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# The Wide Angle

## The Future of Our Cities

### Periodical

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#### Summary

- The global economy is already dominated by cities, and their importance is growing as emerging markets rapidly urbanize. Latin America, Europe and North America are already overwhelmingly urban. Half of China's population now lives in cities and India is likely to be an urban majority country within a generation.
- Urban trends in the US have been dominated by suburbanization since the 1940s but financial stress and a changing social structure may radically shift the trajectory towards densification over the next decade. This has important implications not only for real estate investments but also for how we think of American life and consumption patterns in general.
- The *Hukou* permit system is a unique feature that the Chinese government used to guide the country's rapid urbanization. However, it also means that rural migrants have not grown roots in host cities. Many are likely, therefore, to return to their villages as they age. This process will not only slow net migration into Chinese cities in the future but will also transform rural China.
- India's urbanization is accelerating but high land prices will now force the process to cascade down to smaller towns. We found that slums and "urban villages" play a very important role as routers in the migration process.
- Meanwhile, the global network of major urban nodes like London, New York, Hong Kong, Shanghai, and Singapore will continue to flourish because their flexible clusters of human, financial and institutional capital make these cities especially adept at dealing with an era of rapid innovation and change.



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## Background

The global economy is essentially an urban economy. Cities and towns already generate around 80% of global GDP and more than half of mankind lives in urban centers. Moreover, rapid urbanization in developing countries is likely to further increase the importance of cities. The United Nations forecasts that around 70% of the global population will be living in urban areas by 2050<sup>1</sup>. In other words, any discussion about the future trajectory of production, consumption and investment is ultimately a discussion about the trajectory of our cities.

Of course, urban trends in different parts of the world are likely to be very different. At one end, we have overwhelmingly rural countries like India that are urbanizing so fast that they are likely to have an urban majority within a generation. As rural migrants get routed by slums into the urban economy, we are witnessing the birth of a new middle class that will determine the economic and socio-political future of these countries. At the other end, there are long urbanized countries like the United States that are likely to witness major changes in their urban landscape due to changes in social structure and public/private indebtedness. Then there is newly urbanized China that will witness its own peculiar dynamics brought on by rapid aging and a unique residency permit system called *Hukou*. Furthermore, sitting at the pinnacle of the global economy is the network of inter-connected "global cities" like London, New York, Hong Kong and Singapore, whose economic power is disproportionate to their size and transcends their immediate hinterlands rather like Renaissance-era commercial hubs like Venice and Florence.

Many questions come to mind. What does a radical change in the urban landscape imply for American real estate and the country's way of life? What does the churn of migrants passing through Indian slums imply for the country's labor force? What does the Hukou system imply for the future trajectory of rural China? Does an age of uncertainty imply stagnation for Global Cities? In this report, we will explore some of these trends and try to discern their social and economic implications. We hope that this will allow us to work out the broad contours of the world that will emerge from the current financial troubles.

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## A Brief History of Urbanization

Cities have existed from the dawn of civilization and have always wielded disproportionate political and economic power. Cities like Rome, Delhi, Istanbul and Beijing have been capitals of great empires. Venice and Alexandria were not just commercial hubs but also centers for intellectual exchange and artistic innovation. Nonetheless, it must be remembered that the pre-modern world was overwhelmingly rural. At their height, great medieval cities like Vijayanagar (in southern India) and Angkor (in Cambodia) may have housed almost a million people, but this included large farming communities that lived within the urban agglomeration.

It is only with the Industrial Revolution, starting with Britain in the late eighteenth century, that we see a sustained shift of population from a life of subsistence farming in villages to the cities. As shown in the table below, the share of the urban population in England and Wales stood at 20.3% of the total population in 1800 but jumped to 61.9% by the last decade of the century. Germany, a later entrant to industrialization, saw the urban share of population rise from 5.5% to 28.2% over the same period. Contrast this with the experience of India and China, which did not industrialize during the course of the nineteenth century. The share of the urban population was below 4% in 1800 and had barely budged a century later.

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<sup>1</sup> "The State of the World's Cities 2010/11", UN Habitat.

**Table 1: Urbanization Rates Since 1500**

In percent	1500	1600	1700	1800	1890	2010
France	4.2	5.9	9.2	8.8	25.9	85.0
Germany	3.2	4.1	4.8	5.5	28.2	73.6
Italy	14.9	16.8	14.7	18.3	21.2	67.8
England & Wales	3.1	5.8	13.3	20.3	61.9	79.5
China	3.8	4.0	4.1	3.8	4.4	49.9
Japan	2.9	4.4	5.6	12.3	16.0	67.1
India	4.3	4.5	4.3	3.4	5.4	33.0

Source: *The World Economy – A Millennial Perspective*, Angus Maddison, OECD 2001; Deutsche Bank estimates

**Table 2: Population of Major Western Cities: 1500 – 1900**

'000s	1500	1600	1700	1800	1900
Amsterdam	14	65	200	217	524
Boston	NA	NA	NA	25	561
Lisbon	30	100	165	180	356
London	40	200	575	865	6,480
Madrid	0	49	110	167	540
Naples	150	281	216	427	564
New York	NA	NA	NA	79	3,437
Paris	100	220	510	581	3,330
Philadelphia	NA	NA	NA	41	1,294
Venice	100	139	138	138	152
Vienna	20	50	114	231	1,698

Source: *The World Economy – A Millennial Perspective*, Angus Maddison, OECD 2001; Jan Lahmeyer; *Four Thousand Years of Urban Growth: An Historical Census*, Tertius Chandler.

The process of urbanization in Europe and North America was far from painless. London's population rose from 40,000 in 1500 to 865,000 in 1800, but jumped to 6.5mn by 1900. As can be seen from the table above, this was urban population expansion on a scale never seen before. As rural migrants flooded in, London's urban infrastructure virtually collapsed and slums cropped up everywhere. By all accounts, conditions were probably worse than what we see today in the slums of Mumbai and Sao Paulo. One survey found that 1,100 lived in 27 small houses in one alley in St. Giles (i.e. more than 40 persons per dwelling). In Spitalfields, not far from Liverpool St. station, inspectors found 63 people living in a single dwelling<sup>2</sup>. Moreover, the air was thick with coal smoke and streets in the poor districts were floating with human and animal waste. Given the severe housing shortage, Victorian London saw a boom in what we call "low-cost housing". The invention of the Hoffman kiln allowed the mass production of the red bricks that were used to build mile upon mile of identical houses. It is said that Victorian Britain laid more bricks than all of previous history put together.

So why did so many people migrate to these horrible slums? Part of the reason was that they were pushed out by conditions that were often worse in the countryside (made even more untenable by the enclosure by landlords of previously open village commons). However, the migrants were also pulled in by the prospect that they (more likely their children) would be sucked into the new middle class. This possibility of upward mobility is fundamentally different from social relations that existed in agrarian, pre-industrial societies. The churn is best illustrated by the changing ethnic mix of New York's working class neighborhoods – a

<sup>2</sup> "At Home: A Short History of Private Life", Bill Bryson, Black Swan 2010

process that can still be witnessed. We will return later in the report to this point about upward mobility and churn.

Today, virtually all developed countries are overwhelmingly urban. The UK is 80% urban while the US is 84% urban<sup>3</sup>. However, not all forms of urbanization are the same. Britain and France are each dominated by a single large city. In contrast, Germany has a scattering of medium sized cities like Berlin, Munich, Bonn, Frankfurt, Hamburg and so on. In the US, the urban form is characterized by sprawling suburbs rather than well defined cities. Japan has an urban structure that is altogether different. Although it is a rich and advanced country, it is only 67% urban but with a disproportionate share concentrated in a single agglomeration – Tokyo, the world's largest city with a population of 36mn.

Many factors determine a country's urban structure but physical geography, transport infrastructure and political history are especially important. In the case of Germany, for instance, its decentralized urban model is due to the fact that it was a patchwork of kingdoms and principalities till the late nineteenth century and was unified into a single country only in 1871. Thus, it entered the industrial phase with a scattering of economic hubs. Over time, Berlin would probably have come to dominate the others but was held back by its division into East and West Berlin during the Cold War. Thus, Germany has continued with an urban structure that is far more dispersed than Britain or France.

Over the last half century, many parts of the developing world have also become urbanized although there are important regional variations. Latin America is far more urban than one would expect for its level of development. In Brazil and Argentina, for instance, the share of the urban population rose from 36% and 65% respectively in 1950 to 87% and 93% in 2010, according to UN estimates<sup>4</sup>. Eastern Europe is also largely urban with a population share of 72% for Russia and 61% for Poland. No one will be surprised to know that East Asia urbanized very fast in the last half century. South Korea's urban population has gone from being 21% to 84% of the total population between 1950 and 2010. In contrast, South Asia has been a very reluctant urbanizer till recently and two-thirds of India's population remains rural. As we will discuss later, this is about to change. Africa too remains mostly rural but many countries are witnessing a steady change.

**Table 3: Urbanization Since 1950**

In percent	1950	1960	1970	1980	1990	2000	2010
<b>Western Europe</b>	<b>63.9</b>	<b>67.9</b>	<b>71.5</b>	<b>72.8</b>	<b>74.3</b>	<b>75.6</b>	<b>79.3</b>
United Kingdom	79.0	78.2	77.1	78.5	78.2	78.7	79.5
France	55.2	61.9	71.1	73.4	74.2	77.0	85.0
Germany	68.1	71.4	72.3	72.8	73.4	72.8	73.6
<b>Eastern Europe</b>	<b>39.7</b>	<b>49.0</b>	<b>56.7</b>	<b>63.8</b>	<b>67.9</b>	<b>68.2</b>	<b>68.2</b>
Russian Federation	44.1	53.7	62.5	69.8	73.3	73.3	71.8
Poland	38.3	48.9	52.3	58.1	61.4	61.9	60.6
<b>Asia</b>	<b>16.3</b>	<b>19.8</b>	<b>22.6</b>	<b>26.1</b>	<b>31.3</b>	<b>36.6</b>	<b>44.7</b>
China	11.7	15.9	17.4	19.3	26.4	35.7	49.9
Japan	35.1	43.4	53.6	60.0	63.6	65.7	67.1
Republic of Korea	21.4	27.7	40.7	56.7	73.8	80.4	83.5
India	17.0	17.9	19.7	22.9	25.2	27.4	33.0
Indonesia	12.8	14.8	16.9	21.5	29.4	40.4	42.9

<sup>3</sup> By some definitions, the US is 91% urban.

<sup>4</sup> World Urbanization Prospects, 2009 Revision, United Nations Population Division. Note that estimates of urbanization can vary significantly between sources due to differences in definitions.

**Table 3: Urbanization Since 1950 (Cont')**

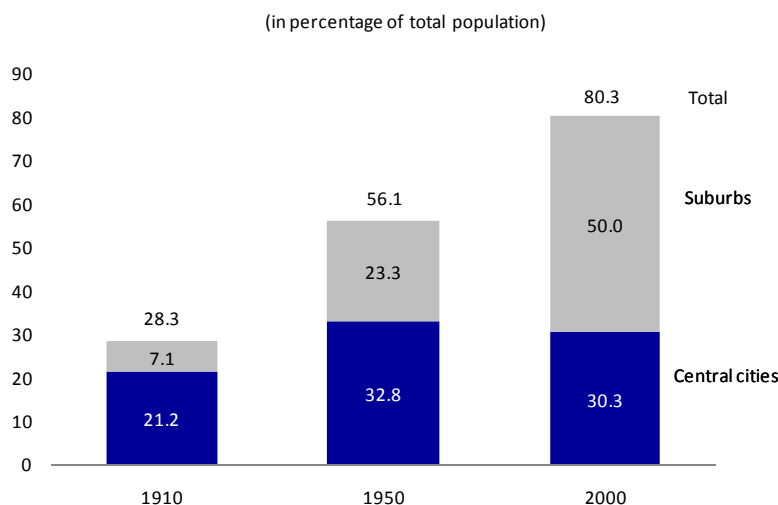
In percent	1950	1960	1970	1980	1990	2000	2010
<b>Latin America</b>	<b>41.4</b>	<b>49.2</b>	<b>57.1</b>	<b>64.4</b>	<b>70.2</b>	<b>75.5</b>	<b>79.4</b>
Mexico	42.5	50.1	59.1	66.4	70.7	74.4	75.9
Argentina	65.3	73.8	78.9	83.0	86.6	90.1	93.0
Brazil	36.2	46.1	55.9	65.4	73.9	81.1	86.7
<b>North America</b>	<b>63.9</b>	<b>69.9</b>	<b>73.8</b>	<b>73.8</b>	<b>75.8</b>	<b>80.5</b>	<b>83.8</b>
United States of America	64.2	70.0	73.6	73.6	75.8	80.6	84.2

Source: World Urbanization Prospects, UN Population Division; Deutsche Bank estimates

### The United States: Back to Density

The urban landscape of the United States witnessed major changes during the twentieth century. Two major and related changes stand out – metropolitanization and suburbanization. In 1910, 26.1mn people lived in major metropolitan centers while 65.9mn lived in rural areas or very small towns<sup>5</sup>. However, the proportions shifted in favor of metropolitan areas throughout the following century. By 1950, a majority of the population lived in large urban agglomerations and, by 2000, 266mn or 80% of the total population lived in metropolitan areas. In 1950, only 14 metropolitan areas had populations of at least a million but by 2000, there were fifty such concentrations that together accounted for 56% of overall US population. In 1950, the urban systems around New York and Chicago were the only urban hubs with 5mn million or more people. Their combined population was 12.2% of the country’s overall population. There are now at least nine such agglomerations that together account for almost a third of the American population.

**Figure 1: Population in US Metropolitan Areas**



Source: Demographic Trends in the 20th century – US Census Bureau

In the initial decades, metropolitanization was driven more by growth in the central cities rather than in the suburbs but, since the late 1940s, urban growth was driven entirely by suburbs. Indeed, the populations of many central cities declined as families moved out to the suburbs. By the beginning of the twenty-first century, 62% of metropolitan populations lived in suburbs. A few urban cores such as Manhattan and Boston have experienced a revival

<sup>5</sup> “Demographic Trends in the 20th Century”, US Census Bureau, 2002

from the nineties but sprawl in places like Houston, Phoenix and Las Vegas has meant that suburban expansion has continued to be the dominant theme.

The initial phase of suburban growth predates the automobile. Till the 1820s, most of Manhattan island was semi-rural and the city was confined to the southern tip. Washington Square was a poor African-American district and cemetery. In 1826, the city bought a large plot of land in the area and built a parade ground. A year later, horse-drawn omnibuses began to run a service from here to the main city. This encouraged some wealthier New Yorkers to build homes in what was then considered a suburb. The coming of steam-driven railways and electric street-cars (trams), however, dramatically changed the transportation dynamics of urban centers in the second half of the nineteenth century. Still, these innovations were in the nature of public transit systems and they continued to force concentration around nodes such as train stations. This changed with the automobile.

Readers should note that automobiles would not have had the same level of impact on American life but for two additional factors – one sociological and one of government policy. The most important manifestation of the latter was the highway building boom that began with the Eisenhower administration. With some justification, the Eisenhower Inter-state Highway system has been called the largest public works project in history<sup>6</sup>. Today it includes 74,000 km of roads that are built and maintained with tens of billions of dollars of state and federal funding. Since major metropolitan areas had a higher clustering of these roads, they pulled people in towards large agglomerations. At the same time, however, they allowed people to abandon the downtown for the suburbs.

At the time when Eisenhower was building his highways, a generation of war veterans was trying to get married, have children and set up homes. Real estate developers like Arthur Levitt saw this as an opportunity and bought out farmland at the periphery of major cities. They then mass produced large numbers of cheap houses. Cheap land and mass production meant that Levitt was able to sell relatively comfortable modern homes for USD8,000 in 1950 (about USD65,000 in today's prices). Furthermore, the Federal Housing Administration guaranteed 95% of mortgages and the GI Bill allowed for no-downpayment loans for veterans<sup>7</sup>. This allowed anyone with USD400 to buy a home. No wonder there was a suburban boom. Note how this process is self-reinforcing. As people moved out, municipal revenues stagnated in the old urban core. In turn, this meant that deteriorating urban services in downtown areas pushed out more people. Meanwhile, the expanding suburban population could use its growing political clout to demand more public spending on highways and other urban infrastructure for the suburbs.

In our view, however, the above dynamics are now changing as both public finance and sociological circumstances are going into reverse. Concerns about the state of federal, state and municipal finances have grown sharply in recent months. In August 2011, ratings agency Standard & Poor's downgraded the credit rating of 11,000 municipal issues to reflect the downgrade of the federal government. More downgrades are likely when the finances of individual municipalities are considered. Towns like Central Falls, Rhode Island, have sought Chapter 9 bankruptcy protection<sup>8</sup>. At the very least this means that the United States will not be able to afford further expansion of roads and other urban infrastructure for many years. Indeed, American city managers will be forced to recognize that urban services are much cheaper to supply in a concentrated urban form. The cost of supplying water to dense urban clusters, for instance, is almost half that of supplying it to dispersed suburbs<sup>9</sup>.

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<sup>6</sup> "Triumph of the City", Edward Glaeser, Macmillan 2011

<sup>7</sup> "Triumph of the City", Edward Glaeser, Macmillan 2011

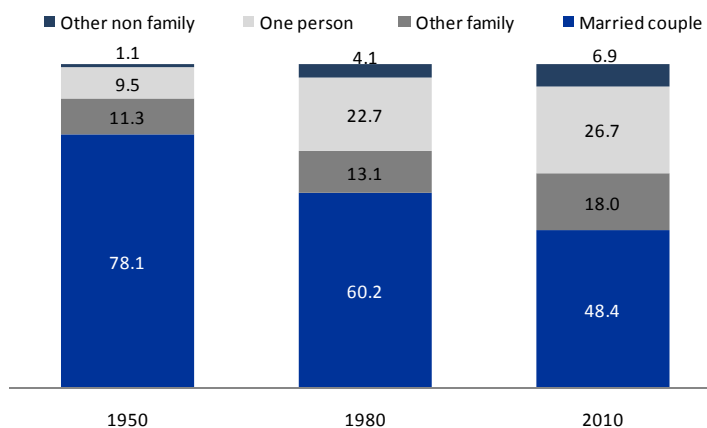
<sup>8</sup> "Dire Finances force R.I. City into Bankruptcy", Michael McDonald & David McLaughlin, Bloomberg, 2 August 2011.

<sup>9</sup> "Urban World: Mapping the Economic Power of Cities", McKinsey Global Institute, March 2011.

Meanwhile, the sociological structure of American society is also changing rapidly. In 1950, households based on married couples dominated society with a 78.1% share of all households<sup>10</sup>. Single-person households accounted for less than 10%. Over the following sixty years, however, the institution of marriage went into steep decline. Census data shows that married couples accounted for only 48.4% of households in 2010 and that their share is rapidly falling. In contrast, the single-person household now accounts for 26.7% of households. The share of other non-traditional households is also growing rapidly.

**Figure 2: Distribution of US Households by Type**

(in percentage of total households)



Source: Demographic Trends in the 20th Century – US Census Bureau

The residential requirements of this new social structure are drastically different from those of a family with mom, dad, and a couple of kids. The single individual, for instance, is likely to prefer an easily managed apartment and close proximity to bars, restaurants, cafes and other theatres of social interaction. An increasing number of these households will consist of older citizens – generally healthy and often still working – but wanting easy access to company, place of work and medical help. The implications of the above sociological trend is that the future trajectory of American cities is towards increased density as well as smaller houses/apartments. High energy prices could further add to a trend that may already be showing through in the recent shift in demand from single-family homes to multifamily homes<sup>11</sup>. Most commentators seem to see this as a temporary deviation caused by current financial stresses but, in our view, this may be a reflection of a long-term transformation of American society.

## China and India: The Tale of Two Giants

China and India were newly minted countries in 1950 and their urban populations merely accounted for 11.7% and 17% of their total populations. The ratio did increase over the next three decades but had risen only to 22.9% for India and 19.3% for China by 1980. Notice that India was marginally more urban at this stage. China then began to systematically reform its economy. Urban policy, including that for special economic zones, was an important part of the country's drive to mass mobilize labor and deploy it in export-oriented industries. As a result, hundreds of millions of migrants flooded into urban centers and the share of the urban population jumped to 50% by 2010. This led to the expansion of large cities like Shanghai but much of the growth happened in medium-sized cities, including brand new ones. In 1990, the urban agglomeration of Shanghai had 8.2mn people but by 2010 this had increased to

<sup>10</sup> US Census Bureau

<sup>11</sup> "Housing starts in US weaken as Construction Stagnation; Permits decline", Shobhana Chandra, 16th August 2011

15.8mn. This pales in comparison to the expansion of Shenzhen from 0.88mn to 8.1mn during the same period<sup>12</sup>.

**Table 4: Populations of select Chinese Cities**

('000s)	1990	2000	2010
Shanghai	8,205	13,243	15,789
Beijing	7,362	9,782	11,741
Guangzhou, Guangdong	3,918	7,388	9,447
Shenzhen	875	6,069	8,114
Wuhan	3,833	6,662	7,542
Tianjin	5,804	6,722	7,468
Dongguan, Guangdong	1,737	3,770	4,850
Guiyang	1,665	2,929	3,980
Xiamen	639	1,977	2,739
Suzhou, Anhui	258	1,509	2,137
Nanyang, Henan	375	1,512	2,115

Source: State of the World's Cities 2010/2011, UN Habitat

In some ways, the rural-urban migration that we have witnessed in China in the last few decades is similar to what we have seen in other developing countries as well as what was experienced by developed countries during their industrialization process. However, there is one peculiar difference in that this shift took place in the context of a system of residence permits called Hukou. This system has allowed the Chinese authorities to manage the migration process to some degree. Although living conditions for the migrants can be very harsh in the "urban villages" and dormitories where they live, the Chinese were partly able to avoid the extreme squalor that we associate with nineteenth-century London or today's Mumbai. Nonetheless, the Hukou system comes with the price, as rural migrants do not have full access to urban services or full right of residence in the city. Migrant workers who may have lived for long periods of time in the cities are still classified as rural Hukou.

Migrants in all societies dream of returning to their place of origin. This is called the "myth of return" because few people go back in reality. There is a possibility, however, that China may turn out to be the exception to this because the Hukou system discourages rural migrants from growing roots in their city of residence. Instead, rural migrants save as much as possible during their stay in the city with the aim of going back home with a bit of capital. A survey of migrant workers in 2007 found that rural migrant workers in Guangzhou had a household savings rate of 41% while those in Shenzhen were at 42%. In contrast, urban Hukou permit-holders had savings rates of 15.6% and 27.5% in those cities respectively<sup>13</sup>.

As pointed out in an earlier report in The Wide Angle series, China's workforce is already at its demographic peak and will begin to shrink by the end of this decade ("The End of Population Growth", 13 May 2011). It is possible that many migrant workers will begin to return home as they age. They will be encouraged by the fact that rural infrastructure is now significantly better than it used to be<sup>14</sup>. Many of them will probably use their capital to set up small businesses. This reverse migration could involve a very large number of people since China's latest census showed that 221mn, or one in six Chinese is now living away from his/her registered home. It is possible that net migration into cities will remain positive for

<sup>12</sup> "State of the World's Cities 2010/11", UN Habitat 2008

<sup>13</sup> "Urbanization, Hukou System and Government Land Ownership: Effects on Rural Migrants and on Rural and Urban Hukou Residents", Yasheng Huang, OECD Development Center, March 2010

<sup>14</sup> "China's rapid urbanization could prove illusory", Jamil Anderlini, Financial Times, 20th July 2011



some time, but it points to the likelihood that China's urbanization could ease off faster than most economists anticipate. In a sense, China could look a lot like Japan, where urbanization slowed down after the urban share of population crossed 60%, quite unlike Latin America where urbanization rates commonly drift over 80%.

Meanwhile, India has urbanized at a much slower pace than China over the last three decades. The share of urban population drifted up slowly in the eighties and nineties before accelerating in recent years. The preliminary report of the 2011 census does not include data on the urbanization but we estimate that the share of population is now at around 33%. In other words, India is still overwhelmingly rural but we believe this will change within a generation.

Unlike China, there is no permit system in India and migration patterns are largely laissez-faire. This has meant that big cities have so far played a much bigger role in India's urbanization than in China<sup>15</sup>. This explains why India's large cities are much more populous than those in China even though it is a less urbanized country. Delhi's population has jumped from 8.2mn in 1990 to 18.5mn in 2010 while that for Mumbai has gone from 12.3mn to 21.3mn<sup>16</sup>. Bangalore's population has gone from around 4mn in 1990 to 9.6mn in 2010. As can be seen in the table below, smaller cities have begun to exhibit exponential growth only in the last decade.

**Table 5: Populations of select Indian Cities**

('000s)	1990	2000	2010	
Mumbai (Bombay)		12,308	16,086	21,300
Delhi NCR		8,206	12,441	18,527
Kolkata (Calcutta)		10,890	13,058	16,300
Chennai (Madras)		5,338	6,353	8,600
Bangalore		4,036	5,567	9,589
Ahmadabad		3,255	4,427	6,150
Kanpur		2,001	2,641	3,500
Nagpur		1,637	2,089	2,800
Kochi (Cochin)		1,103	1,340	1,612
Vijayawada		821	999	1,270
Chandigarh		564	791	1,590
Kozhikode (Calicut)		781	875	1,030
Thiruvananthapuram		801	885	1,110

Source: UN Habitats, Indian Census 2011, IndiaOnlinePages, Thomas Brinkhoff: City Population, <http://www.citypopulation.de>

As millions of migrants move into Indian cities, they need to be matched to the myriad jobs being generated by India's booming economy. Our study of this process suggested that slums play a very important role as routers or clearinghouses that naturalize the rural migrant into the urban landscape. Slums provide much more than housing to poor migrants – this is where they get information about city jobs and get plugged into networks that can help them break into the job market. Often their first jobs are in the slums since the slums are full of informal businesses. We also found that a significant number of migrants were then able to use the slums as a stepping stone to move into the middle class. According to UN Habitat, 59.7mn people moved out of slum conditions in India between 2000 and 2010. The

<sup>15</sup> Migrants typically follow their relations and friends. Since large cities tend to already have a large migrant population, they also attract larger share of new entrants. Note how this is also true of Los Angeles and New York.

<sup>16</sup> "State of the World's Cities 2010/11", UN Habitat 2008

proportion of urban population living in slums dropped from 41.5% to 28.1%<sup>17</sup>. We are not suggesting that more should not be done to help India's urban poor, but merely pointing out that slums are not places of unmitigated hopelessness and squalor as suggested by movies like *Slumdog Millionaire* but are busy and evolving ecosystems that play an important part in the urbanization process (see box for a further discussion on how slums evolve).

As Indian cities expand, they are encroaching into the surrounding farmlands. Unlike in China, these lands are privately owned. Land prices are spiraling even as there is growing resistance from farmers to the acquisition of land by the government using eminent domain powers. The scarcity of cheap land is causing new urban developments to grow vertically. Thus, Indian cities have a unique morphology where the city center often consists of older, relatively low-rise buildings due to conservation laws, old building codes and the preponderance of public buildings while the outer edges have the taller, modern buildings. This is why it's a common remark by foreign visitors to Delhi that the suburbs appear to be in the middle of the city! As a broad generalization, this process is causing an odd social divide between the old elite who live in the city center and the new middle class that lives and works in tall, modern buildings on the city's edge. A fuller discussion of the long-term socio-political implications of this divide is beyond the scope of this report.

#### **Box 1: The Evolution of Delhi's urban villages<sup>18</sup>**

As Indian cities have expanded over the years, they have absorbed the surrounding agricultural lands. In some cases the old villages have been swept away. However, in most cases the old villages survive despite being engulfed by the expanding urban sprawl. Scattered across modern Indian cities, there remain enclaves where the contours of the old villages can be clearly discerned decades after the surrounding farmlands were converted into offices, roads, houses and shops. Often tucked away behind a modern building complex, they make their presence felt in many different ways – as the source of vagrant cattle, as homes to armies of informal workers, as the place to visit if one wants to buy bathroom tiles or electrical equipment. Many of these villages have been newly absorbed into the urban fabric but some are old and have been embedded in the city for generations. In Mumbai, the old villages of Bandra and Walkeshwar retain strong vestiges of their origins despite being located at the heart of a throbbing megapolis.

For the purposes of this report, we will limit ourselves to Delhi's experience, although the story can be easily generalized. There are 106 villages within Delhi state alone and there are many more in the wider metropolitan area if one includes Noida and Gurgaon. Our studies suggest that, in general, these villages go through the following cycle:

**Stage 1:** The farmers sell their land to the government or a developer. Some of them fritter away their newly acquired wealth but most redeploy it in businesses that leverage the emerging urban landscape – transportation, labor contracting, supplying construction materials and so on. Some of the more prosperous villagers buy themselves new homes and move out. However, they all usually retain their houses in the old village settlement. This settlement, dubbed as a "lal dora" area, is exempt from the usual municipal and building codes. The former farmers use the exemption to build a mish-mash of buildings with little regard for safety or ventilation. These become home to construction workers and other service providers who move into the area. Thus, the village turns into a slum with the old villagers as slum-lords.

<sup>17</sup> "State of World's Cities 2010/12", UN Habitat, 2008

<sup>18</sup> An earlier version of this section was published as "Villages that live in our Cities", Sanjeev Sanyal, Business Standard, 8 Sept 2010.

**Box Figure 1: One of the last remaining villages within Delhi State (2011)**

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**Stage 2:** After about a decade, construction work in that particular area begins to wind down. The construction workers drift away to other sites. New migrants move in – security guards, maids, drivers and other people who work in the newly built urban space. The commercial establishments too go through a parallel transformation. The shops selling construction materials and hardware are steadily replaced by shops selling mobile phones, street food, car parts and so on. For the first time we see private and, occasionally public, investment in amenities such as common toilets. As the migrants become more permanent, they bring in their families from their ancestral villages. This leads to an interesting supply-side response – the “English Medium” school! In our experience, language is seen by the poor as the single-most important tool for social climbing. Nathupur in Gurgaon is an example of a village that is currently moving from the first stage to the second stage. Next door, the village of Sikandarpur is rapidly shifting to the next stage thanks to a new metro line connection.

**Box Figure 2: Nathupur village in Gurgaon (2011)**

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**Stage 3:** After another ten to fifteen years, the village goes through yet another transformation. By this time, the surrounding area is well settled and open agricultural fields are a distant memory. We now see students, salesmen, and small businessmen move into the village. Some of them may be the newly educated children of migrants but they are a now a higher social class. The old villagers still continue to be the dominant owners of the

land but they now begin to invest in improving their individual properties in order to elicit higher rents (after all, they now have an location advantage in the middle of the growing city). In many instances, the owners have become politically important enough to lobby for public investment in basic drainage and sanitation. Public transport connections have a strong positive effect on the economic dynamism of the slum. The shops upgrade themselves and the old street food sellers become cheap restaurants. An “Aggarwal Sweets” is almost obligatory in the larger settlements.

### Box Figure 3: Mahipalpur Village near the International Airport (2011)



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**Stage 4:** The final stage in the process of transformation is that the old village gentrifies. This can happen in a number of ways. Since the early nineties, Hauz Khas village has become a warren of boutique shops, art galleries and trendy restaurants. Mahipalpur, near the international airport, has seen an explosion of cheap hotels in the last decade (see photo above). Similarly, Shahpur Jat has become home to a numerous small offices and designer workshops. In many cases, the old villagers have encashed their real estate and the ownership pattern has become much more mixed. The areas now grapple with the problems of prosperity such as inadequate parking.

#### What can we learn?

The evolution of urban villages reminds us that Indian slums are not places of hopelessness but are often industrious and changing ecosystems. The process of evolution has a big positive impact on the economic and social development of both the old villagers as well as new migrants. However, there are two important learnings. First, public investment in the “commons” speeds up the development process. Amenities such as common toilets, public transport and drainage can have an important impact on the quality of life of residents as well as attract new economic opportunities. Second, the process of adaptation depends on decades of steady investment by the owners. This is only possible where private property rights are clear. This is why the same process of organic evolution does not easily take root in the squatter slums of Mumbai. Slumlords charge exorbitant rents but do not invest in upgrades. Therefore, change usually requires an external intervention in Mumbai.

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## Implications for our Urban Future

In the early nineties, just as the internet and mobile telephony were catching on, it was common for academics and commentators to talk of the death of cities. It was believed that these communications technologies would make cities irrelevant as people could now live and work in remote locations without having to pay high real estate prices and suffer congestion. They could not have been more wrong as the twenty-first century has so far proved to be the golden age of cities. At one end, emerging markets have been urbanizing at an accelerated pace while, at the other end, global cities like London, New York, Hong Kong and Singapore have been booming. The gains from human concentration appear to be rising rather than falling despite the communications revolution. Why?

The experience of the tiny band of elite Global Cities is particularly instructive. Cities like London, Singapore, Hong Kong and New York are obviously very expensive places to live and yet people cannot seem to get enough of them. Their power is reflected in the fact that the mayors of London and New York are international figures whose prominence rivals that of national-level leaders. It turns out that certain kinds of cities flourish during an age of rapid change and innovation like what we are experiencing now. This is because such periods place a big economic premium on "soft" factors such as trust, creativity, risk-taking and the exchange of new ideas – all of which still require direct face-to-face interaction as well as a clustering of human capital and credible institutions. The European Renaissance was also such a time and this is why cities like Venice and Florence bloomed during that period. Notice how these cities were able to simultaneously leverage their human capital cluster in seemingly unrelated fields. The Medici family of Florence is today remembered as a patron of the arts and sciences but in reality they were Europe's most powerful bankers and were the first to use double-entry bookkeeping. Similarly, the Venetians were not just extraordinary architects but also invented trading in financial securities. The small city-state would dominate East-West trade for centuries.

The same set of factors mean that today's globalized world is not flat as suggested by writers like Thomas Friedman. Instead, we have a spiky world made up of a hierarchy of interconnected nodes that include Global Cities as well as major national hubs like Paris, Sydney, Frankfurt, Mumbai, Delhi, Boston, Seoul and so on. The emergence of Singapore as a major global node is particularly interesting because it established itself without the legacy of a large empire (London) or the backing of a large economy (New York/Tokyo). Rather, it won its place by carefully building up a cluster of human capital through deliberate government policy. Some readers may recall that we wrote almost a decade ago about the government's then-new strategy in a report called "Singapore: Small Country to Big City". The city-state now has a population of 5.1mn compared to 3mn in 1990. This is still small compared to other major urban agglomerations but it has a disproportionately large international influence.

**Table 6: Major Urban Nodes in the Global Economy**

Population in '000s	1990	2000	2010
<b>Europe</b>			
London		7,654	8,225
Berlin		3,422	3,384
Madrid		4,414	5,045
Rome		3,450	3,385
Paris		9,330	9,692
<b>Americas</b>			
Mexico City		15,312	18,022
New York		16,086	17,846
Los Angeles		10,883	11,814
Toronto		3,807	4,607
Sao Paolo		14,776	17,099
<b>Middle East and Africa</b>			
Dubai		473	938
Cairo		9,061	10,534
Johannesburg		1,898	2,732
<b>Asia</b>			
Shanghai		8,205	13,243
Delhi		8,799	13,459
Tokyo		32,530	34,450
Hong Kong		5,677	6,662
Mumbai		12,308	16,086
Singapore		3,016	4,017

Source: State of the World's Cities 2010/2011, UN Habitat; Thomas Brinkhoff: City Population, <http://www.citypopulation.de>; Deutsche Bank estimates

So, will this global network of major urban hubs continue to be successful in the future? We feel that they will remain very important in a globalized but rapidly changing world. Indeed, periods of change and uncertainty are especially good for these centers because of their flexible clusters of human capital, financial capital and global interconnections. In our view, the future will not alter the overall importance of these cities but we will probably witness a change in the relative importance of different hubs as the global balance of power shifts to Asia. The region already has heavyweights like Tokyo, Hong Kong and Singapore but we are probably witnessing the transformation of Shanghai from a national-level to a major international-level player.

Although the global urban network will remain intact, the underlying urban structure of many countries will change radically over the next couple of decades. As discussed earlier, the long-term urban dynamic of America is turning towards denser cities and an increasing share of apartments and condominiums at the cost of free-standing single family homes. As social aspirations drift away from white picket fences, we will probably find in the long run that even families with children may prefer living in apartments because of shared condominium facilities like managed gardens, swimming pools, security and sports facilities. This is already true in many Asian cities where families with children prefer living in condominiums rather than freestanding houses. In some cases, these trends may result in the revival of old city centers as has already happened in Manhattan, Boston and a few other cities. However, in other cases, it will lead to the densification of certain hubs within the existing sprawls even as traditional downtowns continue to decline. All this has important investment implications –

in particular, that it may not be wise to buy real estate in an urban area that is de-clustering even if it is very cheap. In fact, it is very likely that many failing suburbs will simply be abandoned.

Some parts of Europe have already embraced the idea of shrinking in order to restore urban dynamism. In 2000, Germany's Leipzig found that a fifth of the city's homes were vacant. The municipal government decided to demolish the abandoned houses and replace them with green spaces. This not only reduces the cost of maintaining unviable neighborhoods and releases space for other uses, but it also concentrates the remaining population. As we have seen, density of human capital can be a trigger for urban success in the post-industrial world<sup>19</sup>. Density also has the added benefit that it reduces the per-capita human impact on the natural environment. A comparison of Atlanta and Barcelona, for instance, found that the per-capita ecological footprint of the former city was four times that of the latter. The difference reflects the fact that urban services, including public transport, are far more efficiently provided in a compact cityscape<sup>20</sup>.

Meanwhile, China's urbanization momentum will ease off before the end of this decade. The urbanization rate will probably level off at 60-65% rather than replicate the Latin American experience of 80% or more. The combination of the Hukou system, aging and improved rural infrastructure will mean that net migration will be much lower than what we have seen in the last two decades. The likely return of many rural migrants is somewhat analogous to how Indian and Filipino workers in the Gulf countries return home with their savings. The Indian state of Kerala, for instance, sends a disproportionately large share of its workforce to work in the Middle East. The experience is that these workers return to their home villages with money to build modern homes and set up small businesses. As a result, the cities in Kerala have remained relatively small but the countryside is now a network of semi-urban clusters. This could mean that the next phase of China's development is more about the transformation of its villages rather than of its cities. In turn, this has important implications for China's ambitious plan to create 36 million units of public housing by 2015<sup>21</sup>. Of course, Chinese cities need to provide better housing for the urban poor but the quantity and location of these projects may need to adapt to changing requirements.

The main constraint on urban expansion in India is that land prices are now very high around the main cities and land acquisition through eminent domain is facing ever-growing opposition from farming communities. This is causing new developments to increasingly go vertical. Land prices are also forcing urban growth to cascade down to smaller centers. Large cities like Delhi and Bangalore have seen explosive growth since the mid-nineties. By around 2000, we saw strong growth in the next tier of cities such as Pune, Ahmedabad and Jaipur. In the last few years, towns like Coimbatore and Mysore have seen rapid expansion. The phenomenon is now trickling down to ever smaller "moufassil" towns. Transport linkages are a good predictor of future growth. This not only benefits the terminal hubs but also leads to a ribbon of developments along the way. Thus, urban India is beginning to look more like a spider-web of urban and semi-urban settlements along these transport corridors. Note that this is a major municipal management problem since most of the ribbon development is laissez-faire construction and its dispersed nature makes it difficult to supply urban services such as waste disposal and water supply. Still, this pattern has a degree of official sanction since the government is promoting projects such as the Delhi-Mumbai Industrial Corridor.

Overall, we feel that cities will continue to dominate the world economy for the foreseeable future. The urbanization of large emerging economies, if anything, will make them even more important in coming decades. Nevertheless, it is likely that net migration to Chinese cities will

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<sup>19</sup> "Triumph of the City", Edward Glaeser, Macmillan 2011.

<sup>20</sup> "The Alternative Urban Futures Report", Sanjeev Sanyal et al, WWF, 2009.

<sup>21</sup> "Cracks appear in Chinese push to Build", Dinny McMohan, Aaron Black & Esther Fung, The Wall Street Journal, 10 August 2011.

ease by the end of this decade while the villages will become semi-urban. In contrast, India's urbanization is set to accelerate although spiraling land prices will push the process to smaller towns and ribbons along major highways. There are even signs that Africa may be the next frontier in the story of urbanization. Meanwhile, Americans will have to learn to deal with denser cities.



# Appendix 1

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