, which even in the last decade formed nearly two-thirds of the service sector output. These are provided by tiny enterprises, often below the policy radar, unlikely to have been directly affected substantially by foreign trade policy reforms. It is a matter of some dispute how much of the growth in traditional services (mostly non-traded) is explained by the rise in service demand in the rest of the economy (including increased outsourcing by the manufacturing firms, which formerly used to supply those services in-house), and how much is a statistical artefact, as the way the output is measured in these traditional services has been rather shaky all along. So the link between trade reforms and growth in the whole economy is not yet clearly established, even though it is very likely that the general reduction in controls and regulations and the increased leeway of market discipline and forces of competition (the increase in global market participation is only one part of this process) may have unleashed entrepreneurial energies in both the formal and informal sectors. (I would also like to speculate that the concurrent social changes in India, in the political rise of hitherto subordinate social groups after many centuries of social oppression, may also have played some role in this unleashing of energies.)

Now let us look at the link between growth and poverty reduction in India. Official poverty estimates show that the poverty percentage declined from 44.5 per cent in 1983 to 27.5 per cent in 2004-05. Again the international financial press

often attributes this significant (though not dramatic) decline to globalisation. National Sample Survey (NSS) data actually suggest that the rate of decline in poverty has somewhat slowed down in 1993-2005, the period of intensive opening of the economy, compared to the 1970s and 1980s. It may not be unconnected with the fact that agricultural output (and total factor productivity in agriculture) grew at a slower rate in the last decade compared to the earlier decade. This may be largely on account of the decline in public investment in rural infrastructure (like irrigation or prevention of soil erosion), which has little to do with globalisation. We should also recognise that private consumer expenditure data of the NSS that are used in poverty estimates do not capture the declining environmental resources (like forests, fisheries, grazing lands, and water both for drinking and irrigation) on which the daily lives and livelihoods of the poor depend.

There has also been a decline in the rate of growth of real wages in the period 1993-2005 compared to the previous decade 1983-93. As we have already mentioned, India's export expansion in recent years has largely been in capital- and skill-intensive industries, unlike in China or Vietnam, and as such may not have helped large numbers of unskilled workers. There is a plethora of opinions on why this has happened in India (some blame restrictive labour laws, some our creaking infrastructure, and others the small-scale sector reservation policy for a large number of products, and so on) but a careful statistical study of the significance of these different factors, controlling for other factors, still remains to be done.

Global integration does not seem to have helped some of the non-income indicators like those of health. The national family health survey (NFHS) data show that some of India's health indicators are worse than those of Bangladesh (in maternal mortality, infant mortality, child immunisation rates, etc), and even those of

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sub-Saharan Africa (in the percentage of underweight children), in spite of much higher growth rates in India than in those other countries. Percentage of underweight children (below age 3) in India is 46, and about 30 per cent on an average in sub-Saharan Africa (8 per cent in China). Take the case of Gujarat, one of the richest, high growth, and high-reform states in India: the percentage of underweight children, which was already high (higher than sub-Saharan Africa), went up between NFHS 2 (1998-99) and NFHS 3 (2005-06).

Some disaggregated studies<sup>2</sup> across districts in India have also found trade liberalisation slowing down the decline in rural poverty. Such results may indicate the difficulty of displaced farmers and workers in adjusting to new activities and sectors on account of various constraints (for example, in getting credit or information or infrastructural facilities like power and roads, large incidence of school dropouts, and labour market rigidities), even when new opportunities are opened up by globalisation. This is in line with textbooks in international economics where it is emphasised that product market liberalisation need not be an improvement when there are severe distortions in input markets. In terms of policy, this calls for complementary policies (in credit, labour markets, and in social and economic infrastructure) to mitigate the possible adverse effects of trade liberalisation on some poor people.

The Indian pace of poverty reduction has been less than China's, not just because growth has been faster in China but also because the same 1 per cent growth rate reduces (or is associated with reduction in) poverty in India by much less. The so-called growth elasticity of poverty reduction is much higher in China than in India; this may have something to do with the differential inequalities in wealth in the two countries (particularly, land and education). Contrary to common perception, these inequalities are much higher in India than in China. The Gini coefficient of land distribution in rural India was 0.74 in 2003; the corresponding figure in China was 0.49 in 2002.<sup>3</sup> India's educational inequality is one of the worst in the world: according to a table in the *World Development Report 2006*, published by the World Bank, the Gini coefficient of the distribution of adult schooling years in the population, a crude measure of educational inequality, was

0.56 in India in 1998-2000, which is not just higher than 0.37 in China in 2000 but even higher than almost all Latin American countries (Brazil: 0.39).

Comparing across states in India, as Dutt and Ravallion (2002) point out, the growth elasticity of poverty reduction depends on initial distribution of land and human capital. Purfield (2006) indicates that in the period 1977-2001, this elasticity was quite low in high growth states like Maharashtra and Karnataka, and high in states like Kerala and West Bengal. Similarly, comparing across states in China, Ravallion and Chen (2007a) find that growth had more poverty-reducing impact in initially less unequal provinces.

### Globalisation and Inequality

The link between globalisation and inequality is also not very clear. Theoretically, globalisation may open opportunities for some people (not all of whom are rich), and may cause hardships for those whose livelihoods are ruined by competition. (The analogy with the mighty rivers that flow into the deltas of India, creating new fertile land on one bank, and destroying land, habitations and livelihoods on the other, comes to mind.) Much depends on how society and the political community compensates and rehabilitates the displaced. On the latter, the recent history in both China and India has been rather dismal in general.

While international trade theory points to the potential of gainers compensating the losers and still keeping some gains from trade, the politics of redistribution are much more messy and depends on the social and political institutions of a country.<sup>4</sup> At the same time one should emphasise that the obstacles to (and vested interests against) redistributive policies are often mainly domestic in origin (particularly for large countries like China or India). Closing the economy does not reduce the power of the relevant vested interests.

It is also the case that international trade theory is often preoccupied with costs of production, while a large part of success in exports depends on marketing and distribution, which often require large initial investment, managerial skills and development of networks. The international retail chains that provide the latter often charge monopoly margins,<sup>5</sup> which absorb much of the gains of trade liberalisation, and very little may trickle

down to the poor producers in small farms and firms.

Empirically, there are very few reliable studies for China or India that test a causal model linking globalisation with inequality at the appropriate disaggregate level. At least two major problems beset the empirical analyst in this matter. One is that so many other changes have taken place in the last quarter century in these two countries, it is difficult to disentangle the effect of globalisation from that of other ongoing changes (like technological progress—often skill-biased—demographic changes or regulatory and macroeconomic policies). Secondly, in both countries there are reasons to suspect that economic inequality (or its rise) is underestimated because of a widely-noted fact facing household surveys (in many countries) of large (and increasing) non-response by rich households. It is also difficult to compare China and India, as most of the inequality data that are cited in this context usually are for income inequality for China and consumption expenditure inequality for India (as the NSS does not collect income data). The latter two disparate sources do show a rise in expenditure inequality in both countries in the last decade or so. But, as we have suggested, this rise may be an underestimate, and there is very little analysis as yet to show that this rise is primarily due to globalisation.

Even if global integration were to be causally linked with higher growth, the link between growth and inequality is not always clear. In China, as Chaudhuri and Ravallion (2006) show, the periods of rapid growth did not necessarily bring more rapid increases in income inequality; the periods of falling inequality (1981-85 and 1995-98) had among the highest growth rates in average household income. In China, provinces with more global exposure and higher growth did not have larger rise in inequality. As Benjamin, Brandt, Giles and Wang (2005) show, while the Gini coefficient of income in coastal China went up from 0.35 in 1991 to 0.39 in 2000, the corresponding rise in the interior provinces was from 0.39 to 0.48. In the coastal provinces a more rapid job growth in the non-state sector helped reduce the urban-rural income differential there. In India, the relative income divergence between states is increasing (more than in China) but it is hard to separate the effects of globalisation from those of differential conditions of infrastructure and business-friendly policies in different states.

In both countries, periods of high agricultural growth may have reduced overall inequality, and the recent decline in agricultural growth rates may have had some influence in the rising inequality. For the urban sector in both countries there is some evidence of a faster rate of rise in the wage rate for those with higher education. According to the estimates by the Asian Development Bank (2007), the Gini coefficient of average real wages of urban full-time employees in India went up from 0.38 in 1983 to 0.47 in 2004. This increase in wage inequality is consistent with the skill-intensity of Indian economic growth (that the trade reforms may have played some role in) and the looming talent shortage that the corporate sector is complaining about. In urban China also, the rate of return to college (and above) education compared to, say, high school education has more than doubled since the early 1990s. In both China and India, it is again difficult to separate the effect of the ongoing skill-biased technological progress from that of globalisation. But compared to China, the backwardness of India in the education sector (for example, even among new entrants in the labour force, among the 15-24 age-group nearly a quarter in India are illiterate, almost none in China) and in the status of women (for example, female labour force participation in urban China is above 70 per cent, only 24 per cent in urban India) imply that the forces that perpetuate wage inequality are stronger in India, and these forces are largely domestic in origin.

The contentious debates on globalisation in the media as well as in academia often lead to a volley of sweeping and unthinking generalisations, in particular about China and India the two awakening giants in the global economy. It is time for a great deal of caution and reasoned and rigorous empirical analysis before we pronounce judgments on the effects of globalisation on poverty and inequality in these two countries. **EW**

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## Notes

- 1 A part of this decline may not be real as there may be some overestimate of poverty in 1981 as the official price deflator used for this estimation may not have been adequate for rural areas before 1985. But a large part of this decline is likely to be genuine.
- 2 For example, Topalova (forthcoming). In unpublished comment T N Srinivasan has

raised some doubts about the methods in this study. Hasan, Mitra and Ural (2007) also provide some comments on Topalova's study, and their alternative study based on state-level data reaches a different conclusion.

- 3 This, of course, does not correct for land quality. Land quality is partly taken into account in its valuation when land is included in the assets and liabilities survey. According to this survey by the NSS, the Gini coefficient of asset distribution was 0.63 in 2002 in rural India, while the corresponding figure for China was 0.39 in the same year. For the Chinese estimate see Li, Wei and Jing (2005). The Indian estimate is by the author. The land Gini estimate for China cited in the text is from Khan (2004).
- 4 For a fuller discussion of the general analytical issues see Bardhan (2005), chapter 12.
- 5 For a theoretical treatment of the usually neglected issues of middleman margins in international trade and investment, see Bardhan et al (2007).

## References

- Asian Development Bank (2007): *Key Indicators 2007: Inequality in Asia*, Manila.
- Bardhan, P (2005): *Scarcity, Conflicts, and Cooperation*, MIT Press.
- Bardhan, P, D Mookherjee and M Tsumagari (2007): 'Middleman Margins and Globalisation', unpublished paper.
- Benjamin, D, L Brandt, J Giles and S Wang (2005): 'Income Inequality during China's Economic Transition' in L Brandt and T Rawski (eds), *China's Great Economic Transformation*, Cambridge University Press.
- Bosworth, B and S M Collins (2007): 'Accounting for Growth: Comparing China and India', NBER Working Paper No 12943, Cambridge, Mass.
- Chaudhuri, S and M Ravallion (2006): 'Partially Awakened Giants: Uneven Growth in China and India' in L A Winters and S Yusuf (eds), *Dancing with Giants: China, India, and the Global Economy*, World Bank, Washington DC.
- Dutt, G and M Ravallion (2002): 'Has India's Post-Reform Economic Growth Left the Poor Behind?', *Journal of Economic Perspectives*, 16(3).
- Hasan, R, D Mitra and B P Ural (2007): 'Trade Liberalisation, Labour-Market Institutions, and Poverty Reduction: Evidence from Indian States', *India Policy Forum*, 3.
- Khan, A R (2004): 'Growth, Inequality and Poverty in China', Issues in Employment and Poverty Discussion Paper No 15, International Labour Office, Geneva.
- Li, S, Z Wei and S Jing (2005): 'Inequality of Wealth Distribution of Chinese People: An Empirical Analysis of Its Cause', FED Working Paper No 65, China Centre of Economic Research, Peking University, Beijing.
- Lin, J Y (1992): 'Rural Reforms and Agricultural Growth in China', *American Economic Review*, 82(1).
- C Purfield (2006): 'Mind the Gap - Is Economic Growth in India Leaving Some States Behind?', IMF Working Paper No 06/103.
- M Ravallion and S Chen (2007a): 'China's (Uneven) Progress against Poverty', *Journal of Development Economics*, 82(1).
- (2007b): 'Absolute Poverty Measures for the Developing World 1981-2004', World Bank Policy Research Working Paper No 4211, April.
- Topalova, P (forthcoming): 'Trade Liberalisation, Poverty and Inequality: Evidence for Indian Districts' in A Harrison (ed), *Globalisation and Poverty*, University of Chicago Press, Chicago.

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