PROPERTY RIGHTS AND LAND POLICIES
Edited by Gregory K. Ingram and Yu-Hung Hong

Property rights are fundamental to the conceptualization and implementation of sound land policies, which require a good understanding of how public and private property rights are conceived, applied, and balanced in different institutional environments.

To take stock of current research on this subject, the Lincoln Institute of Land Policy in June 2008 convened a group of international scholars from different disciplines including economics, law, political science, and planning to discuss their work on the nexus between property rights and land policies. The chapters and commentaries in this book summarize the conference participants’ perspectives on the subject and are organized under three key themes:

— the linkages between the design principles for property rights institutions and the political and cultural histories in countries such as China, Estonia, Russia, the United States, and Vietnam;

— private property rights, the public interest, and compensation for eminent domain and regulatory takings in Brazil, Colombia, Mexico, the United States, and selected Western European countries; and

— the effectiveness and fairness of using varied property rights approaches to reduce poverty, promote environmental conservation, and provide affordable housing.

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CONTENTS

List of Illustrations ix
Preface xi

Introduction 1

1. Examining Land Policies from a Property Rights Perspective 3
   Gregory K. Ingram and Yu-Hung Hong

The Design and Evolution of Property Rights Institutions 23

2. Design Principles of Robust Property Rights Institutions: What Have We Learned? 25
   Elinor Ostrom

3. U.S. Private Property Rights in International Perspective 52
   Harvey M. Jacobs

4. China’s Land System: Past, Present, and Future 70
   Dwight H. Perkins

   COMMENTARY 93
   Scott Rozelle

5. Property Rights and Real Estate Privatization in Russia: A Work in Progress 96
   Bertrand Renaud, Joseph K. Eckert, and R. Jerome Anderson

   COMMENTARY 134
   Robert M. Buckley

6. Developing Land Markets Within the Constraint of State Ownership in Vietnam 137
   Stephen B. Butler

   COMMENTARY 175
   Annette M. Kim
Public Compensations for Takings

7. *The Use of Eminent Domain in São Paulo, Bogotá, and Mexico City*
   Antonio Azuela
   COMMENTARY
   Vicki Been

8. *The Myth and Reality of Eminent Domain for Economic Development*
   Jerold S. Kayden
   COMMENTARY
   John D. Echeverria

9. *Property Rights Protection and Spatial Planning in European Countries*
   Vincent Renard
   COMMENTARY
   Barrie Needham

10. *Should Decreases in Property Value Caused by Regulations Be Compensated?*
    Abraham Bell
    COMMENTARY
    Perry Shapiro

Property Rights Approaches to Achieving Land Policy Goals

11. *Land Registration, Economic Development, and Poverty Reduction*
    Klaus Deininger and Gershon Feder
    COMMENTARY
    Alain Durand-Lasserve
Contents

12. Looking Beyond Land Titling and Credit Accessibility for the Urban Poor 296
Edésio Fernandes

COMMENTARY 314
Ernesto Schargrodsky

13. Property Rights Created Under a Federalist Approach to Tradable Emissions Policy 317
Dallas Burtraw and Richard Sweeney

COMMENTARY 355
Wallace E. Oates

14. Private Conservation Easements: Balancing Private Initiative and the Public Interest 358
Gerald Korngold

COMMENTARY 378
Nancy A. McLaughlin

15. The Role of Private-Sector Developers in Challenges to Local Land Use Regulations 384
Keri-Nicole Dillman and Lynn M. Fisher

COMMENTARY 413
Alexander von Hoffman

16. The Mediocrity of Government Subsidies to Mixed-Income Housing Projects 418
Robert C. Ellickson

COMMENTARY 449
Ingrid Gould Ellen

Contributors 453
Index 457
About the Lincoln Institute of Land Policy 485
Changes in China’s land system have been an integral part of the trans­formation of China from a centrally planned command economy to a de­centralized market economy. Going forward, China’s land system will play a key role in ongoing structural changes that are changing China from a pre­dominantly rural and agricultural society to one that is urban and industrial. To understand China’s market reforms in general and the role of land in particular, it is helpful to describe the system as it existed prior to the reforms.

The only markets that existed in China before 1979 were small markets for secondary farm products such as vegetables and eggs. Everything else was allo­cated by administrative means governed by the national plan and implemented by China’s large government bureaucracy. This was particularly true with respect to the distribution of factors: land, labor, and capital. Even under the prereform system, however, land—at least rural land—was different. There was very little reallocation of land once the agricultural cooperatives and then the rural communes were formed. In effect the communes, or, more accurately, the brigades and teams under the communes, had a kind of property right over the land they tilled. Formally the land was owned “collectively,” that is, by the local production unit rather than “by the whole people,” meaning effectively the state. Existing villages were not forced to accept immigrants from outside, and land was typically not transferred from one commune or commune subunit to another. The one excep­tion was when a major construction project required taking land by China’s ver­sion of eminent domain for infrastructure projects, such as a large dam. Urban factories, in contrast, could not ask higher planning authorities to transfer rural land to their use under an eminent domain procedure. Such transfers did occur, of course, but they generally involved elaborate negotiations with the affected rural
Vestiges of this system still exist, and they played a particularly important role in the 1980s. The constraints on the acquisition of land (and rural labor), for example, indirectly played an important role in the rapid growth of township and village enterprises (TVEs) that were located in rural areas but often had close ties to urban enterprises.¹

When market-oriented reforms began after 1978, China found it politically and ideologically easier to introduce allocation through markets for industrial products and farm commodities than for factors of production. Even with industrial products, however, there was considerable political resistance to market reforms, and this led to the dual price system for the allocation of industrial inputs: (1) a lower price for planned allocations to existing state-owned enterprises; and (2) a higher market price for the same input allocated to others and for above-quota allocations to the state-owned enterprises.

Labor was the first factor to be increasingly subject to market allocation. The system of government allocation of all university graduates and many other skilled workers, including sending husbands and wives to different cities, was abolished early on. Similarly, the state-set wage structures gradually gave way to market-determined wages. Capital became subject to market forces more slowly. The government shifted responsibility for large investments to the individual state-owned enterprises, but these enterprises were allowed to go to the state-owned banks for investments they could not fund from their own earnings. Above a certain size, these investments still had to be approved by what was called the State Planning Commission and is now called the State Development and Reform Commission. The decision-making process for bank lending was governed more by politics than by commercial considerations, and this has changed only gradually. Even foreign direct investments (FDI) and private domestic investments above a certain size still require higher-level government approval. Thus, administrative measures still play a major role in the allocation of capital today.

Making land purchases and sales subject to market forces has come last, although, in the case of urban land, one can argue that market forces today are more prevalent than in the allocation of capital. In the rural areas, however, land cannot be legally purchased or sold on an open market, although local authorities do have the right to lease land through negotiations that are anything but transparent and that are closely related to other transactions that can be best described as black market transfers (see, for example, Ho and Lin 2003). This way

¹. State-owned enterprises in the cities could not ask the city or national planning authorities to allocate land and labor for expansion of factories if that land and labor had to come from outside the city’s jurisdiction. In many cases in the 1980s, the state enterprises would instead work out a relationship with a nearby commune, and the commune (or brigade) would set up a collective township or village enterprise that would produce components for the state-owned enterprise in the city.
of transferring land has become a major source of contention in the countryside. Because the urban and rural land systems are so different, they will be taken up in turn, starting with today’s urban market for land.

The Urban Land Market

Well before there was a well-established urban land market, urban service and government units and industrial enterprises had acquired a kind of property right to the land they occupied. The local and national government could override this right for public purposes and has done so regularly, but there generally has been a quid pro quo. For example, in preparation for Shanghai Expo scheduled for 2010, many state-owned industrial and port facilities along the Huangpu River are being moved out of the city to a new location on the coast, with the needed infrastructure and subsidies provided by the Shanghai government.

In the early reform years, new housing developments often had to “persuade” existing residents to move to alternative sites. These residents did not own their apartments, and their rents did not reflect market forces. Rent in state housing (virtually all the urban housing in the 1980s) was set at a level that barely covered the cost of utilities, if that. Access to housing depended on an individual’s work unit. That unit “owned” housing that was sometimes near the place of work and sometimes not. Allocation was based on status within the work unit together with family size and related criteria. This system lasted into the 1990s, at which time the state decided to privatize housing. When housing was gradually privatized, families typically bought their existing housing at highly subsidized rates. Moving from these work unit apartments, whether owned by the residents or not, presented a problem even after privatization. Residents typically could not afford comparable apartments elsewhere in the city unless they also were subsidized. The quality of existing housing was poor. In 1978 urban floor space per capita was only 6.7 square meters, or roughly 20 square meters for a family of three (National Bureau of Statistics 2007, 380). Toilet and even cooking arrangements were typically shared. By 2005, in contrast, per capita space was 26.1 square meters or around 80 meters for a family of three, still not luxurious, but a vast improvement over the situation two decades earlier. With this large expansion in housing of higher quality in all the major cities (see table 4.1), it probably became easier to persuade families to move.

The more prosperous families also had time to save to purchase more desirable apartments, and the banks were increasingly willing to finance mortgages. Some individuals still resisted moving, as in the well-publicized case of a woman in Chongqing who refused to move from her house while the foundations for a major apartment complex were being dug around her, but the issue in that

2. For a brief but more substantial history of the housing market in China from 1949 on, see Song, Knaap, and Ding (2005).
instance was simply how much the developer was willing to pay. In effect, the groundwork had been laid for a true market-based residential housing system with some major caveats as discussed below.

The urban residential land system today, together with much urban commercial real estate, is patterned in a general way—whether deliberately or not—on the Hong Kong system. Land is owned by the state, meaning the local government or some other government agency, and is leased to individuals and developers for a fixed number of years. The longest lease allowed is for 70 years for residential areas, and for less time for land used for commercial buildings (Finance Asia 2004). The leases in effect are purchased by the developers, with the funds going to the “owner.” Land leasing has thus become a major source of revenue for local governments as well as for many other government units. Typically, the revenue from such leases is received as a lump sum rather than as a monthly or annual payment. However, some localities have been experimenting with a system in which only a portion of the fee is paid up-front, with the remainder amortized in equal installments through the period of the lease.

This system differs from the Hong Kong system in that the Hong Kong government decides which parcels to lease each year, puts the parcels up for public auction, and receives the revenue from the auctions. In China many different units have effective rights to parcels of land, and they “sell” the land to developers in ways that are often far from transparent. The state unit “owners” who are not local governments receive most of the revenue from these “sales.” That is, the local governments generally receive revenue only from the land that is not owned by some other state unit. Alternatively, these owners sometimes develop the land themselves. Another common variation is that state-owned enterprises frequently negotiate with foreign direct investment firms to form joint ventures. Typically, the main contribution of the state enterprise is land that it effectively controls, and the value of the land is set in the negotiations between the foreign investor and the state enterprise. This last system existed well before there was a

<table>
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<th>Year</th>
<th>High Grade</th>
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<td>15.63</td>
<td>18.55</td>
<td>2.54</td>
<td>12.12</td>
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<td>2000</td>
<td>27.01</td>
<td>54.24</td>
<td>6.41</td>
<td>37.60</td>
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<tr>
<td>2003</td>
<td>63.29</td>
<td>62.20</td>
<td>14.50</td>
<td>40.19</td>
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<tr>
<td>2005</td>
<td>104.94</td>
<td>51.92</td>
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well-developed urban land market. It was not uncommon for the process to be a back-door form of privatization, with many of the benefits going to the senior managers of the state-owned enterprises in the form of high salaries and other perquisites in the new joint venture.

For well-off urban residents, the purchase or rental of housing is a relatively straightforward process.\(^3\) Real estate firms post notices about properties in their windows much as in the United States and other high-income countries. There are 96 publicly traded real estate firms listed on the Shanghai and Shenzhen stock exchanges and more than 20,000 that are not listed.\(^4\) Long-term urban residents who cannot afford purchases at market prices—a large percentage of registered urban residents fall into this category—still can either rent higher-quality public housing or purchase such housing at highly subsidized rates.

Two kinds of urban residents cannot take advantage of this system. The first group is made up of the urban unemployed and other registered urban residents with low incomes, a category that probably includes at least the bottom two-fifths of the registered urban population.\(^5\) They cannot afford to purchase most apartments in cities because they cannot afford the price or the periodic mortgage payments, although some of these lower-income residents can afford to rent public housing and even to purchase it if the price is sufficiently subsidized. In one sample of 52 countries, the average cost of housing relative to household income was 5 to 1, and in high-income countries it was often less than 3 to 1, whereas that ratio would be over 10 to 1 for the bottom fifth of the Chinese population and around 6 to 1 for the next fifth, with the ratio presumably being higher in cities such as Shanghai and Beijing where land prices are particularly high.\(^6\) Thus, even among the registered urban population, there is a need for subsidized public housing, and the government does provide public housing. There have been recent decisions to increase the amount of such housing.

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3. In the city of Beijing in 2000, nearly 72 percent of the long-term registered urban population lived in either public rental housing or formerly public housing purchased at a highly subsidized rate. Only 3 percent of the population of Beijing lived in housing purchased at market prices, and another 10 percent lived in housing that they built and owned themselves, which in the case of Beijing meant lower-quality housing than the former or present public housing (Logan, Fang, and Zhang 2008, table 3).

4. In 1999 the number of real estate companies reached 25,762 (Zhang 2005, 186).

5. The second fifth from the bottom of the urban population had an average per family income of RMB 24,300 yuan in 2006 (US$3,420), and affordable housing (based on an assumed three persons per family) was six times that figure.

6. The international ratio is referred to in Zhang (2005, 190). The ratios for income in China were calculated from National Bureau of Statistics (2007, 349), and the housing figures were for affordable housing of 80 square meters from the same source as elsewhere in this chapter.
Migrants and the Urban Housing Market

Of much greater quantitative importance is the plight of urban residents who are still registered as rural residents. These rural to urban migrants now total at least 200 million and probably more, and they have been subject to the rules of the household registration (hukou) system. In effect, unless a person is registered as an urban resident—and becoming registered as such has been difficult to achieve—that person has few rights in the city. Specifically, the person has had no right to public education or public health care. These migrants thus often have to set up their own schools, although the central government has now called for cities to open their public schools to migrant children. In recent years, the national government has taken steps to gradually eliminate the hukou system, but many of the system’s restrictions have effectively been turned over to local authorities, who continue to expel migrants deemed undesirable and to set high fees for formal registration as an urban resident, among other measures that effectively maintain much of the discrimination present in the hukou system.

People not registered as residents of a particular city, however, can buy apartments in another city either legally or by getting someone with a permit to register the property. Current efforts to restrict purchases of residential property by such nonresidents are aimed mainly at well-off individuals buying apartments as investments, not at migrants (Li 2008). But why would a migrant want to buy a home if the children could not attend the government schools or obtain adequate health care?

The real problem for migrants is that their income is too low for them to afford an apartment. An average apartment in China’s cities has about 80 square meters, and the cost for an apartment designed for lower-income residents is RMB 1,729 yuan per square meter, for a total of RMB 138,000 yuan (US$19,200 at the 2008 exchange rate). The average migrant makes only RMB 1,200 yuan (US$167) per month, or RMB 14,400 yuan per year (Xie 2008). Even if migrants could obtain mortgages from banks at relatively low interest rates, which is unlikely given their nonresident status, the payments would use up their entire income.

7. For a detailed discussion of how the system now operates, see Wang (2008).

8. As pointed out in Duda and Li (2008, 14–19), there is a lack of data that can be used to estimate whether the hukou system directly affects the ability of non-urban residents to obtain housing. The point here is that restrictions on migrant rights not directly related to housing could have a major impact on whether it makes sense to buy housing, although these rights issues are probably less important than the low-income problem discussed in the next paragraph.

Thus, a large and rising portion of China’s urban population is effectively excluded from the urban real estate market. Instead, these people live on construction sites, in air raid shelters built in the 1970s, on the street, many to a room in rented apartments, and in dormitories supplied by their employers. The people who can participate in the urban housing market are those with high incomes, families that received highly subsidized first apartments from their urban employers, residents of Hong Kong, and people with middling incomes who are registered urban residents and can obtain mortgage financing at a reasonable cost. Under the situation that predominates today, future migrants will have to continue to live in urban slum conditions or will have to rely on urban public housing or some other subsidized living arrangement if the government makes that choice available.

What makes this situation in many ways different from the usual shack communities on the edges of cities of many low-income countries is mostly a matter of scale. China is in the midst of the largest rural to urban migration within a single country in human history. Basically, China’s 2008 per capita income and urbanization levels are comparable to those experienced by Japan, South Korea, and Taiwan in the 1950s and 1960s. These economies experienced high GDP growth rates similar to those currently prevailing in China for two to three decades between the 1950s and the 1990s. During that time, their population in agriculture fell from 50 percent or more of total employment to 10 percent or less, and the proportion of population in the countryside fell from over 60 percent to 25 or 30 percent or less. As the data in figure 4.1 indicate, China is following this same path. Today its urban population is officially 43 percent of the nation’s total, and over the next two-plus decades that share is likely to rise to over 70 percent, assuming the pattern found elsewhere in East Asia holds.

In other words, China’s rural to urban migration is likely to add another 400 million people to the more than 200 million who have arrived in its cities during the past decade and a half, with the urban population increasing from 560 million to roughly 1 billion people. In 20 years, half of that population will be migrants who were born and, in most cases, raised in the countryside.

There are only two ways to reduce this massive migration: (1) by markedly slowing China’s growth rate and urban employment opportunities; or (2) by continuing to try to keep the families of a large portion of the migrants in the

10. A rate of only 10 percent (interest plus payment of a small portion of the principal) would use all of the average migrant’s income. If there were two income earners in the family, the cost would still be prohibitive. They could probably not get a mortgage at this rate in any case.

11. In Shanghai a decade ago, 33.1 percent of migrants lived in dormitories, 33.4 percent rented private, mostly low-quality rooms or apartments, 8.6 percent shared space with urban residents (for example, as servants), 7.2 percent owned or rented low-quality self-built sheds, and only 13.9 percent rented higher-quality public housing (Wu 2002, 216).
Figure 4.1
Share of Agriculture, Forestry, and Fisheries in Total Employment

a. By year

b. By income per capita (purchasing power parity)

Note: Employment data are often available only in five-year intervals. GDP per capita could change substantially in five years when growth was 8 or 9 percent a year. Simple extrapolations have been used to fill in the gaps in agricultural employment data. Source: Heston, Summers, and Aten (2006); Korean, Taiwan, and Chinese statistical yearbooks.
countryside. Both would have negative consequences for China that are complex and well beyond the scope of this chapter. The main point here is that China, barring a large external shock or domestic political upheaval, is going to make every effort to maintain a high rate of growth, and it is my belief that the Chinese are likely to succeed in doing so. As the *hukou* system is dismantled, its limitations are also likely to largely disappear, but it remains to be seen whether local urban governments will welcome migrants and attempt to ease their transition to urban life or instead will put obstacles in their path.

One way or another, China’s urban land system will have to adjust to this new environment. First of all, China faces a challenge in making the current market-based system work better for those in a position to use it. The question of who actually owns various properties will have to be answered. The process of property transfer from one entity to another will have to become more transparent. An urban real estate tax system will have to be markedly improved. (Some of these issues are discussed in greater length later in the next section.) Desirable as resolving these issues are, however, they will be dwarfed by the problem of how to house a half billion migrants who cannot afford real estate of even the low-cost variety as currently defined. The current level of housing construction, large as it is (see table 4.1 above), is far short of what will be required by an influx of 5 to 6 million migrant families a year.

Hong Kong and Singapore are probably appropriate models for what individual families will require. Public housing initiatives in those two economies began at a time when their per capita income (purchasing power parity per capita of US$3,300 and US$4,600 respectively in 1960) was similar to that of China today (Heston, Summers, and Aten 2006). Virtually everyone who required such housing received it, and the shacks on the Hong Kong hillsides disappeared. Singapore and Hong Kong, however, had to provide perhaps 1 million public housing units in total. China will have to provide several times that number each year.

In summary, China has gone a long way toward creating the rules of a modern urban land market, but important as these changes have been, the migration challenge will continue to require a different effort. China basically faces a major market failure brought about by the wide disparity in the incomes of the better-off portion of the registered urban population and the poverty of the new migrants. Registered urban residents in effect received windfall income when ownership of their housing was transferred to them at highly subsidized rates. Something similar will have to be done for the migrants.

Conceivably, the migrants could be given large cash grants to pay for housing, and developers could respond to this newly created demand by building low-cost housing, but that does not seem realistic. More likely, housing will have to be

12. For a more complete analysis of why economic elements are not likely to derail rapid economic growth during the next two decades, see Perkins and Rawski (2008).
provided or paid for by local governments or Beijing. Sometime after this public housing is built and occupied, when the incomes of all urban residents rise to a level where even the migrants can get affordable mortgages, all housing, not just housing for the well-off, can be governed mainly by market forces. In Singapore, in particular, citizens in public housing were encouraged to buy their apartments, typically using loans from their provident (compulsory savings) fund, but this did not occur until per capita income in Singapore was far higher than it is in urban China today.

**Enforcing Urban Property Rights and Implementing Public Housing: Missing Institutions**

The previous discussion has been based on an implicit assumption that a person with an income high enough could readily purchase a secure right in housing, that a business could do much the same with its offices and factories, and that the central and local governments would build the public housing and infrastructure that were not provided by profit-oriented developers responding to market forces. The key assumptions are that property rights are secure or enforceable and that local governments will respond to what to an outsider seems like a clear priority.

In a full market economy with the necessary supporting institutions, property rights are secured, conflicts over these rights are resolved in accordance with law, and law is enforced by a judiciary that is independent of the executive branch of the central and the local governments. In China, however, Mao Zedong abolished all lawyers in the 1960s and 1970s, and law was little more than whatever a person with political power said it was. Even prior to that Cultural Revolution period, the Chinese legal system was never particularly well developed. The basic Confucian view of government was that good government depended on good people, not good laws. Thus, at the beginning of the reform period, China had to build a legal system suitable for a market economy from scratch.

Writing the laws required by the new market system was not particularly difficult. The real problem was how to enforce them and settle disputes in an efficient and equitable way. China’s courts were staffed by individuals who lacked formal legal training and, more important, were expected first and foremost to represent the interests of the state and the Communist Party. Furthermore, the courts often had great difficulty enforcing their decisions. Not only did the top leaders of the government overrule the decisions of the courts, but even enterprise managers could often ignore judgments brought against them. Ultimately, the courts had to turn to the government to enforce their decisions, but there was no government tradition of supporting court decisions—even decisions the government agreed with. Put differently, the courts were expected to support the mandates of government and party officials, and the government and party
officials had considerable discretion in deciding whether the courts had carried out those mandates. This process turned the courts into one more way of implementing government directives rather than serving as a check on abuse by those in power.

China’s legal system, however, is not static. The judiciary is gradually being professionalized, and the power of the courts to decide disputes is increasing. People in urban areas, particularly in the more advanced regions of the country such as on the coast, are increasingly going to court to settle disputes. In many areas, the courts, while far from independent, are now expected to follow the law and not be particularly concerned about the outcome preferred by a senior government official. The real guarantee of urban property rights at present, however, is not the law so much as it is the potential political consequences of ignoring these rights for the government and the party.

Because the ultimate decisions regarding the use of urban land are to a large degree within the discretionary power of the executive branch of the central and local governments, what actually is implemented with respect to land, housing, and infrastructure depends most of all on what the local government wants. What the local government wants, however, is often different from what the central government wants, and the power of the central government to enforce its will on local governments is limited. This is not because the local governments have formal legal rights that override the decisions at the center. It is more because China is a huge country, and central governments today and for centuries past have found it necessary to allow local governments a great deal of leeway in how and even whether to implement directives. Ultimately, if a local government defies the wishes of the center, the center can, and often does, remove the local official. But removal of an official or the top echelons of an entire local government is a blunt instrument that cannot be used to deal with subtle differences between the center and the locality over economic and social issues.

The central government and many urban governments often disagree about priorities. In recent years, the central government has increasingly realized that it has to deal more effectively with a variety of social issues in order to create what is now called a more harmonious society. In 2006 and 2007, this often took the form of calling for measures to improve the situation of urban migrants. Some of these measures have involved little more than ordering local businesses to pay the migrant workers their wages. But it has also led to directives to open up urban public schools to migrant children and a more general relaxation of the household registration rules.

What is far less clear is whether local governments give priority to the issues that the center thinks are most important. The large coastal cities of China, for example, are competing to become modern urban centers by patterning themselves on centers in countries with much higher per capita incomes. Shanghai is trying to catch up with and surpass Hong Kong or eventually even New York, and lesser cities have sister city relationships with comparable urban centers elsewhere. Longtime higher-income urban residents want better apartments and
highways on which to drive their new automobiles, and they often see migrants as the source of increasing crime. Urban governments are responsive to this affluent part of their population. They tolerate migrants because migrants are needed by the local economy, but many see little point in spending large sums to provide these migrants with housing, education, and infrastructure.

Local governments and a weak legal system, therefore, are contributing to the creation of what amounts to a dual economy within urban areas. On one side are the long-term urban residents with high levels of education living in a prosperous market economy with respect to land, housing, and much else. The property rights of these residents and the rights of the enterprises where they work are protected in part by law, but mostly because local governments see their main task as serving this part of their population. On the other side are the migrants, who have few secure rights of any kind, including property rights in land. They are harassed by the police; they do not always receive their wages; and most live in facilities that they do not own. Their schools are often self-financed, use facilities that typically involve violation of some regulation, and so can be taken from them. There is no real market for the land and infrastructure used by the migrants, and there are no property rights. Hernando de Soto (2000), among others, has written extensively about people around the world who are in similar situations.

**Efficiency and Equity in the Real Estate Market**

In many ways, China’s current urban land market operates much like that in other market economies. Land prices, with the important exception of eminent domain cases, are determined by market forces, not by the state. The prices vary by city and region in ways that appear plausible for a market economy, with average 2005 land prices ranging from RMB 780 yuan per square meter in the more remote and less developed northwest to RMB 1,309 yuan in the more developed cities of the north that include such well-off areas as Beijing, Tianjin, and Qingdao (People’s Daily Online 2005).

Real estate more generally is priced at levels that the more prosperous urban residents can afford, especially those who can trade in owned apartments obtained earlier at highly subsidized rates. In 2006 the average price of a high-grade 150-square-meter apartment was just under RMB 1 million yuan (less than US$140,000), although prices in such cities as Shanghai and Beijing could be much higher. Most urban residents do not live in housing of this quality. As noted above, low-cost housing of 80 square meters had an average cost of just under US$20,000. While this cost is too high for rural migrants to the cities, it is affordable for urban residents in the second quintile of the income distribution, whose average family income in 2006 was approximately RMB 30,000 yuan (US$4,200) per year and even for those in the third quintile with average family incomes of RMB 24,000 yuan (US$3,330) (National Bureau of Statistics 2007, 349).
However, there is a danger that market forces could push urban prices out of reach of a larger number of residents than is currently the case. Households in China today have relatively few investment options. They can put money in the bank, where real deposit interest rates are low, or they can buy shares on the stock market, where prices are volatile. Housing has afforded better returns than the banks, at least during the past decade, and has been less volatile than the stock market. Residential housing prices rose by an average of 7.5 percent per year from the end of 2002 to the end of 2006. For well-to-do urban people, who have high savings rates and accumulate funds, housing prices could be driven increasingly by investment demand rather than by the demand for housing to live in. Also, far wealthier people in places such as Hong Kong are now buying large amounts of housing in mainland China as investments, and that speculative demand could drive prices of higher-quality housing out of the range of all but the wealthiest locals. Although this speculative demand from outside probably focuses on a relatively few cities, such as Shanghai, the problem is serious enough for the government to have already discussed policies to limit real estate investments by individuals from outside such cities.

Of equal importance is the question of whether real estate prices are high enough to elicit a rapid increase in supply. The answer to this question is unequivocal. As China has moved to a real estate development system based on the market, the response of developers has been rapid and dramatic. In 1991 China saw urban housing and business real estate sales totaling 30 million square meters of floor space. In 2000, when domestic and foreign developers were becoming increasingly involved, the floor space had increased to 189 million square meters, and in 2006 to 618.6 million square meters (National Bureau of Statistics 2007, 241). This large building boom explains how China could triple the space available per urban household at a time when the urban population was itself doubling and while also rapidly expanding commercial space.

Creating a Reliable Real Estate Tax

A problem that has not been solved is how localities can generate the revenue they need on a steady and substantial basis. The Hong Kong model of selling leases in one up-front sale does not appear to be serving this goal well except perhaps in a few wealthy cities such as Shanghai, and perhaps not even there. There are many dimensions to improving the current system, but they all can be thought of as components of what would be required if China were to implement an effective real estate tax to go along with a revised way of handling leasing fees.13

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13. There has been a debate over whether the leasing fee should be considered a land use tax (see Hong 2003, 66–71). In this chapter, we follow Chinese practice of referring to leasing fees and land taxes as separate sources of revenue.
The biggest single problem with the current land leasing fee and tax system is that the principal source of revenue is a one-time leasing fee at the time the land is leased by the commercial developer. This system worked well in Hong Kong for a long time because the government had a great deal of land and could auction it off on a limited and steady basis over many years. The land chosen for auction could be picked on the basis of a long-term land use plan. Hong Kong, in recent decades at least, also established effective controls over corruption. In China, in contrast, the amount of nonagricultural land is limited, and conversion of agricultural land is strictly controlled. Land in the wealthier urban areas that can be leased by the government is expensive, leading to large one-time payments to the local government or to the government entity that owns the land. These kinds of one-time payments, unlike in Hong Kong, are not sustainable over many decades, so local revenue gets a large windfall boost for a time, but not indefinitely. The current land use tax, in contrast, provides the local government with a steady, if much smaller, stream of income. Furthermore, the local government actually gets the revenue, whereas the leasing fee system generates revenue for whichever government entity happens to control a given piece of land.

Large one-time payments are also tempting targets for corruption, and land transactions have become a major source of corruption ranging from highly publicized cases involving municipal leadership in Shanghai and Beijing to smaller-scale cases in rural townships. It is not as difficult to hide a large payment to an official if it is only, say, 10 percent of the total price. Bribes are also easier to hide when they are one-time transactions rather than ongoing payments. A land tax paid as a small percentage of the value of the land could also lead to side payments to officials to get the tax lowered, though an official’s reward would be far lower and the chances of being caught greater.

Corruption in land transfers could be partially dealt with if auctioning off the land, as in Hong Kong, became standard practice. In China in the mid-1990s, only 5 to 10 percent of the total land sold was auctioned off, with the rest, according to the then director of the General Office of State Land Administration, transferred “through unhealthy practices based on personal factors, power-and-money swaps and behind-the-scenes insidious dealings, and thus hindering the realization of a normal market” (Sun 1995, 5). In 2002 the central government mandated that the cities lease land to private developers only through public tender or auction, but there is no evidence of the degree to which this directive has been implemented.

Another land tax system issue involves transparency, which requires an open system of recording ownership of or user rights over the land. According to the land law, all urban land is owned by all the people, meaning the state. The problem, as pointed out above, is that the state can be a local government, or a factory, or a government entity that is neither an enterprise nor a local government. A similar murkiness can apply to who actually owns a lease, although this is probably less of a problem. The murkier the land user rights, the easier it is for individuals administering these rights to divert funds for personal gain. This lack
of transparency is a large part of the reason there is large-scale corruption in real estate transactions. And even when corruption is not involved, the distribution of land user rights is inequitable and probably inefficient.

Solving the transparency problem is difficult. Because the state formally owns all the land, the control rights that allow one group or another to reap the benefits of a transaction are difficult to define. In part, it depends on the relative power of those claiming control rights. It also depends on who historically has had control rights over the land. No doubt other considerations enter in as well. The only national land survey during the reform period began in 1984, when land was both owned and controlled by the state and allocated administratively, and took 11 years to complete, ending in 1995, when the market economy was well established and land was mainly leased to users. Planning for the next land survey is currently under way, with a target finishing date of 2010 (China Economic Review 2007). In theory, it will cover the ownership of every piece of land in use. Whether that will prove to be a practical goal remains to be seen.

Given the difficulty of establishing who has user rights over pieces of land, an effective land tax system that provides an annual stream of revenue cannot wait until the owners of user rights are properly identified with transparent titles. Fortunately, there is a simpler alternative: local governments can have a fiscal cadastre that need not be related to a legal cadastre based on actual ownership. The fiscal cadastre would identify and value a plot of land and post a notice that that land owed a given amount of tax. If no one stepped forward to pay the tax, the government could seize it. This approach has worked in Indonesia, where identification of the legal owners of land was nearly impossible both politically and technically, in the sense of producing a steady stream of revenue from the land tax. There is every reason to believe it would work in China.\textsuperscript{14}

Today’s Chinese land tax system also has a variety of, for lack of a better term, administrative problems. The urban real estate tax, for example, was developed in 1951 and is out of date. Some of the taxes are redundant; the land value incremental tax, the enterprise income tax, and the personal income tax are all based in part on the net rental transaction income from property. The tax base is also narrowly defined, with commercial properties paying taxes and residential properties exempt. Foreign direct investment properties often pay less than domestically owned properties. There is also a great deal of local variation from one

\textsuperscript{14} I am indebted to Jay Rosengard for this paragraph. As Rosengard points out, this approach also requires keeping the land tax rate low so that the incentive to evade taxes does not become so great that it is worth the risk of losing the land through nonpayment of taxes or that it pays to bribe the taxpayer. For a further discussion of the current Chinese and Indonesian real estate tax systems, see Rosengard et al. (2007).
city to the next in how the taxes are administered and calculated. There is thus a need for a thorough revision of the taxes that apply at least in part to land.\textsuperscript{15}

**The Rural Land System**

China’s rural land system is fundamentally different from its urban land system. The Communist Party came to power in China in 1949 largely on the basis of its ability to mobilize a discontented peasantry. Rural poverty was at the heart of that discontent, and the unequal distribution of agricultural land had much to do with that poverty. In the southern half of the country, half of the land was owned by landlords (mostly absentee) and was leased to tenants in return for rent that amounted to half of the main crop output. In the north, particularly away from the North China Plain, tenancy was less prevalent, but lack of water and mountainous terrain meant widespread poverty of an extreme kind.

A common view of the problem was that private land ownership was highly unequal, and people with less land typically went into debt to a moneylender because of a bad harvest or other crisis, could not repay the debt, lost ownership of the land, and became impoverished tenants. For most members of the Communist Party and others who held this view, a return to private land ownership would simply re-create this situation. Under the commune system, where individuals did not have user rights over particular plots of land, there was no realistic way for land to pass into the hands of rich landlords. With abolition of the commune system and the restoration of household agriculture, however, farmers did have user rights over particular plots of land. If they were also given formal ownership of that land, they could presumably sell or lease it, causing a return to the path to rural inequality. Given the huge population in the countryside during the first decade of the twenty-first century, this was a real, if potential, threat to rural stability.

Another widely held belief of leaders of the Chinese Communist Party in recent decades (and also of past emperors) is that food self-sufficiency is critical in maintaining a stable country. Famine would lead to massive discontent and could bring down a dynasty. The famine of 1959–1961, which led to the premature deaths of as many as 30 million people, was perceived as a real threat to continued rule by the Communist Party. The practical impact of this belief was that China instituted, on paper at least, strict controls on the ability to convert land from agricultural to industrial and other nonagricultural uses. There have also been controls on the ability of farmers to shift out of grain into higher-income-producing cash crops. During Mao Zedong’s era, these controls were rigid, but they have been steadily relaxed during the reform decades in order to allow farmers to earn higher incomes from crops more lucrative than grain. The basic belief

\textsuperscript{15} This paragraph is based on Ding (2005).
in the importance of grain for food self-sufficiency remains, however. The concept of food security, where imports and strong foreign exchange earnings can be one way of maintaining that security, is an idea more accepted and understood among technicians than among the politicians who make the critical decisions.

These beliefs and the government directives emanating from them apply to a Chinese countryside that still had 325.6 million farmers employed in agriculture, forestry, and fisheries in 2006. The share in agriculture has been declining as a percentage of the workforce, as figure 4.1a indicates. In absolute numbers, there has also been a decline from 391 million farmers in 1991. In 2006, however, there were still 2.5 workers per hectare (one per acre) on China’s 130 million hectares of cultivated land.\(^{16}\) South Korea, by comparison, had 850,000 farmers cultivating 1,824,000 hectares or 0.47 farmers per hectare in 2005, and the United States had 0.015 farmers per hectare (Council of Economic Advisors 2008, table B-100; Korea National Statistical Office 2006, 221, 263).\(^{17}\) China thus has far more farmers than can be used effectively on the land, particularly now that Chinese farmers have considerable amounts of capital equipment.\(^{18}\) The low incomes that go with this low marginal productivity are the main reason so many are migrating to the cities.

The land system created when China reverted back to household agriculture in the early 1980s assumed that farm families would stay on the land. Formally, land was owned collectively, which meant that it was effectively owned by the village as a whole. User rights to the land were distributed to individual households based on family size and similar criteria. At least within the territory of the old commune, brigade, and team units, distribution was egalitarian, although landholdings between communes were far from equal. Gradually, the time households were guaranteed use of their designated plots was lengthened in order to encourage investment in the land. Initially, in fact, because of uncertainty about how long they could farm particular plots, farmers put 85 percent of their investment into housing, where property rights were relatively secure (Huang 1998, 52). At the beginning of the 1980s, farmers typically were told that they were being assigned particular fields for two or three years; this quickly was changed.

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16. Chinese employment figures are notoriously unreliable, but they are usable in terms of the general magnitude of employment, as is the case here. These data are all from National Bureau of Statistics (2007, 130–131). The cultivated land figure is also probably high even though it is the published figure in the 2007 statistical handbook. A senior official in the Ministry of Land and Resources indicated that total arable land in 2007 was only 121.8 million hectares, largely because of alienation of arable land to nonagricultural uses (Li 2007, 1).

17. The U.S. figure is farmers per area of crops harvested, which, where there is more than one crop per year, is a bit higher than total cultivated acreage.

18. There were, for example, 1.4 million large and medium-sized agricultural tractors in China in 2005 and 15.3 million small tractors, or one for every 8 hectares (National Statistical Office 2007, 461).
to fifteen years by 1985 (Parish 1985, 18). In 1993 this number was increased to thirty years, and the rights could be passed on to the farmer’s children (Wu 2005, 126–127). Today, rights of this sort are sometimes held for as long as fifty years.

But the rural population began to leave the farms to work in the cities. Those leaving could not sell their land, and many attempted to hold onto it by having close relatives farm it in their absence. This practice was facilitated by the fact that the migrants were typically the young, and many of their parents were still farmers and were “too old” to move. In many cases, however, this meant that the land was not farmed as intensively as it would have been if the original families allocated the land had continued to farm it.

The commune organization had been abolished, but the new township governments took over many of its functions, since the jurisdiction of the commune over land and the jurisdiction of the township (xiang) were more or less identical. Similarly, the former commune subunits, the production brigades, were largely synonymous with villages and village governments. The township and village governments often took a negative view of migrants’ efforts to hold onto their land. Instead, no doubt with the backing of many people who remained on the land, the land was periodically redistributed. Redistribution could happen because of migration, but also because of changes in family size within the rural population that remained. In one survey, two-thirds of the villages had experienced this kind of land reallocation, and a quarter of them had experienced three or more such redistributions (Rozelle and Li 1998). In general, there was a good deal of variation in redistribution practices among villages, with the variation largely determined by the local authorities. These redistributions may have promoted welfare within a village, but they also undermined a family’s sense of having a secure property right.

Renting land was permitted in most villages, according to two large surveys taken seven years apart (Brandt et al. 2002, 80). The percentage of land rented rose between 1988 and 1995 in all but one of the provinces from which data were collected (the exception was Yunnan Province). The average amount of land rented in 1995 was only 2.5 percent of the total, with the highest percentage in a province at 6.9 percent in Zhejiang, a coastal province with a high degree of support for private activity from early in the reform period (Brandt et al. 2002, 80). The small share of rented land suggests that families may have been reluctant to take advantage of the opportunity of renting out their land for fear that it could be used to take the land from them and reallocate it. Also, large-scale rural to urban migration was just getting fully under way in 1995, and most families may

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19. For an interesting discussion on who benefited from and hence supported redistributions of land and who did not, see Kung (2002).
have had enough labor still in the countryside to farm the land themselves. A later survey, say in 2005, would be needed to test this hypothesis.

The other major issue is a result of the increasing demand to use land for nonagricultural purposes. In principle, the government has set a national target of not allowing arable land to fall below 120 million hectares (Li 2007, 1). But the decision about whether land can be used for nonagricultural purposes rests with village and higher levels of government or with individual families. In principle, farmers whose land is taken from them for nonagricultural purposes are supposed to receive full compensation. But there is no established market for rural land, so the price is set in negotiations between local authorities and the unit desiring the land.

The potential for abuse is enormous. It is not just that local officials often do not pay attention to the national laws and procedures, but that in many cases the transfer of the land involves a corrupt arrangement between the local official, who receives a payment, and the purchasing unit, which gets the land at a favorable price. In some cases, local governments collude with developers to simply expand the boundaries of what is considered urban and thereby convert land from collective to government ownership, thus confiscating rural land without compensation (Wang 2008). China’s farm families have increasingly taken to resisting these arrangements, sometimes resorting to violence. The widely reported figure of over 87,000 mass incidents serious enough to require police intervention in 2005 is widely believed to be related to a significant degree to abuses in rural land transactions. This figure is a 50 percent increase over the number of such incidents in 2003 (Xinhua 2006).

In early 2007 the inspectors of the Ministry of Land and Resources instituted a hundred-day crackdown on illegal land seizures and investigated 30,000 cases. Some 3,700 officials were designated to receive administrative discipline, and 2,700 were transferred to judicial departments for trial. This compares to a total of 1,221 who faced legal charges in 2000–2006 (China Daily 2008, 8; Li 2007, 1). Given that the amount of land transferred since 1996 amounted to 8 million hectares and the crackdown involved a total of only 0.22 million hectares, it is likely that the great majority of abuses were not investigated (Wu 2008, 2).

There is no easy solution. The institution of rural elections that allow villagers to vote abusive local officials out of office probably has helped, but local elections can often be manipulated not just to protect the Communist Party, but sometimes also to protect abusive local bosses. Nor is it feasible to have the central government enforce the law in more than 700,000 villages. Campaigns like the one in 2007 will scare abusive local officials for a time, but the incentives to continue these practices are too strong to be held back for long. Villagers can appeal to higher levels of government and even all the way to Beijing. One book that was available for a time in China before being withdrawn detailed how peasants in Anhui facing serious local abuses over taxes, fees, and other matters did on a number of occasions go all the way to Beijing (Chen and Wu
The farmers received sympathetic hearings from the Beijing officials, and steps were taken to try to rectify the situations. The abusive local officials, however, often ignored the directives from higher up and retaliated against the local farmers when they returned home. Eventually, some of the local officials went too far, to the point of committing murder, and they were caught and put in prison or executed, but incarcerating a few of the most abusive cases will not solve the problem.

The long-term solution is to create a transparent market for the purchase and sale of land and let the market determine the price. Where the concentration of land pushes some rural people into poverty, the solution could be a welfare or retraining program. Where local officials still seize land and do not offer fair prices, the farmers should be able to go to independent and efficient courts to plead their case. But, as pointed out above, courts of this kind do not yet exist, particularly in the rural areas, and the government is only now beginning to spend major resources on rural welfare programs in order to put a floor under how low family income can fall.

**Conclusions**

China’s land system is still in transition. It is clear where this transition started, but it is not entirely clear where it will end. In many respects, it is a dual system. Property rights in land in the rural areas are significantly different from property rights in urban areas. The urban and rural land systems also have important elements in common.

Formally, rural land is collectively owned by the local village or township, and urban land is owned by the state. In both cases, local officials play the primary role in deciding whether a piece of land under their jurisdiction can be leased for commercial uses. The method of transfer is occasionally open auction, but far more often such transfers are arranged in private negotiations between the local government official and the company desiring a lease. The situation is fraught with conflicts of interest, and the result is often corruption, sometimes on a grand scale. Such corruption is common in developing countries—and is often not rare in more advanced economies; in China, as elsewhere, it is a source of considerable instability in the countryside and embarrassing scandals affecting the strength and legitimacy of the government in the cities.

In the urban areas, there is a well-developed market for land, and land prices appear to reflect the relative scarcity and location of particular plots. The average urban resident desiring housing or the urban company desiring commercial

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20. Most of the cases dealt with excessive illegitimate taxes and fees and corrupt use of government funds rather than with land issues per se, but the sale of land was subject to the same kinds of problems.
property can obtain the land in what is basically a market transaction, if sometimes not a transparent one. Where there are disputes resulting from the transaction, individuals and companies increasingly resort to the courts, although government officials still have a major say in the outcome of disputes and are often parties to the transaction. The courts are not independent of the executive branch of government, and they are not staffed by highly trained jurists, but this situation is gradually changing. True court independence from the executive branch of the government and from the Communist Party, however, is a long way off.

The urban land ownership system also falls far short of an ideal in terms of how land provides revenue to the government. The main source of revenue from land is a one-time payment at the time of the transaction. While this system works well in Hong Kong, in mainland China it is or soon will be an unstable source of urban government revenue. A reformed land tax system would provide less revenue at the moment, but would be a steadier source of government income in the long run.

The biggest challenge for the administration of land (and much else) in both urban and rural areas is that China is in the midst of the largest rural to urban migration within a single country in history. There are 200 million or more migrants in the cities, and another 400 million are likely to arrive over the next two decades. This large influx of mostly low-income people presents an enormous problem of how to allocate land for housing and expanded infrastructure. Urban planning issues include questions of where these migrants should live and how they will get to work. In the rural areas, the problem is what to do with the land that these former farm families have left. The current practice of having local officials redistribute it to those who remain may be good for local rural equity, but the resulting insecurity of property rights does little for the migrants who left and does not provide adequate incentives for investment in agricultural land.

China’s land system, therefore, is likely to look different a decade or two from now. Whether the differences will be large enough to meet the enormous challenges that China faces remains to be seen.

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