Chapter 2 Land Use Reforms: Towards Sustainable **Development in China**

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Abstract This article explores the nature of China's land-use rights system, its evolution and impact on resource allocation and local governments' public finances. In recent decades, the public ownership of land has not hindered the development of a thriving market economy. Since the inception of the economic reform, land-use rights, a new institution, have been introduced to address the rigidness and ineffectiveness of land ownership in China. The current land-use rights system (LURS) has provided enterprises and individuals with a largely stable land tenure system while permitting local governments to leverage land finance for infrastructure investment. Nevertheless, rampant corruption and predatory behaviors by local governments are associated with land transactions, which pose a threat to social stability at the grassroots level. The Chinese experience sheds fresh light on the development of a sound land administration system in developing countries.

Introduction 2.1

China's rapid urbanization has impressed the world. Urbanization in China and high-tech development in the United States have been cited by Joseph E. Stiglitz, the former chief economist at the World Bank, as the two most crucial forces shaping the development of the 21st century. After being an agrarian economy for several centuries, China has become an urbanized economy with the size of its

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urban population surpassing its rural population in 2011. Behind this, China's land policy has contributed substantially to urbanization. Without land reform in China, urbanization would have been less effective in transforming its economy (Ye and Wu 2014).

Land matters greatly in local public finance. Local governments around the world often have a wide array of assets on their balance sheets, among which land assets are frequently the most valuable (Peterson 2006, 2009). In a city where the government has great control over land, the sale or lease of publicly owned land to the private sector can raise a substantial amount of money for public projects (Wong 1991; Ping 2006). Moreover, using land as collateral for borrowing or as public contributions in public-private partnership (PPP) programs to construct subways, airports or other large public capital projects are commonly adopted approaches for monetizing land assets around the world.

In the development trajectory of Western countries, tapping land values by selling or leasing land ownership or land-use rights had been a large part of the investment strategy for financing urban infrastructure during the 20th century, or even earlier, at a time when urban populations grew fast (Peterson 2009). Over the past several decades, in many developing countries where it is hard to receive large long-term loans for urban infrastructure, the revenue generated by land sales or land leases seems to be a good way to fund infrastructure development (Sagalyn 1992).

For local governments, resorting to land sales or land leases for fiscal revenue has both merits and demerits. "[L]ocal governments often have more flexibility in managing their assets than they do in adjusting tax rates, introducing new taxes, increasing user fees or borrowing funds for investment—all of which may require higher-level governmental approval or be prohibited altogether by the intergovernmental fiscal framework" (Peterson and Annez 2007, p. 284). "When land finance substitutes for borrowing, it reduces the risk surrounding future debt repayment capacity and the need to generate future revenue streams to meet future debt service" (Peterson and Kaganova 2010, p. 7).

From the perspective of intergovernmental fiscal relations, well-disposed land assets and the use of land proceeds in local capital budgets without incurring debt or requiring intergovernmental grants would win applause from higher-level governments and the general public as well. Nevertheless, dependence on land sales or land leases for revenue generation may create a variety of problems and potential risks. It poses a great threat to financial stability and sustainability at the local level. With a strong incentive to obtain increased land revenue through shoring up the land market, local governments may boost a property bubble. If the bubble bursts, it will in turn jeopardize local governments financially.

The experiences of both developed and developing countries reveal that the sale and lease of publicly owned land assets have been an important financing tool for local governments around the world. Similar to their counterparts in other countries, Chinese local governments have relied heavily on land leasing revenue since the 1990s, but the magnitude of land finance in China overshadows any other country in the world. This research analyzes the development trajectory of the land system and land finance, which may reveal the underlying mechanism and impetus for changes in land finance in China. This study explores the following two research questions: First, what major reforms of the land-use rights system (LURS) have been carried out in China? Second, what are the implications of the evolution of China's land management system for China and other developing countries?

This study, mainly based on a comprehensive review and analysis of relevant documents, academic works, and historical data, aims to analyze the evolution of the land system in the People's Republic of China (PRC) after 1979. This study will focus on a discussion of the interaction between the state and the market concerning the reform of the LURS, and will identify the significant milestones and underlying forces behind the development of the LURS during the past three decades. In the first section, a review of the evolution of China's land system and the LURS reform will be presented in chronological order, followed in the second section by a discussion of the contributions and the risks brought about by the LURS reform and local government land finance activities. The last section concludes and presents policy implications.

2.2 The Evolution of China's Land System and Land Finance

The Chinese government gradually eliminated private ownership of land after the founding of the PRC in 1949. After a series of structural and institutional reforms, almost all of the rural land in the country was owned by rural collectives, and urban land by the state, when the Cultural Revolution ended in 1976. During this era, China's land system featured strict state control over land distribution, land allocation free of charge by the state, and non-transferable land-use rights (Xie et al. 2002; Zhang 1997).

When China opened its door to embrace foreign investment, land became a bottleneck for the state to attract capital. The Chinese government, modeling on Hong Kong's experience, has promoted a land tenure system with public ownership to deal with this issue (Zhang and Pearlman 2004). Under this system, the land-use rights in the urban area could be leased to non-state actors, including foreign companies, while rural land could be converted into urban land before the lease of its land-use rights to land users.

Since the first case of the paid conveyance of land use rights took place in Shenzhen (on the border with Hong Kong), Guangdong Province in 1987, the land-use rights system has experienced substantial institutional changes. In this process, market forces have been playing an increasingly important role in the institutional design of the LURS. The Chinese socialist state has also loosened its tight control over land use rights (Chan 1999; Yeh and Wu 1999).

In 1990, the paid conveyance of land use rights became legalized across the country with the approval of the National People's Congress (Tang 1989). It was not until 2002, more than one decade later, that market-oriented land transaction

modes became legal requirements for the paid conveyance of land-use rights (Wang et al. 2011). In correspondence with these significant milestones, this study roughly divides the development trajectory of the LURS into three phrases: 1979–1990, 1991–2002, and 2003–present.

2.2.1 The First Stage of the LURS (1979–1990)

Economic liberalization began with the open-door policy of 1978 and resulted in a demand for land-use reform. Since 1979, foreign and overseas Chinese capital has started to flow into China, pushing the Chinese government to re-examine and deal with the land-use issue (Yeh and Wu 1996; Ho and Lin 2003). On July 1st, 1979, the People's Congress passed *The Sino-Foreign Joint Ventures Enterprises Law* (1979), which marked the start of the 'free' land-use (*wuchang shiyong*) policy. In the same year, a real estate company owned by the Shenzhen Municipal Construction Commission, a government organization, signed a contract with a Hong Kong company, in which both sides agreed that the profits of a real estate project, whose land was provided by the Shenzhen Municipal Government, were to be proportionally shared by both sides (Tang 1989). This was the first case in which land was treated as property, and a price for land-use rights was charged on the transaction between the Chinese side and a foreign investor. More importantly, this case signified that land had its price, and should not be allocated to users for free.

On July 26th, 1980, the State Council (1980), the chief administrative authority of the Chinese government, promulgated the *Tentative Regulations on Land-use for Sino-Foreign Joint Enterprises*, requiring all foreign enterprises to pay for land-use rights (Zhang 1997). This regulation marked the beginning of the paid use of urban land in China. In the following years, a number of municipalities, such as Shenzhen, Shanghai, Guangzhou, Dalian, Hangzhou, Qingdao, Chongqing, and Nanjing, promulgated their own regulations concerning how to charge fees for urban land-use by China-foreign joint enterprises. In the period of 1980–1987, the experiments with charging land-use fees were only carried out in the Pearl River Delta region, including Shenzhen, Guangzhou, and Foshan (Dowall 1993; Yeh and Wu 1995), and were mostly limited to land-use involving foreign investments. Furthermore, land leasing was still forbidden, and the land-use fee was normally set at a level lower than the true land value (Zhang 1997).

2.2.1.1 The Pilot Reform of the LURS in Shenzhen and Shanghai

The reform of the LURS was piloted in two important cities in China, namely Shenzhen—the neighboring city of Hong Kong—and Shanghai, and then spread to

the whole country. This was a fundamental step to establishing the LURS in China. When the Shenzhen Special Economic Zone was founded in 1979, the Chinese policy makers, such as Deng Xiaoping, pointed out that Shenzhen would function as a role model for other cities in the country during the reform era.

Since its founding, the Shenzhen government had initiated a series of reforms in a variety of institutional and socioeconomic aspects, including urban planning, infrastructure construction, the labor market, the capital market, the information market, the foreign exchange market, and so forth. Due to the lack of a legalized open land market, land-use rights could not be traded in Shenzhen, however (Liu 2008). Even without a legal land market, land transactions frequently occurred on the black market; but these transactions could not be fully monetized to generate revenue for urban infrastructure because there wasn't a legal land market.

By the end of 1986, the Shenzhen government had spent CNY 1.35 billion in infrastructure construction, among which CNY 670 million was bank loans with a total annual debt service (i.e. interest charge) of CNY 50 million. The Shenzhen government, however, had only generated CNY 38 million in total revenue via charging land-use fees, which could not even cover the annual debt service (Liu 2008). Thus, under a great burden to finance urban infrastructure construction, the Shenzhen government attempted to explore institutional innovations to alleviate the financial burden.

In the second half of 1987, the Shenzhen government attempted to separate urban land ownership and urban land-use rights, and conveyed land-use rights from the state to industrial and commercial users in the forms of negotiations (*xieyi*), tenders (*zhaobiao*), and auctions (*paimai*). On September 9th, 1987, the Shenzhen government for the very first time (also the first time nationally) conveyed the land-use rights of a piece of land to a Shenzhen company at a price of CNY 200 (USD 24) per m² in the form of a negotiation. The tenure of the land-use rights was 50 years. In the following several months, the Shenzhen government conveyed the land-use rights in the forms of tenders and auctions, respectively, to industrial and commercial users. On December 29th, 1987, *Land Management Ordinance of Shenzhen Special Economic Zone* (1987) was promulgated and laid a legal foundation for the leasehold-based land-use rights system in Shenzhen, and the practice had immediately spread to other cities in the Pearl River Delta region (Zhang 1997).

Although Shenzhen's practice gained much media attention, Shanghai's practice of land-use rights conveyance followed a more rigorous procedure. First, in 1987, the Shanghai municipal government promulgated a regulation coupled with six detailed implementation directives for land-use rights conveyance. Later on, in 1988, the Shanghai municipal government asked the tenders to bid for the land. As a result, three out of six tenders were from overseas, including the United States, Japan and Hong Kong, which made the auctions competitive. In consequence, the Shanghai government collected more land conveyance fees than originally expected (Zhang 1997).

2.2.1.2 A Nationwide Implementation of the LURS

The LURS was promoted across the country after the successful pilot reforms in Shenzhen and Shanghai. A number of laws and the Constitution were made to facilitate the implementation of the LURS. In 1988, at the First Session of the Seventh People's Congress of the PRC, the paid conveyance of land-use rights (tudi *vouchang zhuanrang*) was made official. Perhaps more significantly, the clause "land use right can be transacted according to the law" was added to Article 10, Section 4 of The Constitution of the PRC (1988) (Deng and Huang 2004). This legal amendment to The Constitution of the PRC was endorsed by the National People's Congress on April 12th, 1988 (Tang 1989). Furthermore, in 1988, the State Council (1988) promulgated A Tentative Regulation of China's Land-use Tax in Cities and Towns, which granted permission to local governments to collect land-use taxes and fees. In May 1990, the State Council permitted foreign capital to enter the real estate market in Mainland China. In June, the State Council (1990) promulgated A Tentative Regulation for China's Urban Land Rights Conveyance and Transfer, in which the detailed provisions for land conveyance and transfers were articulated. More importantly, this regulation laid a foundation for the establishment of a land market, where the price mechanism could play a role in the process of land-use rights conveyance and transfer. These milestone events in the late 1980s, and especially in 1990, opened up urban land markets and a new era for lawful land transactions nationwide in China (Dowall 1993).

2.2.2 The Second Stage of the LURS (1991–2002)

The years between 1991 and 2002 were a critical period for land management in China. Since the early 1990s, an urban land market has developed along with the Chinese style market economy and the legal framework of the land market has been put in place (Xie et al. 2002). Before discussing the new developments in the land-use rights system in the period 1990–2002, it is necessary to analyze the structure of China's land market and the role of actors in the development of China's land market.

2.2.2.1 The Structure of China's Land Market and the Role of Different Actors

In the existing literature, researchers prefer to divide the current land market into three sub-markets namely, the requisition of rural land (I), the conveyance of land-use rights (II), and the transfer of paid land-use rights (III) (Yeh and Wu 1996) (Table. 2.1).

| Transaction types | Land markets | Actors | Subject of transaction | Transaction prices |
|---|--|---|------------------------------|--|
| I-1 Acquisition of rural land for administrative allocation | Land ownership market | Buyer: the state Seller: rural collectives User: work unit | Land ownership | Requisition fee |
| I-2 Acquisition of rural land for leasing | Land ownership market | Buyer: the state Seller: rural collectives User: industrial and commercial users | Land ownership | Requisition fee |
| II-1 Conveyance of LURs by acquisition of rural land | Market of the conveyance of LURs | Buyer: land-user Seller: the state | Land-use rights (LURs) | Land price |
| II-2 Conveyance of LURs by acquisition of urban land | Market of the conveyance of LURs | Buyer: land-user Seller: the state | LURs | Land price |
| II-3 Conveyance of LURs by marketing of administratively allocated land | Market of the conveyance of LURs | Buyer: new user Seller: the state | LURs | Payment to the state and existing user |
| III Transfer of paid LURs | Market of the transfer of LURs | Buyer: land-user Seller: land-user | Paid LURs | Land price |

Table 2.1 Urban land markets in China

Source Adapted from Yeh and Wu (1996), p. 340

(I) The Land-ownership market: the requisition of rural land

According to Article 2 of the *Land Administration Law* (1998), rural land, whose property rights are collectively owned, could be requisitioned by the state "in the public interest," whereby villagers who lose their land would be entitled to compensation.¹ The land ownership will be converted from rural collective-owned into state-owned after the requisition of rural land. The requisition of rural land could serve for administrative allocation or lease arrangement for commercial purposes.

¹Rural areas where land is state-owned are not included in the cases of requisition. Moreover, according to the Constitution of the PRC adopted on September 20th, 1954, requisition by the state would be the only way to change the rural collective land into the state-owned land.

The procedure for the requisition of rural land for allocation purposes is as follows: On behalf of the state, local governments acquire rural land from rural collectives and convert it into urban land; and then, local governments grant the use rights of the requisitioned rural land to the intended users—work units (*danwei*), such as government bodies, public schools, public hospitals, and state-owned enterprises. The holding period for land that has been requisitioned for administrative allocation is unlimited; it is a 'freehold'. This requisition procedure existed during the pre-reform era. In a requisition of rural land for leasing, the intended land-users are industrial and commercial users rather than work units.

Due to the monopoly power of the state in this process, the requisition of rural land is neither based on market price nor following market mechanisms. The compensation paid to land-lost villagers is usually lower in the first type than in the second type of requisition (Xie et al. 2002).

(II) Market for the conveyance of land-use rights

The major actors in the market for the conveyance of land-use rights are the state and urban land-users. As the only supplier of land-use rights in this market, the government alone conveys land-use rights to land-users. In practice, local governments represent the state in the conveyance of land-use rights and collect land conveyance fees. Specifically, the state-owned land available to the market for conveyance comes from three different sources. The first source is the rural land requisitioned from rural collectives in the aforementioned land-ownership market. The second source is the existing urban land, which is taken back by local governments from the existing urban land-users with compensation. The third source involves the commoditization of administratively allocated urban land. In this market, users hold the tenancy for a certain period of time. The longest period for land-use rights is 70 years for residential land while the period of occupation is 50 years for industrial, educational, cultural, health, sports or mixed use, and 40 years for commercial, entertainment and tourism use (Zhang 1997).

(III) Market for the transfer, sub-lease and mortgage of land-use rights

According to the *Land Administration Law* (1998), land-use rights purchased by industrial and commercial users may be transferred, sub-leased, and mortgaged. The main actors in this market have little to do with the government in theory; thus, it is beyond the discussion of this study. This study mainly focuses on the market for the conveyance of land-use rights from which local governments have collected a colossal amount of land conveyance fees as their own-source revenue.

2.2.2.2 The New Developments in the Land Market

From 1988 to 1992, China experienced a "rectification period" from an overheated economy to an economic downturn (Brandt and Rawski 2008). Even though there was no land boom during that time period, the scale of land transactions surpassed that in the late 1980s. Since 1992, inspired by Deng Xiaoping's Southern Tour, reasserting his Open Door policy and economic reform, and the 14th National Congress of the Chinese Communist Party in which the establishment of a socialist

market economy was made a national strategy, China entered into a new epoch of fast-track economic development.

The land market, as one of the most important components in the Chinese economy, had started a round of high-speed development (Zhang 1997). In 1993, the total number of land conveyance cases reached 440,000 with a total turnover of CNY 123.1 billion (Liu 2008). Land conveyance activities expanded nationwide, from coastal to interior regions. Land conveyance fees had become critical extra-budgetary revenue for local governments (Lin 2007). By the first half of 1994, all of the provinces, municipalities, and autonomous regions in China had implemented the LURS and collected land conveyance fees.

For the sake of attracting investment to promote economic development and employment growth, local governments were eager to set up a variety of "development zones" and "economic zones." Up until the end of 1992, more than 6,000 development zones were being launched across the country, gobbling up more than 1,600,000 hectares of agricultural land (Cartier 2001). The number of land conveyance cases and the total turnover from land conveyance fees had been on the increase from 1987 to 2001, even though it dropped somewhat from 1995 to 1999 with the macroeconomic crunch (see Fig. 2.1).

Among the vast majority of land conveyance cases, to attract investment, local governments arbitrarily undervalued land prices, and even adopted the "zero-premium" strategy when conveying land-use rights to investors (Chan 1999; Cartier 2001; Tao et al. 2010). The prices and areas of land involved were not subject to the mechanism of supply and demand, but were largely maneuvered by local governments. "Negotiation", wherein local governments negotiated with the developers on land prices, was the most commonly used approach in the land conveyance transactions during that time period (Zhu 2005). Table 2.2 reveals the number and percentage of land conveyances based on negotiations in the total number of conveyances for city governments in China.

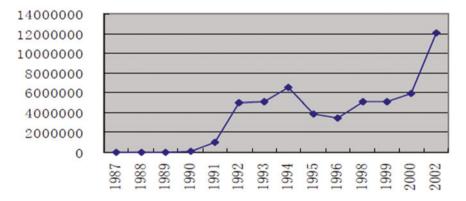


Fig. 2.1 Amount of land conveyance fees. Unit CNY 10,000. Source China Land and Resource Almanac, 1987–2003

| Year | Average number of cases | Negotiated transfer | Market-based transfer |
|------|-------------------------|---------------------|-----------------------|
| 1999 | 290.3 | 249.7 (80.0%) | 50.6 (20.0%) |
| 2000 | 374.5 | 321.1 (85.7%) | 53.4 (14.3%) |
| 2001 | 519.2 | 442.8 (85.3%) | 66.4 (14.7%) |
| 2002 | 597.4 | 472.8 (79.1%) | 116.6 (20.9%) |

 Table 2.2 Number and percentage of land conveyance cases by negotiation for municipal governments

Source See Tao et al. 2010, p. 2228

The rampant negotiation-based land transaction gave rise to various problems, including corruption, inefficient use of land, land hoarding, the engulfment of prime agricultural land, and so forth. From 1999 to 2000, there were more than 510,000 cases involving land law violations. To solve these problems, it was not until 2002 that the Ministry of Land and Resources (2002) promulgated the *Provisions for the Conveyance of State-owned Land by Tender, Auction and Open Listing* to put a stop to the commonly used negotiation-based conveyance of land-use rights. It required that "land conveyance involving commercial, tourist, and residential uses of land must be traded in the form of tenders, auctions, and open listings." Thus, the year 2002 marked another significant milestone in the development of the LURS. Since then, a market-oriented LURS has been legally established, even though in practice it has encountered strong resistance from local governments.

2.2.2.3 The Allocation of Land Conveyance Fees

The allocation of land conveyance fees among different levels of government had been bargained for since the fledging stage of the LURS in the late 1980s, and moved towards fiscal decentralization as local governments had later gained more discretion to collect and dispose land conveyance fees (Zhang 1997; Peterson and Annez 2007). Originally, according to *The Ordinance Concerning Strengthening the Management of the Paid Conveyance Revenue from State-owned Land-use Rights* promulgated by the State Council (1989) in May 1989, the central government retained 40% of land conveyance fees.

This split, however, incurred widespread indignation and discontent since local governments had to pay the high price of land consolidation, land development, residential demolition, and compensation to land-lost villagers before leasing the land to industrial and commercial users. Thus, to address the local demands, the central government modified the ratio from 40:60 to 32:68, with the central government getting the 32% (Zhang 2008). However, this minor change did not encourage local governments to lease more lands. Many local governments chose to hide the real number of land conveyance cases and the fees they collected to avoid remitting it to the central government. In 1992, the central government announced a compromise in the allocation of land conveyance fees, allowing its local agents to

| Year | Price of land requisition (P1) | Land conveyance fees (P2) | Price difference | P2/P1 |
|---------|-----------------------------------|---------------------------|------------------|--------|
| 1987 | 1.77 | 223.46 | 221.69 | 126.25 |
| 1988 | 1.84 | 106.98 | 105.14 | 58.14 |
| 1989 | 1.92 | 71.53 | 69.61 | 37.26 |
| 1990 | 2.13 | 32.99 | 30.86 | 15.49 |
| 1991 | 2.35 | 509.35 | 507 | 216.74 |
| 1992 | 2.49 | 385.46 | 382.97 | 154.80 |
| 1993 | 2.71 | 89.15 | 86.44 | 32.90 |
| 1994 | 2.99 | 131.44 | 128.45 | 43.96 |
| 1995 | 3.83 | 90.05 | 86.22 | 23.51 |
| 1996 | 4.64 | 102.56 | 97.92 | 22.10 |
| 1998 | 7.09 | 81.81 | 74.72 | 11.54 |
| 1999 | 12.03 | 113.31 | 101.28 | 9.42 |
| 2000 | 11.71 | 122.46 | 110.75 | 10.46 |
| 2001 | 10.42 | 143.36 | 132.94 | 13.76 |
| 2002 | 10.89 | 194.54 | 183.65 | 17.86 |
| Average | 5.25 | 159.90 | 154.64 | 52.95 |

Table 2.3 Price difference between land requisition and land conveyance fees

Unit CNY 1/m²

keep 95% of the land conveyance fees. When the tax-sharing reform² was launched by the central government in 1994, in order to mitigate local governments' fiscal budgetary deficits, the central authority allowed local governments to retain the land conveyance fees (Liu 2008; Zhang 2008). This was an important step towards the decentralized management of land finance, which greatly inspired local governments' enthusiasm to lease land for gaining extra-budgetary revenue.

With respect to the financial relationship between local governments and land-lost villagers, the latter are under an adverse situation because the compensation received by them is usually far below the land revenue collected by local governments (Yep and Fong 2009). According to the *Land Administration Law* (1998), land-lost villagers would be entitled to compensation with the highest level being 30 times of the annual average agricultural output value in the 3 years before the requisition. However, in real practice, the calculation of the "annual agricultural output value" was problematic, and the compensation was kept very low. Table 2.3 summarizes, from 1987 to 2002, the average price the government paid to villagers in land requisition and the average price collected by the government through

Source China Land and Resource Almanac and China Statistical Yearbook, 1987-2002

²The bulk of tax-based revenue is collected by the central government while local governments shoulder substantial responsibility for providing basic public services such as education and health care to the general public. On the impact of the tax-sharing system reform wherein expenditure remains decentralized while revenue has been recentralized, see Wu (2012).

leasing land to industrial and commercial users. The price difference is a true reflection of the exploitation of land-lost villagers under China's land administrative system (Ding 2007; Yep and Fong 2009).

To sum up, from 1990 to 2002, China's land market experienced a stage of fast development, during which local governments were enthusiastic about setting up various "economic zones" to attract investment. However, it caused a series of problems in land administration, in particular, the encroachment on arable land. Due to the lack of relevant laws and regulations, the vast majority of land conveyance cases relied on backdoor negotiation rather than market-oriented transaction during the entire 1990s and the early 2000s. This situation resulted in low transparency, insufficient market competition, inefficient land-use, land hoarding, and rampant corruption.

2.2.3 The Third Stage of the LURS (2003–Present)

In the third stage of the LURS, the Chinese central government aims to utilize the Chinese land tenure system to promote economic development while curtailing local governments' predatory behaviors. To address the problems of negotiation-based land conveyance and to integrate land conveyance fees into the budgetary system, the Chinese central government promulgated a series of regulations governing land conveyance activities beginning in 2002 (Zhu 2005). The market-oriented transaction approaches, the land fund (*tudi jijin*), and the land reserve center (*tudi chubei zhongxin*) are the three most important institutions established to improve the LURS and land administration. The market-oriented transaction approach plays a fundamental role in the LURS, ensuring a market-based allocation of land resources. The land fund is an institution designed to help consolidate land conveyance fees, an important category of extra-budgetary revenue, into the budget system. It means that local governments cannot hide land revenue from public scrutiny. The land reserve center has been set up for the sake of achieving sustainable utilization of land resources and avoiding intergenerational inequity (Liu 2008).

2.2.3.1 Market-Oriented Land Conveyance

The market-oriented transaction approaches are essential to the LURS, playing a fundamental role in reducing government intervention and manipulation in the land market. In 2002, the Ministry of State Land and Resources promulgated the *Regulations Concerning the Approaches of Tender, Auction and Open Listing in the Conveyance of State-owned Land*, which mandated local governments to use tender, auction or open listing as the transaction approaches for land conveyance cases involving commercial, tourist, and residential uses of land (Zhu 2005).

The procedure of tenders (*zhaobiao*) includes several steps. First, the local land administration bureau publishes a tender notice and provides relevant documents to

potential bidders. Second, bidders then turn in sealed bids together with the payment of a deposit to the land administration bureau before the deadline. Third, public officials from the land administration bureau together with external experts assess and select the finalists based on certain criteria. Fourth, a land-use contract will be awarded to the successful bidder. In the meantime, all unsuccessful bidders will be informed about the result in writing (Zhang 1997).

Auctions (*paimai*), or English auctions, are usually announced publicly by local governments. During the auction, bidders offer their prices against each other. The bidder who offers the highest price obtains the land (Cai et al. 2009).

The open listing (*guapai*) method is also called a two-stage auction. Open listing is also announced in advance as local governments offer the details of the land parcel. A key difference is that an open listing has two stages. When the auction starts, the first stage takes 10 working days. During the first stage, bids are posted by the land administration bureau. If only one bidder has submitted a bid and the bid price is higher than the baseline price, that bidder is assigned the property at its bid price. In this situation, the open listing process ends, and the second stage will not start. If there is more than one bidder, the one with the highest bid price wins the bid. Similarly, the open listing process ends, and the second stage will not start. But suppose at the end of the 10 working days, there are still more than two bidders trying to update their bid prices; in that case, the second stage, which is the English auction, will start. The one who offers the highest price in the English auction will win the open listing.³

The promulgation of the regulations governing the establishment of tenders, auctions and open listings as a means of leasing land-use rights was a significant milestone in improving the institutional framework of the LURS in China. Nevertheless, it encountered hidden resistance from local authorities because it limited their freedom to grant land to their preferred land-users (Zhu 2005). Previously, to attract industrial investment, local governments used the strategy of "low-premium" or even "zero-premium" through negotiation. This new regulation implemented in 2002 literally prevented them from doing so. Thus, local governments initiated various approaches to circumvent this regulation.

For instance, local governments sought loopholes in the regulation, which stated that land conveyance involving "commercial, tourist, and residential use of land" must take the form of tender, auction or open listing; but whether or not this regulation should be applied to "industrial" use of land was legally ambiguous. Thus, local officials tended to tamper with the process by passing off other types of land-use as an industrial use, and leased land at unreasonably low prices (Yu 2005).

According to the statistics released by the Ministry of State Land and Resources, the number of instances of land conveyance in the form of tender, auction or open listing accounted for only 28.8% of the total number of land conveyance transactions in the first half of 2004 (Ministry of Land and Resources of PRC, 2004). For

 $^{{}^{3}}$ Cai et al. (2009) argue that the open listing approach of land transaction is more likely to be subject to corruption than tender and auction.

most cases of land conveyance involving land conversion from agricultural use to non-agricultural use, the negotiation approach was still the most frequently adopted. A report released by the National Audit Office in 2006 revealed that among the 87 investigated development zones, 60 were illegally leasing land-use rights at arbitrarily low prices. This resulted in a loss of land conveyance fees of about CNY 5.6 billion (Gu 2006).

Over the period of 2002–2007, the Ministry of State Land and Resources promulgated a series of strict regulations to further rectify the land market and to strengthen the dominant role of market forces on land conveyance activities (Zhou 2007). In 2007, market-based land conveyance finally became the major type of land conveyance activity in the land market.

2.2.3.2 Land Fund: The Budgetary Control of Land Conveyance Fees

Since its inception, the LURS has arguably favored urban areas for two reasons. First, local governments turned a large amount of agricultural land into non-agricultural land, but the land-lost villagers received extremely low compensation when compared with the price at which the local government leased the newly requisitioned land to industrial and commercial users. Second, the majority of land conveyance fees flowed into urban regions and financed urban construction rather than public expenditure in rural areas (Jiang 2006).

To change this urban-rural imbalance, in early 2004, the State Council issued a document requiring local governments to devote at least 15% of the net land conveyance fees (i.e. the gross land conveyance fees after deducting the cost of land development) to public expenditure in rural areas (Liu 2008). Moreover, Wen Jiabao, the then Chinese Premier, emphasized at different government meetings in 2006 that the revenue local governments received by leasing land requisitioned from villagers should be used for public expenditures in rural areas. However, Lin and Ho (2005) observe that "[The] Chinese socialist state is better seen as a dynamic, complex, heterogeneous, and self-conflicting institutional ensemble in and through which the forces and interests of different levels of the state are contested, negotiated, and mediated" (p. 411). As these fees were a type of extra-budgetary revenue, the local People's Congress had no power to monitor its usage under the legal budgetary framework.

In December 2006, the State Council promulgated the *Notice regarding Standardizing the Management of Revenues and Expenditures from the Transfer of State Land-use Rights*, stipulating the requirement for local governments to create land funds under the formal budgetary system. This regulation required local governments to turn over the land conveyance fees to the local treasury as one category of "funds" and spend it according to budgetary arrangements. Thereby, since 2007, local governments have integrated most of their land conveyance fees into land funds. Thus, transparency and accountability in the management and the use of land conveyance fees have improved substantially (Liu 2008). Nevertheless, it should be noted that the management of land conveyance fees is still different

from budgetary revenue in China's local state. Local governments still enjoy considerable discretion over the collection and usage of land conveyance fees, with limited oversight by local People's Congresses and higher levels of government (Ye and Wang 2013).⁴

2.3 Contributions and Risks of Land Finance in China

Land conveyance fees have functioned as important revenue streams for Chinese local governments in the twin process of rapid urbanization and industrialization, in particular, contributing to capital accumulation and infrastructure construction. However, the dependence of local governments upon land conveyance fees has also resulted in some challenges and potential risks both economically and politically. In this section, this study investigates both the merits and disadvantages of land finance.

2.3.1 Contributions of China's Land-Use Rights System

China's land-use rights system contributes substantially to urbanization, industrialization, and broadly the market economy in China. Since the economic reform, the state's control over the land market has been challenged by the introduction of market-based land allocation. Economic considerations have played a more significant role than political ideology in the institutional design of land-use policies. Therefore, land finance and the land-use rights system reform have contributed to the growth of China's transition to a market economy. More importantly, since 1987, land conveyance fees have become a vital source of funding for urban infrastructure projects, greatly contributing to local infrastructure upgrades in China (Cao and Zhao 2011).

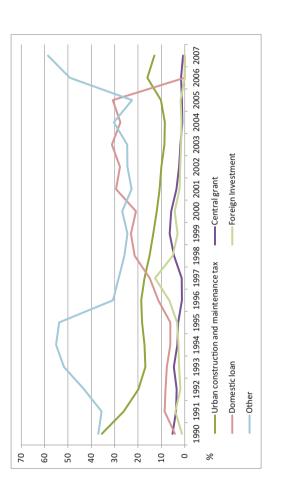
Table 2.4 presents the revenues that are generated from different sources and invested in urban infrastructure projects. According to official interpretation, the category 'Other' contains mixed revenues, including land conveyance fees, urban infrastructure fee (chengshi jichusheshi peitaofei) and the sale of state-owned assets and other fees (Wang et al. 2011). During the past ten years, land conveyance fees have grown substantially and have been the most important component of the category 'Other,' carrying much more weight than other components. Table 2.4 reveals that the amount of revenue from the category 'Other' increased from CNY 7,792 million to CNY 278,570 million, an increase of 3500%. From the same data source, Fig. 2.2 shows that the revenue from the category 'Other' had been the

⁴Some local governments have experimented on reviewing land fund under the budgetary framework. See Xiamen City's comprehensive budgetary review: http://www.xmrd.gov.cn/dygz/201506/t20150624_1136224.htm.

| Year | Total | Urban | Central | Local | Public | Water | Domestic | Foreign | Self- | Other |
|---------|--------------------|-----------------|---------|---------|-----------|----------|----------|------------|--------|---------|
| | | construction | grant | grant | utility | resource | loan | investment | raised | |
| | | and | | | surcharge | fee | | | fund | |
| | | maintenance tax | | | | | | | | |
| 1990 | 21,049 | 6,509 | 1,091 | 1,984 | 2,262 | 279 | 884 | 247 | | 7,792 |
| 1991 | 26,612 | 6,957 | 666 | 2,776 | 2,701 | 353 | 2,930 | 1,071 | | 9,462 |
| 1992 | 39,348 | 7,797 | 1,342 | 5,766 | 3,109 | 425 | 3,226 | 735 | | 16,948 |
| 1993 | 58,119 | 9,802 | 2,696 | 5,946 | 3,296 | 485 | 4,457 | 1,382 | | 30,055 |
| 1994 | 67,480 | 11,612 | 2,136 | 5,994 | 4,139 | 471 | 4,133 | 1,833 | | 37,163 |
| 1995 | 77,437 | 14,091 | 2,135 | 7,258 | 4,474 | 520 | 4,767 | 2,549 | | 41,645 |
| 1996 | 84,764 | 15,781 | 1,037 | 8,626 | 5,559 | 605 | 9,569 | 5,587 | 11,947 | 26,053 |
| 1997 | 111,034 | 19,067 | 1,394 | 11,542 | 5,612 | 612 | 16,574 | 14,072 | 10,780 | 31,381 |
| 1998 | 143,332 | 21,532 | 6,494 | 15,810 | 6,040 | 637 | 30,696 | 7,384 | 17,694 | 37,044 |
| 1999 | 162,712 | 21,920 | 10,520 | 17,146 | 6,316 | 778 | 37,420 | 4,945 | 23,748 | 39,920 |
| 2000 | 198,893 | 23,729 | 11,507 | 20,813 | 5,415 | 1,006 | 41,470 | 8,471 | 33,322 | 53,160 |
| 2001 | 252,627 | 27,094 | 8,958 | 32,378 | 4,881 | 1,111 | 74,166 | 5,632 | 40,956 | 57,451 |
| 2002 | 315,618 | 31,604 | 7,595 | 39,273 | 4,988 | 1,238 | 87,390 | 6,105 | 60,076 | 77,348 |
| 2003 | 427,619 | 37,174 | 7,713 | 53,293 | 5,569 | 1,598 | 133,183 | 6,811 | 76,968 | 105,311 |
| 2004 | 525,760 | 44,629 | 5,264 | 66,577 | 5,903 | 2,069 | 144,555 | 7,418 | 90,020 | 159,325 |
| 2005 | 542,251 | 55,129 | 6,216 | 79,589 | 5,548 | 2,500 | 166,989 | 9,271 | 94,603 | 122,406 |
| 2006 | 354,063 | 56,677 | 5,666 | 107,485 | 7,622 | 2,445 | | | | 174,167 |
| 2007 | 476,175 | 61,706 | 3,481 | 121,379 | 8,243 | 2,795 | | | | 278,570 |
| Unit CN | Unit CNY 1 million | | | | | | | | | |

Table 2.4 Revenue for urban infrastructure by sources (1990–2007)

Source Statistical Yearbook of China's Urban Construction 2007, Department of General Finance, Ministry of Housing, Urban and Rural Construction (2008) with reference to Wang et al. (2011), pp. 2982–2983





most important component among the different revenue sources, and accounted for nearly 60% of the total revenue for urban infrastructure projects. In particular, as suggested by Wang et al. (2011), for county-level governments, which more often than not have little financial capital but control a large amount of rural land, revenue generated from converting rural land to urban land has become an important source of funds for financing infrastructure.

2.3.2 Problems and Risks

2.3.2.1 Risk of Property Bubble Bursting

Although the causal relations between housing prices and land prices are not entirely clear, there is no denying the correlations between these two items (Kuang 2005; Gao and Mao 2003). During the past decade, there has been a real estate boom in China, and housing prices in urban regions, especially in the metropolitan cities (e.g. Beijing, Shanghai, Shenzhen), rose rapidly. The skyrocketing price of houses and apartments was partially attributable to the rising land prices charged by local governments. As a matter of fact, many local governments have relied on continually rising land values for financing local infrastructure. In addition, local government borrowing is often backed up by state-owned land.

In order to promote economic growth, around 8,800 investment vehicles have been set up by local governments to take up massive infrastructure projects during the past decade (Su and Zhao 2006). Due to institutional constraints on local government borrowing behavior, these vehicles, namely urban development investment corporations (UDICs), have sprung up in a relatively short period.

Using land as collateral, local governments attempt to obtain substantial bank loans for infrastructure projects. Victor Shih estimated total bank lending to UDICs had ballooned to CNY 20 trillion (about USD 3.16 trillion), or around 40% of Chin's Gross Domestic Product in 2010 (Credit Suisse 2010). If a big drop in the value of the land occurs, a series of financial crises could be triggered. Thus, land finance may be associated with the potential risk of a property bubble burst.

2.3.2.2 The Unsustainable Nature and Volatility of Land Finance

Given the fluctuation of the property market, the question remains as to whether or not cities can depend on land conveyance fees as an important funding source of infrastructure development (Wang et al. 2011). The current practice of land finance is unsustainable because land conveyance fees are basically a major, extra source of revenue for local governments. The fast pace of land conversion from agricultural to non-agricultural use has also harmed villagers' interests (Chau and Zhang 2011; Deng et al. 2006; Lichtenberg and Ding 2008; Zhu and Huang 2007).

According to the statistics of the Ministry of Land and Resources, the cultivated land area dropped from 130.0 million hectares in 1996 to 123.4 million hectares in 2003 (Lin and Ho 2003). However, some data based on remote sensing and detailed surveys suggested a much worse scenario (Lichtenberg and Ding 2008). Moreover, the land price fluctuates severely.

Land-leasing revenue will drop when the demand for public investment in infrastructure projects declines. Based on the data from *China Land and Resource Almanac* (1999–2009) and *China Data Online* (1999–2009), we calculated the ratio of total land conveyance fees to the total budgetary revenue of sub-provincial governments, in order to measure the degree to which Chinese local governments rely on land finance. The results reveal that this ratio was only 11.7% nationwide in 1999, but hit a historic high of 73.7% in 2003, and fluctuated largely within the range of 45–70% in the following years. In this respect, land finance is volatile and unstable.

In addition, a big potential risk to local finance is that the proceeds from land sales or land leases may be put to use for financing operating expenditures, which is likely to induce the dependence of local operating budgets on those proceeds. It may also aggravate the expansion of government employment as local governments have more money to pay public sector wages. This could substantially increase the volatility of the entire budget system.

2.3.2.3 Rampant Corruption and Social Unrest

The real estate sector and the land market have witnessed rampant corrupt activities. The decentralized management of land assets grants local governments the power to monopolize the planning, development and leasing of land. Government officials can make money through abusing this power. "Possessing the power to decide whether or not, how, to whom, and at what price, to lease the land, they can easily abuse that power by requesting bribes from interested individuals or institutions" (Gong 1997, p. 280). Even though the introduction of the market-based transaction approach may reduce corruption, the land market is still subject to corrupt activities due to the strong government control over the land market (Cai et al. 2009). In 2004, the *China Daily* wrote:

China's Ministry of Lands and Resources announced new measures to crack down on corruption and inefficiency in the land sector. The new rules *forbid officials to receive personal benefits from parties under their administration*. It is estimated that in 2003, the country faced 168,000 violations of its Land Law. (Cited from Cai et al. 2009)

In June 2008, according to the National Audit Office, governments in 11 cities, including Beijing and Shanghai, misused land conveyance fees substantially. Illegal land conveyance cases are rampant in China's major cities (Jia and Liu 2012).

Land corruption and land acquisition without a sufficient compensation have been one of the major triggers of social unrest. The land-lost villagers' sense of vulnerability mainly comes from the low level of compensation they receive and the high prices at which local governments lease the requisitioned land to commercial and industrial users. In addition to the low monetary compensation, relinquishing land has fundamental implications for rural people as they rely on land for food and even welfare support. Due to the insufficient provision of basic public goods in rural areas, losing land means that villagers have few assets to cushion themselves against any shocks in their lives (Yep and Fong 2009). By 2005, due to the government requisition of rural land, around 40 to 50 million villagers in China had lost their land. According to an estimate (Wen 2012), the number of land-lost villagers has been increasing by 2 to 3 million people per year. Such a colossal army of land-lost villagers may well be a time bomb for creating social unrest.

2.4 Conclusion

China's land reforms have some implications for the rest of the world. The sale or lease of the use rights of publicly owned land to the private sector is an approach adopted by local governments in China to finance public projects. Like other reforms in China since the late 1970s, land reforms started from scratch and gradually moved toward the separation of land-use rights from ownership. The separation of land-use rights from ownership, as the defining feature of China's land reform, can be viewed as a combination of economic capitalism and ideological socialism (Zhang 1997). This move has contributed to a substantial change in the urban landscape with some potential risks still unfolding.

From the late 1980s to the present, the Chinese government has gradually promulgated laws and regulations to institutionalize the market-oriented principles involved in the land-use rights system. These laws and regulations have replaced the negotiation approach with market-based approaches (i.e. tenders, auctions and open listings) for land conveyance activities and consolidated land conveyance fees into the budgets of local governments. Land revenue has also become more transparent to the general public, and land reserve centers have been set up to provide for sustainable land-use. All of these measures place China on the right track for developing a healthy and viable land administration system, which is one crucial component of the government's goal for the establishment of a market economy.

Land finance has made a substantial contribution to infrastructure financing, and has become one of the main drivers of China's urbanization and economic growth in the reform era. It remains controversial to allow local governments to retain 100% of the land conveyance fees. On the one hand, the arrangement may aggravate the risk of a housing market bubble as local governments have an incentive to boost the market. Nevertheless, on the other hand, land finance helps a local government enhance its fiscal capacity and promote its local economy.⁵

⁵As noted by Chen et al. (2017), local governments even use public housing programs to promote local economy. In general, Chinese local governments work like private corporations maximizing their profits. This leads to a number of problems and risks.

However, a variety of problems and risks caused by, or associated with, land finance deserves attention. The risk of a property bubble, land-related corruption, and possible social unrest may be a big hurdle for the Chinese economy in the future. The heavy reliance on land finance by local governments drives up the demand for limited land resources, which causes concerns about the sustainability of this development approach. Future reforms need to address these challenges when local governments rely on land assets as an important source of local government financing.

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