

Myths and Realities of China's Urbanization

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Lu's recent research tries to link political economy with economic geography in an effort to analyze regional and urban issues. Lu is also interested in urban labor economics and studies how social interaction and knowledge spillovers affect employment and economic growth in the local labor market.

Introduction

At the root of China's many urbanization problems lie a number of misunderstandings about the nature of urbanization at all levels of society.

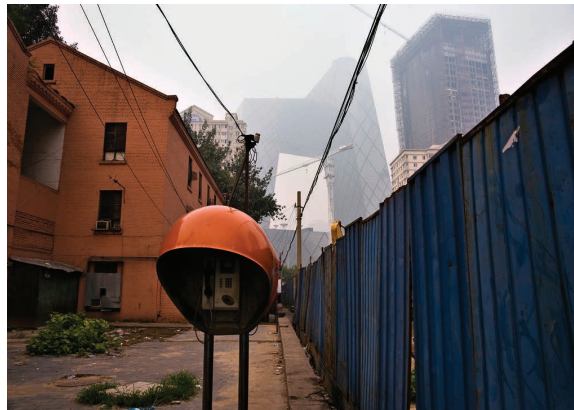
The most common of these misunderstandings are captured in several often-stated assertions: (1) urbanization in China will lead to a reduction of arable land; (2) urban expansion will inevitably mean a deteriorating quality of life, not least because of congestion and pollution; and (3) the costs of comprehensively reforming China's system of residency permits system (or *hukou*)—a system that, *if* reformed, would entitle migrant workers to the full range of public services—will threaten the country's fiscal sustainability.

Taken together, these three misconceptions have had a powerful impact on government policy in China. Indeed, as a direct result of these deeply held beliefs, Beijing has relied on administrative controls, not market mechanisms, to direct China's urbanization process.

But such an approach has yielded some major deficiencies in China's overall urbanization policy.

For one thing, Beijing has imposed tight *hukou* controls on the country's biggest cities, thus restricting their ability to grow. Second, the Chinese government has relied excessively on administrative power to accelerate urbanization in China's central and western regions, even though people are, in fact, moving largely

to the country's coastal areas. Third, Beijing has encouraged the development of small and medium-sized cities, but these are usually scattered far away from regional economic centers.



Source: Flickr/Jim Gourley

Unfortunately, then, these policies have been economically inefficient, and so they have hindered China's economic growth momentum in several ways. One way they have held China back is that the extensive growth of China's central and western regions has resulted in unsustainable levels of local debt. At the same time, the proportion of non-permanent residents in large cities (those who do not have an urban *hukou*) has continued to rise,

exacerbating potential social instability. Finally, unlike other countries that have experienced rapid urbanization, income disparities between urban and rural areas, as well as between different regions of China, have widened instead of narrowed.

This policy memorandum proposes several policy adjustments aimed at mitigating the distorted economic effects of the policies that have flowed from these misunderstandings. Five specific areas of China's current urbanization policy require changes:

1. China's *hukou* system needs dramatic change, not just in the third- and fourth-tier cities that are the current focus of policy but also in large and very large cities.
2. The allocation of construction land quotas should be consistent with the direction of labor flow.

3. China's fiscal transfer payment system should be shifted from support for productive investments to support for public services.

4. Economic growth and tax revenue targets should be deemphasized in the evaluation and promotion system for officials and cadres.

5. China's large cities should make better use of planning tools in metropolitan areas and urban cores. Only in this way can cities expand while mitigating urban ills such as congestion and pollution. For instance, through better design of infrastructure and public service provision, China can effectively respond to the challenges that have bedeviled urbanization in other countries.

Common Chinese Misunderstandings of Urbanization

A careful examination of China's current urbanization debate reveals that the central government has three primary concerns, all of which are misconceived:

- Urbanization will lead, inexorably, to a reduced supply of arable land.
- Urban expansion will “inevitably” lead to worsening pollution and congestion.
- Rapid *hukou* reforms, especially in large cities, will be too costly.

But empirical evidence from China—and comparative evidence from international experience—suggests

that these worries are unwarranted. So Beijing needs to purge these three misconceptions and the pernicious effects they have had on Beijing's urbanization approach to date.

Urbanization and Arable Land

That urbanization will result in the conversion of large amounts of rural arable land is a straightforward presumption. But population density is higher in urban than in rural areas, and density is highest in large cities. This means that the migration of rural workers into cities should actually help to protect the overall supply of agricultural land.

But in reality, this has not happened. And that is because the *hukou* system introduces distortions into the land market, making it difficult for migrant workers to relinquish rural residential land even after they have settled in cities.

To illustrate, Chinese data show that in 2008, rural residential land comprised 165,300 square kilometers (km²), while urban construction land comprised

40,600 km², just one-quarter that of rural residential land.¹ The current problem in China is that a “double occupancy”

phenomenon has appeared—that is, during the process of urbanization, cities need to increase available land to accommodate the residential and infrastructure needs of a large “floating population” of migrant workers. But since these rural migrant workers lack urban *hukou* and thus cannot put down roots in the city, they need to return to their rural homes, which of course also occupies land.

In short, if this migrant population can become permanent urban residents, then they would be able to relinquish their rural residential land, thereby helping to increase the supply of rural land.

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In addition, much of the reduction in farmland has more to do with Beijing's reforestation campaign, not necessarily urbanization. Since the mid-1990s, China has implemented reforestation on a large scale, which in turn has further reduced the stock of arable land. But urbanization is often mistakenly blamed for this type of land reduction. In 2011 alone, for example, reforestation took up three times more farmland than did urbanization.

Urban Livability and Design

A second common misperception is to directly attribute deteriorating livability to the expansion of the urban population. But such causality is tenuous at best, and is hardly supported by international experience when it comes to congestion and pollution, in particular.

Take congestion. The US experience shows that, on average, people living in more populous cities spend more time commuting. But a city's dimension is not a determining factor for commute time. In fact, as US metropolitan areas have become more spread out in recent decades, the commute time of an average worker living in these areas has *not* increased after adjusting for the change in metropolitan population.²

And here is another point of comparison: In the United States, there has been an increase in the use of public transport in large cities, which is part of the reason for longer commute

times compared to smaller cities. But if residents only using *private* vehicles were compared, then the difference in commute times between large and small cities would have been reduced, demonstrating that living in a larger city does not necessarily add to commute time.

The more important trend, then, is that during the expansion of large cities, suburbanization of the population and the expansion of jobs develop simultaneously. Thus residents living in the suburbs do not need to rush to the city center to work. At the same time, there is a greater proportion of driving among this suburbanized segment of the population.

Then there is pollution: It is commonly assumed that as cities expand, pollution worsens. But this is an oversimplification. International experience also shows that larger cities can be less carbon intensive and less polluted. In fact, larger cities typically rely on dense subway networks to solve the problem of intra-city travel. If coupled with restrictions on car use, car density in cities can be effectively controlled and vehicle emissions reduced.

Consider the example of Hong Kong, where licensing and parking fees, gas taxes, and environmental taxes have been increased. Likewise in London and Singapore, a congestion charge is collected for the use of certain road segments. Meanwhile, an analysis of carbon emissions from the commuting patterns of urban residents in 74 Chinese cities found that urban population density showed

a significant negative correlation with carbon emissions from taxis and public buses.³

Another important factor is that the economic structure of large cities tends to be more services oriented, compared to industrial cities, which makes the former more conducive to the reduction of pollution emissions. Indeed, even with the same industrial structure, a high-density, high floor area ratio development model is more conducive to achieving the same output using less energy and fixed asset investment, which will have knock-on effects in improving resource efficiency and reducing carbon emissions. (There is strong empirical evidence showing that the more concentrated the development of an industry within a province, the lower the pollution per unit of GDP.⁴)



Source: Flickr/Matt Ming

Hukou Reform and Fiscal Sustainability

The opposition of so many local governments to *hukou* reform has been based, first, on their forecast that granting full urban status to migrant workers would necessarily entail a heavy fiscal burden, but with no tangible short-term economic benefits. And this view seems to be reinforced by calculations

from a number of studies on the costs of urbanizing migrant workers.

These studies suggest that, at present, the average lifetime cost of urbanizing a migrant worker will fall between 100,000 yuan (\$16,130) and 140,000 yuan (\$22,580), and thus over the next 10 to 20 years, the total cost of urbanizing migrant workers in China will fall between 20 to 50 trillion yuan (\$3.2 trillion to \$8.1 trillion).⁵

But this grossly overestimates the cost of urbanizing migrant workers, since it tends to neglect economies of scale in public service provision and infrastructure.

For example, when a population doubles, the required increase in the length of a subway system is smaller than 100 percent. And this also applies to hospitals and schools, whose capacities can be easily adjusted to accommodate new demand. This implies that per capita public services and infrastructure investment for new urban citizens would be less than the current average expenditure.

As such, the per capita cost of urbanizing a single individual cannot simply be added together. Nor can the per capita costs for new population be deemed equivalent to the per

capita spending on public services and infrastructure for the *current* population.

Another problem is the use of double counting in calculating the cost of urbanizing migrant workers. Since the process of urbanizing migrant workers requires additional expenditures for cities, it can also mean a parallel reduction in rural public service expenditures.

Ultimately, calculating the required expenditure to urbanizing the migrant population should only be the per capita difference between rural and urban public service expenditures. And yet most of the existing calculation methods in China only consider additional urban public service costs once migrant workers are urbanized, while neglecting to account for potential savings generated from a reduction of rural public services.

To illustrate: in 2011, per capita spending on middle school students in China's urban and rural areas were 8,181 yuan (\$1,319) and 7,439 yuan (\$1,200), respectively—a difference of just 742 yuan (\$120). And the per capita spending on primary school students in urban and rural areas were 6,121 yuan (\$987) and 5,719 yuan (\$922), respectively—a difference of only 402 yuan (\$65).⁶

It is also significant that, when calculating the cost of urbanizing migrant workers, individual costs and public costs are not always carefully distinguished. For instance, the costs for which individuals are personally responsible should *not* be included in the accounting of public spending on urbanization.

In some calculations, all social security benefits for migrant workers are included as urbanization costs. But this ignores the fact that the majority of such costs are borne by individuals. The

“five insurances and housing fund” system offers an example. This is the primary social security mechanism

for urban residents, but the majority of it is paid by employers and individuals, with government subsidies accounting for a very small share. For instance, in 2011, the average per capita pension income in China was 5,951 yuan (\$960), while the annual per capita pension subsidies for urban residents was only 772 yuan (\$125).⁷

Most studies also include migrant worker housing as part of urbanization costs, based on the need to build social housing to accommodate the new population. But there is a significant problem in doing so. A large number of migrant workers have *already* been living in cities for years, and thus already rent accommodations. This means that cities do not, in fact, need to construct

A change in urbanization policy could effectively unlock the consumption potential of a population estimated to be 274 million.

large amounts of new low-cost housing to meet demand from new residents. Municipal governments only need to provide rent subsidies to disadvantaged groups when necessary.

Considering the issues noted above, some studies that use flow-of-funds accounting to calculate fiscal spending required to urbanize new migrant workers each year have found that the additional cost will be just 641 billion yuan (\$103 billion) annually.⁸ This is a much more manageable figure when compared to the 13 trillion yuan (\$2.1 trillion) in total government revenue in 2014, implying that the cost of urbanizing migrant workers in China is likely to be less significant than many have suggested.

That is not all. Even as it is important not to *overestimate* the cost of urbanizing migrant workers, it is equally important to consider the economic benefits derived from enfranchising a previously marginal population. Indeed, the urbanization of migrant workers can make major contributions

to urban economic development, which ultimately would translate into a new source of local tax revenues.

For one, urbanization of migrant workers can effectively increase cities' labor supply and thus alleviate some of the demographic pressures of an aging urban population. In addition, enfranchising new urban residents will increase the overall level of consumption in cities, helping to boost domestic demand.

Studies using 2002 data show that, controlling for other factors, consumption levels of the non-local *hukou* population (essentially, migrants) are about 30 percent lower than those of local *hukou* residents.⁹ While this gap was narrowed to 16-20 percent in 2007, the number of migrant workers has rapidly increased.¹⁰ This implies that the current *hukou* system has inhibited migrant workers' consumption. A change in urbanization policy could effectively unlock the consumption potential of a population estimated to be 274 million.

Deficiencies of China's Current Urbanization Policy

As a direct result of the misconceptions detailed above, Beijing has decided that certain state interventions are needed to tackle these supposed “problems.” But such excessive use of administrative power has yielded three major distortions in China’s urbanization process.

1. Tight Hukou Controls in China's Biggest Cities Restricts Their Ability To Grow.

In the 21st century economy, knowledge workers are increasingly important, and the production and dissemination of new ideas requires social interaction. Major cities are central to a knowledge economy because higher population densities and larger population sizes make cities the key nodes for social interaction and the dispersion of new ideas (economies of density).

In practice, this means that large cities become magnets for highly skilled human capital. Their labor productivity is also higher, thus urban hubs become engines for national and regional economic growth.



Source: Flickr/Bernd Thaller

When an economy enters the post-industrial stage, large cities exert an increasingly strong impact on the development of a diversified and highly productive services sector. Even in developed countries that have completed the process of urbanization, populations still agglomerate in large cities, with college graduates moving there.

This is no less true of China. In fact, in recent decades, Chinese cities with a high proportion of college graduates have seen that demographic increase to even higher levels.

Likewise, from an occupational perspective, cities with a significant proportion of high-skilled jobs have seen further increases.

When highly skilled workers agglomerate in large cities, it has the secondary effect of increasing demand for low-skilled workers, since low and high-skilled work can be complementary. For instance, high skilled workers can produce increased demand for low-skilled workers in services industries.¹¹ This means that agglomeration of highly skilled workers in large cities can stimulate more rapid population growth.

A country's urban landscape generally exhibits the following pattern: large cities are more focused on modern services industries, while small and medium-sized cities are more focused, relatively speaking, on manufacturing and some heavy industries—which require greater land area—and on servicing nearby agricultural industries.

But therein lies a problem for China's current urban policy: although the Chinese population is still in the process of agglomerating in large cities, the *hukou* system is inhibiting such agglomeration.

Government policy is oriented toward promoting the development of small and medium-sized cities and towns and preventing population flows into the largest cities.

This was reinforced in the 2014 State Council "Opinions on Further Promoting the Reform of the *Hukou* System." It called for an "all-out opening of *hukou* restrictions in towns and small cities, opening *hukou* restrictions in an orderly fashion in medium-sized cities, and the strict control of population sizes in very large cities." But as a result of such restrictions, China's urbanization level has lagged behind its economic development—its urbanization rate is 10 percentage points lower than countries at similar levels of per capita GDP.

2. Administrative Power Has Accelerated Urbanization, but in Regions Where the Population is Actually Shrinking.

Over the past 30 years, large populations have agglomerated in cities along China's southeastern coast, especially in the Yangtze River and Pearl River Deltas. Guangdong Province has attracted the highest population inflow: from 1982 to 2005, migrants in the province rose from 5.23 percent of the total migrant population to 22.37 percent. The proportion of migrants

moving to the Yangtze River Delta increased from 11.27 percent to 20.58 percent over the same time period.¹²

Based on an analysis of census data from 2000 to 2010 for 287 prefecture-level cities, a clear trend emerges of migrants increasingly agglomerating along the southeastern coast. The provinces (or municipalities) that attract the largest numbers of the floating population remain Guangdong, Zhejiang, Jiangsu, and Shanghai.¹³

But even as large population numbers have continued to be concentrated in large cities along the southeastern coast, the central government, by means of administrative intervention, initiated a significant shift around 2003 with regard to the interregional

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allocation of resources (including construction land quotas and fiscal expenditure).¹⁴

The process began in April 1999, when the State Council laid the foundation for the subsequent shift by approving the “1997 to 2010 National Land Use Policy Outline,” which stressed the integrated and balanced use of regional land. One major change was that the allocation of construction land quotas was used as a policy measure to support the economic development of the central and western regions. This was mainly reflected in the more stringent restrictions on the scale of construction land in coastal regions and in the Bohai Sea region.

After 2003, the supply of land distributed to China’s central and western provinces, as a proportion of

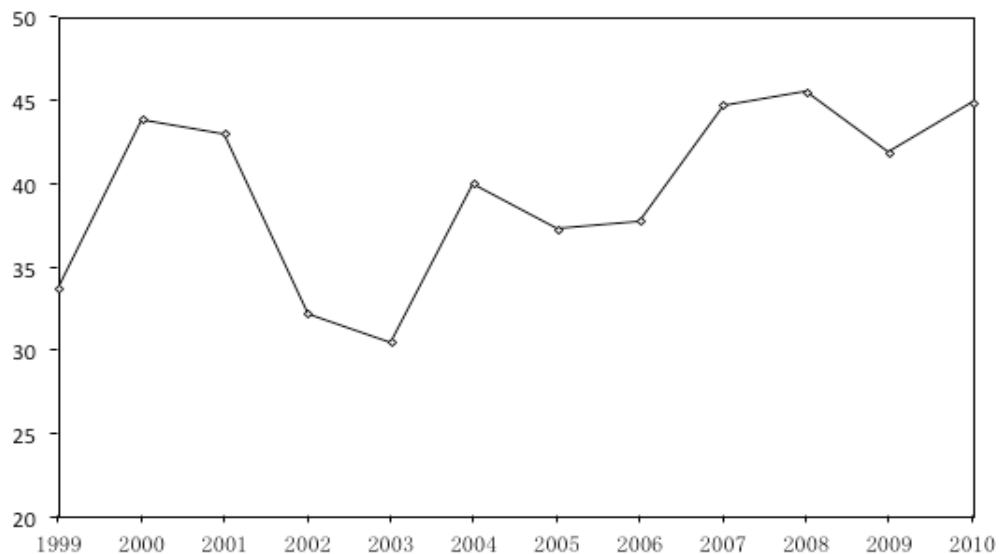
the total land distributed nationally, increased significantly (see Figure 1). Relatedly, the establishment of new urban districts has also been used as a measure to support the development of the central and western regions.¹⁵

In launching these policies, Beijing’s goal has been to equalize the development level across regions. But even if such policies *could* achieve this goal, it would come at the expense of distorted resource allocation and lower efficiency.

3. The Scattered Development of Small and Medium-Sized Cities Lacks Economies of Density.

In modern economies, scale effects produced by agglomeration promote the development of secondary and tertiary industries. In an open economy,

Figure 1. Proportion of Land Quotas Distributed to Inland Provinces (%)



Source: China Land and Resources Almanac; author calculations.

proximity to major coastal ports represents proximity to international markets, and proximity to large regional cities in turn represents proximity to domestic markets. Both are good conditions for economic growth.

Indeed, the growth rate of small and medium-sized cities largely depends on their distance from coastal ports and large regional cities.¹⁶ To put that a bit differently, the economic growth of large cities and small and medium-sized cities cannot be artificially separated. When administrative power is used to restrict the growth of large cities in order to promote the growth of small and medium-sized cities, it may end up hurting the growth of the small and medium-sized cities as well.

Local governments in China have largely ignored these issues. Instead, they have promoted the expansion of numerous new cities and urban districts without much of a strategy or clear objectives—scattering development across geographies and with little underlying rationale. And since the number of new cities and urban districts being constructed is too high, initial land area and population projections usually end up overshooting reality. For many local governments, the main operating principle seems to be, “if you build it, they will come.”

To illustrate, by the end of February 2013, 105 new urban districts were under construction in China, 19 of

which exceeded 1,000 km², 10 of which between 500 and 1000 km², and 40 of which were between 100 and 500 km².¹⁷

According to the National Development and Reform Commission (NDRC), China’s principal planning agency, if the total number of planned new cities and urban districts were added together, they would be able to accommodate a projected population of 3.4 billion, or about 2.5 times China’s total population.¹⁸ Among the new urban districts already built, *actual* population numbers are far below projections, especially relative to the districts’ land area.

Why does this matter? The principal reason is that when the population numbers of these new districts fall below forecast, it directly constrains the development of infrastructure, such as transportation, water and electricity systems, telecommunications, and waste disposal. At the same time, it results in the underutilization of existing infrastructure.

For instance, the construction of new cities is often accompanied by the development of industrial parks so, at present, almost every county in China has an industrial park. But a large number of industrial parks, due to lack of scale, do not possess the infrastructure needed to attract investment, not to mention that much of their financing depends on government debt.

The overbuilding of many new cities and urban districts in China has led to the inability of such cities to absorb adequate levels of population and industry. That in turn has contributed to the emergence of ghost towns.

The resulting situation has been characterized by high investment, low output, and a significant local government debt burden. Industrial development is taking place everywhere in China, but in ways that have yielded redundant industries across regions. Among neighboring cities, and even within the *same* city, it is common to find duplicative industries, which then incentivizes vicious competition to attract investment and generates low productivity.

The blind expansion of cities in this way has distorted the proper allocation of both economic activity and resources, such as land and labor. Since the early 1990s, the degree of economic agglomeration in Chinese cities has significantly increased, while the degree of agglomeration of population (whether measured as total urban population or non-rural population) has seen a limited increase.

Meanwhile, as a result of China's planning and management of construction land quotas, and the prohibition on the interregional trade of construction land quotas and requisition-compensation balance of agricultural land between regions, a serious gap has emerged between urbanization of land and urbanization of the population.

For example, from 1990 to 2006, a sampling of Chinese cities showed that the average annual expansion rate of newly constructed urban district areas was 7.77 percent. In contrast, growth of the non-agricultural population over the same period was only 4.56 percent, a difference of 3.21 percentage points.

If these sample cities are divided into eastern, central, and western regional subgroups, a comparison of the subgroups shows that only China's eastern cities have seen a relatively small gap between the urbanization of population and the urbanization of land. In contrast, in the central region subgroup, the expansion rate of newly constructed urban districts has exceeded the growth rate of the non-agricultural population twofold. And for the western region subgroup, this ratio approached 3:1.¹⁹

Socioeconomic Consequences of China's Distorted Urbanization Policy

All of these distortions have had negative effects on economic growth, social cohesion, and efforts to address inequality.

For one thing, Beijing's effort to administratively allocate land and labor has produced a growth model that is distorted and unsustainable. As a result of these policy shortcomings, China's economic growth momentum has been hindered, and efficiency has suffered.

The extensive growth of China's central and western regions has resulted in an unsustainable level of local debt. And the proportion of the non-permanent resident population in large cities has continued to rise, exacerbating prospective social risks.

But this is not all. Unlike other countries that have undergone urbanization, the income disparities between urban and rural areas in China, and between different regions of the country, have not significantly narrowed.

Reduced Economic Growth Potential and Low Efficiency

To see this in action, consider what has happened to one part of the country as a result of market forces. Because of

the growth and operation of markets, economic agglomeration has continued along China's coast, where large cities continue to attract an influx of labor. Yet the government has significantly strengthened policies aimed at directing resources toward the central and western regions via administrative means, as discussed above.

But although this balanced regional development policy has indeed led to more convergence of the level of economic development across different regions, it has come at a price—

namely, insufficient labor mobility, government intervention in resource allocation, and factor price distortions. Indeed,

the cost to the Chinese economy has been a significant slowdown in total factor productivity (TFP) growth since 2003 and lower resource allocation efficiency. These threaten the sustainability of China's current regional development policy.²⁰

Indeed, the results of the current administrative approach have not been particularly promising. Take as an example the regional concentration of enterprises. The proportion of enterprises in China's eastern region has barely changed since 2003, and has in fact seen a slight uptick from

In effect, China has developed into a segmented "dual society" within its cities, where the urban floating population is stuck at lower income levels.

73.2 percent in 2003 to 74.1 percent in 2007. This suggests that the preferential policies favoring China's central and western regions have not, in reality, reversed the trend of enterprises agglomerating in the east.

Moreover, from 2002 to 2009, employment growth in the eastern region was above the national average, but below the national average in the central and western regions. This illustrates that investment-driven economic growth in the central and western regions has not had a strong impact on job creation either.²¹

An Increased Debt Burden as a Result of Extensive Growth

Since around 2004, China's central and western provinces have grown faster than eastern provinces in terms of GDP. But looking at GDP growth alone, without examining whether local industries are competitive, paints an incomplete picture and offers a distorted view.

It is important to note that such growth performance was achieved on the back of massive public investment in infrastructure, and in the numerous industrial parks and urban districts favored by local governments, which borrowed heavily and ran up debts. Yet this approach has not yielded corresponding economic growth, which means the same amount of capital could have resulted in higher output if it had been invested elsewhere.

Viewing this based on the scale of local government financing vehicle bonds issued (basically equivalent to municipal bonds), the proportion of debt issued by central and western provinces has, on the whole, risen in recent years, surpassing 50 percent in 2012. Yet the share of *national* GDP produced by the central and western provinces was just 41.5 percent in 2011.²² This means the total debt ratio in the central and western provinces is rising, which is worrisome.

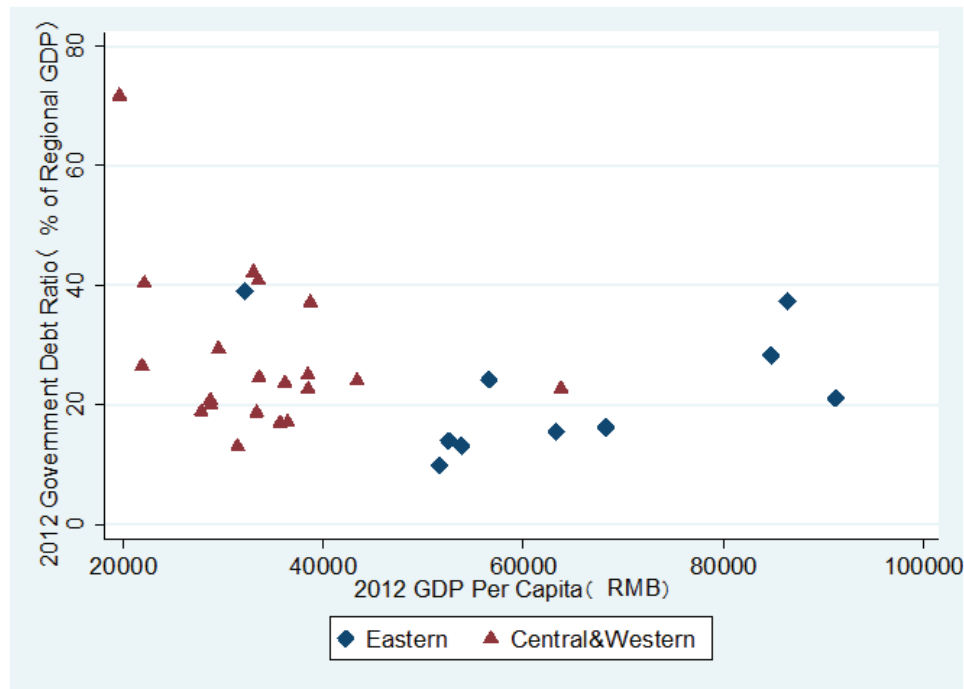
In 2013, for example, the government reported debt stock data for each province, and then calculated the ratio of debt divided by GDP for each of these provinces. It revealed that China's central and western provinces generally had low per capita GDP and high debt ratios (see Figure 2).

The Proportion of Migrants in Large Cities Continues to Rise, Heightening Social Risks

Much of China's urban population lacks the security, status, and standing that comes from possessing a local *hukou*—required to access urban social services. And with urbanization in China continuing apace, the proportion of migrants will increase as well.

The result, for quite some time, has been the creation of not just an urban-rural gap but also an urban-urban gap between the urban *hukou* population and those who hold a non-urban *hukou* but already live in cities. In effect,

Figure 2. Provincial Debt Ratio and Per Capita GDP



Source: Municipal Audit Bureau; 2012 China Statistical Yearbook.

China has developed into a segmented “dual society” within its cities, where the urban floating population is stuck at lower income levels and faces discrimination in access to public services such as education.²³

This social stratification within Chinese cities, once calcified, will be difficult to manage. And that could bring in its wake a range of social consequences not conducive to urban stability. Ultimately, segmentation within cities affects levels of social trust, welfare, and happiness.

For instance, according to empirical research in Shanghai, the migrant population exhibits lower levels of trust toward area residents, lower levels of

social trust, and lower levels of public trust.²⁴ And the income gap between the urban *hukou* population and migrants has, similarly, resulted in lower levels of happiness.²⁵

But the urban floating population also lacks channels that can effectively represent their interests. If migrants are less actively involved in public participation, this can be partially chalked up to the fact that the Chinese system places constraints on their public participation.²⁶ The relatively disadvantaged members of the urban floating population also tend to live in close quarters,²⁷ further exacerbating social tensions and pressures.

Increasing Income Disparities Between Rural and Urban Areas

Urbanization has had the perverse effect of widening, not narrowing, China's urban-rural income inequality, which has long been an important contributor to China's overall income gap. In fact, perhaps 70-80 percent of the interregional income disparity can be attributed to the gap between urban and rural incomes.²⁸

That is surprising because international development experience suggests that, as urbanization progresses, the urban-rural income gap should narrow, not widen. For instance, South Korea basically eliminated its urban-rural income gap in 1994; Sri Lanka and Taiwan, too, saw their urban-rural income ratio fall below 1.4 in 1995.²⁹

The mechanism by which urbanization *should* reduce income inequality is twofold: First, during the process of urbanization, the transfer of surplus rural labor to the higher productivity urban sector can increase labor productivity. Second, with the reduction in surplus rural labor, the labor force that remains in rural areas should obtain more per capita arable land resources, which in turn brings economies of scale in agricultural production.

But in China, this pattern has been interrupted, and the reason is largely attributable to the *hukou* system. That system hinders labor mobility, so that the scale of rural labor flow into urban areas is inadequate. Once migrants have moved to cities, they still experience a large discrepancy in terms of income earned and access to public services, compared to the urban *hukou* population.

Another factor that has worked against China is that arable land resources are difficult to transfer. This has made economies of scale in the agricultural sector difficult to achieve.

Consequently, urbanization thus far has not served the function in China that it has in other countries. Although urbanization, on its own, *can* reduce the urban-rural income gap through economic policies that favor cities,³⁰ this has not been the case in China's process of urbanization.³¹

Ultimately, this means that China will need to bridge the urban-rural divide and promote mobility of urban and rural factors of production, such as labor, as a necessary condition to reduce the income gap between its urban and rural areas.

What China Should Do

At present, two systems hinder the flow and distribution of factors of production between urban and rural areas and between regions. These are primarily the *hukou* system and the land allocation system.

For China, the structural problem that makes finding a solution much harder is that under the country's current tax sharing scheme, local governments shoulder the expense of public services. Because public services provided by local governments are often linked to *hukou* status, such a system also becomes a barrier to labor mobility.

This means that if China is to promote labor mobility, a series of comprehensive reforms must be implemented. The starting point should be the *hukou* system.

1. China Needs Dramatic Hukou System Reform in Large Cities and Very Large Cities.

Currently, the employment destination for most of the inter-regionally mobile labor force is large cities, which means the tensions created by the *hukou* system are more prominent there. And especially in China's eastern region, sizable migrant populations have agglomerated principally in very large cities.

One implication is that so long as the *hukou* system exists, the underlying problem of how to formulate criteria for granting a *hukou* will remain. The key to meeting this challenge will be to identify those who are in pursuit of *employment*, not merely public services. A preference in granting *hukou* should be given to those who are seeking to work and live in the same location over a long period of time.

This means that *hukou*-granting criteria should: (1) use employment and social security payment records as the basis, and (2) prioritize length of employment and length of residence in the same location.

This would replace existing thresholds—for instance, using educational attainment and technical ability as *hukou*-granting criteria. For college graduates, the net effect would be that their actual employment situation would become the principal condition for obtaining a *hukou*. This would replace the practice of setting *hukou* thresholds in advance by weighing criteria such as the college attended and the subject of study.

2. China Should Allocate Construction Land Quotas in Accordance with Population Flow Trends.

Construction land quotas should be allocated in accordance with population

flow patterns. To achieve this, land and *hukou* reforms need to be pursued jointly.

The Chinese government has already proposed that construction land quotas be linked to the size of the floating population that needs to be absorbed. But with respect to the stock of rural construction land (and especially residential land), joint land and *hukou* system reforms would allow rural residents who have already worked and lived in cities for a long time to transfer corresponding construction land quotas for residential land in their hometowns to the cities where they are employed.

Typically, any reduction in farmland due to urban expansion has to be compensated with new farmland elsewhere. So a rural migrant could, for example, give up his home and the parcel of land on which it sits—effectively converting it back into new farmland—and then be allowed to trade the land use rights (for urban expansion) for social security.

Such a reform would have the net effect of assuring construction land quotas for urban expansion, while also increasing farmland in rural areas. At the same time, rural citizens who give up their residential land use rights can be given priority access to urban *hukou*.

In this way, construction land quotas can be leveraged to realize the value-added benefits of land on the outskirts of cities, which in turn can provide a new

source of funding to help rural migrant workers obtain public services and social security.

Furthermore, construction land quotas corresponding to rural residential land can become valuable assets, helping to improve the asset income of rural citizens (especially rural citizens in remote areas). After rural residents transfer the rights to use construction land quotas that correspond to their residential land, contracted agricultural land can be transferred to the rural collective for compensation, or else subcontracted or shared in such a way that future farming income is shared.

3. China's Transfer Payment System Should Be Shifted from Supporting Productive Investment To Supporting Public Services.

When labor moves freely, there are scale effects in the provision of public services. And this means that the locations from which migrant workers depart will face difficulties providing public services.

For this reason, China's central government needs to strengthen its provision of local public goods. Through fiscal transfers, Beijing should promote the convergence of basic public services between urban and rural areas and between different regions of the country.

Such steps could help to reduce the amount of rural labor flow that results

from migrants' effort to access public services in more developed regions. In the future, transfer payments from the central government to local areas should be invested more in public services, along with infrastructure development that will generate revenues. Direct investment should be reduced.

4. Economic Growth and Tax Revenue Should Be Deemphasized in The Performance Evaluation for Government Officials.

Joint reforms to China's land and *hukou* systems would aim, principally, to encourage the redistribution of factors of production between regions. But it is inevitable that this will require adjustments in the relationship between central and local governments, as well as between regions.

If labor flows freely between regions, and if the reallocation of construction land quotas between regions is achieved, this is bound to result in slower economic growth in the areas that migrants leave behind. So local officials cannot be evaluated solely on the basis of growth. If they are, then the officials whose regions are expected to be hardest-hit by migrant outflows will, logically, resist reforms.

This means that Beijing needs to make major adjustments to the evaluation system for government officials, taking into account both per capita GDP (or

per capita income) growth and total GDP growth. The more economically developed the region/province, the more weight should be placed on total GDP growth. In contrast, the more economically underdeveloped the area, the more that average per capita GDP (or per capita income) growth should be the focus.

5. Scientific Planning within Large Cities Should Be Given More Weight, Thus Helping To Respond To The Challenges of Livability and Quality of Life.

Finally, large cities should lean on scientific forecasting of future population growth in order to rationally plan infrastructure and public services. The conflicts between supply and demand of infrastructure and public services can best be resolved by increasing *supply*, rather than by curbing demand through *hukou* controls.

In China's largest cities, urban planning should be revised. Convenient public transport networks must be developed, and the integration of social security and public services promoted within metropolitan areas. Jobs and public services should be consistent with the spatial distribution of the population, whenever possible. This would help solve the commute problem of "job/life separation," as well as have a positive effect on the problems of congestion and pollution.

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compensation was given to rural citizens during the rural land expropriation process. For a relatively long period of time, urban public services (such as education and healthcare) were financed by the government, while corresponding expenditures in rural areas were financed by individuals. This has only begun to change in recent years.

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Paulson Policy Memorandum

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