

# **SIMILARITIES AND DIFFERENCES IN THE ROLES OF CHINA AND INDIA IN THE WORLD ECONOMY**

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## **Abstract**

We interpret the recent acceleration of growth in India and China as the culmination of a new international division of labour, which has absorbed the labour surpluses of East and South Asia into the mainstream of world trade and spectacularly expanded their production and export of labour-intensive manufactures and services. We also explain the differences in growth patterns and rates of the two economies in terms of differences in historical heritage and political economy. We suggest that with time, these growth patterns are likely to converge and the growth rates to diminish, but that India's deceleration will be much sharper

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## **Introduction**

This paper is essentially interpretive. It proposes a tentative interpretation of certain stylized facts about the world economy over the last forty years, particularly in relation to the roles of India and China. These facts are as follows. Since 1965, there has been a dramatic change in the shares of different countries in the world's trade, its manufactured output and its income. Not only has rapid growth been concentrated in a well-defined period of time, it has also been localized in a well-defined region, first East Asia and then South Asia as well. Development in these countries has been characterized by an upsurge of exports of manufactures and services, initially labour-intensive, but graduating later to more sophisticated and capital-intensive products.

None of these countries has grown through technological leadership. Their initial export boom has been powered by simple labour-intensive products. Even after their output mix became more sophisticated and mechanized, it has never been characterized by cutting-edge technology. What has happened in this stage has been the migration from the West of mature industries with stabilized technologies (like steel or automobiles) in search of lower wage costs and good infrastructure in the developing world – after the manner of Vernon's (1966) product cycle. Indeed, the work of Alwyn Young (1995) and Lawrence Lau (1994) has demonstrated that technical progress had very little to do with the Asian Miracle. Meanwhile, the advanced West has experienced virtual economic stagnation coexisting with almost miraculous technological progress.

There are very few common features – of policy regimes, cultural values and the like – that these economies share. The quest for a common secret of their success has so far failed. Initial formulations like reliance on the market and the withdrawal of an intrusive state have been repudiated by a closer look at the high-performing economies (such as the studies of Amsden, 1989 and Wade, 1990), where the role of the state has varied from Korea's dirigisme to Hong Kong's laissez faire. Theories that emphasise the uniqueness of Chinese entrepreneurial spirit or of the Sinic culture or the Confucian ethic

(all of which do indeed dominate the Asia- Pacific economy) do not account either for the spread of the growth impulse to South Asia or for the stagnation of what is now the Chinese Business Sphere prior to 1960.

However, all the miracle economies were densely populated countries with low wages at the outset of their growth. This is the one distinctive feature of East and South Asia, and any explanation of their growth surge in the last forty years must be rooted in it. Specifically, it must account for the increase in this period of the value of low-wage labour as a productive resource.

The cluster of economies have developed in a specific sequence, beginning with smaller countries on the rim of the Pacific and culminating with the giant economies of China and India; and this sequence too needs to be explained in any proposed scenario of Asian growth.

We suggest that the recent spectacular acceleration of economic growth in China and subsequently in India is not an isolated phenomenon, but part of a global process. It is best understood as a phase – perhaps the culminating phase – in the unfolding of a new international division of labour. Central to this unfolding pattern is the absorption into the mainstream of world trade of the labour surpluses of East and South Asia and the expansion of their exports of labour-intensive manufactures and services. In the long run perspective of history, this is a repetition of an old theme. Every major surge of world economic growth has been based on the mobilization of a similarly elastic supply of a key resource, a consequent Arthur Lewis- like (1954) escape from the prison of diminishing returns and an associated expansion of world trade. The Industrial Revolution – as Wrigley (1962) and Cipolla (1962) have argued – was based on the earth's accumulated stocks of fossil fuels and minerals and enabled the world to transcend the limits of an organic economy constrained by renewable sources of energy and materials. The so-called Second Industrial Revolution integrated into world trade the virgin land and natural resources of the New World and derived its momentum from the resulting specialization of production. We look at factors that triggered off this process

in late twentieth century Asia – the changes in tastes, technology and the geography of world affluence that made labour costs a decisive determinant of the location of much manufacturing industry and services.

While Indian and Chinese growth stem from a similar impetus, their patterns diverge significantly. Our second objective is to trace these divergences to differences in political economy, which in turn reflect differing historical experiences and social structure. We focus in particular on the consequences of two hundred years of colonial rule in India and on the extreme heterogeneity of its population in contrast to the Maoist heritage and the relative ethnic, linguistic and religious homogeneity of Chinese society. This has led to distinctive patterns of comparative advantage in the two countries, so that their recent growth has been more complementary than competitive. We argue however that these differences in comparative advantage are essentially temporary: with time, they are likely to disappear, so that the two countries may converge to similar growth *patterns* and a competitive relationship. Further, while both countries may experience some retardation in the *rate* of growth (due both to diminishing returns and to political economy constraints), the fractured nature of India's society and polity may mean that the deceleration will be sharper in India. In this context, we focus on the erosive effect on growth of the redistributive measures that the Indian government has been increasingly driven to adopt by the force of competitive populism: in particular, we analyze the likely economic consequences of the system of caste quotas in employment and higher education that India is planning to vastly extend.

### **Patterns of Trade and Development before 1965**

Before the mid-1960's, it was generally believed that densely-populated poor countries were unlikely to travel down the path of market-induced export-led growth.

Their adverse man-land ratios limited their export potential in primary products while in manufacturing, their labour cost advantage was believed to be more than offset by the diseconomies of scale imposed by small local markets for manufactures. Domestic demand for manufactures was limited by three factors: (1) low GNP which set an outside limit to market size, (2) low per capita income which, by Engel's Law, restricted the fraction of GNP spent on manufactures, and (3) an unequal distribution of income (itself stemming from the low return to labour in labour-abundant economies) which meant that the bulk of national income was controlled by a handful of propertied individuals who were too few to constitute a large market for any single product. Local manufacturers could not mass-produce on the basis of such narrow inelastic domestic markets; and, if they sought to achieve economies of scale by tapping foreign markets, they ran into high distribution costs. They could not therefore compete, abroad or indeed at home, with rivals located in the rich markets of the affluent economies. There were exceptions of course – industries so labour-intensive that labour cost considerations outweighed scale factors (cotton textiles) or products which derived their value from their exclusiveness and were therefore not amenable to standardization (handicrafts). And unique geographical assets might give rise to a primary specialization that could support substantial growth even in a densely populated poor country (tea in India and Sri Lanka, jute in Bangladesh, copper in Chile, Zaire and Zambia). But, in general, exports and output stagnated in populous low-income societies, limiting their participation in world trade and the prospects of growth through the market. The lack of investment outlets discouraged capital formation and foreign capital inflow; it depressed domestic rates of saving as well. This interrelated complex of effects, linking economies of scale in manufacturing, high distribution costs and small domestic markets with prolonged economic stagnation, has been explored in Guha (1981).

Export pessimism also fostered efforts at import-substituting industrialization as the only feasible path of development. The resulting protectionist regimes further retarded the growth of trade – as demonstrated by Bhagwati and Srinivasan (1975) or Little, Scitovsky and Scott (1970). They distorted the incentives of producers and investors away from comparative advantage, ruled out whatever possibilities there may

have been of economies of scale, barred access to foreign technology and to the bracing effect of foreign competition on domestic efficiency and created corrupt and dilatory bureaucracies to control production and trade. All these effects were magnified in the larger countries (like India and China) where the size and variety of the resource endowment were sufficient to foster the illusion that the costs of autarky would not be significant. Once an economy was launched on the path of import-substituting industrialization, it soon accumulated vested interest groups committed to the perpetuation of this policy even after it had become demonstrably dysfunctional (Guha, 1990).

### **The International Economic Environment of the Late Twentieth Century**

From the mid-sixties, however, the picture changed. At the root of the earlier scenario of export stagnation were considerations of scale economies in manufacturing and of distribution costs that segmented the world market into local submarkets. But in the last four decades of the century, a series of interrelated changes in the international technological and market environment progressively reduced the significance of these two factors. Ocean transport costs dipped due to changes like deep-draught cargo vessels and containerization that dramatically reduced pilferage and packaging costs. The Information Revolution virtually eliminated communication costs. Just-in-time management technology cut warehousing and storage costs to a minimum. Changes in production technology (like miniaturization) and in the composition of demand (as rising incomes world-wide led to a taste for more highly processed goods) reduced the material- and mineral-intensity of output and the ratio of freight costs to total value. The rise of new centres of wealth outside the Atlantic (the Middle East on the one hand and California and Japan on the other) widened the geographical spread of the world market and made it more accessible to the less developed world. The importance of scale economies was also dwindling meanwhile. The increasing sophistication of demand meant that quality, exclusiveness and variety counted for more than the mere price advantage that large scale production promised. And the increased uncertainty of an era in which competition became globalized discouraged long term investment in fixed assets

which are the basis of economies of long runs: producers increasingly sought the advantages of ‘flexible specialization’ – the use of micro-electronically controlled general purpose tools that could be redeployed at a minimum cost to produce small batches of differentiated products. Finally, beginning with the Kennedy Round in the sixties, barriers to world trade were successively dismantled, culminating in the establishment of the WTO.

### **The Asian Miracle and the Asian Giants**

The consequences were dramatic. Labour-abundant economies could, for the first time in history, realize their potential comparative advantage in labour-intensive manufactures. As they opened up their economies, their participation in world trade surged, led by a flood of labour-intensive manufactured exports. Incomes increased. Static gains from trade were achieved due to the realization of comparative advantage on the one hand and economies of scale on the other. Global competition forced domestic monopolies to increase efficiency. Moreover, the growth of investment opportunities in the almost infinitely elastic world market for labour-intensive exports stimulated an explosion in domestic rates of saving and capital formation. It also attracted – both directly and indirectly (through the expansion of the domestic market that it induced) – an inflow of foreign capital that swelled gradually from a trickle to a deluge. Foreign capital brought with it access to new technology so that the resource base of these economies was transformed. Dynamic growth in capital and technology reinforced the static benefits of the new international division of labour. The upshot was the Asian miracle.

The initial beneficiaries of this process were the Gang of Four. Their location on the Pacific rim, linked by cheap water transport to California and Japan, the fastest-growing economies then in the advanced world, and their small size (which minimized resistance to the notion that openness was for them the highroad to growth) gave them a head start. But as global specialization intensified, the factor price equalization theorem came into its own. Increasing demand for labour drove up wages in the Four Tigers, eroding their comparative advantage in labour-intensive goods relative to the lower-wage

economies of Indonesia, Malaysia, Thailand and Vietnam and eventually to the two great reservoirs of the world's surplus labour, China and South Asia. The continuing but phased migration of the world's labour-intensive production in search of lower- wage locations gave rise to the 'flying geese effect', so aptly described by Akematsu (1962) but mistakenly attributed by him to imitation of, and technological diffusion from Japan.

Why did the process occur by slow transitions rather than in a single Great Leap? Pioneers in the process typically built up infrastructure and the resulting advantages persisted even after wages rose, thus tempering the effect of wage differentials on profitability and retarding the movement of industry to new locations. Further, unlike small maritime economies, large continental countries tended to believe that they were relatively independent of the world market and accordingly to resist globalization longer. So when wage pressures mounted in the Tigers, the NIC's were initially more receptive to export-oriented production than the outsize economies of China and India. Eventually, however, the sheer volume and elasticity of the labour surpluses of the two Asian giants proved to be an irresistible attraction for labour-intensive manufacturing and foreign capital.

### **China and India: Stylized Differences**

While similar factor endowments ensured that China and South Asia would be the ultimate destinations of the global movement of labour-intensive industry and services, there were very significant differences between the two regions in the pace and pattern of this process. China's growth surge began earlier, was more explosive and involved far larger inflows of foreign capital. While this involved, particularly from 1992 onwards, substantial FDI from the OECD countries, the overwhelming bulk of it came from Overseas Chinese. China's growth was also more sharply focused on manufacturing rather than on labour- or knowledge-intensive services. India's – or more generally, South Asia's – recent development has been lagged and has accelerated gradually with much lower foreign capital participation and expatriate investment; and her major



growth sectors have been newer, relatively more knowledge-intensive industries and, especially, services.

### **Towards an Explanation**

Our explanation of these differences is in terms of distinctive initial conditions. While India and China both were, at the outset of their continuing spurts of growth, intensely poor, densely populated, agrarian economies, their heritage from the past differed in other crucial aspects. Two centuries of colonial rule had left India with a large, articulate, English-educated urban intelligentsia. This was a major force in the freedom movement and acquired, under its main spokesman Nehru, a political influence altogether disproportionate to its numbers in free India. It fought for, and secured, two of its central demands – the continuance of English as a principal language and medium of instruction and large government investments in higher education, particularly in scientific and professional education. In the 1990's, in an age of instant world-wide communication, essentially in English, India thus inherited an asset of incalculable value. Further, over the last several decades, technology became more sophisticated, management increased in complexity as its horizon widened in a globalized world, the demand for health services and medical research increased with rapidly aging populations and rising affluence and legal services became ever more intricate and indispensable for corporate success. The engineers, doctors, managers and lawyers trained by India's professional institutes found demand rapidly increasing for their services abroad; and the existence of such a pool of well-trained manpower became an attraction for industry and, especially for services worldwide.

While India's scientific and technical education infrastructure was an asset in relatively sophisticated, but still labour-intensive, activities, the backwardness of her basic education and health facilities was a major liability in industries requiring low-skilled labour. In part, this imbalance was a reflection and a legacy of India's earlier import-substituting industrialization regime with its Soviet model and its emphasis on capital-, energy- and skill-intensive industries. This was supplemented, supposedly in the

interests of employment generation and equity, by major restrictions on modern labour-intensive manufacturing: some of the commonest product lines were reserved for handloom and handicraft production only, thus decimating the cotton-mill industry, the spearhead of export-expansion in the rest of the underdeveloped world. Thus, as competition for the global mass market in labour-intensive manufactures intensified, India discovered that she had shot herself in the foot, not just by an autarchic trade policy, but by an obsolete industrial policy as well. And while trade policy proved to be slowly reversible with the help of a few nudges from the IMF and the WTO, a political economy dominated by interest group pressures (which we dwell on later) ensured that product reservations were retained and reaffirmed. India voluntarily opted out of the world mass market in traditional labour-intensive goods, the conquest of which propelled China's stratospheric boom of the nineties. India, meanwhile, was restricted, in the field of traditional manufactures, to niche exports (rather than mass markets), to cottage industry, exotica and boutique products.

In contrast, China in the age of reform inherited from Mao's regime an education system in total disarray after the Cultural Revolution, coupled with a strong infrastructure, in villages as well as towns, of basic literacy, health and nutrition. Her labour force was well-equipped for factory work, but not for knowledge-based industry and services. In the first few decades of the East Asian Miracle, up to 1990, this was well-suited to the requirements of world demand: IT and biogenetics were as yet immature, experimental technologies, locationally linked to the affluent markets in which demand for them was concentrated, since this proximity enabled them to be fine-tuned to the specific requirements of the market-place. China's weakness in this area did not therefore constrain her growth, while the more basic assets of her labour force (as well as its cheapness) were just what were needed to establish her as the factory hub of the world. Over the last decade, the picture changed. The new technology became stabilized and could cut loose from its moorings in the West: it now represented an area of lost opportunity for China, one in which India could steal a march over her.

Yet another legacy from the past in contemporary China and India is represented by the two diasporas, with their differences in size, composition and geographical distribution. In an earlier paper written in collaboration with Amit Ray (Guha and Ray, 2001), I demonstrated that a key, perhaps the major key, to an understanding of the differences between recent Indian and Chinese growth experience lay in the differing roles of expatriate investment in the two economies. Overseas Chinese were very numerous all over East and Southeast Asia. For generations, they had dominated trade and industry in Hong Kong, Taiwan, Singapore, Malaysia, Indonesia and Thailand as the major entrepreneurial community even where they were an outnumbered minority. Since the mid-sixties, they were primarily occupied in labour-intensive manufacturing for export from these pioneering and second-tier countries. As wages rose in these locations while China, from about 1984, rolled out the red carpet for them, they simply relocated their plant to the mainland. They had linguistic and family affinities to the Southeastern coastal provinces of Guangdong and Fujian from which they had originally migrated. And they had already acquired marketing links in the West and skills in managing low-wage labour that gave them a competitive edge over rival local manufacturers in China and elsewhere in the less developed world. China was thus the prime beneficiary of the externalities of growth on the Pacific rim, of the two-decade-long learning process that its expatriates had passed through in East and Southeast Asia. The bulk of foreign direct investment in China came in fact from Overseas Chinese and went into labour-intensive manufacturing for export.

India did not enjoy the benefits of geographic and cultural proximity to the Pacific miracle. Her diaspora comprised indentured labour imported to work on plantations and construction projects in South and East Africa, Mauritius, Fiji, Malaysia and the Caribbean and a later, more affluent group of migrants to the West. Entrepreneurs in this population produced according to the dictates of local markets and factor endowments in their host countries. Their business skills and experience, acquired primarily in capital-intensive industry (like steel) or in small retail trade, did not equip them for low-wage labour-intensive manufacture which was the boom sector of labour-abundant economies in the late twentieth century world. There was therefore no substantial inflow of non-

resident Indian capital into labour-intensive manufacturing after the Chinese model. On the other hand, Indian engineers and IT professionals had figured prominently in the early development of cyber technology in Silicon Valley and elsewhere; and it required relatively little by way of incentives to lure them back to India to form the skilled manpower base of a flourishing software industry and IT-based services. This led to a boom in domestic investment in these sectors; it also attracted FDI both from expatriates and from multinationals. More generally, as already noted, her earlier investment in higher education and science and technology and her prior acquaintance with the English language conferred on India a comparative advantage in human capital-based activities (such as biotechnology, pharmaceuticals and business process outsourcing), that was the basis of substantial expansion of production, export and investment, both from foreign and from domestic sources.

Transnational investment by Western conglomerates in the two economies tended, on the other hand, to a similar pattern. It reflected not the comparative advantage of the host country, but that of the firm – in capital- and technology- intensive activities. Obviously, these did not add to the export potential of the host; they were oriented to its rapidly expanding domestic market. An interesting dichotomy thus developed – especially in China – between multinational foreign investment that catered primarily to domestic demand and expatriate investment in labour-intensive export industry. In India, the contrast was not quite so sharp since the major focus both of expatriate and multinational investment was the knowledge-intensive exportable sector.

Initial conditions determined not only the patterns of growth in the two economies, but also its tempo. China inherited from the age of Mao a vast technological slack in agriculture, the consequence of the constraints that the commune system imposed on work incentives. The virtual dissolution of the communes, from 1978 onward, resulted in the rapid absorption of this excess capacity. In the six years between 1978 and 1984, the per capita income of rural China doubled. This multiplication of agricultural labour productivity released a huge rural labour surplus while the increase in income generated large savings and an expanding demand for manufactures in the

countryside. It paved the way therefore for the proliferation of township-village enterprises, the spectacular growth of China's rural manufactures which, together with the export-led expansion of labour-intensive manufacturing and the inrush of expatriate investment, fuelled her explosive growth in the mid-eighties and nineties.

Pre-reform India, despite its manifold inefficiencies, lacked a reservoir of excess capacity on a scale comparable to commune agriculture. It also lacked a diaspora trained in labour-intensive manufacturing for export. After the reforms of 1991, its growth, though very rapid by earlier standards, accelerated slowly with slow injections of foreign capital and modest accretions of non-resident investment. It is only in the second decade of reform, under the Vajpayee and Manmohan Singh governments, that India's growth rate has approached East Asian levels.

Perhaps however the most important single factor behind the relatively more sluggish growth of India in the era of reform is the extreme heterogeneity of its population. India is a virtual museum of the species with every conceivable variation of language, race, religion and caste superimposed on immense economic disparities. Differentiation on this scale fosters compromise and concession. It protects democracy and weakens central authoritarianism. But by the same token, it leads to a *soft state* in which central authority can never plan and implement an optimal design for the economy at large but must continuously modify it under sectional pressures.

The power of such interest groups arose from the fact that in a society as diversified as India's, the centre had necessarily to depend on a host of agents linked to it through a network of patronage. The agents could control the flow of information to the principal. They could also demand and receive much discretionary power. The more complex the society, the greater the bargaining power of the agents until the principal is virtually eclipsed and the political order becomes a bargaining equilibrium between different organized interests. India is in fact an Olsonian state (Olson, 1965, 1982, Guha, 1990).

In such a state, organized interests enjoy and resolutely defend massive subsidies at the expense of the general population, on food procurement, on agricultural inputs, on utility and transport rates, on the public distribution of food to urban consumers, on higher education. They compel a continuous expansion of government employment as a 'sink' of labour: a large standing army, a vast bureaucracy, a sprawling university establishment and a far-flung network of public enterprises, all highly inefficient and generally loss-making constitute an irreducible drain on the exchequer. On the other hand, resistance to taxation by organized groups is articulate and generally effective: agricultural income, for instance, is totally tax-free. Labour legislation strongly defended by organized labour guarantees almost total job security in the organized sector; it eliminates the threat of dismissal as a worker-disciplining device and ensures an increase in real wages – particularly in government jobs – at a rate far faster than productivity. Industries, universities, infrastructure projects and government offices are located not on the basis of functional efficiency but of political pressure from regional interests. Members of politically powerful groups enjoy preferential employment and promotion, whether through formal quotas or informally through political and union pressure on the appointing authorities. In such a society, decision-making is delayed because of the cumbrousness of group decision procedures and the bureaucratic routine and political bargaining that precedes every decision. Resources are diverted on a massive scale from productive uses into rent-seeking. Technological progress too is retarded – because of the dilution of competitive pressures, the higher returns to rent-seeking and the general opposition of organized vested interests to change.

All these constraints on India's productivity and growth were tempered by her exposure to global competition in the wake of the reforms. And their impact was less significant in the new industries and services that emerged in this period, activities not burdened by the legacy of past legislation and in which interest groups had not yet had the time to organize themselves. However, in an intensely plural society, these constraints continued to operate, though in somewhat attenuated form, and to weigh down the growth potential of the Indian economy.

Some of these constraints work in China as well – most notably the interests of workers and management in state-owned enterprises with their iron-clad guarantees of employment, food and housing despite the evident bankruptcy of most of these firms. However, Chinese society is very homogeneous relative to Indian: caste divisions do not exist, ethnic, linguistic and religious differences are minimal compared to India's. China inherited a remarkable regional decentralization of power and finance from the Cultural Revolution, but its underlying homogeneity has placed strict limits on the expression and success of regional pressures. Organized interests and sectional pressures simply do not compare with India so that Olsonian inefficiency does not depress growth on anything like the same scale. It is therefore hardly surprising that India's growth in the Reform era, while substantial, has lagged well behind the Chinese rate.

To sum up, three factors account for the faster growth of China in the age of Reform: the potential for improvement in incentives implied by the prior system of land relations, the presence of a large expatriate population on the Pacific rim where it could learn through experience the skills necessary for labour-intensive manufacturing, and the relative homogeneity of the population which reduced the range and strength of organized sectional interests that could act as a brake on growth. On the other hand, the differences in the patterns of output and export between the two economies are explained by the differences in the composition of skills of the two populations and the two diasporas and the rather rigid commitment of India to import-substituting industrialization (which in turn was reflected in the structure of her skill-development).

### **The Prospects**

What of the future?

We argue that with time the structure of industry and exports in the two economies is likely to approach each other, making them more competitive. The Chinese growth rate may well decline, but the Indian growth rate is unlikely to rise primarily on account of the persistence of political economy constraints.

Thanks to the frenetic pace of Chinese growth, wage rates in China are rising faster than in India or in India's South Asian neighbours or Vietnam. It is only a matter of time before China's advantage in terms of raw labour melts away. What is more, the mushroom growth of factory production has already polluted her environment extensively, often catastrophically. It has also exerted enormous pressures on China's, indeed the world's, natural resource base. China's manufacturing boom is running into rapidly diminishing social – if not yet private – returns. Chinese entrepreneurs and the Chinese state have extrapolated these trends into the future and are investing increasingly in more technologically sophisticated activities with a lower content of materials and unskilled labour. To support these, the Chinese government is seeking to develop a matching human resource capacity sustained by a world class scientific and technological structure and a highly competitive and meritocratic educational system. The cohesion and purposiveness of China's political regime has facilitated its preparations for a future transition away from being the world's factory hub.

In India, the rapid expansion of IT and biotech, of business process outsourcing and other long distance communication-based services as well as the induced growth of multinational FDI oriented to the fast-growing domestic market is as yet fuelling an explosion in employment and incomes for the college-educated, urban, English-speaking segment of her population. It is also creating incentives for upward mobility and opportunities for the less fortunate to ascend the social ladder and be absorbed in what has been described as the Great Indian Middle Class. But this can hardly be called a truly inclusive pattern of economic development. It emphasizes services performed by an educated middle class as the leading sector in growth – amid an ocean of poverty and illiteracy. Of course, the income generated in the leading sector will eventually trickle down to the poor through increased demand for food and manufactures. But this is a process that conspicuously widens economic disparities between an increasingly cosmopolitan elite and vast chunks of India's population. The rural masses, the socially and economically deprived lower castes, the inhabitants of remote and backward regions are excluded from a major share in the first fruits of globalization and growth; their



aspirations for a better life are raised by a very visible demonstration effect and then fulfilled at a painfully slow pace. Not only is the process inequitable in the extreme; it is also a prescription for political volatility.

In a society where interest groups are strongly organized, on the basis of regional, religious, linguistic and especially caste identities, the consequence has been a politics of envy fanned by politicians seeking to carve out sectional, but still sizeable, constituencies for themselves. States have been divided and reconstituted along linguistic, and increasingly regional lines as well: inter-state mobility has been restricted by prohibitions on the sale of land to, and limitations on government employment and college admissions for non-locals, those who are not 'sons of the soil.' Efforts have been made to restrict the use of English, efforts that were conspicuously successful in the Hindi heartland, particularly in Bihar and Uttar Pradesh. The consequence was to reinforce the educational and economic stagnation of these states which remain the major areas of darkness in the Indian economy. As the negative consequences of this policy have dawned on the populations they were supposed to benefit, the demand for it has abated.

Not so however for another redistributive measure, mandatory quotas for lower castes in education, employment and legislative representation. Included in the Indian constitution as a temporary measure for the uplift of the "Scheduled" castes and tribes who constituted 22.5% of the population, these have been progressively extended and broadened to cover more fields of activity and more castes. In many states, 50% of all college admissions and government jobs are now determined by caste quotas. Quotas have of course been extended gradually: new industries and services have enjoyed a honeymoon period of freedom from job quotas, the institutes of technology, medicine and management have successfully resisted quotas till fairly recently and the extension of quotas to private unaided business and educational institutions is a recent idea. However, the holiday that all these sectors and institutions have enjoyed from sectional pressures is now over. The Union government proposes to adopt reservation as its mandatory requirement as well – which would imply 50% quotas for faculty and students in all

universities and professional institutes. The central government is considering imposing it on private business too. If it does so, as is very likely, quotas will become the dominant and the most distinctive feature of the Indian economy.

What are the likely economic consequences of this vast expansion of the quota system? The main characteristic of caste quotas as implemented in India is that while they open the doors of opportunity to the lower castes, they eliminate their incentive to improve, or indeed to perform. Individuals are not given the benefit of the quota at a single point of their careers but at every step – in school, in college admission for every degree, in selection for government jobs, in promotion. At no stage are they required to measure up to the criteria that general candidates are supposed to fulfil. What is more, by making them a numerous component of any institution, quotas create an incentive for them to function as organized pressure groups for selective dilution of standards of evaluation in their own favour. Coate and Loury have shown that affirmative action in favour of a particular group, by impairing the incentive of members of that group to perform, creates a group stereotype of low performance. Employers now believe, correctly, in the pervasiveness of this group stereotype and, to the extent that they are not themselves constrained by quotas, discriminate against the preferred group. Individual members of the group cannot escape stereotyping and so have no incentive to distinguish themselves. Thus, even if the group is as capable *ex ante* as any other, the introduction of affirmative action itself reduces its level of performance and generates discrimination against it. In educational institutions, the sizeable presence of such a group compels a lowering of the standards of instruction: this retards the academic progress of non-quota students as well. Since caste quotas are imposed in faculty recruitment too, the capacity of the institution to teach its students – including those not admitted through quotas – is impaired. A vicious circle of progressive deterioration in quality is set in motion.

The dilution in quality of admissions, instruction and evaluation erodes the credibility and value of degrees. A degree from an IIT or an IIM was a reliable signal of ability. With the dilution in the quality of this signal, employers, both Indian and foreign, will now have to conduct their own independent and costly assessments of ability.

Further, as the value of Indian degrees melts away, Indian students of merit are tempted to go abroad in search of an education, if at all they can afford it on their own or are good enough to earn scholarships. This reduces the general level of talent available for admission to Indian educational institutions and accelerates the devaluation of such institutions in yet another vicious circle.

With such a decline in quality, India's comparative advantage in human capital-intensive activities is certain to disappear. Employers are bound to turn increasingly to other countries where the educational system is not similarly constrained. Not only will they recruit fewer graduates from Indian institutions, they are also likely to curtail their investments, at least in human capital-intensive production, in India.

This is the likely outcome of the vast expansion of quotas in educational institutions alone. If the government goes further along the path it has already charted out and imposes quotas on private business, the inflow of capital into India's knowledge-intensive industries is likely to be reversed. We may witness an exodus that could well assume the proportions of a deluge and include an outflow of domestic Indian capital in search of low-wage havens where hiring is not similarly constrained by government intervention.

A less dramatic, yet important, consequence of the growth in government intervention supposedly in the interests of social justice is an increase in government budgets. With the increase in reservations to 50%, for example, government proposes an increase in seats in educational institutions that would ensure that those excluded from quota benefits still have the same number of places to compete for. This would imply a massive rise in the higher education budget. Other measures to safeguard the interests of specific regions and groups are likely to be equally expensive. All this implies an increase in taxes and government borrowing that will raise interest rates, crowd out private investment and reduce the rate of growth.

All this will not only impinge on the growth rate of India's industry and services; it will also alter their pattern. The entire spectrum of Indian business is likely to be hit by reservations, substantially reducing its growth potential. However, labour-intensive manufacturing will be less damaged than the knowledge sector. Academic ability is not a prime asset for low-skilled factory work and may in fact be a liability if it induces the individual to look down on manual labour. Of course, the recruitment of managerial executives in all private business will be adversely affected by quotas. However, there can be little doubt that the productivity of labour-intensive manufactures will be impaired less by quotas than that of IT, pharmaceuticals or services. Comparative costs will therefore change: the likely composition of India's output and exports will switch towards closer similarity with China's.

Indeed, the quota regime and its likely impact on India's future growth is a dramatic illustration of Persson and Tabellini's (1994) principle: a society deeply riven by initial cleavages and inequalities generates a demand for income redistribution measures which decimate the incentive for future growth. India's future prospects may well be doomed by her fragmented and unequal present.

A final, crucial determinant of the future trajectories of the two economies is their evolving demographic profile. China, as has often been remarked, is rapidly aging. Thanks to the rigorously enforced one-child policy, birth rates have dropped dramatically, so that the age structure has increasingly been skewed in favour of the elderly. A declining working population will soon have to support an ever-increasing burden of retirees and pensioners. The decline in the labour force is bound to affect the growth of output, particularly in the labour-intensive industries. Savings rates too may be impaired as the scarcity of children erodes the bequest motive. India, at least in the aggregate, need have no such immediate apprehensions. The demographic transition is yet to occur in her two most populous states, Uttar Pradesh and Bihar; and her working age population is likely to swell for some decades yet. The surplus of unskilled labour will not contract in the near future, keeping down unskilled wages and labour costs in manufacturing industry, in sharp contrast to China. However, there are acute

demographic differences between regions, communities and castes. The less educated and more backward groups, the Muslims, the lower castes, the Hindi belt (particularly UP and Bihar) will provide the bulk of the labour force of the future. The relatively literate and progressive Southern states of Kerala and Tamilnadu, on the other hand, have achieved total fertility rates near or below 2, and their shares in the labour force will soon decline, not only in relative, but in absolute terms as well. So will the shares of the better educated castes and communities. The Indian labour force of the next generation will be relatively less skilled and educated than if all its segments had grown at the same rate. This should reinforce all the factors we have already dwelt on that are tending to switch India's comparative advantage away from the knowledge sector and towards low-skilled manufacturing.

## **Conclusion**

We have argued that the acceleration of economic growth in China and India in the last few decades is the climactic phase of a global process similar to the First and Second Industrial Revolutions of the eighteenth and nineteenth centuries. This process involved the absorption into world trade and into the pattern of international specialization of a hitherto marginalized resource – the labour surpluses of Asia. The significance of China and India lay in their being the largest reservoirs of surplus labour in the world. While this was the crucial common factor between the two and indeed their link with the other participants in the Asian miracle, the two countries have differed significantly in the speed, timing and pattern of their growth. China's take-off was earlier, her growth faster (with a larger volume of FDI and, especially, expatriate investment) and more closely oriented towards manufacturing as against India's emphasis on IT and communication technology-based services. We have traced these differences to historical heritage and political economy – the colonial legacy of India as against China's Maoist inheritance, the immense diversity of India's population as against the relative homogeneity of China, and the composition and geographical location of the

Chinese and Indian diasporas. Finally, we have tried to extrapolate our arguments into the future: we suggest that the patterns of growth in the two countries are likely to converge and that the rates are both likely to diminish. However, the deceleration may be more drastic in the Indian case, so that over the long run, the gap between the two economies may widen.

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