

Engines without Drivers: Cities in India's Growth Story

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PAPER



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“Poets have tried to describe Ankh-Morpork. They have failed. Perhaps it is the sheer zestful vitality of the place or maybe it’s just that a city with a million inhabitants and no sewers is rather robust for poets, who prefer daffodils and no wonder. So, let’s just say Ankh-Morpork is as full of life as an old cheese on a hot day, as loud as a curse in a cathedral, as bright as an oil slick, as colourful as a bruise and as full of activity, industry, bustle and sheer exuberant busyness as a dead dog on a termite mound.”

- Pratchett, Terry (1988) *Mort Corgi Books* p. 32

INTRODUCTION

It is now almost axiomatic that cities are the engines of growth. Historically, until the onset of Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in 2005, federal support programmes have focused on rural areas, with intermittent attention to urban areas. Indeed, as noted by Sivaramakrishnan (2011) the phrase ‘urban development’ occurs for the first time in the Fifth Five Year Plan of 1974 (in section 9 of chapter 5). Prior to that, the focus was on housing – with the establishment of the National Building Organization (NBO) in 1954 and subsequently, the formation of State Housing Boards, of which there were 18 by 1972. During the fifth plan period, the Urban Land Ceiling and Regulation Act (ULCRA) was enacted in 1976. Over the period, 1974 to 2003, Sivaramakrishnan (ibid, p. 4)) lists twelve major urban interventions, beginning with the scheme for Environmental Improvement of Urban Slums in 1974 to Urban Reforms Incentive Fund in 2003.¹ The National Commission on Urbanization (NCU), was also established in 1985. In the mid-nineties, the scheme named ‘Infrastructure Development in Mega Cities’ recognised the difference between local and metropolitan projects, and it was agreed that the Metropolitan Development Authority (a state-level agency, rather than a local body) would be the nodal agency for co-ordination and monitoring². Finally, the CCF (City Challenge Fund), an incentive based support scheme for cities to improve municipal management systems and service delivery, was sought to be established in the Tenth plan, which clearly stated: *That the ULBs are not yet in a condition to take on all these responsibilities is no argument against making the necessary transition* (Planning Commission, 2002, p. 619). The CCR finally became URIF or the Urban Reform Incentive Fund in 2003, with a set of seven identified reforms, one of which was the repeal of the ULCRA. IN 2005, URIF was discontinued as a separate scheme and subsumed in JNNURM.³ With the launch of JNNURM (and its various sub-Missions) in 2005, there was finally a comprehensive federal support program for urban local bodies. While it has been arguably focused on the larger cities, the various components of JNNURM covered, in principle, all the urban local bodies in the country.⁴

This trend has continued, even strengthened, in the NDA government elected in 2014 with a menu of urban support programmes on offer from the Government of India, such as AMRUT (focused on basic infrastructure in class I towns), HRIDAY and PMAY (Urban). However, the vision of the city as the engine of growth is most clearly evident in the Smart City Mission (SCM), with its focus on area based development – like an engine within the city. As stated in the Guidelines, the *“purpose of the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, especially technology that leads to Smart outcomes”* (Ministry of

¹ See Sivaramakrishnan (2011), especially chapter 1, for a fuller history of urban policy in India.

² In Bangalore the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC), another state agency, was given this function. As per the scheme, local projects ordinarily handled by the urban local bodies (ULBs), or even existing agencies like the water authority, etc. should be financed by their usual budgets and not considered as part of the scheme.

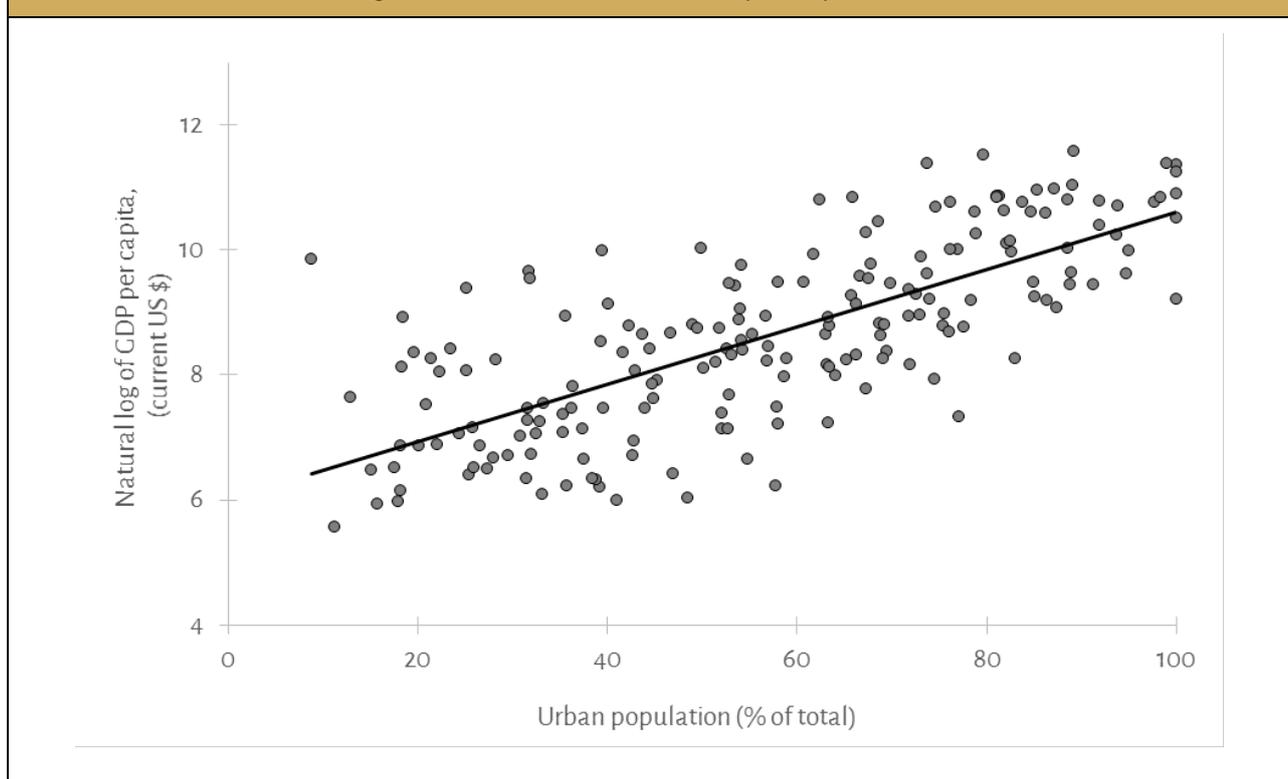
³ During its short existence URIF released a total sum of ₹ 270 crore out of a budget allocation of ₹ 500 crore

⁴ For a more detailed exploration of this issue, see Khan (2017)

Urban Development, Government of India 2015: p. 6). It also clarifies that while “AMRUT follows a project-based approach, the Smart Cities Mission follows an area-based strategy” (ibid. p. 17)⁵.

In addition to the SCM, there are others who posit that India's cities are “growth engines and gateways to the world” and “urban India contributed 57% to the country's gross domestic product (GDP) in 2012” (Maitra et.al. 2014). Along similar lines, Kant and Mehta (2016) state that: “Global experiences reveal that growth in industries and services invariably takes place in cities due to agglomeration economies, increase in productivity, innovations and entrepreneurship. Thus urbanisation is a key driver of growth.” But, how robust really is this idea of the city as an engine of growth?

Figure 1: Urbanisation and GDP per Capita (2012)



Source: World Bank World Development Indicators. The horizontal axis is the urbanisation rate in 2012, which is the percentage share of population living in urban areas, as defined by respective national statistical offices. The vertical axis represents the natural log of GDP per capita in 2012 in current US dollars. The graph is for 189 countries and is based on Duranton (2014, p.2)

THEORETICAL UNDERPINNINGS

There is a relatively well established relationship between how rich a country's citizens are and the country's share of urban population. Duranton (2014) finds that each percentage point of urbanization is associated with about 5 points of GDP per capita, with 60 percent of the variance of income per capita across countries being 'explained' by a single

⁵ Area-based development in SCM can involve improvement (retrofitting), renewal (redevelopment) or extension (greenfield development). In addition, the SCM has a Pan-city initiative for other parts of the city. This had a low weightage in selection and most smart city plans have allocated limited resources to this component.

variable that measures how urbanised countries are⁶. Since the way urbanisation is measured varies significantly across countries (see UN 2016: 118 - 122) one is not quite sure what to make of this, but it is a useful point of departure when one starts to write on growth and urbanisation.

At the same time, this kind of relationship appears weak in India. If one looks at the data from the Indian National Accounts, there is little change in the urban contribution to value added over 2004-05 to 2011-12 – a period of relatively consistent rapid growth of over 8% per annum. During this period over seven years, the urban share increased marginally from 51.9% to 53.1%, i.e., a rise of 1.2 percentage points. Indeed, while the acceptance of urban areas as engines of growth seems to be widespread in the media, the question is far from settled in academia. The evidence is mostly from developed countries and even then, not entirely decisive. Indeed, after presenting the relationship in Figure 1, Duranton (2014) goes on to say:

*Arguably, urbanization and growth interact but in what proportions? How much of that extra 5 percent of GDP per capita is a consequence of this extra percentage point in the rate of urbanization? 0.1 percent? 1 percent? 2.5 percent? 5 percent? Is everything else reverse causality and people moving to cities as they get richer? Is there a third variable out there that explains both GDP growth and urbanization? **Although a lot is at stake here, we have almost no idea.*** (Duranton, 2014, p. 3, emphasis added)

In the mainstream economics literature, summarised for example in Duranton (2008), the static efficiency benefits of cities, i.e., the fact that cities have higher productivity than rural areas, was recognised quite early, e.g., by Marshall (1890). Indeed, in India, in 2011-12, the per capita urban net value added (NVA) was 2.5 times the rural NVA.

Marshall developed a typology about 'where' agglomeration effects – the benefits of being located close to each other – take place. It is located in the market for labour, where firms find it easier to find labour of a particular type and labour finds it easier to find employment when firms and labour both cluster together. This is also true for other intermediate goods firms, whether suppliers or manufacturers. Finally, there are 'spillovers' – tacit learning among firms from each other, that expands the pool of knowledge and the pool of firms that use the knowledge. This is the kind of agglomeration effect that fosters dynamic efficiency – a true engine of growth.

Building on this typology, Duranton and Puga (2004) try to spell out the mechanisms behind these kinds of beneficial agglomeration effect. For example, it is easier to share indivisible facilities like infrastructure in an agglomeration. A larger city makes it easier to recoup the cost of an infrastructure and is a more attractive market for specialized input providers, to the extent that the costs of entering a market do not vary with size. As noted above, it makes for better matching between employers and employees (labour markets), buyers and suppliers (intermediate goods markets), partners in joint projects, or entrepreneurs and financiers (capital markets). There is likely to be both a higher probability of finding a match and a better quality of matches. Finally, there is learning about new technologies, market evolutions, and forms of organization through more frequent direct interactions, which helps the creation, diffusion, and accumulation of knowledge. However, neither the evidence nor the associated policy intervention to account for these spillovers, is very clear.

This is because the policy intervention would depend on the channel affecting growth, i.e., policies to foster knowledge spillovers will differ from those trying to improve job matching. Thus, while "knowledge spillovers are certainly one possible channel by which growth could be influenced by localization or by diversity, it is not the only one. These claims should, therefore, be taken with some caution" (Rosenthal and Strange, 2004: 2147).

⁶The regression for the data in this paper produces the following relationship, which is a little different in numerical magnitude, viz.: $\ln(\text{GDP per capita}) = 6.02 + 0.046 \times \text{Urbanisation}$, with an R^2 of 0.55

Box 1: Cleavages in the Creative City and the Creative Class

"A creative city must be efficient; it should be a city that is concerned with the material well-being of all its citizens, especially the poor and disadvantaged. But it must be much more than that. It should be at the one time an emotionally satisfying city and a city that stimulates creativity among its citizens." (Yencken 1988: 597)

Since the term was introduced by Yencken, the creative city has come to be associated with many characteristics, not necessarily in keeping with its origins, in particular, the creative economy (Howkins 2001) and the creative class (Florida 2002) that apparently powers it. Mechanisms such as these are among the more well received manifestations of the learning spillovers of agglomeration. Cities are now trying to remake themselves into creative cities that can attract the creative class and build a creative economy. One such form of urban intervention is "Vancouverism". Supposedly drawing upon Vancouver's experience, this is seen as "building state-of-the-art university campuses, skyscrapers and museums, enlarging and beautifying green spaces and riverfronts, and otherwise improving urban quality of life." (World Economic Forum 2014, p 55). Yet, the persons associated with the urban regeneration of Vancouver see the process very differently. For Bing Thom:

"It's a spirit about public space I think Vancouverites are very, very proud that we built a city that really has a tremendous amount of space on the waterfront for people to recreate and to enjoy... False Creek and Coal Harbour were previously industrial lands that were very polluted and desecrated. We've refreshed all of this with new development, and people have access to the water and the views. So, to me, it's this idea of having a lot people living very close together, mixing the uses. So, we have apartments on top of stores. In Surrey we have a university on top of a shopping centre. This mixing of uses reflects Vancouver in terms of our culture and how we live together." (Bing Thom, quoted in Sharma (2012, p.35), emphasis added)

But, what kind of public is it that will 'recreate and enjoy'? What is the economic underpinning of this urban form? In his recent book, Florida (2017) presents a chastened version of the person who coined the term 'creative classes'. While he still believes that "[c]ities are still the most powerful economic engines the world has ever seen, and they are bastions of diversity, tolerance, and progress"⁷, he also recognises that:

*"[T]he very same force that drives the growth of our cities and economy broadly also generates the divides that separate us and the contradictions that hold us back. It all comes down to the competition for scarce urban land, which drives up housing prices, creating vast geographical as well as economic inequalities within cities and widening the gaps between them. It's hard to sustain a functional urban economy when teachers, nurses, police officers, firefighters, and restaurant and service workers can't afford to live in it. When no one but the rich live in a city, it loses its innovative capacities... with sufficient will and focus, and the right institutions, policies, and investments, it is still possible to forge a more inclusive urbanism. But cities are going to have to fix their problems on their own... In addition to building more housing and particularly... more affordable rental housing and to investing in transit to connect outlying places to vibrant urban centers... a massive effort to upgrade... service jobs in fields like retail, office work, food prep and personal care... Turning these low-wage, insecure jobs into higher-wage, secure, family supporting jobs is the only way we can rebuild out middle class."*⁸

Thus, not only does this strategy of focusing on policy to foster learning agglomerations not seem right for American cities, even a business group like the World Economic Forum's Global Agenda Council on Competitiveness notes that "this is not necessarily the right blueprint for most emerging-market cities in their present position" (World Economic Forum 2014, p 55).

⁷ <http://www.citynationplace.com/americas/city-nation-place-keynote-richard-florida-on-cities-in-crisis>

⁸ <http://www.creativeclass.com/navbar-included-pages/about-ccg/richard-florida/books-and-writing/books/the-new-urban-crisis?sub=qa>

Even Edward Glaeser (2012), whose work is often cited to buttress the claim of cities as engines of growth, holds a not too dissimilar view. The core issue is that it is difficult to disentangle the advantages of a place, such as a port, with that of agglomeration economies. There is a further issue of selection bias, where one cannot clearly distinguish whether it is the city that makes a person productive or whether productive persons congregate together in cities. He puts it thus:

“the fact that cities reflect both innate production advantages of a place and agglomeration economies often complicates the task of actually estimating the economic advantages of density. If people move to areas where productivity is innately greater, then regressing productivity on density will yield biased results. The empirical problem is only exacerbated by the fact that more innately able people may sort into higher density locales... I personally, tend to find the mass of evidence that agglomeration economies exist, taken as a whole, to be fairly compelling [but]...taking the opposite view is not unreasonable.” Glaeser (2012, p. 10)

The question as to whether urbanisation drives growth, instead of just being associated with it, thus, remains fraught. Ergo, “in terms of policies, this suggests extreme caution when trying to “foster agglomeration effects” (Duranton, 2008, p. 70). A particular example of such need for caution comes from the experience with ‘creative cities’. It started out as a way to revitalise inner cities and seems to have wound up exacerbating urban inequalities (see Box 1).

A final caveat comes from the size structure of cities in the United States, where much of the theoretical underpinning for agglomeration has been developed. Given that the US has barely ten cities with a population of more than a million, the scale at which agglomeration economies begin to work is not clear, and whether the spillovers flatten out after a certain (optimal) city size.⁹ Besides the evidence, one is not sure what policies can be used to influence city size.

INDIAN URBANISATION

The nature of Indian urbanisation adds to this theoretical ambivalence. Over 2001-11, only about a fifth of growth in urban population can be attributed to migration, but more than a third is due to changes in classification, as the economic character of settlements change away from farm to non-farm activities. The rest is due to natural population growth in cities. Furthermore, existing large cities are not the big attraction they are made out to be. Indeed, the share of population in million-plus cities that existed in 2001 actually declined in 2011¹⁰. Finally, about one-seventh of the urban population is in census towns – settlements that satisfy the urban classification criteria of the Registrar General of India but continue to be governed as villages (through panchayats) by their respective states.

This spatial structure is reflected in the National Accounts statistics. Table 1 shows the share of rural and urban NVA by major sectors. In 2011-12, the latest year for which such data is available, more than half (51.3%) of our manufacturing NVA comes from rural areas! The rural areas accounted for 35.3% of the non-farm Net Value Added (NVA)¹¹. While urban NVA is overwhelmingly (98%) non-farm, a substantial part of rural NVA (60.8%) is also non-farm.

⁹Chen and Zhou (2017) support Au and Henderson (2006) in claiming that Chinese cities are still too small. Conversely, Camagni, et. al. (2014) find second rank cities doing better in Europe and propose a more nuanced trade-off between agglomeration and congestion. Besides, Henderson (2003) finds that excessive primacy hinders economic growth.

¹⁰However, the share of population in all million plus cities increased, due to new million plus cities.

¹¹The Net Value Added is calculated as GDP less taxes (net of subsidies) and consumption of fixed capital (depreciation). For comparison, Mitra and Mehta (2011) estimate that 16.3% of the non-agricultural NVA was rural in 2001

Table 1: Urban and Rural Decomposition of NVA by major sectors 2011-12

Major Sector	Share in Rural NVA	Share in Urban NVA	Share in Total NVA	Urban Share in sector
Agriculture, Forestry and Fishing	39.2	1.8	19.3	4.9
Mining and Quarrying	3.6	2.8	3.2	46.6
Manufacturing	18.4	15.4	16.8	48.7
Electricity, Gas, Water Supply and Other Utility Services	1.3	2.3	1.8	66.8
Construction	10.5	9.8	10.1	51.3
Trade, Repair, Hotels and Restaurants	6.8	15.6	11.5	72.1
Transport, Storage, Communication Services	3.9	8.1	6.1	70.4
Financial Services	1.8	10.6	6.5	86.9
Real Estate, Ownership of Dwelling and Professional Services	7.9	16.4	12.4	70.3
Public Administration and Defence	2.2	8.6	5.6	81.3
Other Services	4.3	8.6	6.6	69.2
Total	100.0	100.0	100.0	53.1

Source: National Accounts Statistics Statement 8.19 : Net Value Added from Rural and Urban Areas by economic activity

At a more aggregate level, one can see that while rural areas contribute almost half or more of the NVA when it comes to industry or construction, their share of service NVA is much lower, at a little more than a quarter for traditional services and a little less for modern services (including financial services and real estate, etc.). An important implication of the spatial distribution of economic activity is the need to focus on certain rural areas also, if initiatives to increase the share of manufacturing, such as 'Make in India' are to succeed.

The scenario that emerges from the national accounts is buttressed by the migration flows seen in the Census, in Table 2. When one looks at migrant workers (defined as those who migrate for reasons related to work) who move to cities, only about a half of the male workers move to the large cities, i.e., those with a population of more than a million. As already noted, while the scale at which agglomeration economies begin to work is not clear, over 40% of male migrants from either rural or urban areas seek their employment in cities of less than 500,000 in population. This is true, a fortiori, for women migrant workers,¹² who form a smaller fraction of migrant workers. Given that the question of an optimal city size is ambiguous and almost certainly contextual, the migration data indicate that economic vibrancy may operate at different levels of agglomeration, and it would be unwise to ignore smaller urban areas. Indeed, some authors like Denis, Mukhopadhyay & Z erah (2012) argue that Indian urbanisation should be seen as much more dispersed and in-situ in nature, a form of 'subaltern urbanisation'. Instead of a straightforward migration from villages to cities, much of Indian urbanisation is in-situ, driven by morphing of places than moving of people (Mukhopadhyay, 2012). A number of smaller settlements are changing their occupational character to non-farm activities. This is a growing phenomenon and can provide a base for reinforcing the dispersed settlement structure.

¹² This does not include the many women who migrate for reasons of marriage, but are also in the workforce. The NSS sample data of the 64th round (2007-8) indicates this to be substantial in number.

Table 2: Share of Migrant Workers in Cities by Size-Class

Size-Class	Male		Female	
	Rural origin	Urban origin	Rural origin	Urban origin
All Class I	75.2%	79.3%	50.7%	69.2%
Top 8 Cities	29.9%	31.1%	15.6%	25.0%
Other 'Million plus' cities	19.1%	19.4%	10.5%	14.7%
500,000 to 1 million	8.6%	9.2%	6.4%	8.3%
100,000 to 500,000	17.5%	19.6%	18.2%	21.3%
Other Urban	24.8%	20.7%	49.3%	30.8%
All Urban	100.0%	100.0%	100.0%	100.0%

Source: Census of India 2001. Disaggregated data for 2011 is yet to be released.

ARE INDIAN CITIES READY TO BE ENGINES OF GROWTH?

Based on the discussion above, the answer to the questions as to whether Indian cities are ready to be engines of growth, depends on whether our cities are places of learning and spill over of knowledge, whether there are identifiable mechanisms of such learning (beyond serendipitous face to face interaction) and whether our city institutions – economic, social and political – facilitate such learning.

Labour Market

Given the theory, one of the channels of knowledge spillovers is the exchange of tacit knowledge embodied in employees¹³ Foster-McGregor and Poschi (2016), in a study of the European Union, show that labour mobility, especially for workers moving from high-tech and medium-tech industries, is beneficial for industrial productivity. Similarly, Zhou, et. al. (2011) find a negative influence of high shares of temporary workers on the probability of having products “new to the market”. In their work on Italy, Lucidi and Kleinknecht (2009) find lower rates of productivity growth in firms with proportionately more flexible workers, high labour turnover and lower relative costs of labour. Arvanitis (2005), in his study of Swiss firms also finds that high productivity firms do not engage many part-time or temporary workers.

But the Indian labour market is increasingly becoming contractual. Bertrand, et. al. (2015) find rapid growth in staffing firms and contract labour, especially in the larger firms. This is also concentrated around large cities, i.e., “Kolkata, Delhi, Mumbai and a triangle between Bangalore, Chennai and Hyderabad” (p. 15) While this may lead to more value-addition, largely by reducing labour cost, it may hurt knowledge spillovers and productivity growth. Neither is there much formal worker training, in part due to the large number of tiny enterprises. According to the Census of India, the number of graduate workers is, however, rising, from 16.1% in 1991 to 22.9% in 2011¹⁴.

In India, therefore, economic features such as the rising contractual share, the limited amount of training and low average levels of education diminish the effectiveness of knowledge spillovers in the urban labour market as an engine of growth.

¹³ Fallick, et. al. (2006) is an early attempt to look at this channel by studying employee turnover in Silicon Valley firms.

¹⁴ There is an association between the average level of human capital in cities (e.g. measured by the share of university graduates in the city, the US average is 36.4%) and wages of individual workers, after taking into account the worker's individual characteristics. Further, wage growth for young educated workers is stronger in cities, but it is not clear whether it is due to the self-selection of workers with fast career progressions in cities or because of learning spillovers related to the city.

Social Distance

In addition to these structural features, there is a persistence of social distance even in cities. Thorat, et. al. (2009) find that statistically the odds of a Dalit being invited for an interview were about two-thirds and that of Muslim applicant one-third of the odds of a high caste Hindu applicant for identical job applications. This points to the “existence of discriminatory processes ... even among well-qualified university-educated Indians applying for jobs in modern private sector businesses in India” (p.1). Added to this, there is spatial segregation in our cities, as documented by Vithyathil and Singh (2012) and Sidhwani (2015). Carswell and De Neve (2014) find a more nuanced picture in the Tiruppur garment industry, with Dalits gaining access to the industry in one village and being disconnected in another, constrained by persistent relations of debt bondage and unfree labour. Uchikawa (2017) also paints a more upbeat picture, noting that “social networks function beyond community and caste”. It is possible that the rapid growth phase of garments in Tiruppur helps to weaken these social distinctions. Similar findings are reported by Strümpell (2008) in a company settlement of a powerhouse of a public sector¹⁵ hydroelectric power project in the Koraput district of Odisha, where he finds that caste practices are negated within the settlement even if they are maintained outside in the villages of the workers. Even with marriage, the quintessential caste related institution, Ahuja and Ostermann (2016) find that more than half (53.9%) of upper caste women express an interest in crossing caste boundaries for marriage, but this preference is inversely related to socio-economic status and distance in caste hierarchy, with only 28.7% expressing interest in a Scheduled Caste groom.¹⁶

However, while the findings in the smaller towns are especially encouraging and though it indicates that caste may be attenuated to some extent in urban areas when compared to villages, the continuation of social discrimination, even in a weaker form, hinders the kind of free interaction that would be needed for knowledge spillovers, by perpetuating social distance.

Urban governance

A critical part of ensuring that cities can function as engines of growth is whether they have the ability to take actions on their own – do they have agency? Can they solve a firm's problem at their level, e.g., in terms of land, services, security and transportation? What about the provision of specialised educational and training institutions? How much do decisions taken at the city level influence a firm's location decision? As for firms, so for workers. Can the city intervene to improve living conditions and housing for workers? Put simply, who will be the driver of the engine that is the city? For cities to even have the possibility of being engines of growth, we need to first ensure that drivers of these engines are in place.

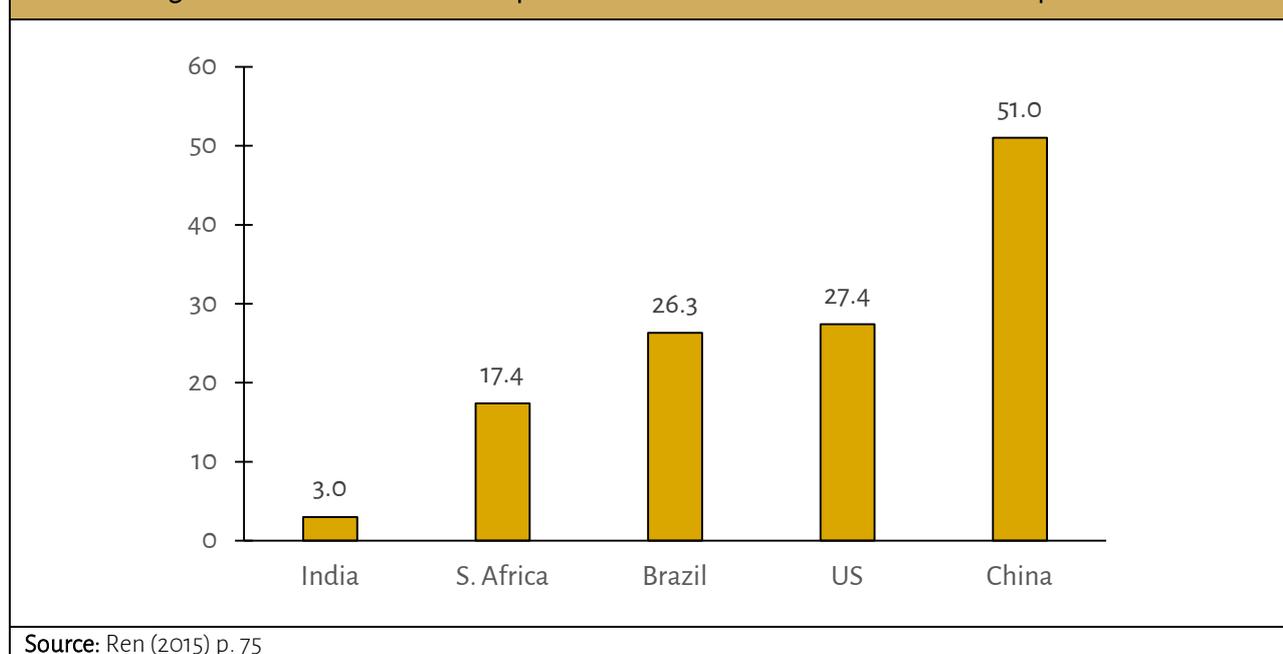
Unfortunately, in India, the 74th Constitutional Amendment, which gave constitutional status to urban local bodies (ULBs) enabled the states to decide which functions to transfer to the ULBs. Very few states have actually transferred functions beyond solid waste management to them. Even large and apparently successful metropolises like Bengaluru do not have control over their water supply and sewerage, their electricity, their land allocation or even their public transportation. Each one of these is under the control of an agency of the Karnataka state government. Apart from Maharashtra and to some extent Gujarat and some of the larger cities in other states, few Indian cities can undertake actions that would enable them to function as engines of growth. This is evident in Figure 2, which

¹⁵ Parry (1999) finds that this is more the case in public sector institutions than private firms.

¹⁶ The study involved responses to nine actual grooms (three in each state) from a matrimonial website by 1070 women. Of the 53.9 % of upper caste women who responded to an out of caste interest, only 28.7 % responded to an interest from a Scheduled Caste groom, while 52.1% responded to other backward castes, suggesting that distance in the caste hierarchy is also a factor. The “groom ... came from an upper-middle-income/high-status background, was between 5'9" and 5'10" tall, was 27 or 28 years old, possessed an MBA degree from a reputable Indian business school, ... an annual income between ₹ 9.5 and 10 lakhs per year, and was fair in skin colour.”

shows the expenditure undertaken by local governments, as a share of total government expenditure. India is seen to be abysmally low, definitely compared to China, where the share is more than half, but also compared to other countries, such as South Africa and Brazil, where the share is about six to nine times larger. With such a small size of the state at the city level, it will be unlikely to fulfil its role as an engine. Even corporate consultants recognise that “cities need to have the capacity and capability required to formulate... plans that intertwine the economic vision and strategy with the infrastructure-led master plan” (Maitra, et.al. 2014). Kant and Mehta (2016) too point to the need for “empowering political leadership at city level”.

Figure 2: Local Government Expenditure as share of Total Government Expenditure



CONCLUSION

Thus, we see that across institutions, whether in economic labour market, or social integration or political agency, there are severe shortcomings that constrain our cities. Recognising these realities means that “it may be more fruitful in practice to think about ... bottlenecks” (Duranton, 2008. p. 44), instead of engines and drivers.

But, is the question just about whether cities are engines? Should it not also be about the journey we want the engine to take us on? It is not clear that there is a consensus on this. As Perlman (2014, p.130) asks:

“Is there room for other goals for urbanization besides development, productivity, and investment climate? How do we balance the trade-offs between investing in the “global city” or “world city” and investing in the “just city” or the “creative convivial city?” How do these relate to where we want to live, learn, raise our families, and enjoy our lives.”

It is unlikely that the answers to these questions are universal. They are likely to vary not just by country, but by region, by local culture, stage of development, and many other factors. Indeed, they will vary across citizens in a city. The question is whether cities will gain such agency as to make these decisions for themselves and concomitantly, whether an urban politics will emerge that will permit such negotiations within the city. It is only then that we can begin to see cities as true, purposeful engines. Some will appear to be like a “dead dog on a termite mound”, as Terry Pratchett evocatively described Ankh-Morpork, but one should not allow that to detract from our appreciating the growth generated by their “sheer exuberant busyness”.

REFERENCES

- Ahuja, A and Ostermann, S. L. (2016). Crossing caste boundaries in the modern Indian marriage market. *Studies in Comparative International Development*, 51(3), 365-387
- Arvanitis, S. (2005). Modes of labor flexibility at firm level: Are there any implications for performance and innovation? Evidence for the Swiss economy. *Industrial and Corporate Change*, 14(6), 993-1016.
- Au, C. C. and Henderson, J. V. (2006). How migration restrictions limit agglomeration and productivity in China. *Journal of development economics*, 80(2), 350-388.
- Bertrand, M, C. Hsieh, & N Tsivanidis. 'Contract Labor and Firm Growth in India'. Mimeo, 2015. Accessed from <https://bfi.uchicago.edu/sites/default/files/research/draft.pdf>
- Camagni, R, R. Capello and A. Caragliu (2014). "The Rise of Second-Rank Cities: What Role for Agglomeration Economies?" *European Planning Studies*, 1069-1089.
- Carswell, G and De Neve, G. (2014). T-shirts and tumblers: Caste, dependency and work under neoliberalisation in south India. *Contributions to Indian Sociology*, 48(1), 103-131.
- Chen, J, and Q Zhou (2017). "City Size and Urban Labor Productivity in China: New evidence from spatial city-level panel data analysis." *Economic Systems* 41.2 165-178.
- Denis, E., Mukhopadhyay, P and Zérah, M. H. (2012). Subaltern urbanisation in India. *Economic and political weekly*, 47(30), 52-62.
- Duranton, G. (2014). The Urbanization and Development Puzzle in Shahid Yusuf (Ed.), *The Buzz in Cities: New Economic Thinking*, The Growth Dialogue, Washington DC, 1-19.
- Duranton, G. (2008). From cities to productivity and growth in developing countries. *Canadian Journal of Economics/Revue canadienne d'économique*, 41(3), 689-736.
- Duranton, G. and Puga, D. (2004). Micro-foundations of urban agglomeration economies. *Handbook of regional and urban economics*, 4, 2063-2117.
- Fallick, B., Fleischman, C. A., and Rebitzer, J. B. (2006). Job-hopping in Silicon Valley: some evidence concerning the microfoundations of a high-technology cluster. *The Review of Economics and Statistics*, 88(3), 472-481.
- Florida, R. (2017). *The New Urban Crisis: How Our Cities Are Increasing Inequality, Deepening Segregation, and Failing the Middle Class and What We Can Do About It*. Hachette
- Florida, R. (2002). *The Rise of the Creative Class (and how it's transforming work, leisure, community and everyday life)* Basic Books New York.
- Foster-McGregor, N and Pöschl, J. (2016). Productivity effects of knowledge transfers through labour mobility. *Journal of Productivity Analysis*, 46(2-3), 169-184.
- Glaeser, E. L. (2012). The challenge of urban policy. *Journal of Policy Analysis and Management*, 31(1), 111-122.
- Henderson, V. (2003). The urbanization process and economic growth: The so-what question. *Journal of Economic growth*, 8(1), 47-71.
- Howkins, J (2001) *The creative economy: How people make money from ideas*. The Penguin Press, London
- Kant, A and Mehta, V. (2016). Cities as Engines of Growth *Quint*, October 16, accessed at <https://www.bloombergquint.com/opinion/2016/10/06/cities-as-engines-of-growth>
- Khan, S. (2017) "The Other Jawaharlal Nehru National Urban Renewal Mission: What Does it Mean for Small Town India?" in E. Denis and M-H. Zérah (Eds.), *Subaltern Urbanisation in India: An Introduction to the Dynamics of Ordinary Towns*. Berlin: Springer, pp. 333-66.
- Lucidi, F. and Kleinknecht, A. (2009). Little innovation, many jobs: An econometric analysis of the Italian labour productivity crisis. *Cambridge Journal of Economics*, 34(3), 525-546.

- Maitra, B., Rohra, S and Gupta, S. (2014). India's growth engines and gateways *Mint*. Oct 30 accessed at <http://www.livemint.com/Opinion/Z3wxhbTwwSHYrJCM3Ugp3M/Indias-growth-engines -and-gateways.html>
- Marshall, A. (1890). Principles of political economy. *Maxmillan, New York*.
- Ministry of Urban Development, Government of India (2015). *Smart City: Mission Statement and Guidelines*. New Delhi
- Mitra, A. and Mehta, B. (2011). Cities as the engine of growth: Evidence from India. *Journal of Urban Planning and Development*, 137(2), 171-183.
- Mukhopadhyay, P. (2012). "Moving People and Morphing Places" *Mint*, Oct. 7 accessed <http://www.livemint.com/Opinion/b4AVxWTKCmduNCTNIgGUjO/Moving-people-and-morphing-places.html>
- Parry, J (1999). "Two Cheers for Reservation: The Satnamis and the Steel Plant" in J Parry and R Guha (eds.) *Institutions and Inequalities: Essays in Honour of André Bétéille*, pp. 128–69. New Delhi: Oxford University Press
- Planning Commission, Government of India (2002) *Tenth Five-Year Plan 2002-2007 Volume II: Sectoral Policies and Programmes* Planning Commission, Delhi
- Perlman, J. (2014) "What Happens When Marginal Becomes Mainstream? How To See the Challenge as an Opportunity" in Shahid Yusuf ed. *The Buzz in Cities: New Economic Thinking*, The Growth Dialogue, Washington DC, 117-41
- Pratchett, T (1988) *Mort*. London: Corgi Books.
- Ren, Xuefei (2015) City power and urban fiscal crises: the USA, China and India *International Journal of Urban Sciences*, 19:1, 73-81
- Rosenthal, S S. and W C. Strange. (2004) Evidence on the nature and sources of agglomeration economies" in V Henderson and J-F Thisse (eds.), *Handbook of Regional and Urban Economics*, Volume 4. Amsterdam: North-Holland, 2119– 2171
- Sharma, I A N (2012) On the Edge: Redevelopment Projects at the Urban- Marine Interface in Vancouver, BC Master of Marine Affairs thesis, University of Washington
- Sidhwani, P. (2015) "Spatial Inequalities in Big Indian Cities" *Economic and Political Weekly* 50 (22), 55-62
- Sivaramakrishnan, K C (2011) *Re-visioning Indian cities: The urban renewal mission*. SAGE Publications India.
- Strümpell, C. (2008). 'We work together, we eat together' Conviviality and modernity in a company settlement in south Orissa. *Contributions to Indian sociology*, 42(3), 351-381.
- Thorat, S., Attewell, P., & Rizvi, F. F. (2009) "Urban Labour Market Discrimination" *Indian Institute of Dalit Studies Working Paper Series* Vol. III, no.1, New Delhi
- Uchikawa, S. "Caste Membership, Business Access, and Social Mobility among Indian Apparel Manufacturers." *Economic and Political Weekly*, vol. 52, no. 22, 3 June 2017.
- United Nations (2016) *Demographic Yearbook 2015* United Nations Publication New York
- Vithayathil, T & Singh, G. (2012): "Spaces of Discrimination: Residential Segregations in Indian Cities," *Economic and Political Weekly*, Vol 47, No 37, pp 60–66.
- World Economic Forum. (2014). *The Competitiveness of Cities: A report of the Global Agenda Council on Competitiveness* August 2014 Geneva
- Yencken, D. (1998) "The Creative City" *Meanjin*, Vol. 47, No. 4, Summer: 597-608.
- Zhou, H, R Dekker, and A Kleinknecht. (2011). "Flexible labor and innovation performance: evidence from longitudinal firm-level data." *Industrial and corporate change* 20.3: 941-968.

ABSTRACT

It is now almost axiomatic that cities are the engines of growth. Historically, federal support programmes have focused on rural areas, but over the past fifteen years, the need to devise such programmes for urban local bodies has come to be recognised, with JNNURM in its various forms, being the most visible early manifestation. This trend has continued, even strengthened, in this government and among the menu of urban support programmes on offer from the Government of India, the vision of the city as the engine of growth is most clearly evident in the Smart City Mission, with its focus on area based development – like an engine within the city. Yet, even in the mainstream economics literature, while there is evidence for cities as places of higher productivity, there is less evidence for cities as drivers of growth – with learning being the primary driver and urban primacy being an important obstacle. The primary questions are whether cities are places of learning, whether there are identifiable mechanisms of such learning and the kind of city institutions – economic, social and political – that facilitate such learning. This paper will interrogate the empirical characteristics of such urban institutions in India in the context of the theoretical literature and learning mechanisms that emerge from international evidence. In particular, it will argue that the nature of the labour market, which is largely contractual, the transfer of rural fragmentation in social relations to cities and the absence of city-level political agency, all reduce the potential of the city as a location of learning economies. For cities to even have the possibility of being engines of growth, we need to ensure that drivers of these engines are in place and we have a mechanism to think about paths to follow.