

The Alchemist's Apprentice

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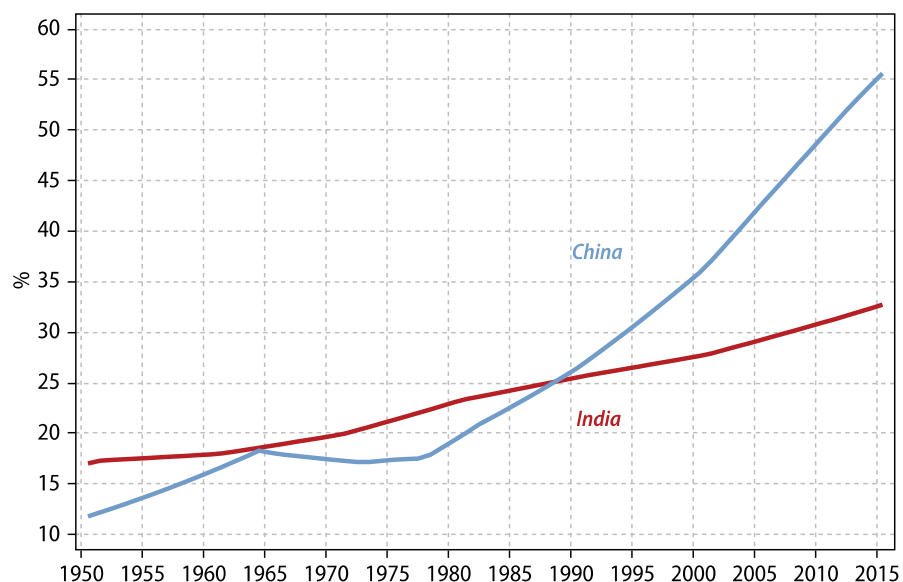
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India's rate of urbanization lags that of China...

Done right, urbanization is a form of economic alchemy. It transforms base material—surplus rural labor, cement, bricks and mortar—into the development “gold” of productive workers, infrastructure and housing. Densely populated cities allow a particularly intense alchemy, as the blend of commercial transactions and scale economies conjure that most precious of modern-day elixirs: economic growth.

India's urban population has expanded by at least 230mn since the economic reforms of 1991, more than the population of Brazil. Three of its cities rank in the world's top 20 by size. Yet India remains an alchemist's apprentice: its urbanization ratio is low and it is failing to realize the full potential of its 500mn urban inhabitants. When compared with China, the only emerging market of a similar scale, India's efforts to exploit its urban economy are half-hearted (see [The Biggest Migration In Human History](#)). Narendra Modi's government has abandoned India's traditional rural bias and is promising to transform its cities with investment in infrastructure and housing. Effective urbanization policies could add a point or two to annual growth, but they will be hard to implement.

Despite a head start, India has urbanized much slower than China



Gavekal Data/Macrobond

...but the good news is that India is moving in the right direction.

How many people live in India's cities?

Wealth is made in cities. Though it is certainly possible to be urban and poor—just look at India's teeming slums—it is impossible for a nation to become prosperous without urbanizing. And slowly but surely, India is moving in the right direction: the national census of 2011 found that 377mn Indians lived in urban areas, out of a total population of 1.21bn.

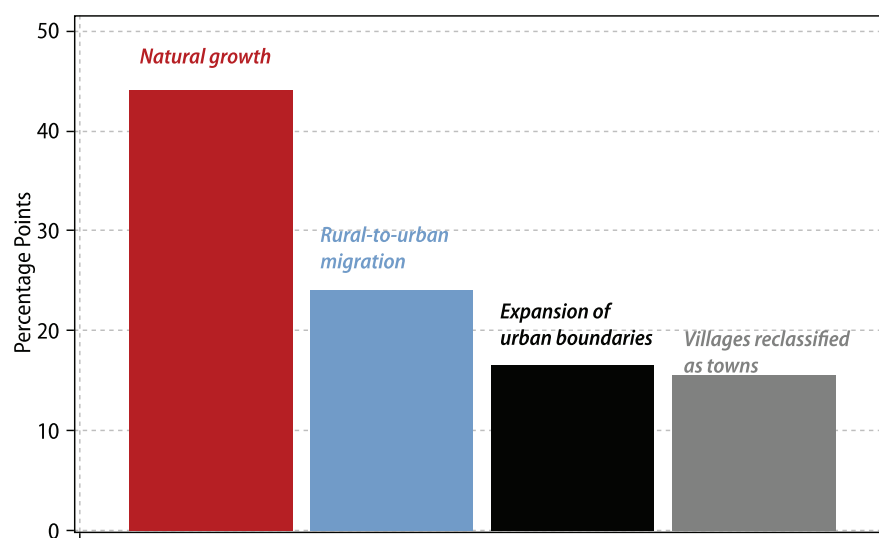
A true picture of urbanization in India is distorted by a complex method of accounting for population centers within census data

That translated to an urbanization ratio of 31%, up from 26% in 1991. The census counted nearly 8,000 towns and cities, which together generated an estimated 60% of GDP. Based on the census, the United Nations reckons the urban population grew to 428mn in 2015, giving an urbanization ratio of 33%.

The raw increase in the number of people living in towns and cities is impressive, but India's urbanization ratio is a good 10pp lower than one would expect at its level of per-capita income. Many experts believe the true ratio is significantly higher, blaming the low number on inadequacies in the census. In addition to all settlements formally administered as urban ("statutory towns"), the census counted rurally administered settlements with clear urban characteristics, termed "census towns" and "urban outgrowths." "Census towns" are settlements with a population of at least 5,000 people, density of 400 people per sq km, and 75% of the male working population engaged in non-agricultural activities. "Outgrowths" are settlements abutting statutory towns, such as villages or university campuses, with urban-style infrastructure and amenities.

Migration is not the biggest source of growth in the urban population

Sources of urban population growth between 2001-11



Indian Institute for Human Settlements, Gavekal Data/Macrobond

Understating Indian urbanization

India applies an especially stringent definition of "urban"

Critics believe these categories fail to capture a sizable chunk of the urban population, for two reasons. First, the definition of "urban" in India is more stringent than in [most other countries](#). If all settlements exceeding 5,000 were counted, including many large villages, the urbanization ratio would rise to nearly 50%. Second, the census data ignore millions of slum-dwellers living in the peri-urban sprawl beyond the formal boundaries of Indian cities. The World Bank has attempted to capture this "hidden urbanization" using its [Agglomeration Index](#), an alternative measure of urban concentration applicable across all countries. It gives India an urbanization ratio closer to 60%—in theory adding 300mn urban inhabitants.

Hundreds of millions of Indians live in areas that are neither strictly urban nor exactly rural

There is no doubt that the official data undercount the true number of urban dwellers, but they are not so wildly inaccurate. The criteria used by India's census bureau are adapted to local conditions. All populous Asian countries have large villages with few, if any, urban amenities: the fact that lots of people live there does not make them urban. Nor are those rural migrants camped out on the edge of cities really urban citizens in any meaningful sense. In reality, the messy process of urbanization means that hundreds of millions of Indians live in a grey zone that is neither genuinely rural nor urban. I think it is fair to say that India's "true" urbanization ratio today is a shade above the official number, in the region of 35-40%—which works out to roughly 500mn people.

The journey from farm to city

The more important point is that, irrespective of how we measure it, India has urbanized slower than many other countries. When China began its reform process in 1978 it was actually less urbanized than India. Today China's urbanization ratio is 56%, with an urban population close to 800mn—much higher than India's, however you cut the data.

Indian cities have attracted far fewer migrants than equivalent Chinese cities

The main reason why India's cities have not grown as fast as China's is that they have attracted far fewer migrants. In the first decade of the century, the number of people living in China's cities grew by over 200mn. Nearly half of this expansion came from rural-to-urban migration. During the same period, India's cities expanded by 90mn, but only one-quarter of this increase came from rural migration. Instead, nearly half of India's urban expansion came from natural population growth. A further third came from the reclassification of rural settlements as urban, either as villages grew into towns or as they were swallowed up by expanding cities.

Both economic and cultural reasons explain Indians' preference for staying in their villages

What explains the relative reluctance of Indian farmers to move to the city? In the first place, India's urban economy has not created enough jobs. For three decades, China's economic miracle was built on labor-intensive manufacturing and vast investment in housing and infrastructure. This, in turn, created enormous demand for low-end service workers. India's service sector is booming, but its manufacturing and construction sectors are comparatively lackluster, employing only a fraction of their Chinese counterparts (see [Demographic Dividend Or Demographic Nightmare?](#)). In addition, cultural factors appear to be a factor: many women are reluctant to migrate away from their families, while the informal insurance provided by village caste networks dissuades many potential migrants from leaving home.

Even so, India's big cities teem with migrants from all over the country. According to [Demographia](#), 59 Indian cities have populations above 1mn, all with substantial migrant populations. The big eight "metros"—Delhi, Mumbai, Kolkata, Bengaluru, Chennai, Hyderabad, Ahmedabad and Pune—are magnets for rural labor, home to a rising share of the urban population (see table overleaf). They suck in migrants from the poor northern "cow belt" on the Gangetic plain, especially from the populous states of Uttar Pradesh and Bihar. If the Indian economy creates sufficient numbers of low-end jobs, a growing share of rural folk will join them.

India's eight "metros"

City	Population (mn)
Delhi	25.7
Mumbai	22.9
Kolkata	14.8
Bengaluru	10.2
Chennai	10
Hyderabad	9
Ahmedabad	7.4
Pune	5.8

Source: Demographia, Gavekal Research

* estimate based on 2011 census

The UN expects some 600mn Indians to live in towns and cities by 2030

Exactly how quickly India's cities grow will depend on the speed and composition of economic growth. If the government is serious about its plan to build "housing for all," improve urban infrastructure and boost manufacturing, then India will urbanize rapidly. The UN's base case is that more than 600mn Indians will live in towns and cities by 2030, and a further 200mn will live in the vicinity of India's 70 largest cities. This means that well over 800mn people will potentially have access to urban labor markets and services—one in 10 people on earth.

Transformative potential

If managed effectively, India's urbanization process will transform the domestic economy, with the effects rippling out into global consumer and commodity markets. But India has done a lousy job of developing a productive urban economy. Cities should be engines of productivity, reducing the cost of providing public services and forcing people together to make transactions. The bigger and denser they are, the more powerful that engine—what economists call the "agglomeration effect." India has no shortage of large, dense cities; but its shoddy infrastructure, lack of housing and jobs, and poor public services mean the urban economy is only running at half throttle. India's urbanization process is inefficient, bringing smaller economic gains than it ought to.

If cities are to be engines of growth for India, infrastructure must be improved

Urban sprawl threatens to exacerbate the problem. As city populations expand, the high cost of housing is forcing inhabitants to the urban periphery. India's biggest cities are growing twice as fast in area as they are in population, pushing down population densities. But as cities spill over their administrative boundaries, it becomes harder to deliver public services and more costly to build urban infrastructure. This "messy urbanization," in the words of the World Bank, threatens to undermine the very agglomeration economies that should make India's cities an engine of growth.

Much more government investment is needed in city infrastructure to keep pace with rising demand. The alternative is urban decay, gridlock, and falling private investment. The good news is that India finally has a

government that sees cities as an opportunity rather than a threat. India's leaders long held to Gandhi's view that "India lives in her villages and not in her towns." But Modi's government has outlined a pro-urban agenda to transform cities into "symbols of efficiency, speed and scale." It has promised to prioritize housing and public transport, build 100 new cities, and use technology to improve urban services.

This is, of course, much easier said than done. Probably the biggest challenge is housing: the 2011 census found that 66mn of India's 377mn urbanites lived in slums, and the government reckons India has a basic shortage of about 20mn affordable homes. [McKinsey](#) estimates that India could add 1.5 points to annual economic growth if it mobilized sufficient capital to meet housing and public infrastructure demand, in turn driving large increases in incomes and consumption. (Housing will be the subject of a forthcoming report.) Such urban alchemy is, unfortunately, a complex and costly business. But urbanization without jobs, affordable housing and functioning transport networks is a fool's gold.

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homes