

The current protests in Hong Kong for democracy reflects only part of the issues facing Chinese cities, as they grow and become ever more sophisticated. In just four decades, China has gone from 17.4 percent to 55.6 percent urban, adding nearly 600 million city residents. And this process is far from over: United Nations projections indicate that over the next 20 years, China's urban population will increase by 250 million, even as national population growth rates slow and stall.

Overall this transition has been spectacularly successful. As it has urbanized, China, following the lead of Hong Kong, has become a much richer country, expanding its share of global GDP from 2 percent in 1995 to 12 percent in 2012.

China now boasts four megacities of over 10 million people, the most of any country. The population of Shanghai, a cosmopolitan world city decades before the Communist takeover of the country, has expanded almost 50% since 2000, and the ancient capital Beijing and the southern commerce and industrial hub of Guangzhou have grown nearly as rapidly. The U.N.'s growth projections suggest that the future list of megacities will include Chongqing, Tianjin and Chengdu.

Shenzhen, one of the four current megacities, epitomizes the speed of China's urbanization. A small fishing village along the Hong Kong border with a few factories when I first visited three decades ago, the city rose as the 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."

Shenzhen has not only grown but thrived over the past three decades, as was evident on my most recent trip. In contrast to the often impoverished slum cities of the developing world, China's cities have grown much as Britain's did in the 19th century, upon the back of rapid expansion of manufacturing and trade. This sets Chinese urbanization apart from India's; manufacturing's share of Indian GDP is half that of China. In the process, Chinese cities have become more tied to the global economy, exposing its people to international trends, as well as greater affluence. This is exactly what has happened earlier in Hong Kong, setting the stage for some of the recent unrest. At the same time, the leading cities of the West are, for the most part, barely growing, and much of that by dint of immigration. With plunging birthrates and generally anemic economies, the great cities of the Europe and North America are hardly likely to blaze a brash urban trail; they are more concerned with retaining what they can from their historical inertia. There is no city in the West — even Houston and Dallas-Fort Worth — that approaches the dynamism one now finds in China.

China's successful urban transformation now faces a challenge as the country's export-led economy weakens. Labor costs are soaring and young adults, some four times as many of whom have attended college than those who came of age a decade ago, have little interest in factory work. At the same time, many of China's most successful and

talented people are seeking out lives abroad; two-thirds of the country's affluent residents, according to one survey, are considering migrating overseas.

The labor crunch is most intense in China's coastal cities, home to most of the urban population. These face greater competition from less expensive urban areas further west, such as Chongqing and Chengdu. But even these areas are facing a labor shortage, forcing companies to fill their ranks with not necessarily voluntary student laborers. There is also growing competition as well in labor-intensive industries like textiles from cheaper cities in places like Vietnam, Indonesia and Bangladesh.

Recent attacks by Beijing on multinationals, charging them for corruption and anti-trust violations, could make things worse. For political reasons, the government has decided to persecute the very companies that account for half of Chinese exports, charging corruption and anti-trust violation. China, where ironically the public is more favorable than most Westerners to large corporations, now faces an investment downturn as foreign companies look for safer havens such as in Mexico or to come back to the U.S.

The logical solution to this challenge, particularly for coastal Chinese cities, is to move up the value chain, much as Hong Kong and Singapore have already done. This means a greater reliance on finance, business services and technology. Shenzhen, for example, looks to Silicon Valley as a role model. But their attempt is taking place in an urban environment very different than that nurtured in California suburban garages. Instead we see typically immense infrastructure projects like the 15 square kilometer Qianhai development near the city's main port. Qianhai hopes to lure service and tech employment from pricier, and for now, more unstable Hong Kong.

But in many cases, high-value industries depend on open access to information, something Beijing clearly sees as a threat to the political order; China's great Internet Firewall is getting, if anything, higher and more difficult to breach, to the detriment of local knowledge workers. Government authorities realize that Hong Kongers' access to western media, movies and culture makes them less pliable than those, even in neighboring Shenzhen, where access to major foreign publications, Google and many websites is highly restricted.

China is not only urbanizing, but doing it at extreme levels of density; barely four to six percent of all new floor space in the country goes to single-family houses. Even on the suburban periphery, there are few low-rise apartment buildings and even fewer houses; much of the construction, particularly for rural migrants, is also substandard, with buildings erected so close that sometimes residents of one can shake the hands of those next to it.

This has created a series of health problems. Dense urbanization, notes a recent Chinese study, has led to 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. Beijing and Shanghai rank among the most polluted major cities in the world, just behind Delhi. This problem has become so severe that it has led, even in authoritarian China, to grass-roots protests, many of them targeted at new industrial plants and other facilities near cities such as Shanghai, Dalian, and Hangzhou.

More serious still has been the impact on birth rates. Even though the government has been relaxing its long-held “one child” policy, the density of Chinese cities continues to help suppress birthrates. This relationship between density and low fertility can also be seen in similarly crowded Singapore, Taiwan and Hong Kong, where there is no official limit on having more than one child. In Hong Kong some 45% of middle-class couples have abandoned the idea of having children, not surprising since the cost of raising a child is now estimated at over \$700,000, more than twice than in the United States.

Given high prices relative to incomes, and dense conditions, Chinese cities appear to follow the same pattern, which over time is almost certain to slow economic growth as the population of elderly grows and the workforce shrinks. Already, notes National University of Singapore demographer Gavin Jones, the fertility rate of women in Shanghai has fallen to 0.7, among the lowest ever reported, well below the “one child” mandate and barely one-third the number required simply to replace the current population. Overall, the Chinese urban fertility rate is a weak 1.08.

Rather than look at the current unrest in Hong Kong as a singular example, we should understand that many problems faced in the former British colony are increasingly felt as well in mainland China. As cities reach middle class status and land prices soar, they need to move up the value scale, but this is very difficult to do under a fundamentally authoritarian system.

Joel Kotkin writes: While authoritarian structures can work in an industrial city, they may be less effective in a more information-based economy, in which companies need to adjust to rapidly changing attitudes and trends. The problem here is that, in an authoritarian state, controls over information are often deemed mandatory; in a sense, in an information-dependent economy, this is like trying to run a car with watered down gasoline. At the same time, the health effects of dense urbanism, and the massive pollution of the surrounding countryside, augur poorly for many of the largest Chinese cities, which will be forced to compete not only with more open economies, but with lower-cost cities across the developing world.

Ultimately, China, whose urban growth has been a great success story, now must consider changing development patterns, perhaps looking at lower density and more dispersed development. One promising sign is that China’s smaller cities, particularly in the West, are now growing faster — with encouragement from Beijing authorities — than megacities. Recently released 2014 population estimates indicate reductions in the annual growth rates of both Shanghai and Beijing.

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 spread out, a quicker and less rigorous commute, with related benefits gained in time and energy conservation. It would greatly help families and children by reducing the need for parents to migrate for work, separating as many as one in five Chinese families.

Clearly, new models are clearly called for, ones that look not only at bulking up cities, but humanizing them. This may be imperative if Beijing would like to avoid the prospect of a future characterized by an aging, alienated and increasingly unhealthy population.