Urban Governance and Development of Informality in China and India

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ABSTRACT

This paper contrasts the process of urbanization in China and in India and the differing outcomes in terms of the provision of urban infrastructure and the development of informality in each country. Differences in the role of local financing and governance structures help to explain extraordinary differences in per capita levels of infrastructure and in levels of informality in urban real estate and labor markets. In China, multiple incentives for local urban growth, combined with the practice of Hukou—the limitation of access to the rapidly developing cities—has resulted in massive growth of a formally housed new urban middle class. In India, on the other hand, urbanization, although slower, occurs outside of formal institutional processes without adequate financing and delivery of public goods and services, resulting in large-scale informality. The paper concludes with a comparison of the challenges faced by China and India in managing urban growth.

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Introduction: India's Established Informal Settlements vs. China Floating Population

Urban informality characterizes many settlements at the center and periphery of cities in quickly urbanizing countries. In these nations, residents lack adequate access to drinking water, sanitation, sewage treatment, health, and education, among other public goods. Informality also encompasses unplanned urbanization at the fringe of urban areas, unregistered economic activity, and illegal construction and development. While other chapters in this volume explore informal housing markets in Latin America and India, this chapter, rather than directly addressing the issue of informal housing, focuses on the comparison of the strikingly different developmental outcomes of China's and India's urbanization process as they relate to the provision of local public services and on the forms that informality takes in both countries as a result.

Urban informality has been linked to high levels of regulation (de Soto, 1989) in the labor market (Djankov and Ramalho 2009) and in the housing market (Monkkonen and Ronconi 2013 and Chapter X in this volume). Informality has also been associated with the lack of a governance system to finance urban infrastructure (Ingram and Kessides 1994). While urban informality is a response to the need for housing with access to jobs, it is generally associated with limited access to public goods such as water, sanitation, energy and public schools (Straub, 2008).

China, while not the focus of this book, represents a major alternative urbanization path to the one observed in India and Latin America. As Amartya Sen points out (2013), China has associated urbanization with broad-based improvements in wages and living standards. Local control and the single focus on economic growth as measured by local GDP provided incentives for the provision of infrastructure, with investment in urban infrastructure almost seven times higher in China than in India (McKinsey 2010). China's government used incentives based on GDP growth for local government officials and its control over land as policy instruments to orient urbanization, resulting in limited levels of urban informality (Mahadevia 2006). Nonetheless, the resulting economic development was obtained at the expense of rural migrants' access to local public services and with major environmental costs, both of which have long-term welfare implications for all citizens. Indeed, China is not exempt from informality. Public support for land development and important public investments have resulted in the growth of the supply of formal housing and employment for urban residents and rural migrants, although the quality of the units and jobs to which migrants have access is limited and in particular can include dangerous living and working conditions.

India, on the other hand, has experienced slower economic growth and a slower rate of urbanization, accompanied by rising urban poverty rates (although rural poverty levels have declined). Nonetheless, much of the urbanization is happening informally, with neither the provision of adequate infrastructure nor the presence of a strong municipal governance structure. Informal urbanization involves the in-situ "urbanization" of rural areas adjacent to cities and along major transport routes, as well as the growth of informal settlements within metropolitan boundaries. The fact that so much of Indian urbanization is informal limits households' access to public services, including education, infrastructure, and sanitation. In addition, these conditions are likely to limit improvement in broad-based developmental outcomes, such as living standards, wages, and access to jobs in the formal sector.

Following the introduction, Section II describes China's and India's urbanization processes with a focus on how infrastructure investment and local services are financed in both countries. Section III analyzes the impact of governance structures on the development of cities and informality in both countries. Section IV concludes by contrasting the challenges faced by India and China in achieving urban development that balances economic growth and long term welfare.

II. Two Urbanization Paths: Settlement Patterns and Infrastructure Development

India and China have both experienced sustained urbanization and economic growth over the last decades, but India has lagged behind. As shown in Figure 1, in 1980, 20% of China's population was urban, compared to 25% for India; by 2010 China was 50% urban, India 30%.

[1] This translates into China adding over 450 million residents to its urban population over that period while India added over 200 million urban residents. Along with the difference in urbanization, figure 2 shows the overall GDP growth differential between China and India. While India's GDP increased fivefold between 1980 and 2010, China's GDP increased more than thirty times over during the same period. Per capita GDP increased from less than $300 per capita in constant 2010 dollars in both India and China in 1980 to almost $1,500 in India and $4,500 in China in 2010, reflecting tremendous economic improvement for the overall population. Hukou. This section explores the role of infrastructure investment and of the land

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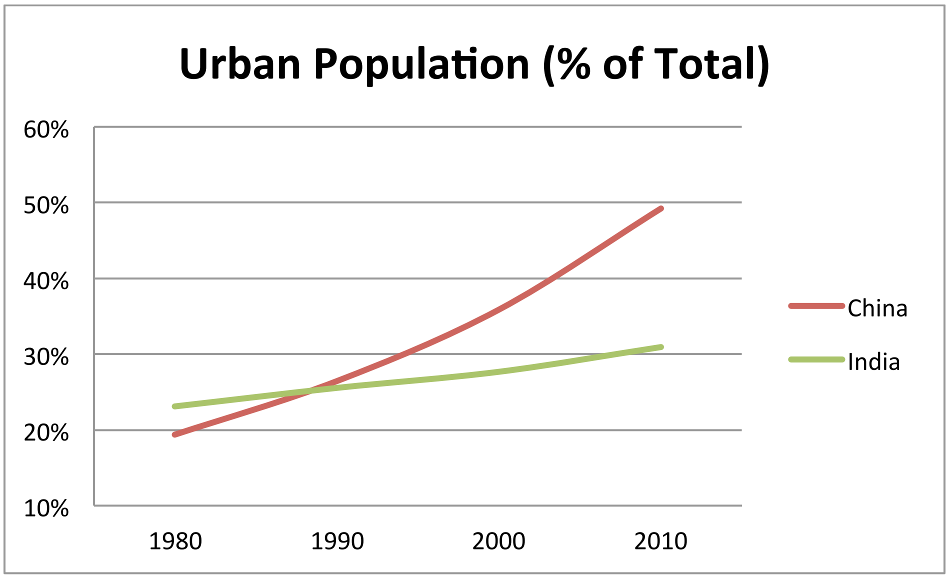
[1] Scholars argue that India's urbanization levels are significantly underestimated in official statistics and may not present an accurate picture of India's urbanization levels (Denis, Mukhopadhyay and Zerah 2012; Pradhan 2012; Denis and Marius-Gnanou 2011). Recognizing the general challenge in providing reliable and comparable data for these two countries, this chapters relies mostly on data aggregated at the national level over long periods of time that are expected to capture the broad trends if not the specific levels of the phenomenon described.

development process in explaining these differential aggregate outcomes in both countries, while recognizing that of course the situation of different regions and cities varies greatly within each country.[2]

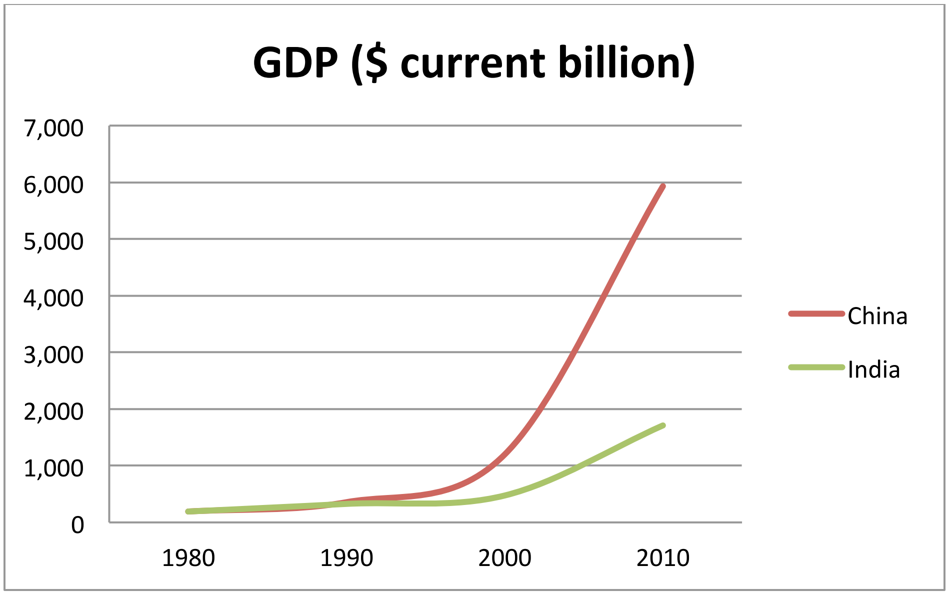
Figure 1: Urbanization Rate in China and India, 1980-2010



Source: World Bank, World Development Indicators

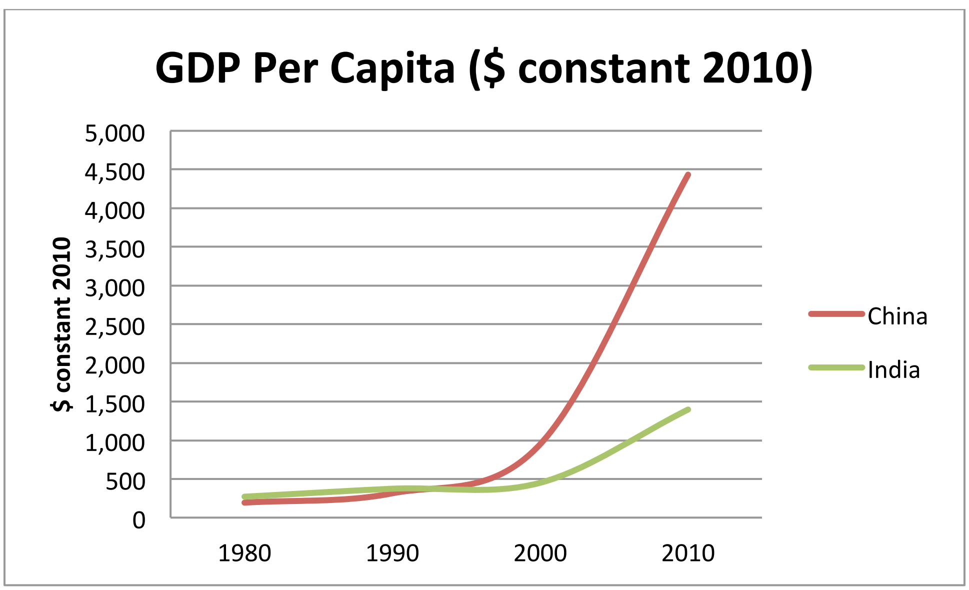
Figure 2: GDP, China and India, 1980-2010

[2] We are aware of the wide differences of development between regions and cities within each country, resulting in vast disparity in fiscal capacity and in the dependence on redistribution from the central government (Antholis 2013), but we focus on aggregate outcomes in both countries for the purpose of this chapter. India and China each have a number of very dynamic, highly developed, mostly coastal urban centers, while other regions lag behind in terms of urbanization and economic development. But overall, China has experienced more urban development than India and less of it is informal in nature.



Source: World Bank, World Development Indicators

Figure 3: GDP Per Capita, China and India, 1980-2010



Source: World Bank, World Development Indicators

The relationship between infrastructure investment and economic development has been recognized going back to Adam Smith. Transportation infrastructures in particular are necessary to enable specialization and trade that lead to the development of economies of scale and important productivity gains (Prud'Homme 2005). The effect of infrastructure on development has been extensively studied showing its direct effect on GDP as an input in the production function (energy, water) and its indirect effects on development by increasing a system's overall productivity through increased agglomeration economies (Gramlich 1994; Ingram and Kessides 1994; World Bank 1994; Prud'Homme 2005; Straub 2008). Infrastructure investments enable firms to maximize agglomeration gains from urbanization economies across industries and localization economies within an industry (Duranton 1999). Without these investments, the congestion, barriers to industrialization, and cost of communication resulting from insufficient infrastructure limit the economic gains associated with the transition from a rural to an urban society and the lack of sufficient serviced land contributes to informal urbanization.

Since 1988, China has framed urbanization as one of its top priorities to absorb surplus rural labor and ensure economic growth. Massive urbanization is occurring along with infrastructure development, but without the emergence of a large informal sector. At the same time it has experienced a rapid increase in GDP and drop in extreme poverty (Table 1). High ranking officials have emphasized the importance of urbanization for China's sustained development. For example in 2005, Chen Yuan, Governor of the China Development Bank wrote that: "Urbanization is the most important and enduring force in stimulating consumption and investment in China's domestic economy. It is also the engine to simultaneously propel China's economic and social development" (Yuan 2005).

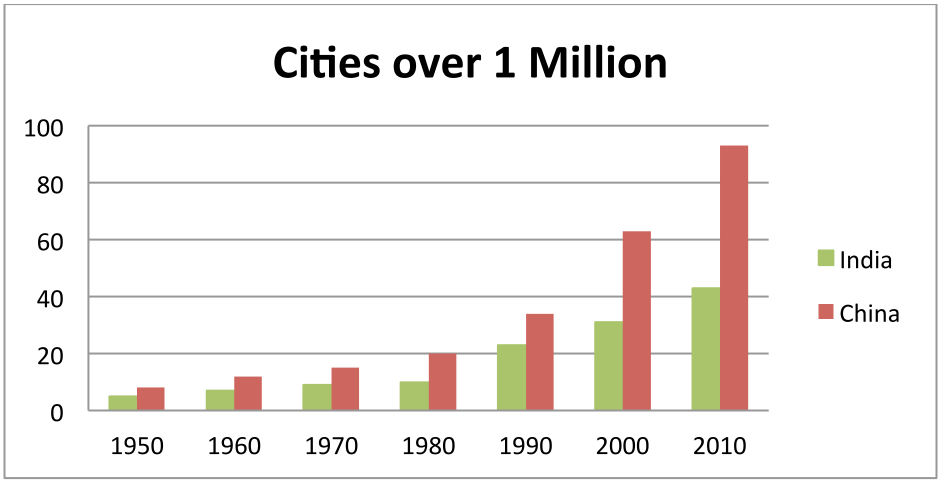
Table 1: Urbanization and Economic Growth

	China				India			
	1980	1990	2000	2010	1980	1990	2000	2010
Population (in million)	981.2	1,135.2	1,262.6	1,337.7	700.1	873.8	1,053.9	1,224.6
Urban Population (in million)	189.9	300.2	453.0	658.5	161.7	223.2	291.6	378.8
GDP ($ current billion)	189.4	356.9	1,198.5	5,930.5	189.6	326.6	474.7	1,710.9
Average Annual GDP Growth Rate (%)	7.8	3.8	8.4	10.4	6.7	5.5	4.0	10.5
GDP Per Capita (2010 Constant $)	193.0	314.0	949.0	4,433.0	271.0	374.0	450.0	1,397.0
Poverty at $2 a day (PPP) (% of population)	97.8 (1981)	84.6	61.4 (1999)	27.2 (2009)	N/A	83.8 (1988)	N/A	68.8

Source: World Bank, World Development Indicators

Urbanization in China resembles the open city model characterized by the emergence of new cities in opposition to a primate model in which most of the urban growth occurs in one or a few main existing cities (Zheng et al 2010; Li 2011). The value created through development is captured by local governments and is their main source of revenue. This puts them in competition with each other to attract growth, encouraging a race to development that has resulted in the expansion of a large number of cities. For example, the growth in the number of cities with more than a million residents occurred at a much faster pace in China than in India. In 1990, China had 34 cities with population above 1 million and India had 23. By 2010, China had 93 cities with population above 1 million, compared to 43 in India (Figure 4).

Figure 4: Cities with population over 1 million in China and India, 1950-2010



Source: UN World Population Prospects, 2011 Revision

In addition urbanization in China is occurring in the context of a fiscally decentralized system despite China being a very centralized country (Weingast 2009). The situation shares some of the characteristics of the model developed by Tiebout (1956), in which the authority given to local communities to control land use and employ taxing powers to finance the provision of local services results in local governments acting as efficient service providers that compete for growth and invest in infrastructure and public services to attract residents by offering more attractive tax and services levels. In contrast, India has a federal system, which implies a certain level of decentralization, but local governments have no real fiscal autonomy and generally depend on central government funding to finance public investments, resulting in a severe infrastructure shortage. There is a clear contrast in the share of public revenue and expenditure that takes place at the local level in India and China. While in China 50% of public expenditure and 25% of revenue are controlled by the lower tier of government, in India, 33% of expenditure and only 3% of revenue are (Table 2).

Table 2:

	Share of Total Public Expenditure (%)			Share of Total Public Revenue (%)		
	Sub-National	Upper Tier	Lower Tier	Sub-National	Upper Tier	Lower Tier
India (2004)	66	33	33	33	30	3
China (2005)	70	20	50	40	15	25

Source: UN Habitat, 2013

The decentralization of local taxation, development rights control, and services provision in China has had a strong impact on local outcomes, even if municipal governments do not have real autonomy from the central government (Weingast 2009). While determined by the central government, the incentives for local officials to promote growth have created in a system in which local governments compete for development in order to receive benefits from urban expansion through increased revenue, in particular by monetizing land assets and career advancement for local officials. The result are pro-growth policies with a heavy focus on the provision of infrastructures as can be seen in cities such as Shanghai and Beijing, which have devoted over 6 percent of their regional GDP to urban infrastructure over the last decade, as compared to an average of between 3 and 4 percent of GDP in developing countries (Ming and Zhao 2007).

Moreover, the massive migration of workers from rural to urban areas in China takes place in a segmented institutional context in which rural migrants do not have the possibility to have full access to the benefit of moving to cities (especially the larger ones) due to the Hukou system. The Hukou are part of China's household registration system that controls where individuals are entitled to live and have access to services. In this system, rural migrants with a rural Hukou are able to move to cities but are not entitled to city services (health care, schooling) and do not have full civic rights in the cities in which they settle. By contrast, residents with a

Hukou for the city they live in receive the full benefits of the increase in the provision of public goods (Chan and Zhang 1999; Gottschalch 2013). It is estimated that while over 50% of Chinese live in cities, only 36% are registered as urban residents. That means that as of 2013 about 270 million people or 20% of the overall population are permanent urban resident but do not have full access to public services because of their lack of an urban Hukou (Johnson 2014).

Many of the migrants with a rural Hukou live in formal housing provided by their employers or in "urban villages," former villages that have been absorbed in urban areas but keep their collective ownership structures, allowing villagers to build as dense as they want and rent out rooms to migrants. These accommodations are often of poor quality, consisting of overcrowded dormitories without basic facilities (Chan 2009). Thus, although China has lower rates of urban informality, the outcomes for those who are rural to urban migrants can be similar to those experienced by Latin American and Indian urban dwellers in the informal sector.

However, such drawbacks do not prevent rural migrants from moving to cities in large numbers to take advantage of employment opportunities. City life is seen as a way to improve living conditions over life in the countryside, as shown by the large, floating population of rural-to-urban migrants. Thus, the main effects of the Hukou system in relationship to urbanization and economic development are the creation of a segmented labor market with limited capacity to increase human capital for rural Hukou holders (Heckman and Yi 2012) and a loss of potential agglomeration economies due to migration restrictions, resulting in losses in economic growth (Au and Henderson 2006).[3]

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[3] Hukou reform has long been an object of attention for China's central and local governments (Chan and Li 1999; Chan 2009) and the current Chinese administration has announced further efforts to reform the Hukou system with the goal to deliver urban Hukou to 100 million rural

The capacity and incentive of local governments to mobilize resources to provide public goods and the elastic supply feature of the open city model, combined with restrictions on rights to move to the city illustrate informality's different form in China. Local governments are able to fund the provision of services and infrastructure, and are incentivized to do so in order to support urban growth, which is one of the main criteria on which they are evaluated by the central government. But the focus on growth has until recently neglected the social and environmental consequences of urbanization. The urbanization plan for the 2014-2020 period is presenting itself as an attempt "to steer the country's urbanization onto a human-centered and environmentally friendly path" (Xinhua 2014). The ability of the central government to manage slower economic growth rate and provide access to public services to current holders of rural Hukou living in cities, as well as limit the environmental damage associated with its current development path will determine the continued success of China's rapid urbanization but successful urbanization is clearly a high priority for the government (Johnson 2013; Xinhua 2014).

In India, in contrast, urbanization has only recently become a priority in the development agenda, and India has not mobilized the necessary resources to organize urban development and provide sufficient urban infrastructure. This underinvestment is a factor in the lower economic growth observed in India as compared to China. Gupta et al. (2009) estimate that it is responsible for a decrease in annual GDP growth of 1.1 percentage point. According to a report by

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migrants by 2020 (Xinhua 2014). The details of a comprehensive reform to grant them full access to cities remain uncertain despite initiatives to tackle this issue at the provincial level, such as in Sichuan (Antholis 2013; World Bank 2014). For more details on China floating population and Hukou system, see for example: Liang and Ma, 2004; Sicular et al., 2007; Logan et al. 2009; Shen 2013.

McKinsey (2010), India spends $17 per capita per year on urban infrastructure, compared to $116 per capita in China. The report estimates that an annual level of expenditure of $100 per capita is required in order to provide the $1.2 trillion in investment in urban infrastructure estimated to be needed over the next 20 years (plus an additional $1 trillion required for operating expenses). Among the key reasons for these vastly different levels of investment is that, unlike in China, where local governments are accountable for growth, urban local bodies in India still have limited policy autonomy or capacity for local economic development.[4] Urban policy-making and administration in most Indian states remains centralized at the sub-national or provincial level. Local governments in small and medium towns are dependent on central and state government transfers, and have limited revenue-raising capacity through taxation or debt-financing. Local governments in India are less likely to own land and use land development as a source of financing.

The lack of infrastructure and the complicated nature of land acquisition and development also contribute to the informal nature of much of the new urban areas being developed in India. These two factors, along with the country's regulatory burden, result in high transportation, utility and land costs that have been identified as part of the reason India is not experiencing massive industrialization (Bradsher 2013). In the 1980s and 1990, China's creation of Special Economic Zones contributed to the growth of its industrial sector. It structured its

[4] Unlike China, which is politically centralized and administratively decentralized, India's local governments are democratically elected and not accountable to sub-national or central level. However, their powers and capacities are limited and many of their functions overlap with the sub-national level.

economic development strategy around large export oriented industrial zones that have received special incentives through infrastructure investments, large serviced parcels, and reduced custom and income taxes. As of 2011, China's industrial sector represented 47% of its GDP (30% for manufacturing alone), compared to 27% for India (14% for manufacturing alone). In contrast, services represented 56% of India's GDP in 2011 compared to 43% in China (World Bank 2012). The development of a large service sector without having experienced a high level of industrialization and urbanization is unique to India and creates a number of challenges.

In the absence of a large export-oriented manufacturing sector, fewer formal jobs are available to low skilled rural migrants in India than in China. As a result, most migrants end up finding employment in the informal sector, such as working in small factories and workshops, which limits the productivity and quality of life benefits generally associated with the rural to urban transition. In addition, instead of a consensus for reforms to enable the funding of infrastructure and easier land aggregation to ensure that urbanization is associated with improving quality of life for migrant workers and increased economic productivity (Desmet et al. 2012), there is still support in India to limit urbanization.[5]

India's rapid economic growth in recent years has not been accompanied by a concomitant growth in formal employment. Absolute employment in "organized manufacturing" declined over the past decade (Chandrasekhar and Ghosh 2007; Tendulkar, 2003). Self-employment, on the other hand, increased rapidly from 2000-2005, reversing a declining trend over the previous two decades (Chandrasekhar and Ghosh 2007). Contract work and casual labor have also increased. As a result, India, unlike China, has not experienced significant growth in

[5] For an argument in favor of supporting rural activity rather than urbanization see: Pankaj 2013, "India's Path to Prosperity Doesn't Run Through Cities."

real wages despite high levels of GDP and productivity growth (ILO 2013).6 While India has made some significant inroads in poverty reduction7, wage levels remain low for a majority of workers and India's progress in terms of human development indicators, for example expanding access to basic services such as water and sanitation, is modest in comparison with China (Dreze and Sen 2013). In China, urbanization is associated with broad-based improvements in wages and living standards. Urban poverty in India is over 25 percent; and some 81 million people live in urban areas on incomes that are below the poverty line (UNDP 2009).8 A far larger number are above the poverty line but lack access to basic services.

These urban residents live and work in the informal economy. The informal economy in Indian cities is heterogeneous and diverse, and encompasses both entrepreneurial as well as exploitative forms of economic activity (Chen 2005, Portes, Castells and Benton 1989; Brugman 2013). Nevertheless, the pervasiveness of informality in urban employment and development

[6] India's real wages fell 1% between 2008 and 2011, while labor productivity grew 7.6% in the same period, indicating that the benefits of the country's economic growth didn't translate into better pay for workers. In contrast, China's real wage growth was 11%, while labor productivity expanded 9% over the same period. India's real wage growth was 1% in 1999-2007, while labor productivity rose by 5%. In 1999-2007, China's real wage growth was 13.5%, while labor productivity growth was 9% (ILO 2013).

[7] Exactly how much poverty levels have fallen in India over the past few years remains hotly debated. (http://www.reuters.com/article/2013/08/03/us-india-poverty-idUSBRE97203820130803)

[8] Although nationally rural poverty remains higher than urban poverty, the gap is closing (UNDP 2009).

has serious negative consequences. The workers in the Dharavi slum's now celebrated[9] informal manufacturing workshops and in small factories "outsourced" to urbanizing rural areas (D. Chattaraj 2010; Heller 2000) make low earnings, often below state-mandated minimum wages, and work in conditions that violate occupational safety, labor, environmental, and building regulations. They are likely to lack the benefits, social security, and legal protections available to workers in formal employment (Breman 2013).

Furthermore, widespread informality weakens the fiscal and regulatory capacity of the local state. Informality is associated with weak state capacity, such as in India where city governments are unable or unwilling to enforce regulations (Chattaraj 2012).[10] The lack of regulatory capacity may result in serious consequences when informal processes of urban growth extend to high-rise buildings and factory complexes, as the tragedy of recent collapses in Dhaka and Mumbai have shown. Informal and unregulated urbanization is also linked to negative environmental and social consequences. Illegal and environmentally destructive sand mining in riverbeds and coastal areas has also been spurred by unregulated urban growth.[11]

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[9] http://economix.blogs.nytimes.com/2009/05/26/slumdog-entrepreneurs/

[10] Informality can be seen as way to sidestep state regulations, as well as taxes and fees, usually with state complicity. While informal residents, workers, and employers contribute to state revenues in various ways, much of the contributions from the informal sector make their way into the private pockets of state officials rather than public coffers, instead of contributing to the financing of public goods.

[11] Illegal sand-mining and the powerful "sand mafia", fueled by unregulated building construction, has recently been in the news in India. http://blogs.wsj.com/indiarealtime/2013/08/06/why-india-has-a-sand-mafia/

Urbanization data from the 2011 Census shows an increase in India's urban growth rate, as well as, for the first time, a greater absolute increase in urban population growth (91 million) than rural (90 million), Much of the urbanization in India is occurring outside the regulatory jurisdictions of municipal governments. This includes informal urbanization in adjacent districts of large cities, but also the in-situ urbanization of rural areas. In fact, population growth within the administrative limits of large metropolitan cities in India in the last decade has declined, while surrounding rural regions have shown higher growth (Pradhan 2012; World Bank 2012). In-situ rural urbanization, according to the 2011 census, accounted for 26% to 29.5% of the urban growth between 2001 and 2011, in the form of "census towns" that meet the density, employment (over 75% of the male population is engaged in non-farm employment), and size criteria of urban settlements but remain governed under rural arrangements (Pradhan 2012). Nonetheless these census towns do not have the capacity to fund infrastructure. Distributed throughout the countryside along major transport routes, they urbanize in an unplanned manner without the development of municipal governance institutions to provide urban services such as water supply, sanitation, waste management, public health, and paved roads.

In-situ urbanization or urban transformation within rural areas rather than through migration into cities and towns is also common in China. However, the major difference in China is that urbanizing rural areas are regularly incorporated within larger city boundaries, so that urban infrastructure and services can be provided (Zhu 2002; Gottschalch 2013). The slower, more informal urbanization of India has implication for the country's development given that high levels of urbanization have been shown to positively correlate with high levels of economic development.12

III. Financing in India vs. China

The structure of urban governance, in particular the relationship between the central and sub-national levels of government, plays a central role in shaping financing of public goods and the urbanization process. China and India are markedly different in their macro-institutional setup: China's system, as we have seen, is strongly centralized at the upper reaches of policymaking, but administratively decentralized down to the local level. India's system is federal and thus decentralized in terms of policymaking and administration at the provincial level, but it lacks fiscal powers at the local level. In India, local governments lack the authority, resources, and capacity to undertake pro-growth measures, due to strong control at the state (provincial) level over urban policy and implementation. Efforts to decentralize government to the local level, through two constitutional amendments, the 73rd Amendment for villages, and the 74th Amendment for cities and towns, have met with mixed success. Rural decentralization to village panchayats (elected village councils) has been more effective than decentralization to urban local bodies (ULBs).

This section expands the chapter's comparative analysis by addressing the mechanisms of finance in China and India. In particular, it looks at the influence of responsibilities and

[12] Malpezzi, 2011 reports results showing a correlation of 0.55 between urbanization and GDP per capita. This strong correlation does not imply causation, but it implies that overall, the positive agglomeration economies associated with urbanization outweigh negative features of agglomeration (congestion, pollution, crime).

financing structures of local governments on urbanization outcomes. In China's case, incentivizing pro-growth policies enabled rapid urban development; in India's case, it fostered largely informal urbanization.

In China, land reforms in 1988 generated revenue for local governments to invest in infrastructure and provided benefits from enabling land development (Yeh 2011). The reform of the tax assignment system in 1994 shifted more revenues to the central government while shifting more expenditure responsibilities to local levels of government, increasing their need to develop extra-budgetary funding through development fees (Ming and Zhao 2007). These reforms and subsequent ones in 1997 and 2002 incentivized sub-national governments (defined as province, municipalities, counties, and townships) to take control over their revenue sources in order to finance their expenditures. The reforms led to a sharp increase in both central and sub-national fiscal revenue with a large portion of the central revenue being transferred to the sub-national level in the form of transfer payments (Ming and Zhao, 2007).

As of 2010, sub-national expenditures represented 80% of all public expenditures in China (Fardoust and Ravishankar 2013). Sub-national expenditures cover local government administration, local capital construction, provision and maintenance of local services (water and sanitation, urban gas, local roads and highways, transit), repair and operation of necessary urban infrastructure, management of local State Owned Enterprises (SOEs), primary and secondary schools (plus some support for higher education), healthcare and hospitals, price subsidies, social protection, environmental protection, and local and regional economic development (Ming and Zhao 2007).

Local governments in China finance expenditures through a mix of on-budget revenue shared with the central government and "formal off-budget revenue". The latter is agreed on by the central government but not shared and reported. Local governments also receive revenue from non-authorized fees and taxes. Among the revenue on which local governments have control over, a number of off-budget revenue sources are used for infrastructure financing such as land leasing, development fees, and asset income. Local revenues increase with development, enabling local government to capture directly the gains from their investments that facilitate such development.

Direct revenue from central transfer payments, user fees, service tariffs, and taxes administered by local governments are not sufficient to finance the level of infrastructure that would sustain the urbanization pace observed over the last two decades. At the same time, local governments are technically prohibited from borrowing in China. As a result, Urban Development and Investment Companies (UDIC), wholly owned subsidiaries set up by local governments to hold infrastructure related assets, have become the main way to obtain financing for infrastructure from banks with the local government guaranteeing that they will use all their revenue raising power to repay the loans (Su and Zhao 2006). [13]

The use of UDICs and the practice of selling land for development to complement limited local governments revenues and pay for investment in the provision of local services has allowed Chinese cities to dramatically increase the provision of infrastructure and services and

[13] Although local governments cannot directly borrow, the focus on local GDP growth as the main way to evaluate local officials performance has encouraged the use of instruments enabling heavy borrowing to finance infrastructure and spur economic growth, resulting in local governments owing or guaranteeing $2.9 trillion of debt (31% of GDP) as of June 2013 according to the National Audit Office (AP, 2013).

accommodate a fast pace of urbanization.[14] However, reliance on the capture of development gains and shadow banking represent significant risks as the path of growth slows down going forward. Stable long-term revenue sources, such as property tax, need to be implemented to pay back these investments and ensure the provision of local urban services in the long run.

In India, local responsibilities were formally enhanced by the 73rd and 74th Amendments to the Indian Constitution (1992) that established a third tier of government below the sub-national level, of village panchayats and urban local bodies (see Balakrishnan/Chapter X). Prior to the Amendments, urban local governments in India were creatures of the state government, which could extend or control their functions through executive decisions rather than legislation (NIUA 2005). While city administrations such as the Bombay Municipal Corporation have a long history in India, most cities were governed, planned, and financed through provincial line departments. The 74th Amendment, which pertains to urban local bodies, provided for the constitution of three types of municipalities for different sizes of cities and towns, the devolution of greater functional responsibilities and financial powers to local governments, representation of women and disadvantaged groups, regular and fair conduct of municipal elections, and the creation of new institutions such as Wards Committees, District Planning Committees, Metropolitan Planning Committees, and State Finance Commissions (NIUA 2005). While the 74th Amendment provides a basis for state legislatures to reform municipal legislation, the

[14] A major difference in India and China is the fact that in China, the state owns all the land. Municipal and local governments can therefore raise revenues through land allocation. In India, land in rural areas is privately owned, mostly in small parcels, and thus land acquisition is complex and politically fraught.

details have been left to the discretion of various state governments, and the extent to which they enact its recommendations varies from state to state (NIUA 2005).

India is projected to have over 4,000 urban local governments by 2011. But, notwithstanding the 74th Amendment, there is little evidence that powers have been decentralized to these bodies to a significant extent except in a few states such as Kerala and Goa. A nationwide review of the implementation of the 74th Amendment's provisions found that its recommendations were not accepted by all states, and even where accepted, not always enacted into legislation to enable devolution of power or resource sharing (NIUA 2005. Even where power has been devolved to a significant extent, "in several states, there exists a problem of ineffective participation in the decision-making process, delays in the transfer of funds to the municipalities despite constitution of State Finance Commissions, poor recovery from various tax and non-tax sources despite devolution of powers" (NIUA 2005).

As cities become more important sources of political and economic power and influence, state-level administrations retain control over policymaking related to land, urban planning and development, industrial policy, housing policy, policing, transport policy, and finance. Urban local governments are given responsibility for the delivery of local services and local-level planning. In terms of their formal division of powers, provincial-level parastatal agencies and local governments overlap in major cities in the areas of urban planning and development regulation, slum improvement, urban poverty alleviation, transport, and environment and forestry.

Thus, unlike in China, where local governments are squarely focused on promoting growth and urban development, in India they have a plethora of functions, but limited capacity and resources, especially outside the municipal corporations of large cities. While land development is a major source of finance for local governments in China (most of which do not levy property taxes), the major revenue source for city governments in India is the property tax. Earlier octroi taxes, levied on the entry of outside goods into a local jurisdiction, were a significant revenue source, but have largely been abolished following urban reforms. Some provincial administrations have abolished residential property tax, starving local governments of resources (Rao and Bird 2011). "Urban local bodies have proved unable (or unwilling) to effect periodic revision of property values," thus rising property values as a result of development does not translate into a proportionately growing tax base. Intergovernmental transfers from the provincial to local governments are inadequate, and "they are also generally ad hoc and poorly designed and targeted"(Rao and Bird 2011).

India's urban local governments are also unable to raise funds on the debt market to finance infrastructure by issuing municipal bonds. In this context, public-private partnerships (PPPs) are seen as an important mechanism to finance infrastructure, but are more likely to work on lucrative large-scale infrastructure projects in major growth centers. Roads (53%) and urban development (20%) projects constitute the largest share of PPPs (FICCI/Ernst and Young 2012), but these are concentrated in a few states in India and are undertaken in partnership with state, rather than local, governments. The central government encourages the use of PPPs as means of meeting urban infrastructure gaps, from large-scale metro projects to sewerage and waste management, but a report by India's largest chamber of commerce states, "the sector still witnesses an obstacle to private investment as there is a lack of an adequate legal framework at the state and city level and key institutions and stakeholders do not have the knowledge and capacity to carry out PPP projects" (FICCI/Ernst and Young 2012).

Urban local governments also lack the resources to contribute funding to PPPs. According to a study by the Reserve Bank of India's Department of Economic Policy and Analysis, the total revenue of urban local bodies (ULBs) has been growing at a lower rate (9.6 per cent during 1998-99 to 2001-02) than the growth of combined central and state government revenues (10.8 per cent during 1998-99 to 2001-02), during a period of rapid urban growth and ostensible decentralization. Municipal revenue growth thus remains low despite high GDP growth in cities. India's economic growth is driven by cities and urban regions and they contribute an estimated 62-70% of GDP (UNDP 2009, McKinsey 2010; World Bank 2012).

The aggregate revenue of all urban local bodies in India is very low at around 0.75% of the country's GDP. In contrast, the ratio is 5% for Brazil and 6% for South Africa (RBI 2007). A central government report states, "The low percentage of revenue and expenditure in ULBs is hurting the competitiveness of cities and consequently national economic growth" (GoI 2011). The RBI analysis of municipal finances across India finds, moreover, that urban local bodies under-spend on civic amenities, although most are in sound fiscal health and many have revenue surpluses. The RBI explains the apparent contradiction, of sound fiscal health and high levels of under-spending, by statutory obligations whereby ULBs are required to restrict expenditures to match available revenues and are limited in raising debt financing (RBI 2007). This creates an urban governance arrangement where urban development policy is directed by provincial level governments, which also capture gains in the form of financial revenues and reputation, while the urban local bodies are saddled with responsibilities without commensurate resources to manage urban growth (Chattaraj 2012).

In part in reaction to the need for greater local provision of public goods to address informality, in 2005, the central government launched the Jawaharlal Nehru National

Urban Renewal Mission (JNNURM), designed to reform urban governance along with improving urban infrastructure. Funding under the $15 billion program is tied to a set of municipal reforms, of which the main thrust is to ensure that municipal governments and parastatals become financially sound, and are able to access market capital for undertaking new programs and expansion of services. A second objective is to improve the means for citizen participation and accountability in local decision-making through elected city government. The JNNURM also provides funds to support basic services for the urban poor.

Mandatory reforms under the JNNURM include "effective implementation" of decentralization initiatives as per the 74th Amendment; the repeal of regulations such as the Urban Land Ceiling and Regulation Act of 1976; the reform of Rent Control Laws balancing the interests of landlords and tenants; the rationalization of the Stamp Duty to bring it down to no more than 5% within seven years; and enactment of laws to institutionalize citizen participation in local decision-making and government transparency. The program also seeks to increase the responsibility and authority of elected municipal governments, rather than provincial administrations, over urban planning and decision-making. As in the case of the 74th Amendment, although some legislative changes have been made in order to access JNNURM funds, there is little evidence to show that these changes have achieved their intended effect.

Despite the legislative changes made as a result of the 74th Amendment and the JNNURM, in major cities, the state government has consolidated, rather than devolved, powers over urban development and planning, as control over urban land becomes increasingly important for political power and resources (Chattaraj 2012). Urban local governments still lack political power or significant autonomy over urban policy, planning, and implementation. The majority of local governments in India still relies significantly on states for a large share of infrastructure funding and service provision (Jin et al. 2011). India's system does not lead to significant competition among local governments to maximize growth as in China, but rather to misalignment of incentives and conflict between state and local levels. Overall, India's urban governance, land use control, and infrastructure development system has been unable to meet the rise in demand for land for housing, commercial uses, and transportation to support urbanization and economic growth.

Conclusion: Urbanization and Local Public Goods: Challenges Ahead

China and India have experienced two very different paths of urbanization over the last few decades, reflecting their respective institutional structures and histories. Urbanization has been much slower and more informal in India than in China, but both countries face significant challenges going forward.

China went from being 26% to 50% urban between 1990 and 2010 without the development of significant informal settlements and jobs while increasing the provision of urban services. China's local control has provided incentives for infrastructure provision and land development, enabling cities to grow and accommodate a large population of rural migrants. The funding of public goods at the local level through the proceeds from land development has delivered growth but represents challenges going forward, requiring the need to develop stable sources of revenue that are not dependent on urban development. In addition, the role played by land leases in the financing of urbanization by local governments in China has resulted in major fiscal disparities: Ming and Zhao (2007) find that in 2007 Shanghai, the wealthiest province, had a fiscal capacity of RMB 5,180 per capita; Guizhou, the poorest, of only RMB 322, a ratio of fiscal capacity between both provinces of more than 15 to 1. Given the reliance on local revenues to finance infrastructures, these disparities contribute to growing regional divergence despite massive redistribution by the central government. There are also challenges associated with the reform of the Hukou system to ensure access to public services for rural migrants moving to cities. There are risks of long-term social exclusion and social unrest if the issue is not addressed (Yeh 2011; World Bank 2014). Finally, one of the major challenges resulting from the focus of local governments on growth is the degradation of the environment caused by widespread misuse of land, urban sprawl, traffic congestion, and pollution. In particular the issues of air and water quality and food security represent major long term challenges (World Bank 2014). The limited internalization of the environmental costs of development is a drawbacks of the focus on economic growth that traditionally dominated China' approach of urbanization. In particular it is linked to the process of land auction used to incorporate rural land into urban centers that represents an important source of revenue for local government but has also resulted in "disorderly land rent competition, and thus fragmented peri-urbanization and environmental degradation as a result of ineffective governance" (Zhu 2012).

India has experienced lower rates of urbanization than China and much of this urbanization has been informal both in terms of the type of settlements developed and of jobs created. This can be attributed to some extent to the lack of implementation of the decentralization reforms that were adopted, maintaining a system in which local governments are dependent on redistribution from the central government for funding and are not focused primarily on growth. Balancing multiple goals, including preserving its democratic and multicultural system, rather than adopting a single focus on GDP growth as in China, India's governance structure has provided an insufficient level of infrastructure to accommodate rural to urban migrants and industrial growth. Given India's rigid regulatory regime and weak municipal governments, informal urbanization provides a market response to accommodate rural migrants drawn to cities to improve their living conditions. At the same time, the widespread informality of housing and job markets limits the access of rural migrants to resources. One result has been the in situ peri-urban form of urbanization in India, but even in these locales, infrastructure and public services are lacking.

With the 73rd and 74th Amendments and the Jawaharlal Nehru National Urban Renewal Mission India has engaged in a number of reforms and programs to support its urbanization, but the translation of these legislative actions into effective pro-growth actions that accompany the urban development of major Indian cities has been limited and it remains to be seen in the recent initiatives to develop PPPs to fund infrastructure development will reduce the gap in infrastructure funding estimated to be necessary to support urbanization (McKinsey 2010). The capacity of Indian cities to offer jobs in the formal sector to low-skilled rural migrants remains a barrier to economic growth and welfare improvement in India.

In conclusion, while both countries are still engaged in their urbanization transition, China has exhibited a faster and more formal urbanization than India. China’s structure, in which local governments are incentivized to encourage growth, has contributed to the development of land, infrastructure, and local services at the expense of environmental protection. A remaining issue is rural migrants’ access to local services that result in a form of informal urbanization even if very different from what is found in India (and Latin America) as described in the other chapters of this book. India has been has also put in place a number of decentralization reforms attributing large responsibilities to local government, but they did not result in the emergence of a new way to encourage growth across a large number of municipalities. Instead local governments have struggled to finance investment in infrastructure and local services and the rate of development has been insufficient for the provision of infrastructure and public services resulting in a large share of informal settlement and jobs. While in China, housing production in urban areas is accompanied by local infrastructure and public services, the lack of the provision of public services along with housing results in widespread urban informality in India.

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