

**When World's Workshop Meets Its Office:
Comparative Advantage, Institutions,
and Foreign Investment in China and India**

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Abstract

Why do China and India, two similarly, endowed high-growth economies, differ so distinctively in their development patterns? China has become world's workshop, whereas India has become the world's office. I argue that China's authoritarian regime gives the government the ability to take bold initiatives in radical economic reform, but it creates a credibility problem for the government. India's democratic regime provides the policy credibility that is essential for private investors, but it limits the government's capacity to change the inefficient status quo.

Moreover, I argue that, at the micro-institutional level where policy is implemented, specific institutional arrangements in fiscal, land, and labor policies have systematic effects on the static comparative advantages. The resulting distortions create dynamic comparative advantages that induce firms to adopt different investment strategies. China's institutional arrangements produce more political uncertainty, but also greater regulatory flexibility, which is particularly favorable for labor-intensive firms engaging in large-scale export-oriented manufacturing. India's institutional arrangements yield more political stability, but greater regulatory rigidity, which induces firms to avoid large-scale labor-intensive manufacturing.



Although China and India, two gigantic and booming economies, appear to have much in common, they play very different roles in the global economy. For foreign investors, China is world's workshop, whereas India is its office. As shown in Table 1, the bulk of foreign direct investment (FDI) inflows in China go to a broad range of manufacturing industries, which accounted for 57 percent of total FDI between 2004 and 2010. Unlike China, India attracted little FDI in manufacturing industries. The service sector has been the largest recipient of FDI, receiving 21 percent of FDI inflows between 2000 and 2010. A high portion of FDI inflows into China consists of labor-intensive export-oriented investments, whereas FDI inflows in India were concentrated on more capital- and technologically intensive sectors.¹ On average, foreign-invested enterprises (FIEs) in China exported 42 percent of their products, whereas foreign firms in India sold 90 percent of their outputs in India's domestic market.²

Table 1: Sector-wide Distribution of FDI in China and India

China	2004-10	India	2000-10
Manufacturing	57.2%	Services Sector	21.0%
Real Estate	17.6%	Software & Hardware	8.5%
Leasing and Business Services	6.0%	Telecommunications	8.1%
Wholesale and Retail Trades	4.1%	Housing & Real Estate	7.4%
Transport, Storage and Post	2.7%	Construction Activities	7.2%
Info Transmission, Comp Services and Software	2.2%	Power	4.6%
Production and Supply of Electricity, Gas and Water	2.0%	Automobile Industry	4.1%
Agriculture, Forestry, Animal Husbandry and Fishery	1.4%	Metallurgical Industry	3.3%
Scientific Research, Technical Service and Geologic Prospecting	1.3%	Petroleum & Natural Gas	2.6%
Hotels and Catering Services	1.1%	Chemicals	2.2%

Source: China Statistical Yearbooks 2005-2011.

Ministry of Commerce & Industry, Government of India. 2011. "Fact sheet on Foreign Direct Investment, from August 2000 to August 2010."

http://dipp.nic.in/English/Publications/FDI_Statistics/2011/india_FDI_July2011.pdf

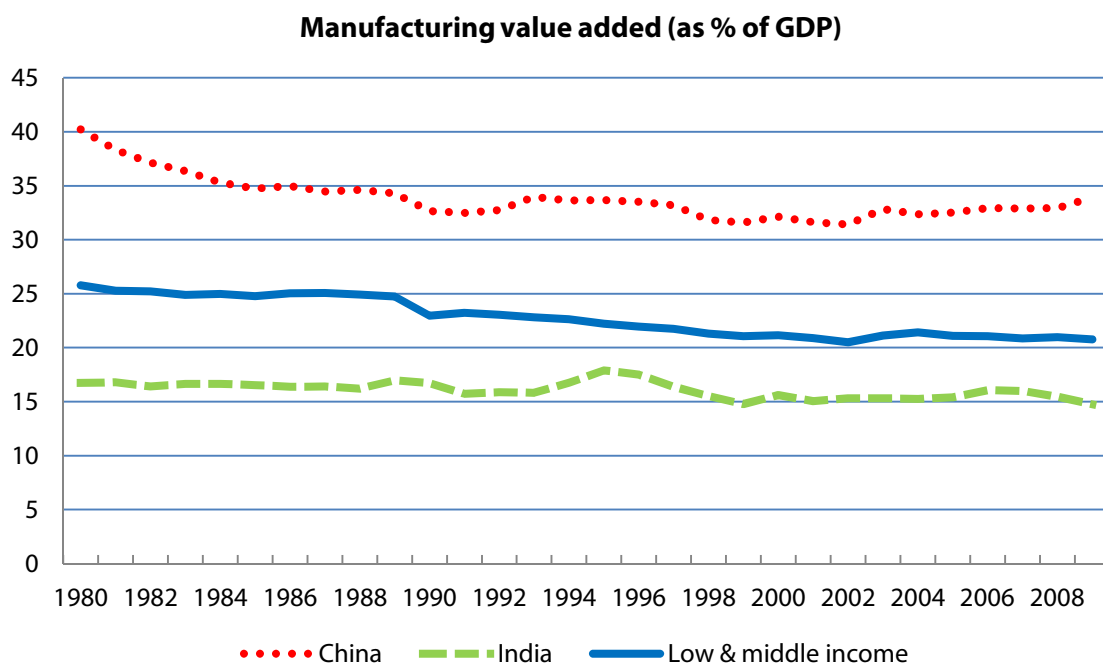
¹ For example, a World Bank survey conducted by Gregory et al. (2009) finds that the average capital-labor ratios in hardware and software manufacturing firms are 25 percent and 60 percent, respectively—higher in India than in China.

² The data for China (1991–2007) are from various years of the *China Statistical Yearbook*; the data for India (1991–2002) are from the *India Report on Currency and Finance* (2003).



The traditional international trade model (i.e., Heckscher-Ohlin model)—that relative factor endowments are a major determinant of a nation’s comparative advantage—would predict that increasing openness to trade would shift both countries towards greater specialization in labor-intensive manufacturing exports, which is usually the case for labor-abundant, capital-scarce developing countries.³ Neither country fits the pattern neatly, however. As shown in Figure 1, compared with countries at a similar level of development, both China and India are anomalies, albeit in different ways. Manufacturing contributes 34 percent of GDP in China, which is much higher than what is usually found in lower/middle-income economies. In contrast, manufacturing accounts for only 15 percent of GDP in India in 2009, which is significantly lower than the average for lower/middle-income economies (World Development Indicators 2011). Why do these similarly endowed, high-growth economies differ so distinctively in their economic structures, particularly in terms of the role of manufacturing industry?⁴

Figure 1: Share of Manufacturing in Total GDP



Source: World Development Indicators, 2011.

³ A detailed analysis of the comparative advantage for the manufacturing sector reveals that both countries have similar comparative advantages in labor- and resource-intensive manufacturing (Batra and Khan 2005).

⁴ To be sure, India, with its smaller territory and greater population density, should be relatively more abundant in the unskilled labor than China.



Indeed, actual development experiences rarely present a perfect fit with the theory, which is based on *laissez-faire* assumptions, because institutions and government policies always play a role in economic development. These institutional and policy forces may lead to various distortions of production factors by affecting factor prices and mobility (Magee 1971). Therefore, modern economic theories consider exogenous institutional differences, rather than natural resource endowment, as the fundamental determinants of economic competitiveness and development patterns (Acemoglu et al. 2001; Engerman and Sokoloff 1994). Rodrik (2007) surveyed a wide range of institutional factors that could lead apparently similar countries to different development paths and economic structures.

Those seeking to account for the divergent patterns of China and India have usually referred to their distinct political institutions, which would provide a convenient explanation for their differing governmental behaviors. For example, China's authoritarian leaders have been credited for the country's impressive ability in building a world-class infrastructure, whereas India's democratic government has often been blamed for its seeming lack of power for improving its outdated infrastructure (Yardley 2011). Governments without sufficient ability to exercise leadership over their private sectors are likely to mess things up rather than improve things (Hausmann and Rodrik 2003), but "the mere fact that a country has democratic institutions tells us little about whether it is well or badly governed" (Fukuyama 2011). Some recent studies on India and China have suggested that despite their distinct political regimes, more nuanced domestic institutions in China and India tend to converge toward efficiency-mandated direction (e.g., Hseuh 2011; Bardhan 2010; Keefer 2007; Sinha 2005).

Neither country was considered particularly well-governed despite their extraordinary economic growth, however (Keefer 2007). The Indian government admitted that its underperforming manufacturing sector was due to "the inability of the country to build and maintain competitiveness needed to meet the global challenges as well as to develop a large domestic market through low cost production" (National Strategy for Manufacturing 2006). It identified various issues, including lack of proper infrastructure, higher transaction costs, higher interest rates, inadequate power, and other disabilities and regulatory issues, as barriers to manufacturing competitiveness. But, China also faces a challenging governance environment. Hsieh and Klenow (2009) find that manufacturing in both China and India suffered from a misallocation of capital and labor that may prevent efficient plants from achieving optimal scale and keep inefficient plants from contracting or closing. Misallocation has been attributed to licensing and size restrictions in India, whereas misallocation is more likely caused by state ownership and political intervention in China. Moreover, China's domestic market has been segmented by protective trade barriers set up by local governments, an unintended consequence of fiscal federalism (Tsai 2004).

The concept of "path dependency" is also insufficient for explaining their similar growth trajectories but different economic patterns. Both countries, after their establishment/independence, adopted state-directed inward-oriented industrialization strategies with the priority on heavy industries, although India's industrial policy was more dedicated to



protect labor-intensive, small enterprises, because they would be more effective for overcoming poverty and unemployment (Little 1987; Kashyap 1988). But, both strategies failed to achieve their intended objectives.

China and India started their economic reforms with similar economic systems and development levels (Srinivasan 2004). They undertook major economic reforms by reducing trade barriers and liberalizing domestic regulations. India's economic reforms started in 1991, a decade later than China's, but its economic growth began to accelerate around 1980, thanks to the government's shift from left-leaning, anti-capitalist rhetoric to a growth-oriented, pro-business strategy (Rodrik and Subramanian 2005; Kohli 2007). In particular, both countries created special economic zones (SEZs), hoping to attract FDI and promote manufacturing exports. More recently, the Indian government announced a National Manufacturing Policy with the aim of significantly increasing manufacturing output and generating more manufacturing jobs (*Financial Express* 2011). Yet, despite their similar objectives and their economic reforms, China and India ultimately achieved sustained growth by following different development paths.

Using insights from the institutional economics literature, I look at the differences in both macro-political and micro-institutions to make sense of the divergent development patterns in China and India. I find that at the decision-making level, China's authoritarian regime gives the government the ability to take bold initiatives in launching radical economic reforms, but it creates a credibility problem for the government. India's democratic regime provides greater policy credibility, which is essential for private investors, but it limits the government's capacity to change an inefficient status quo.

I argue that at the micro-institutional level, where policy is implemented, specific institutional arrangements impose systematic effects on static comparative advantages. Specifically, I find noticeable differences in fiscal, land, and labor institutions between China and India.

- 1) China's fiscal decentralization grants local governments more fiscal autonomy to attract foreign investors, but weak fiscal constraints undermine their policy credibility. India's fiscal decentralization limited the government's ability to offer tax incentives, but strong fiscal constraints increased their policy credibility.
- 2) China's weak constraints on compulsory land acquisition and its low compensation facilitate large-scale conversion of agricultural land for industrial use. India's strong constraints on compulsory land acquisition and its relatively high compensation limit the supply of industrial land.
- 3) China's pro-capital labor contracting system and centralized unions undermine the bargaining power of labor, and thus, maintains the supply of abundant low-cost labor. India's restrictive labor regulations and fragmented trade unions curtail labor mobility and reduce the supply of low-cost labor.



The resulting factor market distortions create new dynamic comparative advantages that induce firms to adopt different investment strategies. China's institutional arrangements produce more political uncertainty, but greater regulatory flexibility, which is particularly favorable for labor-intensive firms engaging in large-scale, export-oriented manufacturing. India's institutional arrangements yield greater political stability, but also greater regulatory rigidity, which motivates firms to avoid large-scale, labor-intensive manufacturing.

This paper proceeds as follows. The second section presents a brief sketch of SEZs and compares their economic performances in each country. Both countries launched SEZs in which applicable policies diverge from the rest of the country, but their frameworks reflect the essential features of the underlying political institutions. China's SEZs were an experimental policy design, and its sustainability was guaranteed by Chinese leaders' political will rather than by a credible legal framework. In contrast, India's political system did not grant the government the flexibility to conduct a large-scale policy experiment outside the legal system. Thus, its SEZs were institutionalized by a comprehensive legal framework agreed upon by various political forces.

The different performances of SEZs require a deeper understanding of micro-institutional arrangements. In the following sections, I examine the explanatory variables—fiscal, land, and labor institutions—and explore their effects on foreign firms' strategies. I conclude by discussing the implications of this paper.

The Political Economy of Special Economic Zones

SEZs are a key feature of China's success in FDI and manufacturing. In 1979, the Chinese government authorized Guangdong and Fujian provinces to use "special policies and flexible measures" to implement an experimental development strategy. Four SEZs—Shenzhen, Zhuhai, Shantou, and Xiamen—were created as an integral part of this strategy. The early success of SEZs, particularly in Shenzhen, encouraged the central government to expand the experiment to fourteen coastal cities with fourteen smaller development zones (the so-called Economic Technological Development Zones [ETDZs]). By the end of 2006, the central government authorized 1,568 zones, both at national and provincial levels, with a total size of about 10,000 square kilometers (Xinhua 2007).⁵

SEZs and development zones are the primary destinations of FDI and export hubs in China. In 2010, they represented 37 percent of FDI, 33 percent of export, and 15 percent of industrial output, as well as 5 percent of employment and 0.5 percent of land area in China.⁶ Although SEZs had impressive early successes, ETDZs have had a higher growth trajectory over time. SEZs

⁵ Since 2008, the Chinese government has converted a large number of provincial development zones into national ones. By the end of 2011, there were 90 national ETDZs and 88 high-tech development zones.

⁶ China attracted \$106 billion FDI in 2010, of which 90 ETDZs contributed \$31 billion and five SEZs received \$9 billion. See *China Statistical Yearbook 2011* and *2010 Statistics of Development Zones*.



received 27 percent of total FDI inflows in 1984, but steadily declined to 8 percent in 2010, whereas the ETDPZ's share of FDI increased from 2 percent in 1986 to 29 percent in 2010.

India's SEZ policy was also driven by a quest for industrialization. India was one of the first countries to set up export-processing zones (EPZ) to promote labor-intensive manufacturing exports,⁷ but it did not establish Chinese-style SEZs until 2000 and the initiative was widely believed to be inspired by the Chinese experience (Chadha 2000; Jenkins 2007; Palit and Bhattacharjee 2008). Central to this initiative was the creation of a flexible policy and procedural framework to facilitate export-oriented industries and promote FDI. The SEZs' export performance is impressive. It increased more than twenty times from 2002–03 (\$3 billion) to 2010–11 (\$69 billion), representing 27 percent of the total exports in the country. But, unlike their Chinese counterparts, which have developed into manufacturing hubs, most of Indian SEZs are tiny information technology enabled service (IT/ITES) zones that are the preferred destination for back-office of business outsourcing. Out of 143 active SEZs, only 17 are multiproduct zones created to host export-oriented manufacturing firms.⁸

The SEZs' performance in attracting FDI and creating jobs was lackluster. Between 2006 and 2009, SEZs only garnered 3.7 percent of the total FDI in India (*Business Standard* 2009).⁹ By the end of 2010, SEZs had reached only 30 percent of their goal in job creation (Ministry of Finance 2011: 177).¹⁰ IT/ITES zones accounted for 75–80 percent of total SEZ employment, but they did not have the capacity to create the large number of jobs that would have been produced by labor-intensive manufacturing industries. Multiproduct SEZs, on the other hand, contributed only a sixth of direct employment (Mukhopadhyay 2009). A senior official at the Ministry of Commerce and Industry admitted that SEZs' performance has been far from the official goals of attracting FDI and creating jobs.¹¹ See Table 2 for a comparison of SEZs in China and India.

⁷ In 1965, India established its EPZ at Kandla, followed by seven other zones. Their institutional deficiencies, however, along with the highly restrictive FDI policy, hindered their performance. They generated low foreign exchange earnings and had a negligible impact on exports and employment (Subrahmanian and Pillai 1978). Another similar policy experiment was the industrial estate program, which was intended to promote labor-intensive small enterprises. In spite of technical and financial assistance, these experiments largely failed to generate significant foreign earnings, exports, or employment.

⁸ The National Manufacturing Policy of 2011 proposes establishing manufacturing and investment zones that would expand the SEZ concept to a larger geographical area.

⁹ The ratio was calculated using total FDI equity inflows between 2007 and 2009 as the denominator. Data on FDI equity flows were reported by Department of Industrial Policy and Promotion. If one uses revised FDI inflows, which include FDI equity inflows and reinvested earnings, as the denominator, SEZs only accounted for 2.7 percent of total FDI inflows.

¹⁰ In 2007, the Ministry of Commerce and Industry estimated that SEZs could eventually attract an investment of 283,319 cr. rupees and create 2.1 millions direct jobs by the end of 2009 (Menon and Mitri 2009: 39).

¹¹ Interview at the Ministry of Commerce and Industry, February 11, 2011.



Although both China and India intended to use SEZs to attract FDI and promote manufacturing exports, their frameworks are noticeably different, and are shaped by the underlying political institutions. As a policy experiment endorsed by the reformist central leaders, China's SEZs/development zones were ad hoc institutional arrangements from the beginning. Top Chinese leaders had to periodically rely on highly publicized visits and speeches to demonstrate their political will to sustain the policy experiment, but development zones never established their legal status through laws approved by the national legislature. The regulatory framework of development zones was established through various provisional directives (*zanxing guiding*) created by the State Council and its ministries, which, however, carried little legal authority. Development zones, after almost three decades of experimentation, continue to operate in what a "legal" but "non-lawful" environment.

Table 2: Major Indicators of Special Economic Zones

	China	India
Initiation Time	1980	2000
No of approved zones	1,568	585 (143 in operation)
Passage of National Law	No	2005
Zone Developer	Provincial and local governments	Private sector, or jointly set up by private sector and state governments
Major Industrial Sectors	Manufacturing	IT/Services
Total Land Area	44,678 km ²	671 km ²
Employment	17.9 million	0.7 million
FDI (% of national total)	37%	3.7% (2006-09)
Export (% of national total)	33%	27% (2010-11)

Note: although China has more than 1,500 approved zones, statistical information is only available for five SEZs and 90 ETDZs approved by the central government.

- Information of SEZs is from China City Statistics (www.chinadataonline.org) and Bureaus of Statistics in Shenzhen, Zhuhai, Shantou, Xiamen, and Hainan.
- Information of ETDZs is from China Association of Development Zones Statistical Report 2011 <http://www.cadz.org.cn/Content.jsp?ItemID=1570&ContentID=99806>.
- Information of Indian SEZs is from Ministry of Commerce and Industry, Government of India, June 2011, <http://sezindia.nic.in/writereaddata/updates/NEW%20FACT%20sheet.pdf>



- Information of FDI in Indian SEZs is from Business Standard. <http://www.business-standard.com/india/news/sezs-attract-over-rs-10900-cr-fdi-in-3-years/67847/on>
- The FDI ratio was calculated using total FDI equity inflows between 2007 and 2009 as the denominator. Data on total FDI equity flows were reported by Department of Industrial Policy and Promotion.

In the absence of a clear national regulatory framework for development zones, local governments at every level rushed to create development zones in their jurisdictions, resulting in several rounds of “zone fever.” At its peak, China had 6,899 zones, covering 38,600 square kilometers (Ministry of Land and Resources 2004). Concerned about the explosive growth of unauthorized zones, Beijing wielded its power to shut down and consolidate small zones and recentralize the approval authority (*China Daily* 2005), but its arbitrary intervention also imposed a great deal of uncertainty on development zones.

Because the central government has not reached a national legislation for development zones, it has allowed provincial governments to create the legal framework. The first provincial zone regulation was enacted in Tianjin in 1985. By 2009, of the fifty-four national ETDZs, forty-six have regulations passed by provincial legislatures ensuring their legal status.¹² These provincial zone regulations, however, are insufficient to fit development zones into the existing regulatory framework, because development zones, unlike a fully fledged local government, lack legislative authority and clearly defined administrative boundaries.

India started the journey of SEZs from the opposite direction. The Indian government drafted a national law for SEZs when it initiated the SEZ policy. Because the collective interest in promoting economic development was so strong, no major political party had a clearly articulated argument for opposing the idea that SEZs would help accelerate India’s economic growth. Opposition was fragmented and, therefore, could be addressed by the central government individually and serially (Jenkins 2007). With little political resistance, the SEZ Act was passed in May 2005 and the SEZ Rules were enacted in 2006.

Like China’s decentralized SEZ experiments, state governments play a major part in promoting SEZs, but they have to rely on private firms to develop them. The SEZ Act stresses the partnership of the private sector with state governments in establishing SEZs, with the central government acting only as a facilitator. Except for the seven EPZ-converted SEZs, which were established by the central government, all SEZs in India have been set up at the state level by public developers, private companies, or public-private joint developers.

¹² The majority of the provincial regulations were applied exclusively to specific national ETDZs. Some provinces passed regulations for development zones that apply to all the development zones in their domains. These provinces include Jiangsu, Shandong, Shanghai, Hebei, Shaanxi, Henan, Jilin, Hubei, Sichuan, and Anhui.



Not only are the state governments the primary promoters of SEZs, they also have the authority to regulate SEZs through state laws. State SEZ laws are as important as the central Act, because a number of areas—in particular, labor relations and land acquisition—fall under the purview of the states. This means that a decision on a controversial issue (e.g., closure of factories, hiring and firing of workers, or displacement and compensation rules) must be made by the state governments.

The launching of SEZ policy and, particularly, the passage of the SEZ Act, illustrate that the Indian government, despite its much stronger institutional constraints, could be as capable as the Chinese government, which enjoys largely unchecked authority, in initiating efficiency-enhancing reforms. It was primarily because of the similar interests among different political forces pursuing external-oriented economic policies, which were expected to benefit the entire society. The differing performances of SEZs, however, suggest that micro-institutional arrangements may play a role in creating both advantages and obstacles for investors. We now turn to three policy areas—tax, land, and labor—to illustrate how institutions may have fostered change in natural factor endowments.

The Fiscal Institutions

Although both countries have similar features of fiscal federalism, they have fundamentally different institutional arrangements. The Indian constitution lays out budgetary responsibilities and legislative procedures for the central and state governments; China's fiscal federalism emerged from a *de facto* political arrangement in the absence of constitutional guarantees (Montinola et al. 1995). Despite limited formal fiscal authority, local governments in China enjoy greater fiscal autonomy than their Indian counterparts. As shown in Table 3, local governments raised about 76 percent of their total revenue (including budgetary and extrabudgetary revenues) between 1994 and 2010—significantly higher than India's state governments, which only raised 36 percent of combined government revenues (including tax and nontax revenues). Local governments in China covered 69 percent of their expenditures with their own revenue, whereas India's state governments only covered 34 percent with their own revenue. Thus, local governments in China have greater autonomy than their Indian counterparts, both in terms of revenue collection and expenditure financing.

Greater fiscal autonomy would create a strong incentive for local governments to pursue their own development goals (Qian and Weingast 1997), but lack of effective fiscal constraints would undermine their fiscal accountability. Because China's Budget Law requires all subnational governments to maintain balanced budgets, local governments can only rely on intergovernmental transfers and off-budget sources to finance part of their expenditures, at least in theory. In practice, however, local governments have numerous ways of circumventing the ban on government borrowing. One popular channel in recent years is to borrow through local financing companies set up by local governments. Through this camouflage, local governments



can avoid both central monitoring and market scrutiny, which has resulted in a tremendous amount of hidden local government debt. The National Audit Office estimates that the total local government debt reached to RMB 10.7 trillion, or 27 percent of the nation's GDP, by the end of 2010 (Xinhua 2011).

Table 3: Central-Local Fiscal Relations

	India		China	
	state revenue/total revenue	state revenue/state expenditure	provincial revenue/total revenue	provincial revenue/provincial expenditure
1994	36.9%	33.9%	73.6%	70.4%
1995	35.6%	35.2%	74.4%	74.5%
1996	34.7%	34.4%	72.9%	77.9%
1997	35.1%	33.6%	77.5%	76.9%
1998	37.5%	33.0%	76.2%	75.6%
1999	36.7%	32.4%	73.6%	72.9%
2000	37.3%	33.1%	70.5%	73.0%
2001	39.5%	33.1%	73.5%	70.3%
2002	38.7%	33.3%	72.8%	66.6%
2003	37.7%	29.9%	73.1%	66.7%
2004	37.2%	32.6%	74.8%	66.1%
2005	36.5%	37.5%	76.4%	67.6%
2006	34.6%	38.1%	77.6%	67.5%
2007	32.4%	37.8%	78.7%	67.9%
2008	34.7%	36.4%	80.1%	63.0%
2009	36.4%	33.6%	81.0%	57.9%
2010	35.7%	35.3%	82.2%	55.0%
1994-2010	36.3%	34.3%	75.8%	68.8%

Note: Chinese government revenues include both budgetary and extra-budgetary revenues. Chinese government expenditures include both budgetary and extra-budgetary expenditures. Indian government revenues include both tax and non-tax revenues. Indian government expenditures include both developmental and non-developmental expenditures.

Source: China Statistical Yearbook 2011. Reserve Bank of India, Statistics of Public Finance, <http://dbie.rbi.org.in/DBIE/dbie.rbi?site=statistics>.



Despite their lesser ability to generate revenue, India's state governments do have the constitutional right to raise capital to finance their expenditures. Although the central government was traditionally state governments' primary source of borrowing, market-based loans have become more important in recent years. Between 1991 and 2000, central loans and market-based loans accounted for 37 percent and 13 percent of state governments' total capital receipts, respectively. Between 2001 and 2010, thanks largely to the central government's decision to curtail its role in subnational borrowing, central loans dropped to 9 percent, whereas market-based loans rose to 37 percent of state governments' total borrowing (RBI 2011: Table 111). Increased exposure to market forces motivates state governments to be fiscally responsible in order to lower their borrowing costs (Singh 2007).

How would these different central-local fiscal arrangements affect investors? For both countries, one of the key selling points of SEZs was a variety of tax incentives. Prior to 2007, foreign firms in China enjoyed an exclusive preferential tax regime consisting of tax holidays and tax concessions for five years and an exemption (or concession) on the payment of import/export duties. In addition to ownership-specific benefits, foreign firms located in SEZ/development zones qualify for a preferential tax rate that is normally half the rate they would pay outside zones. In addition to these benefits, local governments can offer other incentives such as tax rewards, accelerated depreciation, profit rollovers, and subsidies.

As the booming Chinese market became more attractive to foreign investment, the central government felt it was no longer necessary to continue offering tax incentives to foreign firms. The proliferation of development zones intensified the controversy over the effect of tax incentives on FDI, and some officials and scholars argued that the policy was neither effective nor efficient. In 2007, the Chinese government finally abolished the preferential tax rates for foreign firms and replaced them with a new Enterprise Income Tax Law, which applies a single tax rate of 25 percent to both domestic and foreign firms.

While the central government began to scale down foreign investors' privileges, local governments remained more aggressive in offering incentives to foreign investors. Given their short time frame and pursuit of fast political return under the cadre evaluation system, local officials have a strong desire to overcommit to potential investors *ex ante*, resulting in a race to the bottom tax competition.¹³ In many areas, the standard "two-year tax holiday followed by 50% reduction during the next three years" was replaced by "five-year tax holiday followed by 50% reduction during the next ten years" (*Economic Daily* 2004). In some places, low-priced land leases also became an important incentive local governments use to attract foreign investors.¹⁴

¹³ As confirmed by many local officials during personal interviews, the amount of FDI is one of the most important performance criteria for cadre evaluation. Interviews in Suzhou (October 27, 2004), Kunshan (October 28, 2004), Hangzhou (October 29, 2004), Shanghai (November 2, 2004), Beijing (November 25, 2004), Guangzhou (December 4, 2004), and Tianjin (December 21, 2004).

¹⁴ A survey result conducted by Zhejiang Provincial Statistics Bureau shows that the average development cost of land in the development zones is RMB 98,800 per *mu* (667 m²) and the average industrial land-use fee is only



Moreover, local governments have strong incentives to collude with FIEs to avoid paying national taxes. By manipulating the effective tax rates on FIEs, local governments can divert tax revenues that otherwise would have to be shared with the central government as part of the local extrabudgetary account. The lower the probability of detection by the central government, the more likely local governments will offer generous tax incentives to foreign investors. Perceiving local governments' incentive for cheating in advance, the central government is devoting more effort in detecting and punishing local officials for unauthorized commitments to foreign investors.¹⁵ Despite these efforts, however, a race to the bottom over tax incentives prevailed among development zones. In the first three months of 2004, for example, the National Taxation Bureau reported more than 1,000 cases of unauthorized tax incentives in development zones totaling about RMB 430 million (Zhou 2004).

Local governments' generosity, however, often scares rather than attracts foreign investors. Foreign investors are understandably cautious about making large investments in zones in which local governments have little credibility in keeping their promises. The central government's periodical crackdown on local wrongdoers has further reinforced foreign investors' concerns about the accountability of the local governance.

The Indian government also grants generous tax incentives for investors and developers. The SEZ Act ensures that companies in SEZs will receive a tax exemption on export income for fifteen years, including a 100 percent exemption for first five years, a 50 percent exemption for the next five years, and 50 percent of the ploughed back (i.e., reinvested) export profit for next five years. It also granted SEZ developers income tax exemption for any ten consecutive years out of fifteen years (SEZ Act 2005). Moreover, both developers and units within SEZs were granted exemptions from custom duties, central excise duties, service tax, central sales taxes, and securities transaction tax.

Although the Indian government made a commitment to offer generous tax incentives to investors and SEZ developers, the combination of constitutional constraints and political tensions has prevented both the central and state governments from being too generous. The authority of tax distribution is vested in the Finance Commission, an independent agency established under the Indian Constitution. The five nonpartisan Commission members are appointed by the president, upon the recommendation of the prime minister's office, in consultation with Parliament, every five years. Moreover, given its overall objective of providing greater resources to disadvantaged states, the Commission tends to oppose tax benefits or exemptions to SEZs, which are concentrated in wealthier states. In the report of Thirteenth Finance Commission (2010–15), for example, the Commission recommended terminating any area-based exemption

RMB 88,300 per *mu*. About a quarter of the industrial land areas in the development zones have been leased at below-cost prices (Chang 2006).

¹⁵ Between 1993 and 2000, the central government issued three circulars to prevent development zones from offering excessive incentives (China Law and Practice 2000).



schemes, which were primarily applied to SEZs, and replacing them with direct investment-linked cash subsidies (Finance Commission 2009).

Second, the asymmetric fiscal arrangement in which the central government raises two-thirds of tax revenues, but only takes one-third of total government expenditures, gives state and local governments limited fiscal resources to offer foreign investors. Increasing market scrutiny on state governments' fiscal accountability also discourages them from being overgenerous to foreign investors.

In addition, the debates over the benefits and costs of tax incentives led to protracted tussle within the central government, particularly between the Commerce Ministry, which proposes a generous fiscal package for SEZ developers and business units, and the Finance Ministry, which repeatedly sought modifications to tax incentives.

The tension over the tax incentives, fueled by resistance from a variety of interest groups, put pressure on the Indian government to not approve new SEZs. As a result, the number of approvals of SEZs declined dramatically. Between 2006 and 2008, the Board of Approvals granted formal approvals to 552 SEZs, but only 33 SEZs have received formal approval since then (SEZ Board of Approval 2010). Moreover, the Indian government has begun to curtail the tax benefits it previously approved for SEZs developers and units set up in SEZs. In the 2011–2012 Union Budget, the Finance Ministry curtailed additional tax benefits to SEZ developers and units set up in SEZs. For example, the Ministry imposed a minimal alternate tax (MAT) at 18 percent of book profits, which was previously exempt (*India Law Journal* 2011).¹⁶

In short, given their greater fiscal autonomy but weaker fiscal constraints, local governments in China tended to overcommit to foreign investors *ex ante*, which created a credibility problem *ex post*. Anticipating the risk of a policy change after their fixed assets increase, foreign firms prefer to hold their capital in liquid assets (Vernon 1971). Or, they will adopt export-oriented strategies because export-oriented firms tend to be “footloose,” i.e., it is relatively easy for them to locate in a variety of low-wage countries (Encarnation and Wells 1985). In addition, the control of forward linkages (with international market) and backward linkages (with domestic suppliers) would give export-oriented firms more leverage when bargaining with local governments (Lecraw 1984). In contrast, limited fiscal autonomy and stronger fiscal constraints limit the Indian government's ability to engage in tax competition, and thus make its commitment more credible. Foreign firms are more likely to hold their capital in relation-specific assets in the services sector.

¹⁶ The Indian Income Tax Act contains various exemptions and deductions from total income that result in many zero-tax companies despite positive book profits. The minimum alternate tax (MAT) was introduced to address this problem. Under this system, an otherwise zero-tax company is required to pay a minimum tax of the book profit at a certain rate in case the tax on the total income computed under the normal provisions of law works out to less than this amount.



The Land Institutions

Manufacturing production requires abundant land. Both China and India retain powers of compulsory acquisition in order to enable governments to acquire land for specific purposes, but their powers are subject to different legal and institutional constraints.

China's land system has two sets of owners: urban land is owned by the state; rural land is collectively owned by rural residents. Authorized by the Land Administrative Law in 1986 (revised in 1999), local governments, with the central government's approval, can requisition farmland for industrial or commercial use. After requisitioning the land, the government can sell the long-term land-use rights to different enterprises for up to seventy years. State-owned enterprises (SOEs) can get land from the government at a heavily discounted fixed price, whereas foreign or private firms have to pay market prices. This two-tier arrangement was created to accommodate the interests of foreign investors without challenging the overarching socialist principle (Cartier 2001). The central government maintains its control through a hierarchical review system that requires upper-level governments to oversee and approve land expropriation and conversion decisions made at lower levels.¹⁷

There are different compensation regulations for rural and urban land. The compensation for rural land is divided into three parts: land compensation, resettlement subsidy, and improvement and crop compensation. Land compensation is defined as six to ten times the value of the average annual yield of the arable land over the prior three years. Compensation for resettlement depends on the number of residents involved.¹⁸ Compensation for improvements to land and crops is left to the discretion of local governments (Land Administration Law, article 47). The Ministry of Land and Resources also requires that the maximum compensation cannot exceed 30 times the derived land productivity; any higher amount must be approved by the provincial authorities (Ministry of Land and Resources 2004). In March 2006, the National Development and Reform Commission (NDRC) proposed a market-based compensation payment for farmland seized for nonagricultural use, but it did not lay out a timetable for its implementation (*Beijing News* 2006).

The compensation for urban land is based on real estate market value, but local governments have the discretion to determine the compensation standard. Displaced people are not explicitly given a right to compensation, and, in most cases, have to take what is given to them (Chan 2003).

¹⁷ For example, construction projects using up to 3 *mu* of farmland required approval by county governments; those using between 3 and 10 *mu* of farmland required approval at the prefecture level; those using between 10 and 1,000 *mu* of farmland required approval at the provincial level; and those using more than 1,000 *mu* of farmland required approval by the State Council (Ho and Lin 2003). (1 *mu* = approximately 667 square meters or 0.067 hectare [ha].)

¹⁸ The standard payment to each person to be resettled is based on four to six times the value of the average production of the land in the three years prior to acquisition. The maximum payment for each hectare of acquired land, however, is not more than fifteen times the value of the average production in the three years prior to acquisition (s.47, par. 2).



Revenue collected from land leases was initially divided between the central and local governments at the ratio of 40:60, but the central government actually received much less because local governments often underreported the revenue in land transactions. After the 1994 tax reform, Beijing allowed local governments to keep all revenues from land transactions (Chang 2006). More important, because of its irregular nature, the land transaction fee was collected as local extrabudgetary revenue, which was essentially under the discretion of local governments.¹⁹

The decentralization of land authority gives local governments strong incentives to reap huge profits from requisitioning farmland for industrial and commercial use. It also becomes a significant source of social tension, which has frequently sparked violent protests. According to Sun Liping (2011), a professor at Tsinghua University, the total number of incidents of social unrest reached 180,000 in 2010, more than double the number five years earlier.²⁰ Realizing the ineffectiveness of the hierarchical review and approval system, the central government recentralized the land authority in 2004. All expropriations of agricultural land and most conversions of farmland for urban development now require state approval at the provincial level or higher (Huang 2005). The policy was intended to prevent local governments from abusing their authority to generate revenues for themselves, but local governments can always manipulate the policy implementation to offset Beijing's centralizing effort. For example, instead of explicitly expropriating farmland, many local governments acquire farmland by signing long-term leases with farmers, thus avoiding central approval (Xinhua 2006). Between 2003 and 2008, local governments requisitioned 1.4 million ha. of agricultural land for urban use, and another 450,000 ha. were reported to have been requisitioned illegally (World Bank 2012: 30). Between 1999 and 2011, land sales generated RMB 12.75 trillion in revenue, 60 percent of which was generated since 2008 (*Dazhong Daily* 2012).

As GDP growth and unemployment became important cadre evaluation criteria, local officials have a strong interest to promote large-scale manufacturing, which has the greatest potential to boost growth and employment, as their first priority. Local governments' monopoly of land authority enables them to use cheap land as a sweetener to induce foreign investors. In order to attract mobile manufacturing investments, local governments are motivated to engage in intensified competition by offering low- or zero-priced land leases (Tao et al. 2010). Even *People's Daily*—the Chinese Communist Party's (CCP) mouthpiece—blamed local governments for being irresponsible and abusing their land authority, which is described as “local governments treat the guests, but ordinary people have to pay the bill” (*difang zhengfu qingke, laobaixing maidan*) (*People's Daily* 2004).

In India, land ownership is broadly divided into three categories: occupied private lands, unoccupied public lands used for common purposes, and “no-access” land (e.g., protected areas), plus land used by government departments (Department of Land Resources 2008). The principle

¹⁹ Starting in 2007, local governments were required to separate the earmarked government fund (*zhengfu xing jijin*), a fiscal account that mainly consists of land sales revenue, from the extrabudgetary account.

²⁰ The latest official number was 87,000 in 2005, according to the Ministry of Public Security.



framework for land acquisition was established by the Land Acquisition Act of 1894, a colonial law that remained in force after the end of the colonial rule. The act was amended in 1962 to allow the government to acquire land for private companies as long as the acquisition could be justified as a public purpose. This amendment granted the government greater discretionary authority to acquire land for industrial development, but it became increasingly controversial, particularly since the passage of the SEZ Act.

With the initiation of the SEZ policy, the government has tried to further amend the Land Acquisition Act in order to facilitate land acquisition for industrial development. The National Policy on Resettlement and Rehabilitation in 2004 set a national standard of compensation for land and displacement for the first time. It recognized that resettlement and rehabilitation are distinct processes: resettlement is a one-time event of physical relocation; rehabilitation is a long-term process of rebuilding people's economic livelihood and social links. The 2007 Land Acquisition bill redefined "public purpose" as land acquired for defense purposes, infrastructure projects, or any project useful to the general public. It also required that 70 percent of the land should be purchased by private companies before the government could acquire the remaining 30 percent. The 2011 bill, combining both land acquisition and resettlement and rehabilitation, proposed a more specific formula for land compensation, which "dramatically increases both the number of people who are entitled to compensation and the amount they should receive" and would apply when a company acquire 100 acres of land or more (Lahiri 2011). In rural areas, compensation is four times the market value of the land; in urban areas, compensation would be at least twice market value. In addition, landowners are entitled to a subsistence allowance of 3,000 rupees per month for twelve years, and 2,000 rupees per month for twenty years, with an appropriate index for inflation. In addition, the bill also stipulates that any land sale requires the consent of at least 80 percent of the affected families. Every affected family would be entitled to one job or 200,000 rupees if employment is not offered. Those who lose their house in the land acquisition process would be provided a constructed house as well as a one-time resettlement allowance of 50,000 rupees (Bahree 2011).

Although these changes have clarified the government's authority over land acquisition, they have also significantly increased the land costs for industrial development. Since the early 1990s, only about 400,000 ha. of agricultural and forest land has been transferred for mining and industrial purposes (Department of Land Resources of India 2009). In contrast, the Chinese government converted 2.3 million ha. of agricultural land for urban construction use between 2006 and 2010 (Ministry of Land Resources of China 2011: 3).

The Indian government's mild attempt of liberalizing land acquisition policy invited criticisms from both the private business community and the public. On the one hand, the private business community regards land acquisition as the most significant barrier to the development of SEZs and economic growth (Indian Infrastructure Report 2001). On the other hand, the public severely criticizes the SEZ policy for its negative impact on displacement and compensation (Aggarwal 2006).

At the core of the controversy was popular outrage over abuses of the public purposes provision, which was intended to apply to projects of public importance rather than those involving private



profit, the mass displacement of people, and inadequate compensation. The expected benefit of job creation turned out to be largely irrelevant to low-skilled workers. As indicated in the SEZ statistics, most of the jobs created within SEZs were in the information technology (IT) sector, which required higher skills than those possessed by displaced farmers. The growing grievances among the poor frequently escalated into collective disputes and, eventually, public protests. In Singur, Tata Motors was forced to pull out because of strong public opposition. In Nandigram, intense protests over the issue of land acquisition eventually escalated to widespread violence and loss of life in March 2007. A scholar at the Centre for Policy Research said that the Nandigram protest fundamentally shifted public opinion away from general support of the SEZ policy.²¹

These polarized views on land acquisition have trapped the Indian government in a dilemma. The Empowered Group of Ministers (EGoM) on SEZs, an ad hoc administrative body whose members were drawn from relevant government agencies, carefully steered a middle course between proponents of SEZs—primarily developers, business groups, and development-oriented officials—and opponents, who included a variety of groups representing displaced farmers, trade unions, and social activist groups. The EGoM rejected the proposed cap on the number of SEZs, but announced more restrictive regulations on SEZs. State governments were prohibited from acquiring land for the private players and were prohibited from forming joint ventures with private players unless the latter already owned the land for the project (Kumar 2007).

The increasing restrictions on land acquisition imposed high costs, both politically and economically, on SEZ developers and firms. Instead of building large-scale multiproduct zones to host manufacturing firms, developers were more interested in setting up tiny IT zones in areas where a developed infrastructure was already available. Moreover, foreign firms consider land acquisition a high-risk transaction because of the time-consuming conversion (from agricultural to nonagricultural usage) and complicated process of establishing ownership (Kumar and Gupta 2010).

In short, China and India face different institutional constraints in land acquisition. In China, local governments have a great deal of discretionary authority in acquiring land and manipulating the compensation. Their strong interest in promoting economic growth and employment motivates them to use abundant land resources to attract large-scale manufacturing firms. In India, state governments are subject to more careful scrutiny in land acquisition. Foreign investors, discouraged by high compensation costs and social pressure in land acquisition, would avoid land-demanding manufacturing.

The Labor Institutions

Why did low-cost labor play a crucial role in China's rapid manufacturing growth but did not have a similar effect in India? Measured by hourly compensation, manufacturing labor costs in China and India are at the similar levels, reaching \$1.06 and \$1.17 respectively in 2007, according

²¹ Interview at Centre for Policy Research, New Delhi, February 13, 2011.



to the Bureau of Labor Statistics of Department of Labor.²² Institutional frameworks, however, have shaped labor relations differently, and thus affected the indirect costs and mobility of manufacturing labor.

Since the mid-1980s, driven by Chinese leaders' desire to integrate the country into the global economy, China's labor relations have experienced a fundamental transformation toward flexibility, insecurity, and managerial control, evidenced by a large number of new labor laws and administrative regulations.²³

The introduction of a market-oriented labor contract system is particularly important in this transformation (Gallagher 2005). Its introduction in the mid-1980s not only ended the socialist lifelong employment system. Rather, it created a pro-capital labor regulatory environment, because it dramatically curtailed workers' rights to welfare entitlements. Although the National Labor Law of 1995 requires the signing of labor contracts between employees and their employers, it is poorly enforced. According to a 2007 report to the National People's Congress, only about 50 percent of enterprises have signed contracts with their employees, among which 60–70 percent were short-term contracts under one year in length. Compliance was even lower for private firms. Only 20 percent of them have signed labor contracts with their employees (Friedman and Lee 2010). Moreover, the Labor Law gives employers a great deal of discretionary power to make layoffs and terminate employees for violating written company rules.

Accompanying rapid economic growth are increasingly contentious labor relations, which are the primary cause of social unrest. Officially recorded cases of labor disputes, which include both individual and collective disputes, increased more than 14 times from 1996 to 2009, but collective labor disputes declined from 6.5 to 2 percent (*China Labor Statistics Yearbook 2010*: 417–18). As shown in Figure 2, although the number of workers involved in collective labor disputes in China has been increasing since 1996, the number is still significantly smaller than India's. Even we take into account the fact that Chinese statistics tend to underreport large-scale labor movements, which are clearly on the rise, the average size of collective labor disputes is still significantly smaller than India's. The extremely low percentage and the small size of collective labor disputes are the result of lack of autonomous trade unions. Chinese workers are officially represented by the All-China Federation of Trade Union (ACFTU). As the only legal trade union in China, the ACFTU and its local branches serve as a "society stabilizer," an institutional instrument that helps the government achieve policy goals by maintaining stable labor relations (Qi 2010). Although workers have recently been allowed some rights to choose their own

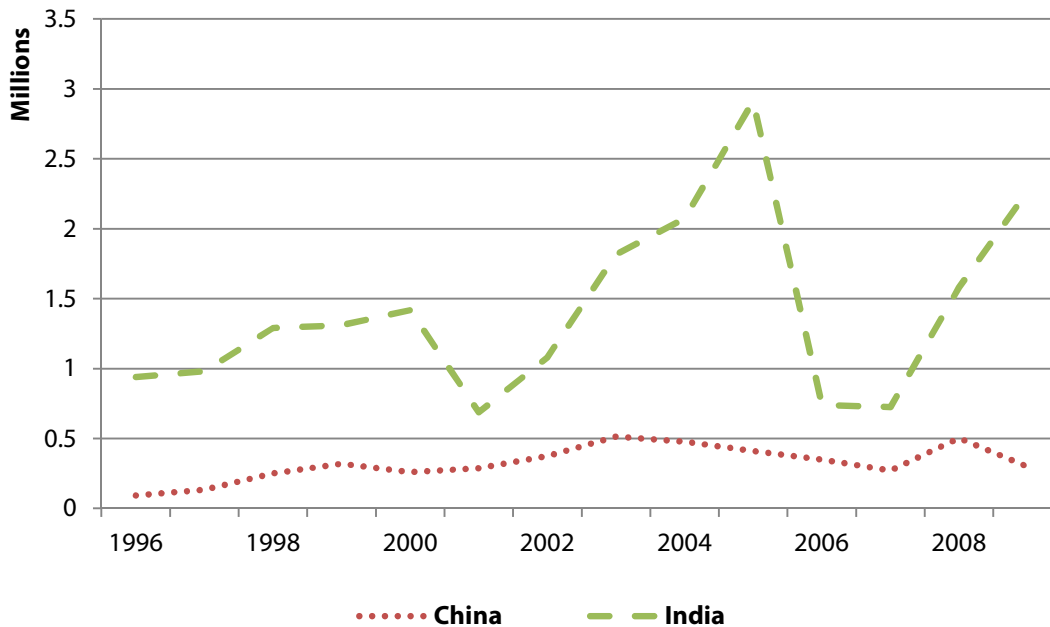
²² The hourly compensation for India only includes higher-paid organized manufacturing workers, who account for approximately 20 percent of the total manufacturing workforce (Bureau of Labor Statistics 2011). The estimate of India data is discussed in Sincavage (2010) and Bureau of Labor Statistics (2011).

²³ The most important labor laws include the National Labor Law (1994), the Trade Union Law (1992 and 2002), the Labor Contract Law (2007), the Employment Promotion Law (2007), and the Labor Dispute Mediation and Arbitration Law (2007).



representatives of the national union or create “employee welfare committees,” the government has not allowed the establishment of any independent unions (Bradsher 2010).

Figure 2: Workers Involved in Collective Labor Disputes, 1996-2009



Note: Collective labor disputes in India include strikes and lockouts

Source:

China: China Labor Statistics Yearbook 2010, p. 417-18

India: 2006-2009 data from Annual Report 2009-10 (p. 57) and 2010-2011 (p. 36); 2002-2005 data from Ministry of Labor and Employment, <http://labourbureau.gov.in/idtab.htm>; 1996-2001 data from Ahn (2010).

Shortly after the passage of Labor Law, a more restrictive labor contract bill was put on the State Council’s legislative agenda. It sparked debate on the trade-off between labor costs, which is the key driving force behind export-oriented economic growth, and worker protection, which is crucial for political and social stability. With the prevalence of capitalist interest, the bill was tabled for a decade and did not pass until 2007, after four active deliberations (Wang 2007).

The Labor Contract Law can be seen as the government’s effort to rebalance economic growth and social stability. It initiated some changes toward greater worker protection, including mandating written contracts for all workers, requiring a nonfixed-term contract for any employee who had worked for an employer for more than 10 years or two consecutive fixed terms, and emphasizing the role of unions and collective bargaining (Becker and Elfstrom 2010). Despite widespread concern among foreign and private firms, the number of labor contracts increased



abruptly after the passage of the Labor Contract Law. A survey conducted in nine cities shows that 65.5 percent of employees signed labor contracts with their employers, but compliance varies across different ownerships. The rate for FIEs, SOEs, share-holding corporations, and private enterprises is 92.4 percent, 80.2 percent, 76.1 percent, and 56.0 percent, respectively (Xu 2011).

Another important contributing factor of China's labor cost advantage is its extremely high labor mobility, particularly among rural workers who migrate into cities to take low-paying manufacturing jobs. Because one out of every three rural, working-age people leaves his hometown for urban jobs, the number of migrant workers increased from 90 million in 2001 to 145 million in 2009 (National Statistical Bureau 2010).²⁴

Why is the labor mobility so high in China? There are two main reasons. On the other hand, rising rural-urban disparity, partly due to the discriminative *hukou* (household registration) system, which continues to deny rural residents' access to social services and stable job opportunities in the state sector, creates a strong incentive for rural workers to pursue better job opportunities in cities (Chan 2010). On the other hand, the pro-capital labor contract system significantly weakened migrant workers' bargaining power and trapped them in highly unstable and exploitable jobs. These institutional arrangements help sustain China's ultra-low labor costs by maintaining the supply of rural surplus labor, which benefits industrial growth, particularly export-oriented manufacturing. Thus, China's export-oriented manufacturing sector was able to take advantage of the abundant supply of low-cost migrant workers.

China's recent labor regulations have gradually shifted away from a strong pro-capital stance, whereas India's labor regulations have moved in the opposite direction. India's labor policy is jointly governed by both the central and state governments. This means that labor regulations are covered by a wide range of central and state laws and implementation varies considerably across states. The central piece of labor regulation, the Industrial Dispute Act (IDA) of 1947, has often been regarded as the key challenge to doing business in India. Chapter V-B of the IDA, which requires firms employing 100 or more workers to obtain the state government's permission to shed redundant workers, is, by international standards, one of the strictest rules in the world concerning layoffs (OECD 2011).

The Indian government, both under the BJP-led coalition (1998–2004) and the Congress-led United Progressive Alliance (since 2004), has sought to relax labor regulations. In order to ease the rigidity of the IDA, the central government proposed a change in 2001 that would move the layoff permission bar from 100 workers to 1,000 while simultaneously increasing the compensation paid to redundant workers. Although the government conducted “reform by stealth”—a strategy to avoid direct political conflict by pursuing piecemeal policy change—the reform received strong opposition from trade unions in organized sectors, which clearly preferred job preservation to job creation (Jenkins 2004).

²⁴ Although rural workers began to migrate as far as the early 1980s, there was no comprehensive statistical information until 2008 when National Statistical Bureau set up a nationwide statistical and survey system for migrant workers. The number from 2001 was from Ministry of Agriculture (cited in Mo et al. 2006).



The 2005 SEZ Act also grants more flexibility in implementing labor regulations within SEZs, primarily through two provisions (Singh 2009). First, it classifies SEZs as “public utilities,” which curtails workers’ ability to organize strikes. Second, it delegates the authority of implementing labor regulations within SEZs to the development commissioner, not the labor commissioner, in keeping with the general objective of creating “single-window clearance.” Given SEZs’ strong interest in promoting investment, development commissioners are more likely to intervene in industrial disputes with a view to protecting firms’ interest.

Table 4: Statistics of Labor Disputes 1996-2009

China		India	
Total number of collective labor disputes	160,888	Total number of Strikes and lockouts	9,593
Total number of workers involved	4.5 million	Total number of workers involved	19.8 million
Average number of workers involved	28	Average number of workers involved	2,066

Source:

China: China Labor Statistics Yearbook 2010, p. 417-18

India: 2006-2009 data from Ministry of Labor and Employment Annual Report 2010-2011. p. 36; 2002-2005 data from Labor Bureau, Government of India, <http://labourbureau.gov.in/idtab.htm>; 1996-2001 data from Ahn (2010).

Whereas China’s sole centralized trade union has offered little help in protecting workers’ rights, India’s fragmented trade unions might have offered too much help. The Indian Trade Unions Act of 1926 set a low bar for forming trade unions: seven or more members can register a trade union, Although a legislative amendment in 2001 has made it more difficult for workers to organize trade unions, i.e., at least 10 percent (or 100 workers, whichever is smaller) are required to be members of the union before it can be registered, India has 12 central trade union organizations representing more than 6,800 trade unions (Ahn 2010: 73). Active but uncoordinated engagement of trade unions has resulted in numerous large-scale labor disputes. As shown in Table 4, between 1996 and 2009, India had almost 10,000 strikes and lockouts that affected 20 million workers and caused 320 million lost workdays.²⁵ On average, each labor

²⁵ Although both strikes and lockouts lead to temporary disruptions of production, the former is initiated by the employers whereas the latter is initiated by the employees.



dispute affected more than 2,000 workers and caused 33,000 lost workdays. The size and duration of labor disputes are significantly larger than those in China, which only affect an average of twenty-eight workers. Welfare losses from labor movements would add considerable indirect labor costs for foreign firms.

Another important factor that undermines India's labor advantage is the markedly low labor mobility from unorganized to organized sectors. Of the total 459 million workers, only 26 million (6 percent) are workers in the formal private sector and government (Srivastava 2011). Unorganized workers, which account for 94 percent of the total workforce, dominate India's labor market (Ministry of Labor 2010).²⁶

Like Chinese migrant workers, unorganized workers in India not only suffer from low wages and harsh working conditions, they also have much weaker collective bargaining power. Fifty-three percent of organized workers are unionized, whereas only 2 percent of unorganized workers are union members (Ahn 2010). Despite the Unorganized Workers' Social Security Act of 2008, unorganized workers are exempt from the application of major labor regulations.

Although we do not have good data to directly measure the degree of labor mobility, the trajectory of urbanization could provide some insight. One would expect high economic growth to be associated with rapid urbanization, because rising urban-rural disparities would create strong incentives for rural-to-urban migration. As indicated in Figure 3, however, the process of urbanization is much slower in India than in China despite their similarly high economic growth. Between 1978 and 2010, India's urbanization rate increased from 22 percent to 30 percent whereas China's urbanization rate rose from 19 to 45 percent.

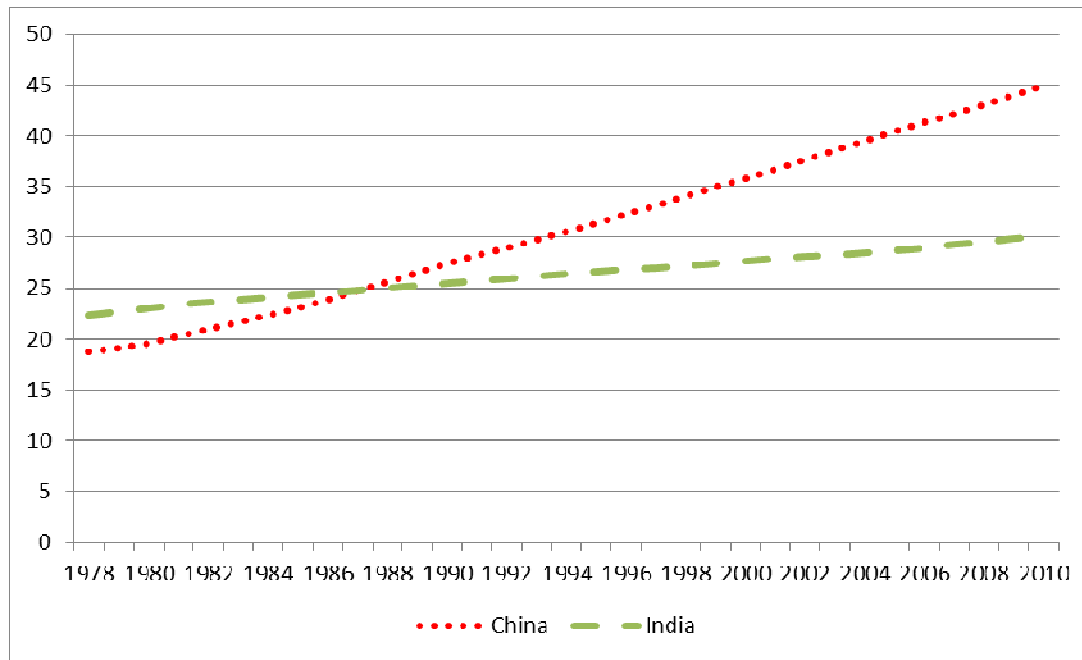
The considerable disparities in labor costs and collective bargaining capacity between organized and unorganized workers would, one would think, motivate unorganized workers to leave low-paying informal jobs and move to the organized sector. The recent trend in labor market, however, is actually moving in the opposite direction. From 1997 to 2004, the organized sector had 1 percent annual job losses, whereas the informal sector recorded 8 percent annual growth (Ahn 2010: 121).

Why is the mobility of unorganized labor so low despite rising urban-rural disparities? Labor productivity might be an explanation. Unorganized workers make up 80 percent of manufacturing jobs, but, given their lack of education and scale of economy, their productivity is much lower than organized workers. Labor productivity in the organized manufacturing sector is fifteen times as high as in the unorganized manufacturing sector (Trivedi et al. 2011). Social structure could be another reason. Munshi and Rosenzweig (2006) argue that caste-based labor market networks have lock entire groups of individuals into narrow occupational categories for generations, reducing the supply of surplus labor.

²⁶ "Unorganized workers" are both those working in unorganized enterprises or households and workers in the formal sector who do not receive employment/social security benefits from their employers. The "unorganized manufacturing sector" covers manufacturing units employing fewer than ten workers and using power or fewer than twenty workers and not using power.



Figure 3: Trends of Urbanization



Source: WDI 2011

On the demand side, however, labor mobility could be hampered by labor regulations. Besley and Burgess (2004) find that pro-worker state labor regulations resulted in lower output, employment, investment, and productivity in the formal manufacturing sector. Therefore, restrictive labor regulations would motivate firms to contract out work to the informal sector instead of adding more workers to their regular payroll. The practice of subcontracting is widespread in manufacturing firms, particularly in labor-intensive firms (Ramaswamy 1999). When labor regulations are less rigid, argues Sharma (2009), firms are more interested in employing organized workers, resulting in the shrinkage of informal sector.

Moreover, restrictive labor regulations could also motivate firms to remain small or move to industries that are less labor intensive. Hasan and Jandoc (2010) find that manufacturing firms are much smaller in India than in China: firms with fewer than 50 employees contributed 84 percent of manufacturing employment in India, whereas their counterparts in China only contributed 25 percent of manufacturing jobs. Between 1991 and 2001, labor intensity of the manufacturing sector decreased by 4.05 percent whereas capital intensity increased by 3.18 percent (Virmani and Hashim 2009).

Overall, despite recent legislative attempts to increase worker protection and rights, China's pro-capital labor regulations and state-run centralized trade unions have significantly weakened workers' bargaining power, and thus maintained the supply of low-cost labor. India's restrictive labor regulations and fragmented trade unions have limited labor mobility while facilitating collective labor movements, thus substantially reducing India's labor advantage.



Conclusion

Why do China and India, despite their similar natural factor endowments and growth trajectories, have different development patterns? China is a major platform for export-oriented, labor-intensive manufacturing activities, whereas India is the preferred destination for inward-looking, capital-intensive services and IT industries.

I argue that the different development patterns in China and India, although partially shaped by their distinct political institutions, are more complex than what the democracy-autocracy dichotomy would suggest. Although the popular view that “China’s growth has been led by the state, India’s growth is often impeded by the state” contains elements of truth, it does not tell the entire story (Yardley 2011). Both countries have relied on state-led policy initiatives to create momentum for growth, but their implementation was shaped by domestic institutional arrangements that distorted their factor market and thus shaped their natural comparative advantages differently. The patterns of FDI reflect foreign firms’ adaptations to the dynamic comparative advantage.

China’s fiscal decentralization gives local governments a great deal of fiscal autonomy, motivating them to engage in aggressive tax competition to attract FDI, but the inherent credibility problem drives foreign investors to “footloose” industries, such as export-oriented ones, where they have more leverage to bargain with local governments. India’s centralized fiscal system restrains the government’s capacity to offer tax incentives, but it increases its policy credibility, which is particularly attractive to foreign firms investing in relation-specific assets, such as the service sector.

Next, China’s state-monopoly of land resources grants the government great discretionary authority to requisition agricultural land with little compensation for farmers, creating attractive situations for foreign firms interested in investing in large-scale manufacturing. India’s land regulations give the government limited authority for compulsory land acquisition with high economic and social costs. This institutional barrier discourages foreign firms from investing in large-scale manufacturing.

Finally, China’s market-oriented labor regulations and state-led centralized trade unions weaken labor protection and collective bargaining power, which effectively suppress labor costs while increasing the mobility of migrant workers. These institutional arrangements facilitate a pro-capital environment that is particularly attractive for labor-intensive manufacturing. India’s restrictive labor regulations hamper labor mobility and its fragmented trade unions make labor disputes more difficult to control. Given these institutional barriers, foreign firms tend to avoid investing in the labor-intensive manufacturing sector. ■



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