

China : Land Policy Reform for Rural–Urban Integration and Sustainable Urbanization

Introduction

Land reform is a key part of contemporary China's economic transition and development. The reform and opening up process in China was initiated from rural land reform in the late 1970s and the early 1980s. With the introduction of the Household Responsibility System (HRS) in the early reform period, agriculture shifted from a collective-based farming system to a family-based one. This brought about robust growth in agricultural output and farmers' income throughout the first half of the 1980s (Lin et al 2003, Huang et al 2009). The rural land reform also laid a solid foundation for the fast growth of township and village enterprises (TVEs) afterwards. Without the success of rural land reform as the first push, one cannot even imagine the subsequent reforms in urban China that has generated the nearly double-digit growth rate in the past three decades. One cannot also think of China could shift from a closed plan economy to an increasingly open market economy.

Since the early 2000s, in particular after China's accession into the World Trade Organization in 2002, the Chinese economy has entered a new phase of growth. There has been a consensus in Chinese academia and policy circle that industrialization, urbanization and globalization have been the driving forces behind China's robust growth in this period. It is precisely in this period that land-related issues have become prominent as the country rapidly industrializes and urbanizes.

First, for industrialization and urbanization to happen, there needs to be conversion of agricultural land that allows the building of factories and urban housing and infrastructure. This would involve the displacement of farmers from land around the cities in the process of urbanization. Second, as industrialization and urbanization proceeds, it is also necessary that a set of institutions are in place to encourage farmers to move from rural to urban and from agriculture to manufacturing and service sectors. This would further require a way to finance such migration and insure the migrating farmers throughout what is inherently a risky process (Todaro, 1969; Stark, 1991). Land is an important element in migration since it is indispensable in providing decent and affordable housing for migrants so that they can settle down in cities on a permanent basis. Finally, since the process of industrialization and urbanization is gradual, the system must allow those who are left behind in the first

wave of migration to be able to access to resources so that they can prepare themselves to move in the coming years either in this or even the next generation (Johnston and Mellor, 1961).

However, precisely because there are inherent weaknesses in China's land system, land-related issues in China's fast urbanization become increasingly acute in the past decade. Under the current land requisition system, fast urbanization has led to tens of millions of dispossessed farmers left undercompensated. Under the current rural construction land management system, farmers are legally disallowed to develop their own land for non-agricultural purposes. This makes the provision of affordable housing with decent living conditions and adequate public services such as physical infrastructure and education extremely difficult. The hundreds of millions of Chinese rural migrants have to live either in the employer-provided dorms or in the "urban villages" with poor planning and infrastructure. Unable to settle down in cities on a permanent basis, the large number of migrants, who are already earning most of their incomes in the cities and who had no intention of returning to the countryside, are still unwilling to give up their agricultural land back home. This, in turn, makes it difficult for those are left behind in the countryside to expand their scale of agricultural production and to increase their agricultural incomes .

This background report aims to look at the critical deficiencies in China's system of land policy as these pertain to rural-urban integration and urbanization. We will look at the design of China's land management system and examine how the system gets abused in the broad political economy context. We will also look at China's tax assignment system, the land use planning system, the governance structure of villages, the cozy relationship between government and business and examine how they have shaped China's urbanization and more generally the country's economic development, in particular the distortions that ensued. We will propose the directions and sequencing for future reforms that would help to address the existing distortions.

The rest of the report proceeds as follows. In section II, we will discuss the role of land as a key policy instrument employed by the Chinese local governments in their industrialization and urban development drive. This is followed by an analysis how the instrumental use of land has shaped China's growth and urbanization model and the economic, social and political implications of this model. In Part III, we will discuss the main challenges in China's land requisition system and rural collective land management system. An analysis of the existing land reform initiatives both at the central and at the local level is then provided and the inadequacy of such reform initiatives in terms of improving land use efficiency and promoting social justice is discussed. In Part IV, we propose an integrated and gradualist land-Hukou-fiscal reform package to address the challenges in China's land management system and unfinished urbanization. Part V concludes.

1 Instrumental Use of Land in China's Urbanization and Local

Development

Land became a key instrument in China's local economic development since the mid-1990s. This had to do with a major change of central-local relations, i.e., the 1994 tax-sharing reform. The 1994 tax reform raised the central share in government revenues (World Bank, 2002). Local governments, on the other hand, found their share shrinking in the late 1990s and early 2000s (Wong, 1997, Wong and Bird, 2005). A further hit to local public finance in the mid-1990s was large scale restructuring and privatization of local government-owned SOEs (state-owned enterprises) and TVEs (township and village enterprises) that contributed a great deal to local revenues in the 1980s and the early 1990s. As industrial over-capacity emerged in manufacturing by the mid-1990s it became clear that SOEs and TVEs, instead of being a tremendous asset, turned to a liability for many local governments. To save them from endless financial drains, regional governments initiated the privatization of small SOEs. When the new century dawned, the majority of SOEs and TVEs in the country had finished the transformation (Qian, 2000).

As a result of these changes, local governments metamorphosed from asset owners to tax collectors. This redefinition of state role had powerful impacts on local governments' behavior. As asset owners, local officials had strong incentive to support their own "children" and ensure their profitability. Being tax collectors, however, they must cater to all potential tax contributors. Besides more efficient and profitable private enterprises, foreign firms started to enter China en masse in the second half of the 1990s. Unlike SOEs and TVEs, these firms were mobile and were more responsive to local policy incentives. They would relocate to another jurisdiction if the latter offered more favorable tax deductions and better infrastructures. Local governments must compete fiercely to grow their tax bases.

Fiscal centralization and privatization worked together to exacerbate the fiscal strain of local governments. As a result, local governments' resources could not keep up with the increasing fiscal obligations, including supporting retirees and laid-off workers from former SOEs and fulfilling various unfunded mandates from the center (Tsui and Wang, 2004). To make up for the revenue shortfalls, local governments gradually discovered the value of land. Cheap land now became a key instrument in regional competition for mobile tax bases. As the de facto owners of urban land, local governments could sell land use rights to industrial investors for 50 years, businesses for 40 years, and residential housing for 70 years. During the 2000s, land leasing fees have grown very rapidly and constituted a big part of local fiscal revenues. What is more, when urban land was used up, local officials had the legal authority to convert farmland. Therefore, local revenues would grow with urbanization. Since then, requisitioning farmland, leasing land, and managing urban expansion have become

the main business of China's local governments.

Local officials were particularly keen on attracting industrial land users for revenue reasons. In terms of taxes, manufacturing businesses mainly generate two kinds of revenues for local governments, i.e. VATs and enterprise income taxes. Ultimately, only 25% of VATs and 40% of enterprise income taxes will stay locally. However, it has become a common practice since the late 1990s for regional authorities to rebate all enterprise income taxes for the first three years and half in the next two years. Moreover, in order for the enterprises to settle in their jurisdictions, localities must spend a large amount of financial resources on basic infrastructures, including land, road, water, and electricity. Nevertheless, because of the fierce regional competition, local governments often had to offer manufacturing investors with cheap land and sometimes even leased land to industrial investors free of charge. The questions that naturally follow are why is manufacturing so desirable? How can local governments secure other financing to subsidize manufacturing in the short or even medium term? It turns out that local governments have developed a clever strategy to exploit this linkage and keep their development continued (Tao et al, 2009, Tao et al 2010).

Figure 1 sketches a simplified analysis. All localities essentially deal with two kinds of businesses: manufactures and services. As discussed above, manufacturing enterprises bring stable VATs and enterprise income taxes. What appeals to regional governments even more is their ability to spill over and foster service industries. Once factories start to operate, workers and managers living in the cities and towns have the financial means to improve their lives. Services and businesses such as shopping malls, restaurants, entertainments, banks, and real estate developers sprout up to cater the growing needs of these people(Lin and Ho, 2005, Tao et al 2010).

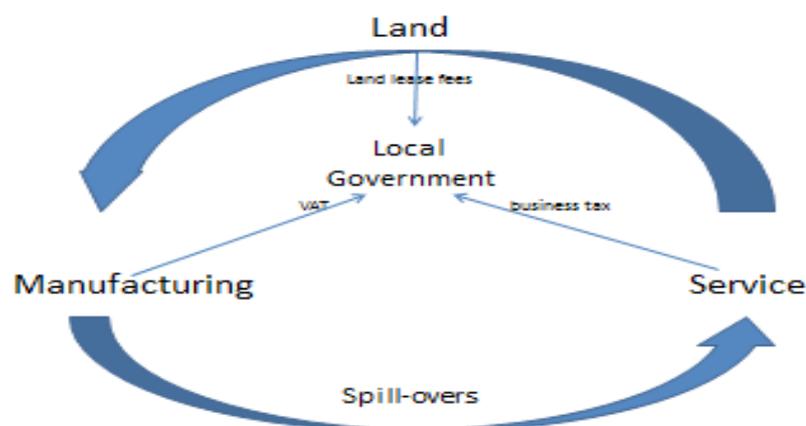


Figure 1. Local Government Development Strategy: Manufacturing, Service, and Land

In recent years, we have conducted many interviews on local development practices and, almost without exception, local officials emphasized the importance of industrial spillovers from manufacturing to service in their decision-making. Therefore, from a revenue perspective, manufacturing not only generate VATs and enterprise income taxes directly, but also contribute to growing business taxes, a tax assigned solely to local governments. Since manufacturing growth could stimulate local service sectors that generated handsome business tax and land leasing fees, subsidizing manufacturing land would be worthwhile. In particular, significant profits could be generated by more competitive public auctions of commercial/residential land.

The past decade also witnessed a gradual geographical expansion of land developmentalism. Initially, large scale industrial park and urban construction unfolded in coastal areas in the late 1990s. Since the early and mid-2000s, inland areas started to catch up in this industrialization and urbanization drive (Lin, 2007). Inland localities did not join the regional manufacturing competition in the beginning due to relatively poor endowments such as infrastructures. As their infrastructures began to improve, inland regions were finally ready to compete for investments. Another equally important factor was the rural tax reform introduced between 2002 and 2006, which caused severe revenue shortfalls among inland governments. The rural tax reform deprived local governments in agriculture-based inland regions of the right to collect revenues from agriculture through formal taxes and informal charges. Unable to continue revenue collection on agriculture, local governments in inland China had to engage in the fierce regional manufacturing competition in this period.

From hindsight, the emergence of land developmentalism was not an accident, but a natural outcome of China's unique land regulatory regime after fiscal recentralization in mid-1990s. Here China's land requisition system under which local governments have monopolistic control over land conversion from rural to urban use played a pivotal role. Local governments are de facto owners of all urban land in their jurisdictions. They can determine how land is used and collect revenues from leasing out land use rights on the market. Land in rural areas, on the other hand, is owned by rural collectives. Therefore, in each locality, there are two parallel land ownership regimes and only local governments have the power of crossing this line and convert rural land for urban use. It is illegal and strictly forbidden for village collectives to directly lease land to urban users (Lin, 2007; Zhu and Prosterman, 2007, World Bank, 2005; Lin & Ho, 2005). This de facto regional monopoly of land supply allows local officials to discriminate against certain land users and leverage land for development. Local governments were found to strategically limit the amount of land for commercial and real estate businesses in their jurisdictions so prices would continue to rise (Tao et al, 2010; Lin & Yi, 2011; Wu, 2010). Service businesses had no choice but to pay local governments high land lease fees. Because limited land supply

weakened competition, service providers passed the costs to local residents.¹

Under China's current development model, local governments rushed to build more and more industrial parks and development zones. By the end of 2003, the total number of industrial zones and parks had reached 3,837. Among them, only six percent (232) had received approval from the central government. Provincial governments approved twenty-seven percent of them (1,019). Various city, county, and township governments had taken their own initiatives to get the vast majority of these zones (2,586) up and running. By 2006, the figure further jumped to 6,015 (Zhai and Xiang, 2007). That was about two industrial parks per county on average! Developing and managing land has become a major business for local governments in many localities.

While comprehensive information about all industrial parks is rare, a government audit report offers a glimpse of the geographic distribution of the parks. In 2006, the central government was alarmed by the great leap mentality among local officials and ordered the National Development and Reform Commission, the Ministry of Land and Resources, and the Ministry of Construction to launch a full investigation. Table 1 groups Chinese provinces into coastal and inland ones and summarizes the number of development zones by the approving authority. Out of 222 economic development zones, high-tech industrial parks, tariff-free zones, and other types of zones approved directly by the State Council, 2/3 were located in coastal provinces. If we look at provincial governments' decision, however, the regional imbalance is no longer prominent. Many inland provinces, such as Anhui, Jiangxi, Hubei, and Hunan, were not far behind in setting up development zones. Even Gansu, a poor province in the remote western region, established 34 industrial zones, specializing in machinery, construction materials, food processing, and chemicals. This audit did not cover development zones and industrial parks approved by municipal and county governments. But it is reasonable to assume that the same pattern should hold. Overall, the rush to industrialize originated in the East coast but, by the mid-2000s, had become a national phenomenon and engulfed the whole officialdom at the local levels.

Table 1. Development Zones and Industrial Parks by Level of Approval and by Province

Approval Authority	Coastal Region	Number	Inland Region	Number
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¹ Both manufacturing and service create jobs and generate revenues, but they differ in one crucial industrial attribute: location specificity (Tao et al, 2010). Manufacturing enterprises mostly produce tradable goods for the national or international market. The tenuous attachment to specific locations enhances their mobility in response to production costs. If other regions provide better conditions, they may pack up and relocate their production facilities relatively easily. Service businesses, on the other hand, must establish contacts with local residents to deliver their products. This location rigidity gives local governments an upper hand in the bargaining and creates a potential for backward linkage.

State Council	147		75	
Provincial Governments	683		663	
	Beijing	16	Shanxi	22
	Tianjin	25	Inner Mongolia	39
	Hebei	45	Jilin	35
	Shandong	155	Heilongjiang	29
	Liaoning	42	Anhui	85
	Jiangsu	109	Jiangxi	88
	Shanghai	26	Henan	23
	Zhejiang	103	Hubei	89
	Fujian	65	Hunan	73
	Guangdong	69	Chongqing	34
	Guangxi	23	Sichuan	38
	Hainan	5	Guizhou	13
			Yunnan	15
			Shaanxi	17
			Gansu	34
			Qinghai	3
			Ningxia	15
			Xinjiang	11

Source: *An Audit Report of Development Zones in China* (2006) by National Development and Reform Commission, Ministry of Land and Resources, and Ministry of Construction.

After the audit, the central government decided to curb the overexcitement among local officials and consolidated development zones or ordered shutdowns in many places. Unable to set up more industrial parks without upper level approval, most newly setup industrial parks had simply changed their names and become “urban industrial functional zones” or “urban industrial complexes” without any change in real functions. According to the author’s observations, the number of industrial parks in actual operation after the mid-2000s had actually increased with extension to deeper inland areas. This diffusion was further accelerated after 2008 financial crisis when the Chinese government introduced the fiscal and financial stimulus package. As analyzed earlier, to make the rapid industrialization financially viable, rising real estate bubbles soon followed across the country that gave many local governments in inland areas a fiscal illusion that they could borrow money for more industrial park building and pay the money back using the land leasing fees through leasing residential and commercial land at higher prices. Manufacturing capacity built up quickly. To find market for their products, enterprises had to be more aggressive on the international market, leading to ever rising foreign exchange reserves.

Overall speaking, since the late 1990s, the fiscally-strapped local governments in China have increasingly turned to land (Yang 2004). On the one hand, they lease land to manufacturing investors mostly by negotiation and at subsidized prices. Local

governments usually incur net loss in leasing land for manufacturing users. By providing land at negotiated and usually very low leasing prices, local governments strived to attract industrial investors through “site-clearing” style packaged development. Usually at only nominal prices or even the so-called “zero price”, the prepared land was leased out for 50 years. Since local governments need to finance the land requisition costs (compensation to dispossessed farmers) and infrastructure preparation costs (costs in building roads and providing access to electricity, water, heating et al) ex ante, leasing out industrial land at low or even zero price inevitably means local governments are incurring net loss in the process.

On the other hand, local governments lease most of the commercial and residential land out by auction and public tender so as to earn as high extra-budget revenue utilizing their monopolistic position in urban land leasing markets. In practice, almost every cities have set up one or several industrial parks that supply cheap land to industrial users while most cities have also set up ‘land reserve center’ that would prepare land for residential and commercial use, and then auction off the land to commercial and residential developers for profit. In many regions, the revenue from land leasing, especially the fees from commercial and residential land leasing, have become the single most important source of local extra-budget revenue. Studies consistently show that land transfer fees account for some 30-50 percent of total sub-provincial government revenues and in some developed regions, it amounts to 50-60% of the total city revenue (World Bank 2005).

As Figure 2 shows, land lease fees, as a part of local extra-budgetary income, were about 50% of the formal budget at the provincial level. In some areas, the ratio was as high as 170%! These revenues enabled regional governments to subsidize incentive packages, including cheap land and tax exemptions, to lure footloose manufacturing capital. In 2007 alone, local governments in China made 226,500 hectares of land available for commercial and industrial use. Of this land, a total of 115,300 hectares of land (50.9 percent of the total land let, up 20.4 percentage points from 2006) were auctioned off. For the whole year, land sales generated close to CNY one trillion Yuan (913 billion for Jan-Nov period.), up from 767.7 billion Yuan in 2006 and only 49.2 billion Yuan in 2001. Simply put, local authorities have become hooked on land revenue as virtually a ‘second budget’ (Tao et al, 2010).

Figure 2. Land Lease Fees as a Ratio of Local Budgetary Revenues, 1999-2008

Source: China Statistical Yearbook (www.stats.gov.cn) and China Land and Resources Statistical Yearbook, various years.

2 Economic and Social Distortions Resulting from China's Land

Management System

Analysis of China's current economic growth model is useful in understanding the country's urbanization model during the same period. It is also helpful to understand the economic and social distortions brought about by this urbanization model. An instrumental use of cheap land in regional competition manufacturing for investment has contributed to the investment-driven growth in the past decade. When land as a key production input is under-priced, the overall investment, especially the investment in the manufacturing sector, would be higher than the social optimal. This would lead to an over-industrialized economy as well as relatively low returns in industrial investment.

Imbalance between Urbanization of Population and Land .

Land use distortions have also lead to an imbalance between China's urban spatial expansion and migration. As shown in Table 2, from 2001 to 2008, China's urban population grew at a fast annual rate of 3.55%, while the average annual growth rates of urban built area was 6.2% and the annual growth rate of urban construction land area was even as high as 7.4%. This means that urbanization of population has been much slower than urbanization of space.

Table2: Comparison of Annual Growth Rates in Urban Populations and Urban Areas under Construction (%)

Year	Urban Population	Area of Urban Built Area	Area of Urban Construction Land
2001-2005	4.13	7.70	7.50
2006-2008	2.57	3.73	7.23
2001-2008	3.55	6.20	7.40

2009-2012

Source: Based on calculations from the *China Statistical Yearbook for Urban and Rural Construction* (2008) and the *China Statistical Yearbook* (2009).

Note: Data for urban construction land for Beijing and Shanghai in 2005 is missing. An average value based on data in 2004 and 2006 has been used.

Distortions in Land Use Structure

The imbalance in China's urban land use structure is also serious. Currently, there are 240,000 square kilometers of construction land in rural and urban China, five-sixths

of which is in the countryside owned by rural collectives and used by rural residents. Between 1990 and 2004, urban land in China increased from 13,000 square kilometers to 39,140 square kilometers, or 155 square meters per capita (Tan and Li, 2010).² In cities alone, the area of urban industrial land in 2004 had already reached 7,900 square kilometers and by 2008 was 9,853 square kilometers, comprising a full 25% of the total urban construction land, while ecological land made up only 10% and residential land hovered around 31%. Industrial land area percentage in the more developed cities of Shanghai and Suzhou were as high as 25.77% and 31.79% respectively. However, the global standard for urban industrial land area is usually not over 10-15% (Huang Xianjin, et al, 2007; Dai Xuefen, 2006).

As shown in Table 3, the structure of land use in China's urban area is highly distorted, with a high share of land going to industrial use, while relatively low share of land is allocated for residential, transportation, green spaces and service sectors. This happened because of the land lease pricing strategies as discussed above. In 2006, the average price of land in major Chinese cities nationwide was CNY 1,544 Yuan/sqm, with commercial land valued at CNY 2,480 Yuan/sqm, residential land at 1,681 Yuan/sqm and industrial land at CNY 485 Yuan/sqm; by 2010, the average price of land nationwide was 2,882 Yuan/sqm, a CNY 229 Yuan increase over the previous year. A breakdown of this number shows that the price of commercial land was the highest at CNY 5,185 Yuan/sqm, followed by residential land at CNY 4,245 Yuan/sqm, while the price for industrial land was CNY 629 Yuan/sqm (CASS, respective years).

Table 3: Land Use Ratios in Chinese Cities (2004-2009)

SqKm/Year	2004	2005	2006	2007	2008	2009
Urban Construction Land	30781	29638	31766	33923	36711	38727
Residential	9729	9297	9772	10497	11290	12056
Public Facilities	3772	3704	4229	4399	4678	4848
Industrial and Warehousing	7900	7533	7998	8580	9265	9853
Transportation	1717	1448	1407	1498	1617	1673
Roads and Squares	2989	2983	3378	3668	4031	4369
Municipal Public Services	1053	1069	1120	1164	1251	1300
Green Space	2856	2911	3155	3404	3786	3868

² In 2004, China had a total village construction land area of 248 million mu. Based the number of people engaged in agricultural work that year, per capita area of village land was 217 square meters, 45.3% greater than the national limit of 150 square meters per person.

Special Use	766	694	708	713	794	760
%/Year	2004	2005	2006	2007	2008	2009
Urban Construction Land	100	100	100	100	100	100
Residential	31.6	31.4	30.8	30.9	30.8	31.1
Public Facilities	12.3	12.5	13.3	13.0	12.7	12.5
Industrial	25.7	25.4	25.2	25.3	25.2	25.4
Transportation	5.6	4.9	4.4	4.4	4.4	4.3
Roads and Squares	9.7	10.1	10.6	10.8	11.0	11.3
Municipal Public Services	3.4	3.6	3.5	3.4	3.4	3.4
Green Space	9.3	9.8	9.9	10.0	10.3	10.0
Special Use	2.5	2.3	2.2	2.1	2.2	2.0

Source: *China Statistical Yearbook for Urban and Rural Construction*, respective years.

Note: Years 2009, 2008, 2007 and 2006 do not include data for Shanghai. 2005 does not include Shanghai or Beijing.

As to the new land leased out, industrial land makes up 40-50% of the total new leases every year. Table 3 shows that in 2003, 2005 and 2007, China provided 99,400, 90,500 and 135,600 hectares of land for mining, industrial, and storage use for each of the respective years, or 51.4%, 54.7% and 57.7% of new urban land leases. Between 2003 and 2009, the area of industrial land leased out was 788,000 hectare, 51.3% of the total land leased. The area of residential land and commercial land leased out was only 39,100 hectare(25.4%) and 198,000 hectare(12.9%) respectively. As a result, the price of industrial land rose very slowly over these three years, reaching CNY 1.25 million, 1.38 million and 1.56 million Yuan per hectare for each respective year, while the price of commercial land rose from CNY 3.55 million to CNY 6.34 million to CNY 8.71 million per hectare and the price of residential land was CNY 5.98 million, 6.8 million and 11.31 million per hectare.³

Table 3 Total Land Area Transferred, Use Ratios and Prices (2003, 2005, 2007)

2003					
Total	99,400	102,600	100	54.2%	3.80

³ Overly high percentages of industrial land use and overly fast growth also exist in medium and small cities. For instance, average annual increase in industrial land area for the city of Kunshan from 1990-2001 was 210.92 hectares, which made up half of all land area under construction and increased annually at a rate of 21.25%. The average increase in industrial land per person was between 40-70 square meters for the cities of Kunshan, Wujiang, Zhangjiawan, Taicang, Yixing and Liyang. On the whole, China's per capita industrial land area has far exceeded the national standard of 15-25 square meters (Huang Xianjin, et al., 2007).

Commercial	59702	39082	20.2	138.62	3.55
Public Buildings	1864	7979	1.5	5.87	1.99
Residential	81487	43323	22.4	258.99	5.98
Transportation	581	600	0.3	1.07	1.79

2005	No. of Land	Total Land Area	% of Area	Total Transaction Value	Unit Price
		hectares		Billion Yuan	Million Yuan

Total	162112	165586	100	588.38	3.55
Industrial	2124	1004	1.2	10.67	5.05
Public Buildings	1627	7436	1.5	5.86	2.41
Residential	80285	43675	26.4	296.93	6.80
Transportation	161	1246	0.8	1.51	1.21

2007	No. of Land	Total Land Area	% of Area	Total Transaction Value	Unit Price
		hectares		Billion Yuan	Million Yuan

Total	160404	234961	100	1,221.67	5.20
Industrial	1702	1454	0.6	4.82	2.82
Public Buildings	1507	2121	0.9	12.01	5.66
Residential	87393	66575	28.3	753.09	11.31
Transportation	411	1414	0.6	4.89	3.46

2009	No. of Land	Total Land Area	% of Area	Total Transaction Value	Unit Price
		hectares		Billion Yuan	Million Yuan

Total					
Industrial					
Public Buildings					

Residential	
Commercial	
Special Use	

Source: *China National Resources Statistical Yearbook*, respective years.

Wasteful Use of Industrial Land and Real Estate Bubble

The negative impacts of local government land leasing strategies are obvious. Many cities have constructed ‘garden-style factories’ that use industrial land very inefficiently. Some industrial companies lease in land at an extremely low price and use only a part of it, leaving other areas undeveloped or even carry out large-scale greenification projects on the land.

In 2006 , the Ministry of land and Resources conducted a survey on 124 new industrial projects across 23 key cities across the country. The average land leasing prices for the eastern, middle and western China were RMB 183, 264 and 265 per square meter respectively, while the corresponding land requisition costs were RMB 463、 325 and 268 per square meter respectively. That means a subsidy of RMB 280, 61 and 3 per square meter respectively for the eastern, middle and western China .⁴

As more and more regions engage in a race to the bottom style competition for manufacturing investment, industrial land area grew very fast. In 1996, the total area of independent industrial and mining land in China was 27,700 square kilometers. According to the 1997-2010 National Land Use Plan between 1997 and 2010, the area of independent industrial and mining land cannot exceed 33,000 square kilometers by 2010. However, by the end of 2005, the area already reached 33,600 square kilometers. By the end of 2009, the area further increased to 43,000 square kilometers about 40% of China’s urban and industrial/mining land.⁵ In another word, the area of independent industrial and mining land increased by about 15000 square kilometers (225 million mu, 9 million hectare) and the average floor-area ratio was only 0.3-0.4, half of the national government standards.

⁴ Cited from “Final Report from the Workshop on Industrial land price evaluation and Analysis ” Sept, 2006, the Ministry of Land and Resources. .

⁵ Xinhua News Agency, Wasterful Industrial land use in China is significant. http://news.xinhuanet.com/legal/2010-03/07/content_13113869.htm

On the contrary, in order to maximize profits from commercial and residential land, local governments usually undersupply such land and charge a very high land leasing fee. For example, between 2003 and 2010, more than 15 million Mu(100,000 hectare) industrial land(43% of total land supply) was leased out with an average land prices of RM 9,7000 per mu, while the area of residential land supplied was only 8.31 million mu(23.6% of the total land supply) with an average land prices of RM 560,000 per mu(China's National Land Yearbook, various years). A rising real estate bubble in China can also be largely attributed to the instrumental use of land by local governments, i.e., oversupply of industrial land and undersupply of residential land. The depressed prices of production factors (including land and workers that lack labor protection or sufficient social insurances) and the relaxed enforcement of environmental protections in China's 'regional race-to-the-bottom' style of competition have resulted in excessive investment in manufacturing sectors and an excessive production capacity that cannot be absorbed by the domestic market. At the same time, the currently low level of compensation for expropriated land and insufficient levels of social insurances have made it difficult for the consumption levels for two major groups, i.e., dispossessed farmers and migrant workers, to keep in step with the growth of the overall economy. This further exacerbates the problem of poor domestic demand in the course of China's economic growth.

In order to absorb this accumulated excessive production capacity, the government had no choice but to artificially keep the value of the Chinese Yuan low, ensuring that the excessive production capacity could thus be exported to the international market. Keeping the Chinese Yuan artificially low naturally resulted in a trade surplus. The Yuan's inability to appreciate as China's labor productivity grows naturally attracts speculators who believe that the Yuan would eventually be forced to appreciate, resulting in a huge amount of hot money into China and therefore the country's ever-rising foreign reserve. In 1995, China had \$73.6 billion in foreign-exchange reserves. By 2000, they had grown to \$165.6 billion. By 2004, it quickly rose to \$609.9 billion. In 2006, China's foreign reserve was as high as one trillion dollar and in April 2009 it exceeded two trillion. This number further exceeded three trillion dollars in March 2011. China's central bank was forced to release CNY 24 trillion to sterilize the foreign reserve, leading to serious excessive liquidity in the economy (*State Administration of Foreign Exchange, 2011*).

Excessive liquidity naturally flooded into the under-supplied commercial and residential land market and bubble in the real estate sector emerged. Prior to 2004, the growth of China's housing prices remained slow below 5%, but housing prices began to shot up since early 2004 with a growth rate near 10%. In order to stabilize the market, the central government implemented regulatory policies that mostly focused on managing and standardizing the land supply. This happened because at the time it was believed that too much corruption in the land market fostered speculation and resulted in high prices. However, these land market control policies did not address

the real problem and housing prices continued to grow at double digit rates. In May of 2005, another round of housing price control policies went into effect. In addition to providing public housing to middle- and low-income households, there are additional articles to punish land speculators, and business tax was also used as a tool to control housing prices. While this did effect a slowing down in housing price growth, the rate remained above 5%. Realizing that these policies would not be able to control housing prices successfully, the central government started to take harsher measures, including forcibly regulating the lowest proportion of residential land and even the area of commercial housing. Tax revenue and interest rate controls were also put into place.⁶ Starting from late 2006, as liquidity in the market continued to increase and the “bidding, auctioning and public tender” for land leasing policies were widely implemented, land and housing prices soared further and new records for land leasing prices are set every few days. None of the four consecutive interest rate increases by the central bank in 2007 were able to stem the rapid rise in housing prices. It was only in 2008, with the arrival of the global financial crisis, that housing prices in China started to decrease. In the first quarter of 2009, housing prices dropped by 1.1%.

Investment Platform Boom and Local Debt Accumulation after 2008

The central leadership is well aware of the potential problems associated with this development model and has attempted to steer the Chinese economy toward a growth largely driven by domestic consumptions. The reality, however, is more complicated. The old model has created its own vested interests and these actors, central and local, public and private, forged a strong growth coalition to perpetuate the existing path. The post-2008 episode illustrates this dynamics very well. In the aftermath of the financial crisis, Chinese exports dropped by more than 20% in the second half of 2008 and early 2009. The Chinese government’s response was prompt and massive. It pledged four trillion fiscal spending in two years as well as increased bank credits by 9.6 trillion in 2009 and 7.95 trillion in 2010. The irony is that, instead of boosting consumption, the stimulus money reinforced the existing imbalance in the Chinese economy and further distorted land use pattern in urbanization. Flooded with cash, local governments initiated more ambitious industrial park construction and became more aggressive in attracting manufacturing businesses. **Land leases for industrial purposes reached 0.14, 0.15, and 0.19 million hectares in 2009, 2010, and 2011, respectively, which exceeded the pre-crisis level of 0.136 in 2007.** Giant state-owned corporations, the other major beneficiaries of the stimulus, splurged on business expansion, including huge purchases of mines both domestically in the global market. Both contributed to further buildups in manufacturing in China. On the other hand,

⁶ Since 2003, China’s government has put forward a myriad of control measures, including the ‘121 Document’, the ‘New and Old Eight Opinions’, the ‘Six Opinions’ and the ‘Fifteen Opinions’ issued by the State Council, including the implementation of the ‘three-step’ approval process for controlling land as well as the push to build economized housing and low-rent housing, as well as implementing financial and taxation rules such as eliminating low interest rate home loans, increasing downpayments on new homes and levying transactional taxes on second-hand properties. Despite the implementation of these measures, housing prices continued to rise quickly and new highs continued to be set.

local government's urbanization scheme was kept buoyant by easy credits as well as speculative funds. Land lease prices made new highs as real estate developers chased the limited quantity of available land. The centrally-controlled state-owned enterprises (SOEs) also heavily invested in the real estate sector and in many cases they overbid substantially, fueling a real estate bubble. In many third or fourth tier cities, housing prices more than doubled within one to two years. Local governments cashed in from land development and lease fees doubled from 1.59 trillion in 2009 to 3.15 trillion in 2011. These revenues combined with land-backed bank loans and bond sales enabled local governments to launch massive urban infrastructure projects, such as rail, subway, road, and airport, etc.

The world financial crisis not only failed to shift China's primary driver of growth from investment to consumption, but also heightened the risk of a potential crash of Chinese financial system due to overinvestment that built more overcapacity in manufacturing and industrial-related infrastructure. Worldwide recession and its associated protectionism have already put a damper on China's export growth and rapid expansion in the future is unlikely. Massive investments in manufacturing and infrastructure really hinge on continual revenue flows from housing and real estate sectors. Instead of becoming an alternative engine for Chinese growth, super-high property prices actually suck up savings of the middle class and weaken their demand for other goods. Moreover, local governments' addiction to land revenues and intention of propping up the markets have invited rampant speculation and contributed to the buildup of a huge asset bubble. Like Japan and United States in the past, this music-chair game will have to end at some point. When the bubble bursts, local governments will lose the main source of income to binge on industrial parks and infrastructure construction. The immediate shock to China's financial system would be devastating. Once land and housing values plummet, state banks bear the direct brunt of easy credits and trillions of loans may turn into non-performing assets on their balance sheet.

Social Impacts of China's land-based Urbanization

Economic imbalance aside, this developmentalism also left a devastating trail on the society. Over-leveraging land for development also caused social and even political problems.

First, the rapid rise in housing prices and the formation of a real estate 'bubble' over the past decade has made it impossible for the vast majority of rural migrant populations to afford commodity housing in cities. In fact, even the new entrants into the labor force with university degrees find that today's housing prices are far more than what they can afford. Clearly, this has become a main challenge for China to realize full urbanization and urban-rural integration. In the urban areas, residents were overburdened with skyrocketing housing prices. The red-hot housing market not only

drained people's financial resources for consumption but also carried the huge risk of a bubble (Su & Tao, 2011).

Moreover, the great Chinese land grab has especially soured urban-rural relations. The need to generate revenues and subsidize manufacturing enterprises led to the twin problems of excessive requisition of farmland and under-compensation for land owners, resulting in millions of disgruntled farmers in the countryside (Zhu & Prosterman, 2007; Tao et al, 2010). Insufficient compensation for land requisition is now primary reason for rural petition and collective actions made by farmers against the state. A research report (Unirule Institute 2007) estimates there were over 40 million dispossessed farmers due to urban expansion and transportation projects. For a host of reasons but primarily because local governments tend to underpay, especially in light of soaring urban land prices, farmers losing their land are often dissatisfied with the amount of compensation. Moreover, under-compensated farmers who have lost their land easily become unemployed but generally have limited access to urban welfare benefits. A 17-province, 1,962-farmer survey conducted in China in 2005 shows that the number of land-related incidents increased more than 15 times during the past 10 years and appeared to be accelerating. In the first nine months of 2006, China reported a total of 17,900 cases of "massive rural incidents", in which a total of 385,000 farmers protested against the government. Approximately 70 percent of these incidents were related to illegal land-takings. In some areas, land disputes have resulted in mass incidents and have greatly undermined social harmony.⁷ And this is only the tip of the iceberg, as many Chinese peasants do not even demonstrate in protest when their land is taken away. The problem is so widespread that one commentator notes that an "economic war is going on at the local level in China today especially on the fringes of expanding urban areas" (Subrahmanyam 2004). Alarming, the conflicts that result become increasingly violent, with strong clashes between farmers, police and hired thugs

Dualism in Land Management and Rural Collective Land Use Inefficiency

Under the current system, markets for urban and rural land have been artificially divided. A market-oriented reform for rural collective land is badly needed to improve both efficiency and equity in China's land use. The rising illegal use of land throughout the country and the spontaneous emergence of rural construction land market in many localities indicate that the current land management system is no longer functioning under an increasingly market-oriented economy (Han, 2003).

⁷ According to statistical data from 2005, there were nearly 80,000 mass incidents nationwide, of which 30% were to uphold the rights of farmers, while 70% of these cases were because of unfair compensation for land that had been allocated. Of the more than 74,000 mass incidents examined on the CCTV program Topics in Focus in 2005 found that 15312 were related to land disputes. Most of these were conflicts that arose because of the low price paid by local governments in allocating the land (2006). Later, land-related disputes rose to 60%. (Yu Jianrong, 2006).

Special attention needs to be paid to China's rural residential land that accounts for a majority of China's rural construction land. Under China's land management system, every rural household is eligible to apply for one and only one, piece of residential land on which a house can be built for accommodation purpose.

Given the huge number of rural households (around 200 million) in China, residential land constitutes one of the most important land use types in rural China, only next to farmland. According to the first national land cadastral survey conducted in 1996, rural settlement occupied 164,558 hectare of land, which was 6.21 times as high as urban settlements and which accounted for 68.4 % of all settlement & industrial/mining land(240,753 hect.)(Lin and Ho, 2005). A more recent census data also showed that total area of rural residential land reached 166,000 ha by the end of 2004, 4.88 times of the land taken by the urban construction uses (34,000 ha). This implies that per capita rural residential land holdings is 214 square meters, 64 square meters higher than the standard defined by the National Village and Township Planning Standards

However, different from the urban housing properties, the rural residential properties, including the land and the housing unit, are still strictly regulated and cannot be traded freely on the market. The policies of allocating one piece of residential land for every rural household but disallowing trading beyond village are alleged to help secure farmer's housing rights in an egalitarian way while at the same time to protect the country's limited arable land resources. Given the sheer size of total rural residential land in China and the rural housing building craze in the reform era, both the government and the academia have expressed a continuous worry that rural residential land and its expansion 'may have contributed greatly to the loss of farmland in China' (Sargeson, 2002; Lin and Ho, 2003; Lichtenberg and Ding, 2008). Since village housing accounted for about 5 to 6 per cent of the total area forfeited and the area lost to new housing was greatest in the central eastern provinces – traditionally a highly productive agricultural region (Sargeson, 2002, Ash and Edmonds, 1998), these worries sound reasonable. As a result of policy tightening, rural residential land transactions beyond village boundaries have been completely prohibited after 1998. If any such transaction occurs, it would be illegal and thus no land and housing certificates would be issued.

The strict regulations on residential land use and transactions have met serious challenges in policy implementation. The main challenges come from the country's large-scale migration and fast urban expansion, which generated land use problems both in China's vast agriculture-based countryside and in the fringe of cities where urban expansion is fastest and where demand for residential land is intensive. In the agricultural-based areas far away from the city, such challenge is mainly manifested in that residential land continues to encroach arable land while at the same time residential land use efficiency turns out to be low since a large number of farmers leave their housing idle, i.e., the phenomenon of 'hollow villages'. In the suburban

areas and even within cities, many ‘suburban villages’ and ‘urban villages’ have emerged and provided affordable housing for a great number of migrants.

Idle House Sites and Hollow Villages in Pure Farming Areas . Between 1996 and

2006, rural residential land account for 80% of the 1 million mu (1/15 hectare) newly occupied arable land due to rural construction. In the context of urbanization, although an increasing number of farmers are earning higher incomes through off-farm employment, they are still unable to settle down in cities on a permanent basis under China’s household registration system (Hukou). Since rural population cannot be effectively reduced through permanent migration while at the same time rural residential land cannot be traded freely beyond villages, local governments and rural community organizations have to allocate more land for residential housing construction when new families are formed in villages. This usually implies occupation of existing farmland. At the same time, a significant share of existing rural residential property are either under-utilized or left totally idle as a large number of migrants go to cities. In many of the agriculture-based regions one can find ‘hollow villages’. Based on a survey in 119 villages, 59 townships, 30 counties across six provinces including Jilin, Hebei, Shaanxi, Sichuan, Jiangsu and Fujian. in 2008, Wang et al (2011) presents the following interesting findings: first, for the surveyed 2,230 rural families, 34 families (1.52%) have no residential properties, 1,965 families (88.1%) own one residential property. Although the government policy states that one and only one rural residential property can be allocated to every rural family, the survey shows that 231 families(10.36%) possesses two and more residential properties; Second the average area of the land occupied by residential property in rural China is 288 square meters per residential property.⁸ Third, the higher share of out-migration in a village, the more likely the village to have higher ratio of vacant residential properties. This relationship tends to be consistent with the general observations in the reality that people who left their villages for urban jobs may leave their housing properties under-used or even idle in the villages. Fourth, the average ratio of vacant residential properties was as high a 7.5 percent for the six provinces. Among all of the 119 villages, there are total 14 villages which had vacant rates higher than 20%, and 7 villages with vacant rates even higher than 30%; finally ,while there are significant shares of vacant housing in rural villages, new residential house building continues to occupy arable land. Since 1978, on average the share of residential housing built by occupying arable land has been over 20% of all the new residential building and this share was still as high as 23.4% during the 1999-2008 period. In other words, on average, more than one-fifth of the residential housing

⁸ Jilin Province had the largest size of the residential land (511 square meters per residential property) on average, followed by Hebei Province (347 square meters per residential property). Jilin Province also experienced a steady increase in the average land area for rural residential property, with more than 45 percent increase from 1978 to 2008. As for the whole nation, the survey data revealed that average size of the land taken for residential use had dropped slightly from 1980s to 1990s, but increased about 9 percent afterwards in spite of the implementation of so-called “the strictest” regulation for farmland protection in China.

construction in rural China occupied arable land.

‘Urban villages’ and ‘small-property-rights housing’. In contrast to ‘hollow villages’ and inefficient residential land use in China’s agriculture-based areas, many ‘urban villages’ and ‘small-property-rights housing’ have emerged in China’s suburban areas and even within cities. These are the locations where the value of rural collective land appreciates fastest due to booming demand for housing. Under the current law, only the state has the right to expropriate the collectively owned rural land and then lease it to urban users. Since expropriation of rural collective land by the State is often carried out with very low compensation, it is no strange that farmers and village collectives in urban fringe have strong incentives to engage in rent competition with the urban state that monopolizes urban land supplies (Zhu and Hu, 2009). Informal land developments thrived in China’s urban fringes, including the rapid development of housing rental market targeting migrant farmers in urban villages and the fast growth of ‘small-property-rights’ housing.

Housing rental markets in urban fringes boomed largely due to an influx of floating population of migrant workers. Being limited by the Hukou system, the floating populations have no access to public housing, neither are they eligible to the urban affordable housing programs that target urban permanent residents. Though in theory purchasing the urban commercial housing is an option, rural migrants usually cannot afford the high prices. Moreover, without urban Hukou many of the floating population regard their presence in the cities as temporary. Therefore they tend to minimize their living expenditures in cities, thus renting and sharing housing in the urban villages and suburban areas become their major housing choices. As a result, many suburban villages in China have become the so-called ‘migrant enclaves’, or urban villages in which migrant workers from the countryside concentrate. It is estimated that at present around half of the 140-150 million migrant workers are living in around 50000 urban and suburban villages in cities

Overall speaking, under China’s current land and Hukou system, fast migration inevitably leads to a large population of migrants living in ‘urban villages’. The landlords of the urban villages (farmers who own the residential properties) can earn considerable incomes by renting out their houses. In this sense, the urban villages have played significant roles in China's urbanization process. They not only provide affordable housing when urban governments fails to provide housing security for migrants, but also generate incomes for the landlords in urban villages whose arable land have already been requisitioned by local governments in urban expansion. This largely offsets the negative impacts of land requisition that usually pay inadequate compensation. Therefore, one needs to recognize the important values of urban villages for two most vulnerable groups in China’s urbanization, i.e. the floating population and the dispossessed farmers. For sure, the emergence of urban villages may have some negative consequences. Since local governments cannot obtain revenue from such land and housing development projects, they have no incentive to

improve the infrastructure and public service in urban villages, thus environmental conditions in these localities are usually very poor and sometimes crime rates are also very high compared to other urban space under government control.

Precisely because urban villages provide dispossessed farmers with considerable incomes, urban redevelopment and renovation projects that targets these urban villages is usually very difficult to implement. When the compensation to landlords in urban villages fails to reflect the opportunity costs of their rental income, strong opposition to local government move to demolish and redevelop urban villages occurred. Unfortunately, as housing prices rocket in Chinese cities in recent years, many city governments and real estate developers now find demolishing urban villages an increasingly profitable business. Urban village demolition is being carried out in many cities across the country. Social unrests due to unfair compensation easily follow. The questions to ask then are: if urban villages are demolished, how can the dispossessed farmers (the landlords of urban villages but who already lost their arable lands) make a living since they would no longer have the rental income to maintain their livelihood? Moreover, where can the large number of migrants find shelter if they are forced out of urban villages?

Besides urban villages, the 'small-property-rights' housing is also booming in China's *city fringes*. *Small-property-rights housing is the commodity housing developed either by village collectives or by farmers themselves that does not have ownership certificates issued by the urban state.* These housing units could not be legally transacted on market. Small-property-rights housing could either refer to the large-scale apartment buildings developed on rural land for sale, or the small-scale rural residential housing properties owned by individual rural households and then sold to people from outside villages. As a result of local governments' monopolized land supply in urban areas, land and housing prices have rocketed in the past decade. It is natural for the rural collectives and farmers to start commercial real estate development on collectively owned land for profit. Though there is no legal protection and the government has issued many prohibitive policy documents, the growth of the small-property-rights housing is just amazing. By the end of 2007, an estimate of the total construction area of small-property-rights housing is 6.4 billion square meters, accounting for 17% of the country's total urban housing stock (Wang and Wang 2009).

3 Land Requisition and Limited Reform So far

3.1 Land Requisition in China

Nowhere is the question of using public power to acquire land for private investment more prominent than in China, where, due to Chinese land law, typically the only way land can become available for private investment is through a process of land requisition. Both the Chinese Constitution and the 1999 Land Administration Law (LAL) specify that the state, in the public interest, may lawfully requisition land owned by collectives, thus setting the stage for compulsory land acquisition.⁹

However, there is no clear definition of public interests in the law and in practice the local governments acquire the land from farmers and then either use it for infrastructural development and public projects such as public schools and hospitals, or lease it out to industrial and commercial/residential developers. According to the Land Administrative Law amended by 1998, “all land used for urban development, as well as the land used for energy, transportation, water conservancy, mining and military projects outside the urban land use planning boundaries, if it needs to be taken from rural collectives, has to be acquired through the formal government land requisition process”. Moreover, decisions with regard to whether to acquire the land, how much land to acquire, and the compensation and resettlement packages for land taking, are all to be made by the city and county governments unilaterally. Local governments only need to provide a Land Acquisition Notice and a Land Compensation Notice within 10 working days after the approval of land taking plan by the upper level governments, i.e., either the provincial government or the central government depending on the scale of land taking (article 3, Regulations on Land Acquisition Notices, 2001, the Ministry of Land and Resources). The notice is a procedure to be fulfilled after the land taking approval and after the compensation decisions have been made. Farmers whose land is to be acquired would only be informed about the decision and they would then be asked to register their names to the related government agency for compensation and resettlement issues.

Overall speaking, land development in urbanization is a complicated process because it requires first acquiring the land, then converting it to state ownership, resettling the displaced farmers and providing urban infrastructure before finally leasing the land to developers. It also involves the interactions of multiple players in land acquisition including individuals, corporations and governments. In China, The acquisition of new land for urban expansion is largely controlled by government officials through a process in which officials requisition land from nearby villages and pay compensation determined by the value of agricultural production, the value of land improvements, and other factors as specified by law (Ho 2005, Ding 2007, Lichtenberg and Ding

⁹ In 2004, Article 13 of the Chinese Constitution was amended to give constitutional protection to private property rights. It provides that “[t]he state may, for the public interest, expropriate or take over private property of citizens for public use, and pay compensation in accordance with the law.” This protection is also echoed in Article 2 of the Land Administration Law, which was amended after the aforementioned constitutional amendment. the Chinese Constitution merely mentions compensation without any requirement that it be just.

2008). Under the current system, land acquisition is to be carried out without much, if any, participation of and negotiation with farmers. No land taking contract needs to be signed with the rural collectives and its members whose land would be dispossessed. The rural collectives and farmers affected by the land acquisition could only dispute the level and contents of compensation and resettlement package but no dispute can be raised about the land acquisition itself. According to the 1998 LAL and its 'Detailed Rules For Implementation' enacted in 1999, the disputes about compensation and resettlement should not affect the land requisition process and the final decision about land compensation is to be made by local governments at the county and city level.¹⁰ Overall speaking, China's law provides only that farmers affected are to be informed about land requisitioning and the compensation to be paid (LML 48). Thus farmers are not involved in bargaining about the compensation amount and have no formal legal instrument for stopping land acquisition when they do not agree with the amount of compensation offered.¹¹

However, since the county and city level governments are exactly the actors that implement land acquisition, it is difficult for them to make a fair arbitration when there are disputes about the compensation. Local courts also tend to ignore the lawsuits against local governments with regard to land requisition and the excuse is usually that the individual farmers are not the owners of the land.¹² Dispossessed farmers usually had to resort to petitions to the upper level government or even

10 In the 1986 Land Administrative Law, the state can acquire land for 'public interests' though there was not clear definitions of public interests. However, article 13 of the 1986 LAL stipulates that disputes about land use must be negotiated by the relevant parties and the final decision is to be made by the local governments at and above the county level... if any party involved is not satisfied with government decision, it can go to the local Court for lawsuits within 30 days of being informed of government decision. Before the disputes is resolved either by the government decision or the court, no party involved can change the status quo in land use. In another word, regulations in the 1980s stipulates that land users need to negotiate with the rural collectives about the quantity of land to be acquired, the compensation and resettlement package and sign land acquisition contracts.

11 Even the existing procedure is not well implemented, as recent research found only 20% of the farmers whose land was acquired had received required prior notice about compensation (Zhu et al. 2006). This shows that even if negotiations became required by the law, many land developers would still be able to start construction without following the procedure, whether it was a duty to provide information as at present or a duty to enter into negotiation introduced in the future

12 Initiating civil or administrative litigation against unlawful behavior of land developers or local government—have not been used much or with much success (Roojj, 2007). The nationwide data on legal redress for land takings, which demonstrated that only 0.9% of aggrieved farmers filed a lawsuit for more compensation (Zhu et al. 2006). Clearly, going to court has not been a preferred option for land grab victims. The chances of winning a case against a local government or against land developers with good local connections are slim. Courts are paid and partly managed by their local governments and have tended not to bite the hand that feeds them. In addition, the context of judicial corruption

and personal favors (*guanxi*) further denies poor peasants success in the courtroom. Courts, like lawyers, have refused to take on land cases, claiming that they lack jurisdiction, or that litigants do not have a right of standing (Phan 2005:18).

engage in confrontational collective actions against local governments. In most cases, such protests were directed not against the purpose of land grabbing but against the compensation farmers were to receive.

Even in the 2007 Property Rights Law, not much progress was made in protecting farmers from abusive land taking. The law only stipulates that “government can acquire rural collective land for the purpose of public interests according to law and following the legal process” and still there is no clear definition for ‘public interests’. As to the compensation and resettlement package, it only vaguely stipulates “compensation for the land itself; resettlement subsidies; and compensation for improvements to the land and for crops growing on the requisitioned land need to be paid in full. Social security payments should be arranged for the dispossessed farmers so that their livelihood be maintained and their legal rights be fully protected.”¹³

As securing cheap land for local governments to attract businesses became increasingly important after the mid-1990s, local officials have strong incentives to depress land compensations to the farmers, which further pressures local officials into direct confrontation with farmers whose land was the target of forceful requisition. While this pressure applied to all municipal and county level officials, the stress on township cadres were particularly acute. Sitting at the bottom of the local state hierarchy, they were responsible for almost all matters related to the rural society. The municipal or county governments might set land development plans and propose terms for land requisition. It was township officials who would carry out difficult negotiations with village collectives or were in charge of coercing defiant farmers to accept government-set terms. Having village cadres who shared their interests would not only lower the requisition costs but may also determine whether or not the transaction could be accomplished at all. If the deal failed, the superiors would discount their leadership credential, thus jeopardizing their future career.

Therefore, township officials in localities which experienced higher intensity of land requisition had stronger incentive to manipulate the rules to make sure that more cooperative cadres were elected. Drawing on two national surveys a recent research by Su et al(2013) offers strong empirical evidence of the impacts of land taking on Chinese Villager’s Committee(VC) elections. As shown in their analysis, there are no uniform rules in VC elections and villages have relied on different formulas to elect their leaders. Some rules are more transparent and democratic, but others leave a lot

¹³ The LMA provides for a standard of compensation 6-10 times the annual average output value of the three preceding years and a resettlement fee of 4-6 times average annual output. The law also provides absolute combined compensation maxima of no higher than 15 times annual output or when approved by provincial authorities no higher than 30 times the annual output of the land compensated. The specific standards are determined at the provincial level. Both Village Committees and farmers are to be consulted in the requisition compensation. Compensation payment shall be made public, and the new act explicitly states that it is forbidden to embezzle or divert compensation funds (LML §47, 48, 49).

of gray areas that are open for manipulation. In villages with more intensive land requisition, electoral rules are more likely to be manipulated by their upper level governments. For example, local government may intervene into the formation of election committees by appointing members of election committees, or they can intervene into the nomination of candidates so that they can pick their own favored individuals as candidates.

Besides intervening the village elections to pick up the “right” cadres, local governments also have multiple other instruments to incentivize village officials to be on their side in land acquisition process. Various economic incentives are used to induce cooperation from the village cadres. This could happen since the village collective is the basic socioeconomic organization in rural areas, and its largest asset is the land collectively owned by the members. Even though China’s laws recognize that both the collective and its members should be entitled to sharing compensation, there are no specific policy guidelines or regulations on how to divide the shares in different situations. In practice, among the three types of land compensation for acquisition, i.e., compensation for the land itself; resettlement subsidies; and compensation for improvements to the land and for crops growing on the requisitioned land need, the compensation for the land itself is usually paid to the village collective. Therefore, village cadres may benefit from the land acquisition. In some localities such as Shanghai, rural collectives can share stock in the land they transfer for projects. In return, they receive annual cash payments equivalent to average profits from farming that they can use. In other places such as Suzhou, local governments leave some nonagricultural land to the village collectives for non-agricultural development and thus the village cadres are able to obtain revenue simply by renting out the allocated land for nonagricultural purposes. Therefore, in the process of land acquisition, local cadres have strong incentives to cooperate with local governments or even the land users rather than the villagers since the collective organization and the cadres can benefit in terms of economic returns.

If local governments could influence village elections to pick up the cooperative village cadres and have multiple economic instruments to induce village cadre collaboration, it is very difficult for the land acquisition process to be transparent so farmers know very clearly where and when their land will be acquired and how much they will be compensated. Lack of transparency easily leads to corruption and lack of legal channels for farmers to file appeals and protests against governments in compulsory land acquisition cases. The issue of accountability and transparency therefore figure out prominently in land acquisition in which village cadres usually work together in land acquisition. Misappropriation of compensation funds for land and indulging in fraudulent means to acquire land from the farmers is inevitable (Ding 2007; Subrahmanyam 2004).

3.2 Limited Reforms So far

For China's current development and urbanization model to work, local governments must have access to a lot of cheap land to compete for the mobile manufacturing land users. Luckily, the Chinese local governments are empowered by the present land requisition and leasing system almost as the monopolistic player in land taking, preparation and leasing process.

An amendment to the Constitution in 2004 provides that the state may carry out land requisition to serve the public interests in accordance with the law and appropriate compensation shall be made. However, the concept of "public interests" has not been clearly defined by relevant laws and regulations, such as the Constitution and the Land Management Law. In practice, not only the land used for urban infrastructure construction needs to be requisitioned from rural collectives, but also land for industrial, commercial and residential development are prepared through government requisition. In the process, local governments generally have the power to decide the compensation standards. Concerning the compensation for land taking, both the owners (rural collectives) and the users (individual rural households) of the rural land are in a weak position.

For the interests of their own, local governments inevitably have strong incentives to set low compensation standards. Our fieldwork in recent years revealed that even in some developed areas dispossessed farmers only get very low cash compensation while at the same time there is no social security provided for them. Since a fair number of dispossessed farmers are poorly educated, they may easily get unemployed after land requisition. While some localities have started to implement a social security policy for dispossessed farmers (known as the 'land for social security' policy), the conditions of which are still set by the local government. Dispossessed farmers usually lack any negotiation power about the scope and the level of social security benefits. Some areas even used the 'land for social security' policy as a method to avoid short-term government fiscal obligations by promising dispossessed farmers certain social security benefits in the future. In this way, governments are able to obtain huge revenue by land leasing while at the same time delay paying out social security benefits until a later date (Wang and Tao, 2009).

Over the past ten years, the vast majority of China's suburban areas have witnessed a massive urban expansion, along with a fast growing number of dispossessed farmers. In recent years, the scale of land requisition has reached approximately 3 million *mu* every year. If we assume per capita farmland is one *mu* in suburban China, this means that around 3 million farmers lose their land each year. By 2006, the total number of dispossessed farmers exceeded 40 million and this number will increase to 70 million in the next 10-15 years (Tianze Economic Research Institute, 2007).

To address the challenges from excessive industrial land leasing and abusive land requisition and practices by local governments, the State Council and the Ministry of Land and Resources in the past several years have issued a series of policies and

regulations aimed at regulating local governments in recent years. These include the elimination of industrial parks and strengthening land supervision as well as requiring local governments to lease land through more market-oriented approaches.¹⁴ However, according to our fieldwork across the country, the central policies have hardly been implemented because of the intense regional competition for manufacturing investment. The local strategy in response to the central government directive is what has been called ‘designated bidding, auctioning and public tender’, i.e. local governments usually set a series of conditions for participating companies to constrain competition in land leasing, therefore they can lease the land to a preselected industrial company. Therefore, enforcing a policy that requires the ‘bidding, auction and public tender for industrial land leasing’ is essentially ineffective. This is because this policy is unable to eliminate the root cause of intense regional competition for manufacturing investment.

The central government has also attempted to reform the land requisition system by raising compensation standards for land taking and by limiting the scope of land requisition. The central government is now amending the *Land Administration Law* and has also issued the *Measures for Public Notification of Land Requisition*, so as to stop local governments from abusively taking farmland and infringing farmers’ property rights. However, due to fiscal pressure from the tax sharing reform in 1994, local governments had no choice but to rely on the cheap transfer of industrial land to compete for manufacturing investment, while at the same time earning profits from leasing out commercial/residential land to support urban industrial park and infrastructure development. As long as compensation criteria are set by the local governments, it will be impossible to establish a good mechanism that can protect the property rights of dispossessed farmers. While short-term measures implemented by the central government to contain abusive land requisition and raise compensation for land taking may help, the high monitoring costs and the unwillingness to cooperate by local governments would render such central policy ineffective. For sure, this does not imply that the central government should be responsible for setting compensation criteria for land requisitions at the local level. In a country as large as China, putting the land compensation setting power in the hands of the central government would not make much sense. A final solution to this problem requires a fundamental reform of the land management system.

The latest amendment of Land Management Law serves a good example of limitations in reform so far. In 2009, the Ministry of Land and Resource came up with

14 For example, requirements are specified in the Circular of the State Council on Intensifying Land Control (No. 31 [2006] of the State Council): “industrial land shall be leased by means of public bidding, auction and public tender and by strictly following the procedures and methods prescribed in the Provisions on the Assignment of State-owned Lands by Means of Bidding, Auction and public tender and the Rules on the Assignment of State-owned Lands by Means of Public Bidding, Auction and public tender.” and this, “is of great significance to strengthening macroeconomic control, strictly controlling land use and effectively controlling the total land ; to bringing down the competition by lowering industrial land prices and overexpansion of industrial parks, and realizing value preservation and appreciation of state-owned assets; to establishing a functioning land market mechanism and to improving land use efficiency.....”

a highly controversial draft of LML amendment. In the draft, the articles related to land requisition have been amended significantly. Compared to the existing 'Land Management Law', a new chapter on 'land expropriation and requisition' is added to standardize the scope and procedure of land requisition. The key idea is to restrict government power and narrow the scope of land requisition, as well as providing social security for dispossessed farmers.

Even though these changes demonstrate government's determination to improve the current land requisition system, the new draft of 'Land Management Law' still prescribes that "within the urban construction area defined by the Master Land Planning, the state can requisition collective land for construction use according to the city planning", whether the land is used for public purposes (such as land for infrastructural development) or it is used for non-public purposes (such as land for industrial, commercial and residential use). Only in areas beyond 'the urban construction area defined by the Master Land Planning', rural collectives can develop land for non-public purposes on their own.

Such constraint on rural land development is inevitably problematic. First, it implies that the vast majority of rural land with high value for non-agricultural use would still need to go through the land requisition process even if the land is used for non-public purpose. As a matter of fact, this is in line with the interests of local government. If such definition has not been made, local government would only be able to requisition the land that serves public interests such as the land used for infrastructure development, public education and public health institutions. Then local governments would no longer be able to requisition land from farmers and lease them out for industrial, commercial and residential purposes.

Moreover, local governments may easily expand the 'urban construction area defined by the Land Master Plan' by adjusting land-use planning. This is evident in the implementation of 1997-2010 Master Plan: the more economically developed one locality is, the more frequent there are planning adjustments. Although in principle the preparation, implementation and adjustment of the Land Use Planning needs to go through a public hearing process, in reality there has been little public participation. If this afore-mentioned article of LML amendment is adopted, it would be very difficult to convince farmers who live within the 'urban construction area defined by the Land Use Master Plan'. This, in turn, would lead to confrontations between local governments and farmers (Wang Hui and Tao Ran, 2009).

Reducing the scope of land requisition and allowing rural collectives to develop land for industrial, commercial and residential uses on their own are two sides of one coin. If the rural collectives and farmers are allowed to develop rural land on their own, it would imply that such land development does not need to go through the process of state requisition-preparation-leasing. Therefore, progress in land requisition reform largely determines the progress in rural collective land reform.

For a long time, the Chinese academia has been arguing for granting rural collectives and farmers the rights to develop the collective land for non-public purposes. In 2007, China enacted a 'Property Law'. The law has some element of providing 'equal property rights protection for both the rural collective land and the state-owned land'. However, if no fundamental reform is to be carried out in China's land requisition system, it would be extremely difficult to imagine rural collective land can ever enjoy an equal treatment in development. In this sense, land requisition system reform is a prerequisite for rural collective construction land reform.

Reducing the scope of government land requisition and allowing rural collectives to develop collective construction land on their own would not only contribute to limit the development zone craze witnessed across the country and enhance land use efficiency in China's urbanization, but also help farmers in city fringes to share some benefits of urbanization by engaging in land development. However, our fieldwork in the past several years in the Yangtze River Delta, the Pearl River Delta, North China Plain and Chengdu-Chongqing area indicates that the opposite is happening. Indeed, local governments in many localities, rather than limiting the scope of land requisition, begin to demolish existing urban villages and requisition more land from urban suburbs so as to continue the distorted land-based urbanization. Acquiring more land from urban villages to be leased to real estate developers not only generates substantial land revenue for city governments, but also helps to improve the physical image of the cities. For sure, these requisition and demolition actions are often met with serious confrontation between farmers and the local state.

In fact, demolition of rural residential housing occurs not only in the city fringes where space is needed in urban expansion, it also occurs in some pure agricultural areas far away from cities. In the latter case, farmers are asked to leave their old rural residential housing and are relocated to apartment buildings provided by local governments in nearby townships or central villages. To see why this happens, a better understanding of China's farmland protection system and construction land use quota system is needed.

As is well-known, the Chinese central government adopts a "toughest" policy to preserve farmland in the country. The 1998 Land Management Law provides a clear regulatory framework for this policy to be implemented. Land Use Master Plan (tudi liyong zongti guihua) and the Annual Land Use Plan (niandu tudi liyong jihua) are two major instruments to achieve the ultimate goal of farmland preservation. The Master Plan sets long-term (usually 10-15 years) regulations on both the quantity and spatial distribution of agricultural land in a locality that is allowed to be converted to construction land (jianshe yongdi, referring to land for non-agricultural use). The Annual Land Use Plan breaks down these long-term objectives for each year. Each level of government, from the center to the township, must formulate and observe their land use plans. The first National Land Use Master Plan was made in 1997 and

set the primary goal of preserving 120 million hectares of farmland by 2010. All local and annual land use plans ensued to specify the details in the following years(Wang et al, 2010 forthcoming).

These land use plans rely mostly on a set of quantitative measures. The most important one is the “planned farmland conversion quota” (PFCQ) (nongyongdi zhuanong guihua zhibiao). It regulates the total farmland that can be converted for non-agricultural use over the entire planning period. The annual plan further specifies land use regulation on each individual lot. For any agricultural land, PFCQ must be acquired through the Master Plan and the Annual Plan before conversion could take place.

However, for localities where planned quotas and annual quotas could not satisfy local land use demand, the regular arable land constitutes a potential source for urban expansion. Nevertheless, it is very difficult for a city to simply convert the regular farmland since, under the Master Plan, this type of land is still designated for agricultural purposes. To convert this type of land legally, some extra quotas must be generated and the Master Plan has to be revised.

One approach is to reclaim rural construction land (i.e. land for rural housing and industries) into arable land. This could be done by demolishing the sparsely distributed rural residential houses and relocating farmers to a more densely built residential area. Local governments could obtain an equivalent amount of extra construction land quotas if certain amount of non-agricultural land within their jurisdictions was reclaimed to farmland. Inevitably, residential land reclamation involves paying for the relocation of farmers from their original residential housing to more densely build houses or apartment buildings. Local governments could recover this cost easily from land leasing fees since now they have more construction land use quotas and can convert more arable land in city fringe into urban construction land. This approach is in accord with the central government policy and the Ministry of Land and Resources in fact used this reward quota as an incentive for land reclamation (Ministry of Land and Resources, 1999). This clearly incentivized local governments to carry out residential land reclamation in their jurisdictions.

Under such a background, a wave of rural residential housing demolition and relocation was started. Initially in localities such as Tianjin municipality, Chongqing, Chengdu Municipality and some cities in Zhejiang province and later all across the country, demolishing and reclaiming farmers’ residential housing and relocating farmers to apartment buildings in nearby townships became a major mandate for township governments since the county and city governments require construction land use quotas thus generated.

Though it is undeniable that in some localities these reclamation and relocation

initiatives help to improve rural living conditions since better infrastructure are now installed in the relocation sites, our fieldwork in Tianjin, Shandong, Henan and Chengdu indicates that these initiatives are still essentially local governments' actions to generate new construction land use quotas. In many cases, both the level of compensation for the old rural residential housing demolition and the standards of new housing in the relocation sites are unilaterally decided by local governments. Farmers involved usually have no much saying in the whole process. In some occasions farmers are forced to live in the apartment buildings that are very far away from their farming land. This inevitably leads to dissatisfactions and even social unrests. In Tianjin, for example, the 12,000 mu (1/15 hectare) farmland and the residential housing area of 12 villages in Huaming Township were taken away by local government and all the farmers are relocated to the central township of Huaming. Many angry farmers are now appealing to the upper level governments for better arrangements. In Chengdu and Chongqing, similar residential land reclamation to arable land and relocation of farmers to concentrated apartments were carried out along with the Hukou reform and local governments usually claim that those who give up their residential land for apartments can also obtain an urban Hukou. One innovation by Chongqing and Chengdu experiments is that local governments at township or county level that were able to generate some construction land use quota by rural residential land reclamation to farmland and relocation of farmers involved to concentrated apartment buildings, they can auction the land use quota on land use quota exchange market set up the provincial and municipal government. Some of the revenue from such land use quota can then be used to pay for the residential land reclamation to farmland and farmers' relocation. Overall speaking, though many local governments have started such pilots land reform and have reclaimed many rural residential land to farmland, the quality of such farmland is usually not very high and in many localities farmers' livelihood has been adversely affected after being relocated to concentrated apartment buildings. Starting from 2012, the central government has requested local governments to stop forcing farmers to relocate to concentrated building.

4 Toward a New Model of Urbanization with Coordinated Reforms focusing on Land

As detailed in the preceding sections, the challenges China faces in the course of urbanization and economic development are not only complex, but also are closely related to China's land system. To address the distortions in urbanization and help China to complete its great economic transformation, the government must be resolved to carry out fundamental land reforms. Only by implementing real land reform and coordinating the land reform with reforms in Hukou and local public finance, can the unsustainable model of urbanization be rectified.

Reform of the Land Requisition System

A reform of the land requisition system needs to strictly define public versus non-public use of land. In other words, for land requisition to be considered legal, expropriated land must be designated as public use. In defining “public”, we believe that if a product manufactured on a piece of land is produced for market consumption, then the land use itself should also be decided by the market. Only products that cannot be provided by the market, whether profitable or not, should be seen as public projects and land requisition applies.

Even for land requisition that target public use, the government should also ensure that compensation is based on fair competition. No matter what the purpose of the project, citizens should not suffer loss from land requisition. Besides, compensation for land based on market values is the internationally recognized principle. At this point, it is worth looking at the methods that Beijing Municipal government has used: 1. Provincial governments set minimum compensation criteria at the municipal and county level for land expropriated within their jurisdictions. These criteria should not violate the ‘Law of one price’, and should be based on the overall evaluation of local economic and social conditions such as land resources, production level, geographical condition, and supply-demand relationship, etc. 2. Establish a negotiations mechanism between governments, developers, village collectives, as well as local farmers. 3. Design a scientific land requisition system and a negotiation and arbitration mechanism in land requisition compensation, which are independent of the municipal or county government.

Reform of the Collective Construction Land System

A decision by the Third Plenary Session of the Seventeenth Congress of the CCP stipulated that the scope of market transactions for collectively owned land should be gradually expanded. However, based on the current revised draft of the *Land Administration Law*, lawmakers tend to constraint the location where farmers can obtain non-agricultural development rights on their own land. In another world, only the land outside the defined scope of urban construction land can be developed by farmers on their own. However, this regulation would mean that the vast majority of rural land with market value (within the defined scope of urban construction land) still needs to be go through the land requisition-land preparation-land leasing process and farmers could not develop them. This would also mean a continued restriction on commercial/ residential development on collective land. The Chinese government apparently worries about losing control of construction land use. However, these policies have not been implemented well, as not only do ‘Small-Property-Rights Housing’ continues to flourish, the government has lost tax revenue that could have been collected if such properties had been legalized.

Granting development rights on collectively owned land would not only help to

protect the interests of those with rights to the land, thus reducing social conflict, but also good for improve land use efficiency. With regard to the widespread issue of ‘Small-Property-Rights Housing’, standardizing and guiding the development of such properties in the amendment of the *Land Administration Law* would be preferable to an outright ban. As long as it is not against public interest and is in line with the overall land use and urban planning, this land should be transferred to state-owned status and the development rights to most of the land should be given to the original property rights holder. This would be the only way toward realizing the ‘Law of one price’ between collectively-owned and state-owned land. Under this model, both industrial and commercial developers can deal directly with village collectives or farmers, while the government can be compensated for this by requiring developers to pay a standard transfer fee and/or charging a value added tax on the land. In this way, while ensuring that a portion of the increased value of land goes to the government, the village collectives and farmers, as holders of transferable land with a high appreciation potential, can maintain the agricultural value of their land and a certain portion of the land value appreciation throughout this transition.

The implication of land reform would go far beyond simply providing reasonable compensation to dispossessed farmers. It would be essential to stabilize and even lower the high prices of residential land monopolized by local governments, and thereby controlling the corresponding skyrocketing housing prices. It would also be essential to stop local government from expropriating land at low prices and then build large-scale industrial parks. It would also be essential for China to address the land use distortions and the serious social conflicts due to abusive local land requisition. If these reforms can be implemented along with corresponding land use planning adjustments, the issue of farmland protection of farmland and excessive urban expansion would be addressed effectively. With the introduction of tax reforms, local government would also be compensated for the shortfall of land leasing revenue

Large Scale Public Housing versus Market-based Land Reform for Housing Security

One key issue in China’s urbanization is to accommodate the huge migrant population with affordable housing. The central government is currently demanding that local governments increase the supply of public housing. However, due to the massive investment required, there is a serious lack of incentives on the part of local governments. A more fundamental issue is whether any country can cover the 200 million floating population and their families with public housing and whether this is the best way to address the housing problems for the newly urbanized(Tao and Xu, 2006, 2007).

In a global context, a healthy real estate development model is one in which public housing mainly focuses on individuals at the lowest income levels who are not even able to afford market rental rates. The vast majority of people, whether through

housing purchasing or through renting, should be sheltered through the market provided housing. If the market price is so high that the government has to provide a large proportion of mid- to low-income households with public housing, reforms would be needed to address the housing prices.

The concept of ‘affordable housing’, in broad terms, can refer to housing provided by any entity for mid- and low- income groups. This naturally includes public housing provided by local governments for low- income families that cannot afford to rent or purchase a home. However, this does not necessarily mean that government need to provide the housing directly, nor does it infer a welfare society in terms of housing. If the market can provide the vast majority of population with housing that they can afford to rent or buy, then housing affordability is realized. As an example, in the Pearl River Delta region where housing is relatively expensive, 40-50% of migrant populations live in the dormitories, while the remaining floating population lives in rented housing within urban or suburban villages. While a majority of the rental housing is illegal ‘Small-Property-Rights Housing’ without decent infrastructure or public services, it has indeed provided migrant workers with a place to live with their families. In fact, experiences in Pearl River Delta cities such as Guangzhou, Shenzhen, Foshan and Dongguan show how local farmers and village collectives in suburban areas can proactively share the benefits of urbanization and how they can providing affordable rental housing to migrants. In Shenzhen alone, half of the 7 million migrants live in urban villages. In 2005, 327,000 people with local *hukou* lived permanently in these urban villages, while temporary residents totaled almost 4.7 million, or 14 times the number of permanent residents. According to the *Shenzhen Municipal Housing Construction Plan 2006-2010*, of the 250 million square meters of homes in the city, 120 million square meters belong to original village residents or the village collectives. Of these, private homes concentrated in urban villages cover an area of 95 square kilometers (8 square kilometers within the SEZ) with a total construction area of about 100 million square meters (20 million square meters within the SEZ).

In the course of China’s urbanization, the primary cause of housing bubble is that local governments monopolize and undersupply land for residential use. Therefore, besides building some public housing or providing rent subsidies to low-income groups, allowing collectively-owned construction land in suburban and urban villages to gradually enter the market is essential. Not only local farmers can build housing to share some of the land value appreciation in urbanization, but also the hundreds of millions of migrants can be accommodated without much government expenditure.

Urban Village Redevelopment and Coordinated Land-Hukou –Fiscal Reform

We propose that addressing the issues of housing bubble and providing migrant population with affordable housing in China can be achieved by innovating models of urban and suburban ‘village’ redevelopment. This will not only increase land use

efficiency, but also promote social equity. One possible improvement is to incorporate

The issue of redeveloping “urban villages” deserves more elaboration here. At present, the common practice in most cities is to demolish these villages and lease the land out to commercial and residential developer after requisitioning the rural collective land as state-owned land. This not only easily lead to social conflicts in urban village redevelopment programs, but also drive away the migrant workers who find urban villages the only affordable housing sites in cities. Therefore, it is hardly a sustainable model of urban village redevelopment.

An alternative approach is to learn from the successful experiences of land value capture, land readjustment¹⁵ and urban land consolidation ¹⁶ from the United States, Japan, South Korea and Taiwan. A land readjustment scheme is typically initiated by the municipal governments designating an area which is about to be developed. A subdivision plan is developed for a unified planning of the area. Provision of infrastructure and services is financed by the sale of some of the plots within the area, often for commercial activities. The original landowners are provided plots within the reshaped area which, although smaller in size, now have access to infrastructure and services.¹⁷

The redevelopment and renovation of China’s urban villages can draw on these successful international land readjustment experiences and further innovate by taking into account China’s specific conditions to provide affordable housing for migrants from the countryside. This can be done by requiring, through urban planning, the landowners of urban villages to develop rental housing rather than commodity housing. The floor-area ratio can be lifted in these readjustment projects by the city planning authority. If such practices can be extended to sufficient number of urban/suburban villages, the supply of rental housing would be adequate and the rental prices can be kept reasonable even after urban village redevelopment. In this way, affordable housing can be provided for the huge number of floating population through market mechanism rather than through direct government provision of public housing.

15 “Land readjustment” refers to a situation that after having expropriated and redeveloped an area of land, government takes a portion of the land for infrastructure use, another portion for public auction to cover the cost of land development, and the remaining portion (with a much higher plot ratio) mostly for returning to the original land rights holders.

16 “Urban Land Consolidation” is a method by which, according to the development needs of a city, areas within urban planning zones, areas of urban-rural fringe zones or outskirts, sections of land that are irregular and poorly organized as well as areas that are overcrowded and not suitable for economic use, are redeveloped under government order and reallocated to coordinate with public facilities, improving roads, parks, squares and rivers. Once it is ensured that all plots of land are of a suitable size and square with a certain scale, they are reallocated to the land rights holder. This guarantees that urban land is used more efficiently and economically, creating a clean and orderly urban environment.

17 A definition of the technique is provided by Archer (1987): "Land readjustment is a technique whereby a group of neighboring landowners in an urban-fringe area are combined in a partnership for the unified planning, servicing and subdivision of their land with the project costs and benefits being shared between the landowners"

As a matter of fact, allowing farmers in urban and suburban ‘villages’ to build housing for non-local migrant populations, once proper planning, infrastructure and government taxation are in place, would not only imply a breakthrough in China’s land reform, but also would facilitate China’s ongoing Hukou reform. Once the issue of housing for migrants can be addressed effectively and public schools can be built for migrants’ children in these redeveloped urban ‘villages’, an effective breakthrough in household registration reform would be realized.

The underlying economics can be illustrated by the following example. Assume a urban ‘village’ that covers an land area of 100 *unit* owned by 200 village households. During the course of redevelopment, local government first engages in direct negotiations with the village collective. After calculating the potential value added to the property after the redevelopment, the government can requisition a 45 units of land from the villagers. Of the 45 *units* taken by the government, 30 *units* can be used for infrastructure development in redevelopment while the remaining 15 *units* can be sold via public auction to cover the cost of infrastructure construction. Meanwhile, even though the original land rights holders have given up 45 *units*, the remaining 55 *units may still have higher value with better infrastructure and higher floor-area ratios granted by the governments*. By extrapolating from this simple example, we can design a series of steps to implement a coordinated reform in land, household registration and local tax system:

First, in terms of the legal system and policy implementation, the land on which urban ‘villages’ are built can be converted to state-owned land first. But the government will not grant land use rights to a third party such as real estate developer but to the original land right holder, i.e., the urban villagers.

Second, in terms of development and financing, once the villagers are issued the certificates of state-owned land use rights, they can work together to apply for a bank mortgage or bring in private funds to begin redevelopment on their own. With the funding, villagers can development rental housing to accommodate migrants and other low and medium income residents in cities.

Third, since theoretically speaking the land value appreciation in rural-urban land conversion can be largely attributed to the “positive externality” generated by urban growth and infrastructure investment, there is an economic rationale for the government to take a certain share of land for free. The land can be used for infrastructure development and financing.

Fourth, the government can in principle levy a tax on rental income of urban villagers and in the long run, a property tax on housing stock can be introduced to further consolidate local tax bases. Local government may use some of the tax revenue to pay for the education of migrants’ children in newly built urban public schools.

In essence, the proposed reform allows rural communities in urban/suburban villages of migrant-receiving cities to take their non-farming land onto the urban housing market if these communities are willing to submit some of their land to local government for infrastructure development. One further condition is that for the first 10-15 years, they can build properties only used for rental purposes. After the transitional period, however, these houses would gain full rights and can be sold directly on the housing market.

This design has a number of advantages. Insulating rural construction land in the rental market initially provides a cushion for the existing housing market and prevents market panics and a crash of housing bubble. On the other hand, eventually merging the two tracks in the future sends a credible signal to the speculators that housing prices would not rise further, therefore, the central government can phase out its strict regulations on real estate markets installed since 2010 to curb the housing bubble. Both contribute to a healthy growth of the housing market. Moreover, granting rural community the development rights (even though restricted during the transition) opens the legal channel for them to apply for bank loans for development. This can unleash a housing construction boom in urban villages and suburban areas, which provides a lift for construction-related industries with significant overcapacity. Finally, unlike the current housing bubble, this kind of real estate development is more socially beneficial and economically sustainable. Rural residents, particular those living close to urban centers, benefit from this change directly. The growth in the rental property track also makes housing affordable for hundreds of millions of migrant workers, enabling them to settle in cities permanently. Urbanization holds the potential of turning the Chinese economy away from the investment-driven model.

The key to the success of the proposed reform lies in the attitude of local governments. Their concern over revenues is perfectly legitimate and needs to be addressed in the reform package. Under the current system, local governments are burdened with too many spending responsibilities but do not have adequate revenues. After the reform, they will have limited power of land requisition and lose the sizable land lease fees and bank loans associated with that power. In the long run, property taxes should be levied so that local public finance can be supported by a stable source of income. Considering the strong resistance from the wealthy and the politically powerful in the trial cities, however, it is unrealistic to expect this new tax to take effect soon. However, the loss of revenue during the transitional period will be compensated by several sources.

First, the urban and suburban villages that are lured by the huge rents and join the proposed rental market track would be happy to contribute some of their land for free to the local governments in return for their newly gained land development rights for rental housing. The land readjustment technique proposed earlier is an effective way for government to capture the land value appreciation in urbanization. Local

governments would then be able to spare themselves from paying for infrastructure improvement from their own budgets. In addition, the proposed rental income tax could be used to cover the education expenditures for migrants' children in urban public schools. Once China is able to accommodate hundreds of millions of migrants on a permanent basis, they would work, live and consume like urban residents, a further boost to domestic demand.

Second, for those rural communities that have already developed their land "illegally" for urban usage, a gradual process of legalization can be started if certain infrastructure and building standards are met and due taxes are paid. The land and house owners would be willing to pay to local governments to gain full legal status.

Finally, another untapped source for local governments is the under-utilized industrial land. According to various reports, the floor-area-ratio in China's industrial park is only around 0.3-0.4 even in China's developed areas. Through reorganization by negotiation, it is possible to double land development intensity of industrial land use so that local government can work with industrial land users to convert some industrial land to residential and commercial use. Between 1997-2009, the area of industrial land increased by 15,000 square kilometers, i.e., 22.5 million Mu. This means if the floor-area-ratio in China's industrial park can be doubled to 0.6-0.8, at least 10 million mu industrial land can be used for residential and commercial purposes. As a matter of fact, as cities expand, the location of a lot of land in industrial parks becomes valuable for residential and commercial development. If such kind of land conversion can be gradually implemented with planning adjustment, at least one million mu industrial land should be available for residential and commercial development each year. One way to make this happen is to allow industrial land users to redevelop its land for residential and commercial purpose, either by themselves or working with real estate developer, under the condition that they pay the difference between land leasing prices for industrial purpose and residential/commercial purpose. Assuming 750,000 yuan per mu for housing and commercial land (the 2008 price) and assuming local governments only take two third of the revenue, local governments can collect 500 billion yuan per year for the next 10 years. Further assume that 2/3 of this converted land is used for housing, with a floor-area-ratio of 1.5, about 600 million m² housing would be built each year. With a moderate price of 5,000 yuan per m², under the current tax system local governments can raise 420 billion yuan in real estate related taxes(Tao et al, 2013). Therefore, even with some moderate assumptions, local governments can be largely compensated even if they gradually phase out of land requisition for non-public uses. The key is to adjust land use structure in existing urban land by intensifying the use of industrial land and converting some under-utilized industrial land to residential and commercial purpose. If this can be done, local governments can use some of the revenues to pay for the debts incurred through local financial platforms. Their resistance to land requisition reform would be much weaker.

Generation of Construction Land Use Quota: An alternative approach

At present, many local government are working hard to reclaim farmers' residential land in pure agricultural areas so as to generate construction land use quota that is needed if city want to use more land in urban expansion. The key mechanism is that according to the Ministry of Land and Resources, a city that needs some extra construction land use quota (beyond the central government plan quota) must be able to generate the same amount of arable land in the countryside. However, in China's countryside, an alternative approach to generate additional arable land is through agricultural land consolidation.

Land consolidation can not only raise farming productivity by improving existing land quality, but also develop extra arable land since many abandoned land parcels such as isolated garden plots, pond plots and tomb plots can be converted into quality farmland. As a matter of fact, China's Zhejiang province initiated a series of policies to encourage land consolidation in late 1990s. Local governments were awarded with construction land-use quotas as high as 72% of the newly cultivated arable land through land consolidation, a quite high-powered incentive. For example, if a land consolidation program spanned an area of 100 ha at a cost of CNY 2,250,000 and about 10 ha new arable land were generated, local governments could obtain 7.2 ha land-use quota. The cost of acquiring one additional hectare of construction land-use quota was about CNY 312,500 (2,250,000/7.2) per hectare. Local governments could recover this cost easily from land leasing fees paid by urban land users. This reward quota policy clearly incentivized local governments to carry out land consolidation in their jurisdictions.

The 1998 Land Administrative Law offered similar incentive for land consolidation as well but the new farmland could only be used for offsetting construction land quotas in the Master Plan, not creating new quotas (Ministry of Land and Resources, 1999). Zhejiang policy has clearly exceeded central authorization and expanded the total construction land areas. Besides more land for development, these extra quotas also allowed for more flexibility in their usage. The annual land-use quota had a time limit and expired if a locality did not use it for the year specified by the Annual Plan. Instead, quotas through land consolidation could be accumulated over time and used at any time. Zhejiang Province actually introduced a bank for these land reward quotas and each local government had its own account. Through this institutional design, reward quotas worked like a deposit in a bank checking account. As a matter of fact, this reward quota bank became the basis for trading Land Development Rights across localities in Zhejiang.

In 2000, Zhejiang granted official permission to trading reward quotas across localities (Zhejiang Provincial Government, Document No. 77, 2000). This policy

allowed less-developed localities to choose between using the quotas for their own development and trading the quotas out to other localities for revenues. For more developed localities, they could decide either reducing investment thus lowering land demand or buying quotas from other localities for urban expansion. The market quickly flourished and many developed cities traded in valuable land quotas to support their fast growing economies.

The central spirit of the 1998 Land Administrative Law was to keep the total farmland stable. The Zhejiang experiment facilitated this goal by offering powerful financial incentives for land consolidation. Local governments could use newly cultivated farmland to redeem reward quotas, which were quite valuable in the market. Or they could trade these farmland to other regions to fulfill the latter's replacement farmland quotas. Regions with high quality land could also receive financial compensations for preserving prime farmland on others' behalf. Between 1999 and 2004, land consolidation alone yielded 121,380 ha of new arable land. Despite sizable conversion to construction land for industrialization and urbanization, total area of farmland in Zhejiang declined only modestly from 1.612 million hectare in 1997 to 1.594 million in 2004 (Zhejiang Statistical Yearbook, 2009). Another indicator, i.e. prime farmland, reveals a similar pattern. As a matter of fact, between 1999 and 2004, the total area of prime farmland in Zhejiang actually grew and the quality of existing arable land was significantly improved after land consolidation(Wang et al, 2010).

We propose an alternative approach to generate construction land use quota by rewarding some land use quota if some additional arable land can be generated by agricultural land consolidation. Compared to the generation of land use quota through the reclamation of farmers' residential land, this alternative approach would not negatively affect farmers' livelihood by demolishing their residential housing, but rather would improve agricultural productivity since arable land consolidation would not only generate additional arable land, but also help to improve the quality of the existing arable land. This is particularly important since after the rural tax reform, local governments in China now have much less incentives to improve agricultural land quality through water conservancy and irrigation projects. If the proposed reform of rewarding land use quota after land consolidation can be enacted, local governments would immediately be incentivized to engage in agricultural land consolidation and improve arable land quality with water conservancy and irrigation projects. Moreover, if the central government can allow for a national trading of such land use quotas, it would not only help to preserve farmland but also redistribute development opportunities spatially. Rich regions can purchase development rights to build needed infrastructure for their fast growing industries, businesses, and urban population. Poor regions, usually with more land resources and little business opportunities, earn financial resources they desperately need for local public services.

4 Conclusion

In China's land reform, or any reform, strategy matters. Gradualism, in particular, can not only ensure the right sequencing is followed so reforms make good economic sense but also generate enough political support to overcome the resistance. In our view, a reform package that centers on land and urbanization provides the best chance of unleashing huge domestic demand and relieving the overcapacity problem in many industries in China.

China should focus on land reform because land has played an essential role in the making of China's growth model in the past 15 years old and it is also responsible for current woes in the economy. As discussed in this background report, even though China's land-based developmental model contributed to the dramatic rise of the Chinese economy, the negative consequences are also numerous and obvious.

Changing the course, however, is not easy. The old model has created its own vested interests and these actors, central and local, public and private, forged a strong growth coalition to perpetuate the existing path. In the aftermath of the 2008 financial crisis, the prompt and massive response from the Chinese government reinforced the existing imbalance in the economy.

Despite the tremendous inertia, some reform in land can no longer be postponed. A gradualist approach is proposed that aims to build a dual track system. Under the current land regulatory regime, land ownership is separated into urban and rural and only urban governments have the authority to take land from rural areas for urban development. This not only deprives rural residents of their development rights but also leads the Chinese economy down to a quite destructive path. Total liberalization, however, may result in a crash of the existing housing bubbles when large volume of rural construction land rushes to the market. To alleviate this concern by local governments and urban homeowners, China may need to first set up a rental property market track targeting mainly the 200 million rural migrants who already choose to live and work in cities. This could be done by redeveloping urban/suburban villages so that local farmers in these villages can legally build rental housing for migrants. The land readjustment technique can be employed to ensure such land development can conform to urban planning and infrastructure development criteria. Government can also levy rental income tax and in the long run, the property tax so as to finance urban public services such as education for migrating children. To make up for the potential revenue shortfall due to this reform, local government in China can also convert some industrial land for residential and commercial construction and levy a tax on land value appreciation from such conversion. This would not only alleviate the revenue concerns of local government, but also help to reduce the distortions in China's urban land use structure.

At the current stage of development and transition, no reform in the Chinese economy is going to be easy. One certainly should not have any illusion about a quick fix. But the proposed land reform package may offer some hope of transitioning into a more healthy urbanization model, boosting domestic consumption and alleviating the overcapacity problem in many sectors. One particularly favorable factor for this reform is the new leadership's emphasis on a new urbanization model by making real breakthroughs in reforms. What China needs now is a realistic roadmap for such reforms.

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