THE PROBLEM WITH MEGACITIES
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“Demographics is destiny” has become somewhat an overused phrase, but that does not reduce the critical importance of population trends to virtually every aspect of economic, social and political life. Concern over demographic trends has been heightened in recent years by several international trends — notably rapid aging, reduced fertility, large scale migration across borders. On the national level, shifts in attitude, generation and ethnicity have proven decisive in both the political realm and in the economic fortunes of regions and states.

The Center focuses research and analysis of global, national and regional demographic trends and also looks into policies that might produce favorable demographic results over time. In addition it involves Chapman students in demographic research under the supervision of the Center’s senior staff. Students work with the Center’s director and engage in research that will serve them well as they look to develop their careers in business, the social sciences and the arts. They will also have access to our advisory board, which includes distinguished Chapman faculty and major demographic scholars from across the country and the world.
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Wilkinson College of Humanities and Social Sciences is committed to the larger university effort aimed at providing students with access to key researchers. Undergraduate research encompasses both scholarship and creative activity, and has the ability to capture student interest, create enthusiasm for and engagement in, an area of study.

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The ethos of BURN is to facilitate research at the individual and group levels.

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Executive Summary

No phenomenon more reflects the sheer power and appeal of urbanism than the rise of megacities, which we define as an urban area with more than 10 million residents (defined as areas of continuous urban development). Until recent decades there were only three — Tokyo and New York, joined by a third, Mexico City, only in 1975. Now the megacity has become a global phenomenon that has dispersed around the planet. There were 29 such cities in 2014 and now account for roughly 13% of the world’s urban population and 7% of the world’s total population (Figure 1).

Urban boosters such as Harvard’s Ed Glaeser suggest that megacities grow because “globalization” and “technological change have increased the returns to being smart.” And to be sure, megacities such as Jakarta, Kolkata (in India), Mumbai, Manila, Karachi, and Lagos — all among the top 25 most populous cities in the world — present a great opportunity for large corporate development firms who pledge to fix their problems with ultra-expensive hardware. They also provide thrilling features for journalists and a rich trove for academic researchers.

Like Mr. Glaeser, many Western pundits find much to celebrate about the megacities mushrooming in low-income countries. To them, the growth of megacities is justified because it offers something more than unremitting rural poverty. But surely there’s a better alternative than celebrating slums, as one prominent author did recently in Foreign Policy bizarrely entitled “In Praise of Slums.”

As demonstrated in our new paper on global cities developed with the Civil Service College of Singapore, many of these emergent megacities in Africa and elsewhere in the developing world lack of an economic basis sufficient to substantially compete beyond their national or nearby regional markets. As a result, the rise of megacities in the developing world may be laying the foundation for an emerging crisis of urbanity, where people crowd into giant cities that lack of the economic and political infrastructure to improve their lives. At the end of this paper, we try to suggest that they may be better solutions that steer growth to smaller cities and towns, and even seek out ways to improve the life in rural villages.

Urban and economic context

Cities have grown exponentially in size and population since 1800. Then, approximately 5% of the world’s population lived in cities. By 2015, the world’s urban population will approach 55%. In 1800, only Beijing had a population exceeding 1,000,000. Today, that number has increased to more than 450, and the largest, Tokyo, exceeds 35 million.

Cities have played a critical role in increasing the standard of living for people who, in rural isolation, often barely existed little above a subsistence level. This process accelerated rapidly in the years following 1800, when the scientific,
technological, industrial and medical advances nurtured the growth of cities. As urban economist Edwin Mills has shown, urbanization brought in its wake improved incomes, more employment opportunities, and created conditions that made business investments more lucrative.  

How cities develop will shape life even more in the future. Over the next 35 years, all world population growth will be in cities. Today, there are nearly 4 billion dwellers, and by 2050 there will be 6.3 billion, according to United Nations (UN) projections. Rural populations are expected to decline by 300 million. Nearly 95% of the city growth is expected to be outside the more developed world. This places enormous importance on megacities that are rising in these places. Even with the substantial progress in reducing world poverty, the concentration of growth in lower income cities presents formidable challenges for both policy makers and those who live there. As suggested in our aforementioned global cities paper, many of these cities are not well-suited to compete not only with established global hubs as New York or London, but also with much smaller, more efficient and productive global cities such as Singapore, the San Francisco Bay Area, Hong Kong, and even Seattle.

This lack of global reach — and the extensive poverty often associated with such developing world places — suggests that perhaps the enthusiasm about the emerging megacities expressed in some accounts may be misplaced. A recent National Geographic article, for example, celebrated the entrepreneurial spirit of Kinshasa’s slum dwellers, which is understandable, but underplayed the miserable conditions in which the majority of Kinshasa’s 9 million residents are forced to live. That city, which Belgian researchers described as an example of “aborted urban development,” suffers from high crime, poor drinking water, and pervasive informal housing. Similar conditions...
exist in many of Africa’s largest cities, which are growing as fast as any in the world. Even in those megacities — for example Mexico City, Sao Paulo Mumbai, Kolkata — that have enjoyed strong growth in recent decades, the pace of expansion seems to be slowing. This is particularly evident in the once much heralded BRICs countries — Brazil, Russia, India, China and South Africa. Many of these countries over the past 2 years that have seen their growth rates slacken, often by as much as 50%, from a decade earlier. This can be seen most notably in places such as Istanbul, whose long property boom, both in residential and commercial construction, appears to be winding down. Some analysts compare the situation in some of these countries to that faced in southern Europe, and the United States, leading up to the bursting of the property bubble. 

Yet, despite these problems, we should urban growth to continue to be strong as hundreds of millions of people are poised to move from the countryside. United Nations projections indicate that India’s urban population will increase nearly 250 million in 20 years, while China’s will increase 200 million, even as national population growth rates slow and even stall (in the case of China). 

The evolution of megacities

The modern megacity may have been largely an invention of the West, but it’s increasingly to be found largely in the East. The seven largest megacities are located in Asia, based on a roundup of the latest population data. The largest megacity remains the Tokyo-Yokohama area, home to 38 million, followed by the Indonesian capital of Jakarta, Delhi, Seoul, Manila and Shanghai (Figure 2).

With roughly 21 million inhabitants, the New York urban area was the world’s largest urban agglomeration from early in the 20th century until Tokyo surpassed it in the 1950s, now ranks eighth.

Sources: See Demographia World Urban Areas (demographia.com/db-worldua.pdf)
in the developing world. Karachi, Pakistan, has led the growth charge, with a remarkable 80% expansion in its population from 2000 — 2010. The growth economies of China and India dominate the rest of the list of most rapidly growing megacities.

China, not surprisingly, has the most megacities of any country, four. The second fastest-growing megacity over the past decade, Shenzhen, was a small fishing village not long ago that became a focus of Deng Xiaoping’s first wave of modernization policies. In 1979 it had roughly 30,000 people; now it is a thriving metropolis of 13 million whose population in the past decade grew 56%. Its rise has been so recent and quick that the Asia Society has labeled it “a city without a history.”

Older Chinese cities are also growing rapidly. Shanghai, a cosmopolitan world city decades before the Communist takeover of the country, expanded almost 50% since 2000. The ancient capital Beijing and the southern commerce and industrial hub of Guangzhou grew nearly as rapidly.

India matches Japan with three megacities, but they are all growing much faster. The population of Delhi, the world’s fourth-largest city, expanded 40% over the past decade; Mumbai, almost 20%; and Kolkata roughly 10%, a relatively low rate for a city in a developing country.

Other rapidly growing megacities are scattered throughout the developing world. In Nigeria, Lagos saw its population swell by over 48% over the past decade; the Thai capital of Bangkok and Dhaka, Bangladesh, both grew some 45%. The world’s second-largest megacity, Jakarta, expanded 34% and is now approaching 30 million (Figure 3).

As in the rest of the world, the rise of megacities in Latin America parallels rapid urbanization throughout the
region. The UN Population Division estimates that over 80% of the Latin American population now resides in urban areas and that 87% will live in cities by 2050. Argentina will reach the highest urbanization rate by 2050, at 95%. Put into perspective, this means that more than 19 of every 20 Argentines will live in cities. The urbanization rates of other Latin American countries will not fall far behind: Chile, Brazil, Venezuela and Uruguay will also surpass 90%, and México, Panama, Colombia, Ecuador, Perú, and Suriname will exhibit urbanization rates above 80% (Figure 4).15

In contrast, high-income countries in Europe and the United States, where population tracking is more reliable, grew relatively slowly. The only megacities with a purchasing power adjusted GDP of over US$40,000 that registered population growth over 10% between 2002 and 2012 were London and Moscow, which has expanded rapidly as the center of Russia’s resource-led boom. The population of Paris grew 8%; Los Angeles, 6%; and New York, barely 3% over the past decade.16

Japan, one of the world’s most urbanized major countries, has also logged slower growth. Tokyo, the great outlier in that country’s stagnant population profile, expanded 7%, Nagoya grew 6%, and Osaka-Kobe-Kyoto a weak 2%. The rapid population depletion in the rest of the country and a lack of immigrants suggest that Japan’s great cities will grow even slower in the years ahead, as the country runs short on migrants from rural areas and young people in general.17

So what do the numbers tell us about the future of megacities? For one thing, it’s clear that the most rapid growth is taking place in countries that still have large rural hinterlands and relatively young populations. These poor places — most with median incomes between Dhaka at US$3,100 per capita and Bangkok at US$23,000 — will continue to grow, at least until their populations begin to see the results of decreasing birthrates.

United Nations growth projections to 2025 suggest that the future list of megacities (Figure 5) will be dominated by such lower-income cities. In fact, 10 more megacities are likely to emerge by 2025, including Lima (Peru), Kinshasa (Democratic Republic of the Congo), Tianjin, Chengdu and Dongguan (China), Chennai (India), Bangalore and Hyderabad (India), Lahore (Pakistan) and Ho Chi Minh City (Vietnam). If the project-

### Probable Future Megacities: 2025 and 2030

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Sources: See Demographia World Urban Areas (demographia.com/db-worldua.pdf)
already seem to have reached a point of saturation. A generation ago, it was widely predicted that Mexico City would become the world’s largest city, with some 30 million people by the beginning of the 21st Century. Yet its growth has slowed to a modest rate, and is current population is 20 million. Lower Mexican birthrates and the development of other urban alternatives have made La Capital far less of a growth hub than once imagined. Similar processes can be seen elsewhere in Latin America, where fertility rates have been dropping to levels closer to American and Northern European norms, but not yet those of the ultra-low Japan or Southern European countries. Over the past decade (2000-2010) population growth was 15% in Sao Paulo, 12% in Mexico City, and 10% in Rio de Janeiro. These are huge declines from their peak growth rates between 1965 and 1975 when Sao Paulo grew 75%, Mexico City 60% and Rio de Janeiro 40%. These cities will continue to grow, but at reduced rates.

The best-positioned megacities in the coming decades are likely to be Chinese, and (to a lesser extent) those in India. China’s megacities all enjoy per capita incomes above US$20,000 and the vast scale of the country’s rural population suggests there is still room for growth. It will be perhaps another decade or so before the country’s low birthrate catches up with it, and slows urban growth down to western or Japanese levels.

India’s cities, notably Mumbai and Delhi, are not as wealthy as China’s, but are clearly getting richer, with Delhi getting close to the US$10,000 per capita income level. With a somewhat higher birthrate than its Chinese or South American counterparts and its continuing rural to urban migration, Indian cities can be expected to continue more rapidly at least for the next decade or so.

These trends, of course, may be altered by any number of developments, including the possible threats to cities from wars, environmental challenges or other large-scale disruptions. But we can say, with some confidence, that the world’s megacities will continue to become increasingly dominated by Asia and Africa, reflecting the protean nature of an urban growth pattern that continues to de-emphasize slower-expanding regions in the Americas, Japan and, of course, Europe.

Health and Quality of life

Increasingly, the megacity is increasingly a phenomena of countries that are struggling to find their way in the modern world economy. Size used to be more correlated with economic and political success and dominance on a global scale. Today, some of the largest cities are disproportionately poor, and seem likely to remain that way for the foreseeable future. Such problems are often ignored or minimized by those who inhabit what commentator Rajiv Desai has described as “the VIP zone of cities”, where there is “reliable electric power, adequate water supply and any sanitation at all”. Outside the zone, Mr. Desai notes, even much of the middle class have to “endure inhuman conditions” of congested, cratered roads, unreliable energy and undrinkable water.

These conditions reflect the inability of such megacities to handle rapid growth. Places like Dhaka, which gains as many as 400,000 new migrants from the villages annually, grows mainly in its slum, whose residents move to the megacity not for the bright lights, but to escape hopeless poverty, and even the threat of starvation, in their village. Some argue that these migrants are better off than previous slum-dwellers.
since they ride motorcycles and have cell phones. Yet access to the wonders of transportation and "information technology" is unlikely to compensate for physical conditions that are demonstrably worse than those endured even by Depression-era poor New Yorkers who at least could drink water out of a tap and expect consistent electricity, something not taken for granted by their modern day counterparts in Manila or Mumbai.  

More serious still, the slum-dwellers face a host of health challenges that recall the degradations of Dickensian London. Residents of mega-cities face enormous risk from epidemics and unsafely built environments. Traffic, as anyone who has spent time in these cities easily notices, poses particular threats to riders and pedestrian as alike. According to researchers Tim and Alana Campbell, developing countries now experience a "neglected epidemic" of road-related injuries accounting for 85% of the world’s traffic fatalities.  

This can be seen by examining one of the world’s most intriguing, important and, in many ways, highly challenged megacities — Mumbai. One telling indication of the difficulties the newcomers face is the relatively low level of life expectancy in the city — roughly 57 years — which is nearly seven years below the national average. Gaps in life expectancy could be found in other developing world megacities, including Tehran, Cairo, and Buenos Aires.  

Even with solid economic growth, megacities have not have become better places to live. In 1971, slum-dwellers accounted for one in six Mumbaikers; now they constitute an absolute majority. Inflated real estate prices drive even fairly decently employed people into slums. A modest one-bedroom apartment in the Mumbai suburbs, notes R. N. Sharma of the Mumbai-based Tata Institute of Social Sciences, averages around 10,000 Rupees a month, double the average worker’s monthly income.  

Similar, if somewhat less dire problems, can be seen in the megacities of the other great rising global power, China. Dense urbanization, notes a recent Chinese study, engenders more obesity, particularly among the young, who get less exercise, and spend more time desk-bound. Stroke and heart disease have become leading causes of death.  

Perhaps the best known result from intensified urbanization can be seen outside any window: pervasive air pollution. This problem has become so severe that it has led, even in authoritarian China, to growing grass-roots protests, many of them targeted at new industrial plants and other facilities located near cities such as Shanghai, Dalian, and Hangzhou. High degrees of pollution have led at least some affluent urban Chinese to move back towards the countryside as well as to cleaner, less congested regions in Australia, New Zealand and North America.  

The health situation is even worse in poorer megacities. Nearly two-thirds of the sewage in the megacity of Dhaka, with 15 million people, is untreated. Overall, the developing world like those of the early industrial era, pose a major health hazard to its residents. As Dr. Marc Reidl, a specialist in respiratory disease at UCLA, puts it, "megacity life is an unprecedented insult to the immune system."  

Denizens of these cities also live in an environment with very little exposure to nature. This (exposure to nature) has both mental and physical health implications, studies have shown, with substantial benefits to city-dwellers. Sadly, many developing cities have little such open space, which itself has both negative mental and physical health implications.
The Problems of Gigantism

Not surprisingly, the massive growth in many emerging megacities — often accompanied by rapid densification and the loss of cherished places — often occurs in places that lack responsive structures to deal with residents’ concerns.

In 2013, this issue came to a head in Istanbul, which is the most rapidly growing megacity in Europe. Faced with plans to bulldoze parts of Gezi Park near Taksim Square that is one of that ancient city’s most beloved spots, major protests erupted. This development was part of Prime Minister Recep Tayyip Erdogan’s grandiose vision of the city as, “the financial center of the world,” and the park’s neighbors and supporters took to the streets. The protests were directed against what has been described as “authoritarian building”— the demolition of older, more-human-scaled neighborhoods in favor of denser high-rise construction, massive malls, and other iconic projects.33

Other protests, usually more peaceful, but sparked by a similar revulsion against gigantism, have erupted in the megacities of Brazil, Rio de Janeiro, and São Paulo. There, local residents have accused the Government of putting mega-projects ahead of basic services such as public transport, education, and health care, particularly in the run-up to the 2014 World Cup and the 2016 Olympics.34

Excessive concentration and ultra-rapid development also accentuates the health problems discussed above. Air pollution increases with density.35 This is most evident in Asia, which accounts for half of the world’s most polluted cities. Among the ranks of megacities, Beijing and Shanghai rank among the most polluted, with Delhi now suffering the worst air conditions of any major city in the world.36 High-density is associated with higher rates of coronary disease, as well as psychiatric disturbances, notes a 2006 article evaluating the ecological consequences of the land use changes in Asia.37 In cities such as Manila, roughly one in three residents lives in shanty-towns, with high degrees of infectious diseases, including pneumonia, measles and cholera, which far more rarely are lethal in higher income countries.38

The Infrastructure Challenge

Arguably the biggest challenge facing the emerging megacities lies in lagging infrastructure. In the ultra-dense environment of developing country megacities, inadequate sanitation and poor hospitals exacerbate the health problems.39 Traffic congestion is also worsening. Nearly half of Mumbai commuters spend at least one or two hours to get to work, far more than workers in smaller rivals such as Chennai, or Hyderabad. 50% of formal sector workers in Mumbai expressed the desire to move elsewhere, in part to escape brutal train or car commutes; only a third of workers in other cities expressed this sentiment.40

This suggests that megacities will need massive new infrastructure development. This extends beyond simply transportation. Many of these cities are low-lying and prone to flooding. Incessant rain also causes drainage problems in megacities such as Mumbai and Kolkata. The threat of higher sea levels, according to some, suggests even greater threats to these cities, as well as other coast-hugging megacities such as Jakarta, Manila and Lagos. Some experts project flood losses worldwide are projected to grow from US$6 billion per year in 2005 to in 2050 to US$52 billion.41

These cities continue to add population, without the infrastructure that paralleled the growth of earlier western cities. Sao Paolo, notes urban historian
Peter Hall, has three times the population of London in its most dynamic period during the early 20th Century, yet has a far less well-developed urban transport system. In megacities such as Mexico City, much of the growth has been in less formal areas such as Nezahualcóyotl, where titles to property were irregular and basic services, such as water and sewer, are regularly not provided to all households.42

Under any circumstances, these burgeoning cities will require enormous investment. A recent McKinsey study suggests that developing countries will account for the bulk of US$10 trillion more of capital investment required to keep them running, even given slower overall growth in their populations.43

**The City of Disappointment**

Historically, cities have served as engines of opportunity. Yet, as we demonstrated our global cities paper, many of the largest cities in the high-income world, such as New York, are also the most unequal.44 And Gotham’s great rival, London, according to one recent study, now may be the most unequal major city in the Western world. Overall, in both the developing and high-income world, notes a recent Euromonitor International study, (larger) “city size remains the key explanatory factor for income inequalities across the world’s urban agglomerations”.45

These disparities are even more keenly felt in the developing world. Unlike the burgeoning cities of the last century — New York, London, Tokyo, Los Angeles — the many new megacities lack a compelling economic logic. Industrial growth paced much of the development of cities in the high-income world, followed by an explosion in business services. Industrial growth also drove the development of those in East Asia. In contrast, manufacturing is far less prevalent in places like South Asia; its share of Indian GDP is half that of China.46

As a result many of the megacities — including the fastest growing, Dhaka — are essentially conurbations dominated by very low income people; roughly 70% of Dhaka households earn under US$170 a month, and many of them far less. “The megacity of the poor,” is how the urban geographer Nazrul Islam describes Dhaka, his home town.47 If they didn’t offer more hope than the rural areas from which the urban migrants have come, these megacities would not be growing.

Although not generally as impoverished, many other megacities that we might refer to as “middle income” are also failing to create a better life for their burgeoning populations. Places like Tehran and Istanbul can be described as “cities of disappointment”. In many cases, high housing prices and a lack of space have already reduced the birthrate to well-below the replacement level. Increasingly, many women are choosing to remain single — heretofore something rare in these countries.48

In poorer countries — where much of the most rapid urban growth is now taking place — the sense of disappointment may be even more profound.49

Indeed, much of the population of most developing country cities — such as Mexico City, Cairo, Jakarta, Manila, Lagos, Mumbai, and Kolkata (all megacities) — continue to live in “informal” housing that is often unhygienic, dangerous, and subject to all kinds of disasters, natural or man-made. Moreover, many of these unmanageable megacities — most notably Karachi — offer ideal conditions for gang-led rule and unceasing ethnic conflict.50

These pressures are further enhanced by a lack of social mobility in many of these cities. In Mexico City, only four out of 100 persons whose parents belonged to the 20%poorest sector of the population...
have been able to join the most wealthy 20%. Close to 50% of those who were born in the poorest level have not been able to ascend socio-economically, and close to 60% of those who were born in the richest level have not descended.51

Similarly, the trajectory of Mumbai’s middle class remains uncertain. One scholar, Jan Nijman, suggests that most gains in recent years have accrued to the upper echelons of the middle class while “the ranks of the lower middle income classes have shrunk, and the ranks of the poor have expanded rapidly”. Much of the growth in a perceived middle class, Mr. Nijman argues, is based not on income but on consumption driven by credit.52 As in Mexico, much of the new employment is in the “informal sector”, that is, jobs that frequently lack any real social benefits. The informal sector — drivers, stall-owners, repair-people, household industries — account for much of the employment growth in both Mumbai and Mexico City. 53

Researcher Vatsala Pant estimates a monthly total household “middle class income” in Mumbai at 40—50,000 Rupees; equivalent to less than $1000 US dollars. Yet monthly salaries for teachers, police officers and other mid-level jobs are often half that amount. Not surprisingly, even these kinds of workers often find themselves — given the city’s high housing prices — living in slum neighborhoods, which are also known as jhopad-patti, jhuggi-jhopadi or busties. “It’s the dream of an immigrant for a place in Mumbai… and ends up with a slum”, she notes.54

Is there a better alternative?

Given these realities, perhaps we might consider a different approach to urban growth. It is clear that urbanization will continue, but in what form? Future urbanization does not need to be a choice between rural hopelessness and urban despair. The rise of a mass of poor slum-dwellers — estimated as a high as 1 billion — threatens the social stability not only of the countries they inhabit, but the world, as they tend to generate high levels of both random violence and more organized forms of thuggery, including terrorism. 55

Planners often link density with community, notes British social critic James Heartfield, but maintaining that “physical proximity that is essential to community is to confuse animal warmth with civilization”, It may well be that a more dispersed approach to urban development might make more sense. Many megacities suffer from the impact of what Lewis Mumford defined as “megapolitan elephantitis,” a total loss of human scale.56

Fortunately, an alternative structure of urbanization is beginning to emerge, one that emphasises a diversity of cities as opposed to concentration in gigantic agglomerations. An impressive new
Planners often link density with community, notes British social critic James Heartfield, but maintaining that “physical proximity that is essential to community is to confuse animal warmth with civilization”

and demographically, as growth shifts to 577 “fast growing middleweights,” many of them in China and India.

We can see this already in the shift of industrial growth to smaller cities in India. The national government has established an objective of an additional 25 million jobs for the Indian auto industry by 2016. It appears most will go to other states, such as Gujarat (home to newly elected Prime Minister Modi), West Bengal and Tamil Nadu, enriching cities such as Chennai and Ahmedabad, but not Mumbai.

Thus, the population of our now half-urban world does not typically live in the largest cities, but rather in smaller towns and cities with fewer than 500,000 residents. Nearly four times as many people live in smaller cities that few are aware of, such as, Modesto (United States), Gaoyou (China), Kakinada (India), Dire Dawa (Ethiopia) and countless others (Figure 6).

In the future, the biggest urban trend may be away from megacities to smaller, arguably more manageable, ones. In the coming decade, McKinsey predicts megacities will underperform economically

study by the McKinsey Global Institute, called “Mapping the Economic Power of Cities,” has found that, “contrary to common perception, megacities have not been driving global growth for the past 15 years”. Many, the report concludes, have not grown faster than their host economies.

The growing disconnect between people and planners is illustrated by the oft-ignored fact that around the world the great majority of growth continues to occur on the suburban and exurban frontier, including the fringes of virtually all of the world’s megacities. This, notes New York University (NYU) professor Shlomo Angel in his landmark book A Planet of Cities, is true both in developing and developed countries. As the World Bank has noted: “Cities became more packed and more sprawling at the same time.”

There needs to be a far-greater emphasis on smaller cities. After all, worldwide megacities account for only 13% of urban residents. More than twice as many people live in the middle-sixed urban areas with from 1 million — 10 million population, while 28% live in urban areas with populations between 100,000 — 1 million. Finally, 29% of urban residents live in urban areas with fewer than 100,000 residents (Figure 6).

Thus, the population of our now half-urban world does not typically live in the largest cities, but rather in smaller towns and cities with fewer than 500,000 residents. Nearly four times as many people live in smaller cities that few are aware of, such as, Modesto (United States), Gaoyou (China), Kakinada (India), Dire Dawa (Ethiopia) and countless others. (Figure 6)

In the future, the biggest urban trend may be away from megacities to smaller, arguably more manageable, ones. In the coming decade, McKinsey predicts megacities will underperform economically.
There are indications of substantially muted megacity growth in some nations. In Brazil, India, Mexico, Turkey and the United States, megacity population growth was less than that of cities with from 1 million population to 10 million population between 2000 and 2010 (Figure 7). The difference was greatest in the United States, where smaller city growth was three times that of the two megacities (New York and Los Angeles).

Indeed, since 1950, today’s megacities have tended to grow at a somewhat lower rate than other, smaller cities enjoying a growth rate 10% greater than that of megacities. (Figure 8).

There are indications that smaller cities may continue to grow faster than megacities. Currently projected megacity growth rates are somewhat below those for smaller city categories (Figure 9). In addition, growth may be slowing down in the largest megacities of China. Recently released 2014 population estimates indicate reductions in the annual growth rates of both Shanghai and Beijing.

These realities lead some advocates in developing countries to question the logic of promoting megacities. The best way to relieve the migration pressure on Mumbai, and other developing world cities, may be to improve the infrastructure and attractiveness of smaller cities, the suburbs of mega-cities, and even the villages.

Indeed in India, migration to large cities is beginning to slow down, as more potential migrants weigh the costs and opportunities of making such a move as opposed to staying closer to home and in response to a national program to provide greater unskilled employment in rural areas. The recent (2011) census of India indicated that an unprecedented number of villages had transitioned from rural to urban (predominantly non-agricultural employment).

This phenomenon has been called “rurbanization” and was an important provision of the campaign of India’s new Prime Minister Narendra Modi, who implemented such programs as Chief Minister of the state of Gujarat. Mr. Modi speaks of human settlements with the “heart of a village” and developing “the facilities of the city.” This phenomenon is also occurring in China, with perhaps the best example being Guangzhou in Fujian, which is transitioning from a collection of villages to an integrated urban area. This has occurred at lower population densities and typically occurs when growth is nearly exclusively driven by migration from outside the urban area.

Ultimately, a shift towards dispersion — both within regions and between them — could have a many positive effects. It would allow people more living space, and if employment also was also dispersed, a quicker and less rigorous commute, with related benefits gained in time and energy conservation. The potential benefits of dispersed economic activity can be seen, for example, in the
One challenge for cities like Mumbai — economically, socially and especially environmentally — may well be slower population growth. This would lead to a shift to smaller cities where costs are lower and workers’ wages go further. “We are inevitably getting more competition from elsewhere”, notes R. Suresh Kumar, human resource manager at Mumbai-based Associated Capsules. “2000 Rupees a month means nothing in Mumbai, but in Uttar Pradesh it really is meaningful”.

In the years ahead, companies like Associated Capsules are likely to relocate most operations to these cheaper areas. Yet this process will also create a situation, as has occurred both in London and Mexico City, where de-industrialization will leave many new migrants without decent prospects for upward mobility.

R.M. Sharma of the Tata Institute of Social Sciences, notes that as manufacturing and other industries move to smaller, more efficient and cost-effective cities, they remove many middle-income opportunities extending the gap between the megacity’s rich and poor. “The boom that is happening is giving more to the wealthy. This is the ‘shining India’ people talk about,” Sharma says. “But the other part of it is very shocking, all the families where there is not even food security. We must ask: The ‘Shining India’ is for whom?“

Ashok R. Datar, chairman of the Mumbai Environmental Social Network and a long-time advisor to the Ambani corporate group, suggests that Asian megacities should stop emulating the early 20th Century Western model of rapid, dense urbanization. “We are copying the Western experience in our own stupid and silly way,” Mr. Datar says. “The poor gain on the rich. For every tech geek, we have two to three servants.”

Mr. Datar suggests that developing countries need to better promote the growth of more manageable smaller cities and try bringing more economic opportunity to the villages. One does not have to be a Ghandian idealist to suggest that Ebenezer Howard’s “garden city” concept — conceived as a response to miserable conditions in early 20th Century urban Britain — may be better guide to future urban growth than the current trend of relentless concentration.

The “garden city” alternative could help ameliorate the downsides of mass urbanization in China as well, where the government is seeking to move 250 million more people from the countryside to urban areas over the next decade. “There’s this feeling that we have to modernize, we have to urbanize and this is our national-development strategy,” said Gao Yu, China country director for the Landesa Rural Development Institute, based in Seattle. Referring to the disastrous Maoist campaign to industrialize overnight, he added, “it’s almost like another Great Leap Forward.”

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**Projected Population Growth: Megacities & Other Large Cities 2014 to 2025**

<table>
<thead>
<tr>
<th>Category</th>
<th>Population Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>MegaCities Over 10M</td>
<td>21.2%</td>
</tr>
<tr>
<td>Cities 5M – 10M</td>
<td>24.7%</td>
</tr>
<tr>
<td>Cities 2.5M – 5M</td>
<td>22.0%</td>
</tr>
</tbody>
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THE PROBLEM WITH MEGACITIES 19
Rejecting gigantism for its own sake, “the garden city” promotes, where possible, suburban growth, particularly in land-rich countries. It also can provide a guide to more human-scale approach to dense urban development. The “garden city”, for example, is a primary focus in Singapore, Singaporean planners are embracing bold ideas for decentralizing work, reducing commutes and restoring nearby natural areas.

These ideas may be most relevant to cities on the cusp of rapid growth, such as Hanoi. As we walk through the high-density slums on the other side of the dike that protects Hanoi from the Red River, Giang Dang, founder of the nonprofit Action for the City, tells me that rapid growth is already degrading the quality of Hanoi’s urban life, affecting everything from the food safety to water to traffic congestion. Houses that accommodated one family, she notes, now often have two or three.

Expanding Hanoi’s current 3 million people — already at least three times its population in the 1980s — to say between 10 million and 15 million — may thrill urban land speculators but may not prove so good for city residents. Like Mr. Datar, Ms. Dang favors expanding conditions both smaller cities, and the Vietnamese countryside. “The city is already becoming unlivable,” Ms. Dang insists. “More people, more high-rises will not make it better. Maybe it’s time to give up the stupid dream of the megacity”. Such voices are rarely heard in the conversation about urban problems. But they embrace an urban future with radical new thinking. Rather than foster an urban form that demands heroic survival, perhaps we should focus on ways to create cities that offer a more a healthful and even pleasant life for their citizens.

This leads us to suggest we find new ways to continue population de-concentration policies through dispersing employment and better distribution of urban amenities throughout a country. In building or expanding new localities, we need to value and pay attention to human dignity, and not the latest urban design and planning fad.

The primary goal of a city should not be to make wealthy landlords and construction companies ever richer, or politicians more powerful. Nor should it be to elevate particular urban designs or strategies above the well-being of people. Urbanism should not be defined by the egos of planners, architects, politicians, or the über-rich, who can cherry-pick the best locales in gigantic cities. Urbanism should be driven above all by what works best for the most people.
THE PROBLEM WITH MEGACITIES
1. Urban areas are the city in its physical form, and include only developed areas. This is in contrast to the city in its economic or functional form, which is called the metropolitan area (the labor market). Metropolitan areas include areas outside the urban area (largely rural areas) from which employees are drawn to jobs within the urban area. There are no international standards with respect to delineating metropolitan areas. Urban areas are called “built up urban areas” in the United Kingdom, “population centres” in Canada and unité urbaines in France.


One caveat: Estimating population for comparably defined urban areas, particularly in the developing world, can be difficult. For example, there is considerable disagreement about the population of Lagos, where local officials claimed there were twice as many people in 2005 as were counted in the 2006 Nigerian census. Add the “missing” 8 or more million people and the population would be 22 million this year. The higher local count, however, has not been broadly accepted. The population of Karachi is also disputed, with some claiming a somewhat lower population than reported. Part of the problem is that the latest completely reported census in Pakistan was in 1998 with only spotty data released from the most recent count.


18. From the United Nations, national census authorities and other sources.


66. Based on end of 2013 municipal population estimates. Shanghai grew 3.5 percent annually from 2000 to 2010, but only 1.9 percent from 2010 to 2014. Beijing’s growth rates were 4.0 percent and 2.6 percent, respectively.


Design Notes

The Problem with MEGACITIES and the graphics utilize the following:

To achieve visual harmony a modified version of the grid Jan Tschichold conceived for his book Typographie was employed.

MINION PRO Chapman’s serif family, is a digital typeface designed by Robert Slimbach in 1990 for Adobe Systems. The name comes from the traditional naming system for type sizes, in which minion is between nonpareil and brevier. It is inspired by late Renaissance-era type.

BERTHOLD AKIZEDENZ GRÖTESK is Chapman’s san serif family. It is a grotesque typeface originally released by the Berthold Type Foundry in 1896 under the name Accidenz-Grotesk. It was the first sans serif typeface to be widely used and influenced many later neo-grotesque typefaces after 1950.

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Book exterior and interior design by Chapman University professor Eric Chimenti. His work has won a Gold Advertising Award, been selected for inclusion into LogoLounge: Master Library, Volume 2, and been featured on visual.ly, the world’s largest community of infographics and data visualization. He has 17 years of experience in the communication design industry. To view a client list and see additional samples please visit www.behance.net/ericchimenti.

Professor Chimenti is also the founder and head of Chapman’s Ideation Lab that supports undergraduate and faculty research by providing creative visualization and presentation support, which can include creative writing, video, photography, data visualization, and design. Appropriately qualified Chapman University undergraduate students staff the lab and help with the design and presentation of complex communication problems.
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