

Local States, Markets, and the Geography of Political Economy and Land in China

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Abstract

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This dissertation examines the evolution and role of land as a fiscal asset in China since the onset of reforms in 1978. Research presented in this dissertation specifically examines: 1) the role of land markets and land use rights in China's local political economy and local bureaucrat fiscal behavior; 2) the evolution and development of land finance as local government strategy for maximizing revenues in the absence of other sources; and 3) the extent to which neoliberalism explains growth and change in the value and transacting of land use rights in the Chinese context.

Findings from this analysis show that the local government behaves in ways consistent with revenue maximization. Land, as an available, immobile asset made available for expropriation through an ambiguous legal and institutional framework, is a coveted asset of local bureaucrats and exploited to support local fiscal revenue needs. Land markets, or the monetized transfer of use rights, are organized in ways that allow the local state to capture economic surplus. Land markets thus represent the state's leveraging of market mechanisms to achieve state aims of revenue and economic capture, rather than a local state embrace of a market logic to governance and resource allocation.

Exogenous changes in China's political economy and central-local relations with respect to land have catalyzed new forms of land finance, ranging from the collateralizing and leveraging of

land assets to expanding the local state's indirect revenues into bank loans and bond capital purposed for local state infrastructure investments, to elaborate debt restructuring schemes as is in the case of Yufu Capital Management Corporation in Chongqing.

The findings from this research expand our understanding of land finance and the legacy effects of past institutions on current period political economy and state behavior. While economic geography has focused much attention on the behavior of firms, the case of China broadens this field of research into the behavior and incentives of the local state in the fostering and operation of markets. Moreover, evidence presents challenges to neoliberalism as the primary paradigm through which to understand and interpret China's economic growth and class divisions over the reform era. Contrary to the narrative of the state retreating and embracing the market, Chinese local government bureaucrats have leveraged market mechanisms to expand and strengthen the local state.

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Chapter 1: Introduction

1.1 Introduction

This dissertation argues that China's land markets embody a process of state shaping and leveraging of market mechanisms that meet the budgetary and political economy needs of the local state. Markets can be better understood as land allocation mechanisms, or systems that reshape land use and urban morphology to reflect the needs of the local state, including rent-seeking behavior and policy imperatives such as the need to both salvage local state enterprises and exploit implicit economic surplus value in core urban land parcels. Our understanding of China's rapid urbanization should be viewed through the prism of these state land use imperatives and the revenue-seeking behavior of local bureaucrats.

In the context of China's economic “miracle” of recent decades, the development and growth of markets and market principles—and perceived partial retreat of the state from economic allocations—have often been cited as the primary drivers of China's economic growth (Lardy N. , 2014). However, it would be mistaken to bluntly differentiate between the Mao-era command economy and the opening of markets as two distinct political economic systems. Central to this dissertation, China's political economy remains, and has never ceased to be, in the grasp of the party-state apparatus and bureaucracy. Plainly stated, the state has not retreated. Markets have not undermined the state's control, but rather have been permitted, shaped, and curtailed according to the needs of bureaucrats and the Chinese Communist Party (CCP). This process—leveraging ideology to achieve state capital accumulation aims—is also not new within the modern history of the CCP. As early as the 1950s during the period of collectivization, farmers were dispossessed of their land under the auspices of collective ownership, while its true purpose was state accumulation of land assets, or what legal scholar Li Fengzhang has described as using "empty rights" [to land] to command "denying rights" (Li F. , 2010).

What has changed is the localization of the command economy—the localization of China's fiscal system and the often intentional ambiguity written into Chinese law has both prompted and enabled local governments to more actively shape and leverage land and capital markets to achieve statist industrialization and urbanization objectives.

The urban-rural landscape reflects a deeper system of political economic forces at work, shaping land use rights, asset allocations, and the forces behind economic growth. Land reform and urbanization have been closely tied to the course of modern Chinese history. Early experimentations in land reform were implemented in Yan'an during the years of Japanese resistance. During the 1950s, land reform and collectivization, both their socialist ideals and its occasional brutality, came to characterize the Maoist agenda during the first decade of the PRC. The Great Leap Forward and accelerated collectivization of the peasantry further consolidated land assets and redefined the relationship between the Chinese citizen (mainly peasants) and land. The rapid advance of economic development in China beginning in the late 1970s has largely been a story of land reform and urbanization. Land—claims to its rights of use, development, and revenues generated by land use—has and continues to be front and center in China's course of development.

A large corpus of literature on economic development and the geographic implications of growth have explored the role of the state in supporting economic growth and institutions, ranging from institutional development and adaptability, resource endowments, factor mobility, and the pursuant interests of the state. Yet in all instances, the interests of the state shape, drive, and distort the trajectory of growth. Mancur Olson (1993), in his famous treatise on the characteristics of a growth-motivated state apparatus, differentiated between the "roaming bandit"—one defined as seeking to maximize wealth gains but with a short time horizon, and thus highly extractive—and the "stationary bandit," or kings and autocrats with much longer time horizons who saw the benefit of developing an economy, and by extension the necessary institutions, to achieve greater wealth

returns. To what extent does the local state fit Olson's archetype in its policies and behaviors towards land reform and the development of land markets?

Markets constitute a means of allocating goods and services in an economy, but the degree and robustness of the market varies widely across both capitalist and socialist societies. The extent to which any given economy operates under a market depends on: 1) the free, uninhibited entry and exit of buyers and sellers; 2) free flow of commodities; and 3) price mechanisms as the signal for determining the volume and supply of goods and services. This framework represents an archetype of a market economy; in practice, no economy operates completely across each of the above states variables. What does differentiate economies is variation across each of the above variables. Even among western capitalist societies, price setting and entry and exit is highly variable, as evident in labor wage negotiations (Hall & Soskice, 2001; Thelen, 2004).

According to Polanyi (1957), the functioning of markets relies on states and the influence of state actors; the "self-regulating market" serves as an archetypal utopian ideal. Markets do not exist without the guiding hand, the regulating oversight, and the enforceable cudgel of the state, though the type of market—or system of exchange based on price signals—is influenced, among other factors, by the incentives and ideological leanings of state actors and path dependent legacies of existing institutions and endowments (ibid).

The state shapes, develops, and curtails the extent and reach of markets to achieve state aims and development objectives. This dissertation is concerned with the China development model, which diverges with other well-studied development models in several important ways. First and most prominent among these differences is the role of the state and land. China's recent growth, while departing from the Maoist/Stalinist industrialization model between 1949 and 1976, has retained several important features, namely control of land and its blunt use as an instrument to

achieve state aims of industrialization and more recently, fiscal obligations tied to infrastructure investments. In the Chinese case, the party-state apparatus continues to wield wide control over the allocation of factor inputs and assets throughout the economy, even under the veil of markets.

The development and functioning of land rights markets offers important insights into the extent of the local state as an active agent and participant in the market. Chinese bureaucrats shape and calibrate the supply and demand for land through a variety of means. In all of these ways, Chinese bureaucrats exploit (intentional) ambiguity in the written law to exploit the underlying fiscal value of land. Incomplete codification and enforcement of laws and rules regulating and defining land use rights have provided openings for local officials, seeking to maximize revenues drawn from the potential commercial value of land, to expropriate rural land and broaden the local state's fiscal frontier through the leveraging of land assets by locally owned state enterprises.

This dissertation is motivated by two simple, intertwined yet seemingly unsatisfactorily addressed questions: 1) to what extent does the Chinese local state participate in land markets; and 2) to what extent does the local state influence and shape land market (including the buyers and sellers of land use rights)? I explore these two questions through the prism of land and local government finance during the reform era.

Urban land plays a critical role in regional economic development and investment during the reform era, beginning with the creation early on of special economic zones, for several reasons. First and foremost of interest in this dissertation is as an asset that can either be developed, its use rights transferred (via market-oriented mechanism or private, negotiated transaction, depending on the developmental agenda), or leveraged as collateral in the acquisition of credit that is then invested in infrastructure and other urban public goods. Local government investment vehicles (LGIVs), when first established, are often capitalized with land assets withheld from the market by local

governments as part of a land reserve system to control urban expansion—and in many cases potentially for sustaining the high value of land to protect land-based revenue sources. These entities can then borrow against the value of these holdings to raise capital for projects, often times (and assumed to be) those that are strongly desired by either the central or local government (or both) but are not being amply provisioned by the local economy. In regions with weaker revenue streams generated by the private and state-owned sectors, LGIVs and their borrowing capabilities become more critical; these disadvantaged regions must “catch up” yet lack sufficient revenue sources to do so without additional, non-traditional sources. In the spirit of Gerschenkron (1962), these regions must, if not innovate or adopt new institutions to facilitate faster growth, deploy them in ways—and at such scale—that will.

This dissertation examines local government behavior and the factors and conditions that shape the choice of tactics employed to achieve specific economic outcomes. To this end, this dissertation explores policy decisions and tactics as my outcome of analysis, and the phenomenon which I will empirically observe and examine. Of keen interest is the changing role and agency of local governments in the space of public finance and exploitation of land as a fiscal asset. Research will explore changes in local government behavior with respect to land, or what will be referred to throughout as “land finance,” through statistical inquiry and case studies. Economic impacts of choice land-related policies will not be examined, but rather variation in government land finance strategies, and the extent to which institutional and socioeconomic and fiscal factors importantly influence these strategy choices. Evolution and change in the political economy of local governance and the tactics of local bureaucrats in shaping economic outcomes are of prime interest. These changes have created a new set of conditions under which local government bureaucrats must and do operate. Land figures prominently in these strategies.

1.2 Land Markets and Policy Experimentation

While central states, as exogenous agents, introduce new institutional frameworks that then take hold at the local level, local agents can, and often do, catalyze additional reforms. These local actors thus introduce endogenous change in a set of institutional arrangements, either through new policy ideas, or more commonly, the adoption and implementation of policies innovated in other locales. Local bureaucrats are given a set of constraints and incentives to respond to, but how they respond is in part reflective of local conditions and existing, local constraints that shape their decision making.

Experimentation has served as a key policy framework and strategy throughout the reform era (Xu C. , 2011). Experimentation has allowed central bureaucrats to break the logjam of institutional inertia by introducing significant policy reforms at a small geographic scale, most notably the change in property rights within the boundaries of state-designated special economic zones (*jing ji tequ*, 经济特区) beginning in the late 1970s. Despite the expansion of and nationwide scaling of many originally experimental reforms, the framework of experimentation remains an important fixture in the tool kit of Chinese central planners.

In the case of Chongqing, extensive use of local government investment vehicles (LGIV) has been widely noted and observed (World Bank, 2010; Huang P. C., 2011; Ren, Wang, & Liu, 2005). Local bureaucrats, while not innovators in the development of the LGIV model in China, pioneered its intensive usage to finance local infrastructure investment. Moreover, the model became a further means for the state, through its proxies in the form local state enterprises, to participate in land markets and to consolidate and restructure local state-owned enterprise (SOE) debt obligations. These bureaucrats faced fiscal pressures similar across near all major municipalities since the 1994 tax reform—reduced claims on local tax revenues, but greater expenditure obligations—as well as unique features of Chongqing that have set it apart from other regions. These include the region's

unique geography that offers both physical remoteness as part of China's interior and state asset endowments owing to this remoteness due to state planning policy in the 1960s that awarded isolation as a desired attribute for the sake of protecting the state's industrialization against potential foreign aggression. The Three Gorges Dam project spurred Chongqing's designation as a provincial-level municipality and the central government's larger plans to grow Chongqing as an interior entrepôt as a part of its much grander "Develop the West" policy agenda (Lai, 2002).

The urban system reflects and embodies these reflexive processes. As land becomes an increasingly vital factor in the fiscal position of local governments, cities are reshaped to allow for the capture of these profits from as yet unexploited assets. Local governments shape the urban landscape in order to gain rents—the state behaving as a revenue maximizing entity, leveraging its own state enterprises and control over land markets to achieve revenue maximizing ends. The local state shapes the land market, just as the local state shapes the credit market and the property rights regime.

In the case of land markets, I offer a hybrid framework. The central government introduces a regulatory change, e.g., introduction of land markets across China, based initially on experimentation. But, either deliberately or incidentally, there is a large degree of ambiguity and flexibility embedded within these reforms and new policies. As a result, local governments, seeking to maximize revenues, exploit this ambiguity in varying ways, such as by using their own locally owned state enterprises to participate in land markets at the behest and on behalf of the local government. Local states help shape their own land markets, both in the supply and demand for land, and resulting land prices that obtain.

The local state shapes the land market, and we would expect the characteristics of the land market to vary by region according to pre-land market/commodification reform endowments and policy histories by region.

1.3 Hypothesis and Central Arguments

Land finance is a practice observed across China at multiple levels of government in an effort to raise revenues through the state's access the land (Han & Kung, 2015; Tao, Su, Liu, & Cao, 2010). This dissertation tests the following hypothesis:

- Local government officials operate as revenue maximizing agents and employ land finance strategies to mitigate an institutional and fiscal environment marked by: 1) fiscal pressures and limited revenues and borrowing capabilities matched with high expenditure responsibilities; 2) incentives to grow economic output and respond to top-down evaluation measures; and 3) legal framework that provides opportunities for local bureaucrats to use land as a primary tool for revenue expansion.

Local government bureaucrats in China support and shape markets as a means to resolve fiscal constraints. Land is the commodity most available for local governments to exploit and earn revenues off of. As such, land finance constitutes a strategy to exploit the value of land use rights to generate revenues—either directly or through more circuitous means—to resolve fiscal shortfalls.

Local governments, while prohibited from borrowing, are able to indirectly raise capital from banks and bond markets through state enterprises under the local State-owned Assets Supervision and Administration Commission (SASAC). The recent growth and ubiquity of local government investment vehicles (LGIVs) reflects: 1) China's recent history of experimentation (Xu C. , 2011); and 2) ambiguous legal framework around borrowing restrictions. The recent growth of LGIVs is spurred by the same fiscal constraints and incentives faced by local bureaucrats across China. As

such, the role of land use rights as an asset used to capitalize these enterprises is but another example of land finance at work in China. While land is not used to directly generate revenues for local governments, the leveraging of land use rights to obtain loans and bond capital that is then deployed for local infrastructure projects or debt restructuring and redevelopment—all at the behest of the local government—indirectly achieves the same objectives of land conveyance fees for local coffers. By using land to satisfy the objectives of the local state and cadre performance measures, LGIVs represent another iteration of land finance.

In order for land finance to operate, the local state must create and participate in new land markets out of a highly rigid urban regime inherited from the Mao era. Fiscalization of land involves not only the reliance on land sales to support local coffers, but the drive to expand the supply of commodity land through expropriation and land rationalization that frees up previously locked parcels for commercial development, with fiscal revenues netted as a result. The (local) state creates the market to achieve the needs/ends of the (local) state.

I argue the local state creates and participates in the market, including its supply, to satisfy its fiscal needs. The state both expropriates land and unlocks land to achieve this end. It is able to do this through a legal and institutional framework that permits, through deliberate and fluid systems of laws and legal rights, the local state to expropriate land unencumbered by rural property rights regimes. Akin to Olson's "stationary bandit" (1993), the local state supports and nurtures institutions related to land and property rights in order to maximize its fiscal return, creating land out of thin air, or the ether of a calcified Communist urban regime that assigned land claims based on output maximization.

My arguments challenge neoliberal critiques (Harvey, 2005; Lin G. , 2009) of China's rapid growth along two axes. First, I question the assumption, inherent in the literature, that it was not

until the advent of incremental reforms and open door policies beginning in the late 1970s, that political and social class power became reconstituted within Chinese society. Contrary to this view, the Chinese state has long been able to marshal factor inputs and industrialization policies through the use of coercion and exploitation of the rural classes. While class divisions and wealth disparities have become more widespread and pronounced in recent years, this phenomenon cannot be divorced from the social and political institutions that govern social movement and the labor market, most notably through the household registration system.

Second, I challenge the application of urban growth machine theory and its socio-political machinations to the Chinese experience. An important tenet of this theoretical framework is the advent of local state capture by a capital class and local elites who then wield their disproportionate influence on land use decisions. While this framework holds merit within the Western context, in the case of China it ignores important, interconnected facets of the local state—the strong, hierarchical and vertical power structure of the Communist Party, managed through such institutions as the cadre evaluation system, the revenue maximizing behavior of the local state, and the monopolization of land by the local state, either directly or through an often unencumbered ability to expropriate peripheral rural land. Rather than behave in ways that respond to market conditions and the influence of capitalist actors, the local state is prone to its own capital accumulation and the creation of markets to achieve these aims.

1.4 Methods

Both quantitative and qualitative methods are employed in this analysis. Land finance will be measured across two scales of inquiry. The first will be a nationwide assessment of the contributions and importance of land transfer fees to regional local governments (prefectures). I use a panel data series for years 2003 to 2011 to evaluate: 1) the growth and spatial dispersion of land dependency, measures as the ratio of gross land transfer revenues to local budgetary revenues; and 2) through an

assessment of the linkages between past land transfers, measured in hectares, and future budgetary revenues.

To observe local government institutional arrangements and the further evolution of land finance into the realms of bank borrowing, bond markets, and debt restructuring, I begin with an assessment of the broader institutional innovations around local government investment vehicles, including a delineation of constraints and incentives shaping the development and intensive use of this strategy. I then look at specific case studies of how this model is used to evaluate the extent to which these strategies represent land finance. The case of Yufu Capital Management Corporation in Chongqing is used to assess the more elaborate configurations of land finance that involve the linking of land assets with a more complicated state enterprise debt restructuring process that includes China Development Bank loans, bond markets, and land re-zoning policies in the urban core.

1.5 Contributions to Economic and Political Geography

According to Harvey (2005, p. 2), neoliberalism as theory "is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade." The primary prerogative of the state is to "create and preserve an institutional framework appropriate to such practices."

Similarly, Harvey (1987) and Logan & Molotch (1987) emphasize the concept of state capture and its implications for control and access to public assets and space. Using a Marxist political economy framework, both works view local states as falling under the influence of well-financed interest groups representing a capital class of investors. The distribution of land rights and land assets represents a form of capital accumulation, with resulting marginalization of less influential, less endowed groups in urban society. Harvey has extended the mechanics of this process to include the notion of a "spatial fix," whereby the fissures inherent within the contradictions of a

capitalist society and economy are mitigated by the introduction of new spaces for development and accumulation.

While Marxist views on the expansion and inherent contradictions of capitalism offer important insights into the development and growth of the urban landscape, they provide, ironically, less utility in helping the researcher understand urban form, growth, and the emergence and function of land markets in a "socialist" country. While the neoliberal broad meta-framework provides an instructive understanding of the process of state capture and the driving ideological agenda of capitalist elites, it is misplaced in the context of a command economy leveraging market mechanisms to achieve state aims. Moreover, the application of a neoliberal framework to explain the changing social and political dynamics of China assumes a clear distinction between pre- and post-reform regimes, when in fact a deeper inspection of China's growth and role of the state yields a murkier story, including continuity of institutions such as the hukou system (Chan, 2009). The consistent narrative and practices across all eras of Communist rule has been the exploitation of the agrarian class to support urban-focused industrialization; what has changed are the mechanisms through which the state carries out this industrialization project. In the pre-reform era, the household registration system and a two-tiered price-scissors¹ price regime for basic goods enforce both coercive and institutionalized under-population of urban regions and capital accumulation within cities towards large-scale industrialization projects.

While the character of China's industrialization has changed, notably through the growing relevance and role of domestic private sector actors, foreign capital, the elimination of market

¹ This effect refers to the state-controlled purchase of agricultural products at artificially depressed prices and subsequent sale of these goods to the urban sector at similarly low prices. Similarly, the state purchase of urban products and sale to rural consumers at artificially inflated prices. In both cases, the agriculture sector is being forced to effectively subsidize the urban, capital goods sector. The price scissors effect is a phenomenon observed not only in China (Chan, 1994), but also across many developing economies in the twentieth century (Bates, 1981; Lipton, 1977). These urban, capital goods-centric policies are often implemented by way of state market boards.

boards for agricultural products, and loosening of migration controls to allow for large-scale movement of migrant workers to urban factories, urban-focused industrialization and exploitation of rural households through the coerced underpricing of key industrial inputs—namely land, labor, and capital—remain critical drivers of the Party's growth agenda (Lardy N. , 2012; Bai & Qian, 2009).

This dissertation aims to present a more holistic political economy framework required to unpack the interconnected contradictions of a central state planning regime, experimentation, and the local state. This research matters importantly in our understanding of how the political economy of central-local relations—fiscally, institutionally—can manifest in the management and use of urban space and land. Land embodies three non-mutually exclusive values that in turn reflect larger machinations of the Chinese state: 1) economic value; 2) social value; and 3) fiscal value. The economic value of land refers to land as a factor input, whereas the social value of land refers to the utility of land as a source of social security, employment, as well as an instrument of social control. The fiscal value of land is the most recent iteration of land value, reflecting the intrinsic value of land as a revenue source for the local polity within the state's control and space of expropriation and exploitation.

To the extent that local governments are both fiscally and institutionally constrained yet have endowments (e.g., state assets, geography advantages, socio-cultural legacies) that induce path dependent growth trajectories, we can better articulate the configurations of local stakeholders and participants in the construction of urban space. The mechanisms through which credit is allocated are not via a pro-active, coalition-building corporatist alliance among banks, industry, and urban government found in cases of local developmental states reviewed elsewhere. Rather, local state behaviors with respect to credit allocation reflect coping strategies under the constraints of a regulatory and legal framework and central government mandates. While experimentation—the selection of a small set of geographies to test new reform-oriented policies—has been an essential

characteristic of China's growth policy agenda over the past three decades, the concept of experimentation is anathema to the local government-oriented experience. Local governments are the recipients of such reformist agendas, and react in ways reflective of the structural constraints bestowed on them. My work will help deepen our understanding of the internal machinations of China's political economy and the local rigidities that will aggravate efforts over the next several years for policymakers to reorient China's growth model away from investment and more towards consumption and services-driven growth.

1.6 Organization and Approach

In order to explore the fiscalization of land and its role in the broader framework of the China model, I employ both quantitative and qualitative methods, discussed below.

Chapter 2 develops a theoretical framework for understanding and examining the role of land within the broader context of China's growth model. I begin by reviewing relevant extant literature on the role of the state as an arbiter and interventionist actor in the development and evolution of markets. I ask a complicated yet deceptively simple question: what explains China's rapid economic expansion over the reform era? I attempt to unpack the primary drivers of recent growth, including the disproportionate share of GDP in gross capital formation, and the historically low share of economic output from household consumption, through the prism of land. I then turn to the role of the local state and drive to develop land assets as an important explanatory factor in driving up the role of investment in the Chinese economy, and to what extent the incentives of local state bureaucrats align with an investment-driven growth model.

Chapter 3 begins my empirical analysis of land finance. Throughout the reform period, a critical theme has been the unleashing of factor inputs from the grip of state planners. Land has been partially liberalized, meaning a market has evolved and been gradually codified, with a legal process defining land ownership and access and discretion over use rights. But the legal framework

and institutions governing land use rights—including the right to vest, transfer, or forgo such rights to develop land and/or earn rents—has remained incomplete, providing openings for fiscally constrained local bureaucrats to accumulate land assets through expropriation and earn net returns on these assets (Kung, Xu, & Zhou, 2013; Whiting, 2011; Huang & Cai, 2013), often at the expense of rural households. I then explore the fiscal importance and contributions of land markets to local governments, using a custom dataset constructed from data published by the Ministry of Land Resources, Ministry of Finance, and National Bureau of Statistics.

Chapter 4 delves into the next phase of land finance, involving the active participation of state enterprises in land markets. Land finance is a means of financing public infrastructure and other local government fiscal expenditure obligations in the absence of sufficient budgetary revenues. Institutional ambiguity discussed in Chapter 3 can be further applied to the development of local state fiscal proxies, often in the guise of local state enterprises. This chapter includes a historical review of the growth and evolution of local government investment vehicles, or LGIVs, and their role in addressing critical gaps in infrastructure financing.

Chapter 5 examines the recent experience of Chongqing as a case study to illustrate the ways in which a local state has pioneered the intensive application of the LGIV model and the indispensable role of land as a crucial asset leveraged by these SOEs to finance major public works projects. The creation of a local state asset management corporation, in the case of Chongqing, and policy initiatives that mandate the relocation of older state enterprises from the urban core to the urban fringe, have the dual functions of both freeing up economically underutilized land and restructuring insolvent state enterprises.

Chapter 6 provides a review of findings, summarizes key arguments presented in this dissertation, and presents directions for future research.

Chapter 2: Literature Review and Theoretical Framework

2.1 Overview of Dissertation Approach and Key Questions

This chapter begins with a review of existing theories on economic growth and state intervention and the agency of the local state (section two). It next explores competing theories and articulations of the "China model" and the extent to which the Chinese case represents either a unique or generalizable example of state intervention (section three). Section four introduces land as a key asset and instrument of economic growth, both broadly across developing economies and within the Chinese context. Section five rearticulates and refines the motivating research questions of this dissertation and outlines the empirical analysis that follows.

2.2 Theories of the State, State Intervention, and State-led Economic Growth

Market economies mainly operate through price signals. The allocation of final demand goods and services, and the intermediate demand for factor inputs and labor, operate in accordance with price signals; in the obverse, the price of any good or service operates in accordance with supply and demand. On either side—supply and demand, or prices directly—markets can be shaped and influenced by the state.

According to Polanyi (1957), markets and national states are ultimately human constructs—the idealized self-regulating market, free of state intervention, is an ideological abstraction that is not borne out by empirical observation. Markets are reliant upon state intervention, either directly or through the preservation of select institutions. Prices for labor and land are not freely set by such a utopian system of unfettered transactions, but rather insufficiently reflect the social value of land and labor, and the institutions that influence these prices. Market transactions thus often embody and manifest the interests of a certain class in society, who wield the mantra of a self-regulating market to obtain greater material gains. Polanyi cites the gold standard as a means to restrain the interventionist tendencies of sovereign states to influence currency markets in support of domestic

economic outcomes, yet the necessary array of social institutions and policies (e.g., central banking) that were necessary to sustain such an arrangement amongst sovereigns. As such, free markets create social dislocations that spur what Polanyi refers to as a "double movement"—the spontaneous, uncoordinated response of society to rein in these dislocations, either peacefully or through, at times, violent revolution (ibid).

While Polanyi's (1957) work focuses on the phenomenon of liberal economics as a political economic creed in the Western world, elements of his analysis can be applied within the Chinese context. China, like Europe during its proto-capitalist and industrialization periods, is experiencing significant, large-scale upheaval of rural populations as land is commoditized from its fictitious zero value into a tradable good that can be transferred from agrarian use to industrial and commercial use. Even before English industrialization, the enclosures during the Tudor sovereigns were largely driven by the more profitable enterprise of wool enabled through the opening of international markets; the squirearchy during this period often preferred the conversion of land from agrarian use to grazing to reap potential profits from wool, resulting in mass dislocations of the rural peasantry. This dislocation, while preceding the Industrial Revolution, helped bring about an increase in pauperism and a large underutilized labor force that could be used for the Satanic Mills of the early industrial revolution; preexisting institutional arrangements helped to ease the exploitation of land for new purposes (ibid).

China is also experiencing a process of rural land conversion and dislocation of large segments of the rural population, in what in many respects reflects the insights of Polanyi's work. According to Polanyi, land, labor, and money must be considered commodities, despite the non-commodity status of these inputs prior to the opening of reform in the late 1970s. The value of land as an insurance against future economic uncertainty has provided an implicit safety net for rural

migrants working in China's urban manufacturing centers. However, this social value of land conflicts with local state fiscal imperatives enabled through a legal and institutional framework. Concurrent with China's economic transformation over the past three decades have been important shifts in the structure of local public finance, with implications for urban planning and regional economic development. In tandem with broader shifts in China's economy—beginning with the dismantling of the commune system from 1978 to 1984, the embrace of foreign direct investment, restructuring of the state enterprise system, ascendency into the WTO—the role of local government as a regulator and arbiter of the local economy and investment has also evolved.

Throughout this analysis, “political economy” is narrowly defined as the intersection of political interests, governance, and the allocation of wealth (including the consumption of goods and services) and factors of production, and the ways in which political incentives skew and influence these allocations. Political economy introduces the role of special interests and stakeholders who wield influence over this allocation process, and the specific arrangements that enable this influence to be both disproportionate in scope and magnitude among different groups in a given society and economy. Importantly, political economy offers an alternative explanation for these allocations than simply price signals determined in a purely neoclassically perceived market—ultimately “price” is a function not simply of supply and demand, but by political actors and stakeholders and political and social organizations and institutions to which they belong and/or create. This allocation of wealth and factors of production can obtain along multiple (simultaneous, though weighted) axes.

2.2.1 Variations on the Capitalist System

Capitalism, in contrast to central planning, is a system of economic activity and exchange in which the medium of exchange is money, the outcomes of exchange are determined by price signals, and the means of economic production are (predominately) privately owned (by individuals or

groups). Put another way, economic organization, including the allocation of, and access to, factor inputs (land, labor, capital, and energy), and the spatial organization of production and markets, are determined by price signals. However, the above is an idealized, “utopian” concept—in reality, no systems of economic organization exist in which production, ownership, and exchange are strictly the outcomes of price signals determined in a market.

According to Polanyi (1957), the “free market society” is both a product of ideology and a volatile system that cannot self-regulate nor self-sustain; unfettered free market capitalism has historically failed to solve large-scale collective action problems, such as tragedy of the commons and other self-undermining tendencies. Instead, production and consumption are, to varying degrees, influenced and mediated by the actions of the state and institutional arrangements. Polanyi argues these systems vary in: 1) the degree, magnitude, and extent of the non-state sector; 2) the degree to which consumers and producers are availed access to desired goods and factor inputs and the degree to which factor prices are determined by an open and free market; and 3) the scale at which prices are determined through state intervention. However, on this last dimension of the state involvement in prices, agency can be ascribed to both the central state and local state.

State intervention varies in both degree and type. Gerschenkron (1962) was the first to coin the phrase “catching up” and the advantages of “economic backwardness” in reference to national economic development. “World time”—the existential geopolitical conditions and constraints faced by a nation at a given time in history—has helped shape the resulting options availed to national governments to stimulate and nurture economic development. In the 19th century, French industrialization involved strong state intervention in the banking system to ensure necessary capital flows into key industrial sectors, whereas British industrialization at an earlier period developed along a much more decentralized paradigm; these policy paths were shaped by the parameters of their respective periods of development. Relative prices and the geography of resources also play a

role; Pomeranz (2000) has argued that the more advantageous deposits of coal relative to settlements in England, along with the development of British colonialism, played a critical role in its wealth and development departure from the rest of Europe and China. Others, such as Allen (2011), emphasize that differences in the average wage played a crucial role in whether or not a technology was adopted.²

More recent work by Beckert (2014) goes further, arguing that the great divergence in economic growth and industrialization can be traced to the advent of "war capitalism" and the imperial projects of Western states to redirect and reorganize trade relations and the spatial dimensions of cotton production through forceful, coercive means. While India and China were advanced in the manufacture of cotton textiles as late as the seventeenth century, English imperialism expressed through the machinations of its overseas trading companies, combined with protectionist policy, territorial claims, and monopolizing of trade routes to the detriment of overland traders helped herald in a new age of industrialization, largely driven by cotton textile production. According to Beckert (2014, p. 38),

War capitalism relied on the capacity of rich and powerful Europeans to divide the world into an "inside" and "outside." The "inside" encompassed laws, institutions, and customs of the mother country, where state-enforced order ruled. The "outside," by contrast, was characterized by imperial domination, the expropriation of vast territories, decimation of indigenous peoples, theft of their resources, enslavement, and the domination of vast tracts of land by private capitalists with little effective oversight by distant European states. In these imperial dependencies, the rules of the inside did not apply.

Central to war capitalism was the use of state coercion to ensure the relatively cheap and available access of two inputs: land through expropriation and dispossession of indigenous populations, and slavery.

² Although Allen (2009) also argues that it was cheap energy in the form of coal (along with labor-saving technologies that pre-dated the Industrial Revolution) that were a major factor, enabling British firms to pay relatively high wages while still maintaining price competitiveness against European contemporaries.

Another important feature of capitalism, emergent from the above mentioned characteristics, is the unique configuration of the spatial economy. Unlike feudal or state planning systems of economic organization, the capitalist system tends towards economies of scale both in firm production and the allocation of resources and location of firms across space. Classical models of spatial organization of economic production include Weber's (1929) model of transportation costs and factory location and Von Thunen's (1826) nineteenth century model of spatial organization as a function of economic rents. Under capitalist systems, regional comparative advantages and specializations obtain, forming the basis of urban systems. This formation, however, is predicated on relatively free factor mobility, namely labor and capital. Central Place Theory illustrates the importance of regional networks and hierarchies of place, providing important contributions to our understanding of the spatial distribution, ranking, and configurations of markets (Lösch, 1940; Christaller, 1933).

Urban-rural relations are not only an outcome of growth, but in many ways the *driver of* growth. Allen (2009, pp. 78-79), for instance, argues that it was urbanization and the growing urban demand for labor and rural output (to feed a swelling urban population) that pushed up rural wages and encouraged significant rural productivity, output improvements, and better rural economies of scale in eighteenth century Britain—a major reason behind Britain's global lead in the adoption of capital-intensive modes of production. This causal narrative contrasts with previous arguments that institutional reform (e.g. the farm enclosure movement) was the primary driver of technological adoption. This argument also strongly echoes Lewis's (1954) theory of transitional economic development discussed later in this dissertation.

The state in a capitalist system can also heavily influence the costs of human capital. Soskice (1999) delineates a “bifurcated convergence” among advanced capitalist systems: business-coordinated market economies (CME) and liberal market economies (LME); the type of regime will

significantly influence the type and magnitude of risk for business-to-business linkages and consequently affect types of production and rate of innovation (e.g., the differences between German and Northern European production with “Anglo-Saxon” economies). While general training in Anglo-Saxon (UK and U.S.) regimes through the university level has given workers greater transferability across industries, vocational training in CMEs has largely locked workers into particular industries, thus raising the damages created by unemployment (see also Thelen (2004) on the path dependent nature of these labor institutions). CMEs are also more in favor of retaining employment over household wealth. In the case of an exchange rate increase, German firms are typically more interested in retaining market share with no alteration on international prices, whereas British firms (a “liberal market economy”) are characterized as more willing to adjust prices and pass on these costs to consumers (Hall & Soskice, 2001).

Likewise, the scale at which prices are determined is an important metric of the degree of “capitalism.” In the U.S., collective bargaining between unions and firms occurs at the individual firm-level, whereas as in Sweden wages and benefits are negotiated at the national level, between all workers of a particular trade and all firms that employ the trade. Germany and France provide intermediate models. Despite the increase in globalization, there is only limited institutional convergence.

The Soviet model provides a useful alternative reference point for understanding the organization of capitalism (from a non-capitalist perspective). In order to “catch up” with more industrialized Western European states, Soviet planners highly discounted future development for immediate/short-term development through two types of “borrowing”: 1) heavy exploitation of resources, leading to fast depletion; and 2) postponements of investments in lower yield projects, such as infrastructure, effectively trading future growth for immediate, short-term growth (Bideleux, 1985; Ofer, 1988). The Soviet economy traded for key imports, but was largely an autarkic import

substitution system, at best achieving GNP levels roughly half that of the US (peaking in 1975, though mostly driven by military expenditures). Importantly, Soviet economic growth was driven by factor increases, not increases in total factor productivity (TFP); after the initial period of rapid industrialization, as factors became fully utilized, TFP subsequently declined. Although exigencies may have warranted the Gerschenkron-style “catching up” policies in earlier periods, the Soviet system did not move away from this orientation (for ideological reasons and inertia), leading to stagnation and overall TFP declines (Ofer, 1988; Bideleux, 1985). Factors were also heavily constrained: under the Stalinist development paradigm, urban industrialization was the key objective. This program necessitated a strong degree of urban bias, dramatically constraining the flow of labor while creating a two-tiered price system that artificially inflated industrial goods while depressing the price of important agriculture inputs, such as grain, for the under-populated urban market (see, also Lipton [1977] and Bates [1980]).

The Soviet model also offers insights into the *dual structure* system (*eryuan zhi*) observed in China. Factors were also heavily constrained: under the Stalinist development paradigm, urban industrialization was the key objective. This program necessitated a strong degree of urban bias, dramatically constraining the flow of labor while creating a two-tiered price system that artificially inflated industrial goods while depressing the price of important agriculture inputs, such as grain, for the under-populated urban market (see, also Lipton [1977] and Bates [1981]). The basis of the Soviet model during the 1920s and 1930s was the belief that investment in producer goods actually increased both producer *and* consumer durable goods production (and thence consumption); Stalinist planning during this period largely reflected the theories of Fel'dman and Preobrazhensky (Allen, 2003).

2.2.2 Economic Growth, Institutions, and State Intervention

The local state can be both a buffer for and medium/vehicle of special interests. This dissertation explores the extent to which existing theories of urban governance, alliances, and institutions can be applied within the context of urban political economy and public finance in China. Particular attention is given to the drivers of urban governance and land use decisions, and the mechanisms and tactics by which local bureaucrats respond to structural pressures and constraints reflective of both central-local institutions, regional asset endowments, and the mandate of local economic development.

Institutions play crucially in the opportunities, risks, broader development of a private sector, and extractive capacity of the state. Institutions such as a particular property rights regime shape the willingness of market participants to take risks, time horizons, and claims on revenues. Multiple pathways to economic growth have manifest in history, but political economy and institutions have often played critically in economic outcomes; political power and the institutions that govern economies and societies meaningfully impact these outcomes. Under some situations, when political institutions hinder and constrain the interests of economic organizations and firms, those organizations “with sufficient bargaining strength will use the polity to achieve objectives when the payoff from maximizing in that direction exceeds the payoff from investing within the existing constraints” (North, 1990, p. 79). The right institutions and incentives matter—local bureaucrats in autocratic one-party systems balance local development objectives with career advancement and the performance criteria for advancement outlined and enforced by the central state (*ibid*). Fiscal maximization is both a means and ends in many cases.

Local government behavior with respect to economic development objectives is also a function of the time horizons of local bureaucrats, affecting the types of governance and economic

development strategies employed by local bureaucrats. Olson's "roving bandits" behave in accordance with short time horizons; their interests lie in near-term extraction of wealth and revenues from the local polity. These actors are more inclined to abrogate contracts, impose high taxes, and confiscate wealth without considering the long-term economic consequences of their actions. Such examples of near-term wealth maximization inhibit sustained development of the necessary institutions and property rights regimes that nurture economic growth. In contrast, "stationary bandits" have a vested interest in promoting economic development and wealth generation that can be taxed sustainably over a long period of autocrat rule (Olson, 1993). The requisition and conversion of land and the transfer of land use rights within an urban economy reflects a local bureaucrat's utility maximization function and the set of realistic options for deploying land within this context. Bureaucrats who seek short-term revenue maximization may exhibit a preference for the conversion of land for real estate purposes, while those with longer time horizons may prefer some land to be converted for industrial use. However, both strategies depend on the fiscal and economic realities of a given polity.

According to North (1990), this "path dependency" obtains due to: 1) the increasing returns to institutions, despite optimal efficiency in driving innovation and allocating of goods within a given society; and 2) incompleteness of markets, fragmented information, and high transaction costs. Path dependency helps explain the lack of convergence across states and economies, despite the proven superiority of one type of property rights regime or other institutional framework over all others.

2.2.3 East Asia Variations on the "Ideal-Type" Capitalist System—the Developmental State

Capitalism broadly refers to the majority ownership of the means of production by private actors and the allocation of goods and service through the mechanism of a market. However, there

are no hard and fast rules as to how much private ownership is needed to be considered a capitalist economy. Similarly, while markets operate according to price signals, the relative supply and demand of any set of goods and services are often in turn a function of non-market, state and quasi-state interventions. For example, Baumol et al (2007) delineate four types of capitalism: 1) state-guided capitalism, often identified with the “developmental state”; 2) oligarchic capitalism, in which the bulk of power and wealth are held by a small group of individuals or families; 3) big-firm capitalism, in which most significant economic activities are carried out by established giant enterprises; and 4) entrepreneurial capitalism, where there is a significant role played by small, innovative firms, and characterized by many new firms, breakthrough innovations, and a large number of actors. Land markets in China further complicate clean definitions of market-based economies—a theme revisited throughout this dissertation.

At varying moments in parts of East Asia, Mexico, and Brazil, the statist *developmental state* became the model of capitalist development through the 1980s. The developmental state requires a cohesive bureaucracy, the championing of national economic interests over individual localities, and an autonomous coordinating organization or entity. The developmental state differs from a “market-rational, regulatory state” in its main agenda of forced development, proactive macro industrialization policies, and state-led efforts to reduce important dislocations in the economy (Johnson, 1982). But it is not clear whether the developmental state fits the typology delineated in Hall & Soskice (2001); while these economies are not LMEs, they also do not necessarily fit the coordinated market economy as defined by the other. Developmental states also cycle between export-oriented industrialization (EOI) and import-substitution regimes (ISI). Gereffi (1990), for instance, argues that “[r]ather than being mutually exclusive alternatives, the ISI and EOI development paths in fact have been complementary and interactive” (pg.18).

In East Asia (excluding China), the statist developmental state became the model of capitalist development through the second half of the twentieth century. This model is an institutional phenomenon as much as it is structural and/or an historical accident; it constitutes a “deviant form of capitalism,” relative to the prevailing type Anglo-Saxon, *laissez-faire* ideology (Woo-Cumings, 1999, p. 21). The developmental state requires a cohesive bureaucracy, the championing of national economic interests over individual localities, and an autonomous coordinating organization or entity, such as the Ministry of International Trade and Industry (MITI) in Japan, to oversee state resource allocations.

Literature has pointed to the importance of historical factors in shaping the trajectory of the development state. Cumings (1984) views the developmental state in Korea and Taiwan as an outcome of Japanese imperialism in the pre-war period, while Doner et al. (2005) articulate these institutional arrangements as derived from “systemic vulnerability”—a shortage of foreign exchange needed for militarization, internal threats of social instability brought on by a low standard of living, and hard budget constraints due to a lack of easy revenue sources. Kohli (2004), an Indianist by training, concludes—reluctantly—that one-party regimes hold unique advantages in economic development over low-income multi-party states such as India and Brazil.

The developmental state differs from a “market-rational, regulatory state” in its main agenda of forced development, proactive macro industrialization policies, and state-led efforts to reduce important dislocations in the economy (Johnson, 1982 and 1999). Developmental states are also characteristically export-oriented, import-substitution regimes (ISI). Cumings (1984) views the developmental state in Korea and Taiwan as an outcome of Japanese imperialism in the pre-war period, while Doner et al. (2005) articulate these institutional arrangements as derived from “systemic vulnerability”—a shortage of foreign exchange needed for militarization, internal threats

of social instability brought on by a low standard of living, and hard budget constraints due to a lack of easy revenue sources.

The government under a (capitalist) developmental state regime selects and nurtures “national champions”—large, capital-loaded firms in key industry sectors—and the formation of large, interconnected, lateral conglomerates, such as the *zaibatsu* (and later *keiretsu*) in Japan and the *Chaebol* in Korea (Woo-Cumings, 1999). Firms in these key sectors receive generous government support in the form of cheap capital and “greenhouse” tariff protections during the incubatory stages. Evans (1995) explains the developmental state as an “institutional context composed of complex, historically emergent patterns of interaction that are embodied in social structures and taken for granted by the individuals that work within them. These patterns have a reality that is prior to ‘individual interests.’ They define the priorities of competing individual goals and the range of means that will be considered to pursue them” (ibid, p.28). Bureaucracy, in and of itself, is not an inhibition on growth. Rather, it is the bureaucratic structure – the degree of *cohesiveness*, *coherence*, and *connectedness* (to industrial and economic elites in society)—that is determinant in high tech economic development; this “embedded autonomy” of the state through corporate coherence and connectedness permits innovation programs to succeed (in Evans’s [1995] empirical studies, the growth of informatics in Korea, India, and Brazil in the 1980s).

Fan (2006) extends Evans’s argument to explain the success of the telecom equipment sector in China. She argues state intervention followed a similar midwifery-husbandry sequence of state support. In the late 1980s and early 1990s, when the domestic market was still dominated by multinational firms, the Ministries of Science & Technology and Posts and Communications provided direct technological and non-technological support in the form of market access and production resources, and several universities under the direct control of the Ministry of Posts and Communications mobilized resources to provide the human capital needed to buttress this nascent

industry. By the mid-1990s, Fan argues some indigenous firms, such as Huawei and ZTE, had become well established and began to diversify into other sub-sectors, whereby direct state financial support waned, replaced by indirect support via R&D awards and grants through the Ministry of Science & Technology and the “863” program (to be discussed below).³ By 2000, Fan argues financial support became exclusively channeled through high-tech R&D, such as the development of China’s own 3G mobile system.

Salient throughout existing scholarship on the developmental state is relative bureaucratic cohesiveness—state actors at all levels of the bureaucracy work in tandem and alignment over developmental objectives. It is this assumption—bureaucratic alignment—that becomes less sure-footed in the Chinese case. Chinese local bureaucrat behavior can be thought of more as an equilibrium condition balancing central government institutions, such as performance evaluation and promotion, against the exigencies of a local economy and fiscal imperatives. Even when bureaucrats aim to fulfill fiscal and economic imperatives as outlined by their superiors within the party hierarchy, they must do so under varied, non-uniform local conditions, often times resulting in behaviors that may contradict directly or the spirit of central party policy objectives and directives.

2.2.4 Urban Bias as an Economic System

The roots of China's dual track land system derive from China's own unique form of urban bias. Urban bias refers, broadly, to a set of state policies that provide disproportionate privileges to urban-based interest groups and constituents over rural-situated groups and sectors for the purposes of urban industrial development. The most notable works on this subject are by Lipton (1977) and

³ Fan (2006) describes capital flows from the central state to telecom equipment industries as following two general patterns: 1) as guided by development of firm, following the immediate and future needs of firms [such as marketing support, encouraging research into domestic switch equipment]; and 2) to help firms that already have research capability—hence those with proprietary technology—further develop technology.

Bates (1981). This “bias” can obtain through several forms, such as: 1) large investments in urban sectors and disproportionate investments in urban public goods (such as infrastructure, education, and urban industry) relative to rural investment; 2) an overvalued exchange rate that favors urban producers that import a large amount of manufacturing inputs; and 3) a “price twists” effect—state policies that reduce rural commodity and goods prices to the benefit of urban consumers. The third manifestation of this “bias” is often implemented through the following complementary practices: 1) state monopsony marketing boards that set artificially low procurement prices for agricultural goods, with goods then either resold on world markets with the margins transferred to urban areas through state investments or distributed at low costs in urban markets; and 2) state support for large farms that undercut the competitiveness of small landholders (Lipton, 1977). Lipton argues these disparities create the impetus for rural-urban migration, often resulting in over-urbanization, characterized by increased urban unemployment and a swelling of the “informal labor/services” labor force.⁴ Todaro's (1969) work argues migrant workers not able to secure formal employment in urban industries resort to low-skill informal services (both illegal and quasi-legal) with the *expectations* that formal labor can be secured in the near future, resulting in lower labor productivity per worker compared with the alternative of agrarian labor (this concept will be revisited).

Corbridge and Jones (2004) question the generalizability of urban bias. While not dismissing the theory, the authors argue that productivity, economies of scale, and mobility/immobility should also be considered (p.5). They argue there is also no clear method for measuring “bias,” as well as a means to operationalize it and identify clear divides between what is “rural” from what is “urban” (particularly with the rise of suburban settlement patterns). They also view the spatial and class-based logics of exploitation as conflated, pointing out that urban bias theory has failed to prove the

⁴ Though in China, the advent of migration controls has prevented the phenomenon of over-urbanization.

pervasiveness of “price twists” across the developing world, and question whether urban bias is necessarily a bad thing.

Bates (1981) challenges the assumption of state autonomy in the urban bias process; urban elite individuals and groups are viewed as accruing privileges through their leverage and influence over government officials. Bates argues state-led or nurtured urban industrialization depends importantly on the relative political and social stability of urban labor; instrumental reductions in food prices not only increases urban employee budget constraints (reducing demands for increased wages on owners of capital), but also precludes price-based urban instability and riots that may challenge the state’s legitimacy on a number of fronts. According to Bates, a critical condition behind urban bias is the limited capacity for collective action on the part of the peasantry: when the rural peasantry is well organized and able to solve collective action problems, it can resist these policy biases, but when rural sector is fragmented with many small landholders this problem becomes extremely difficult to overcome.

Others have argued that the potentially most significant effect of urban bias on growth and urbanization is through the resulting under-development of agriculture. Agricultural development has been shown to be a robust engine of economic growth through its large, significant multiplier effects, especially in early stages of development and positive externalities accrued by non-agricultural sectors (Bezemer & Heady, 2007). Industrialization depends crucially on abundance of food and raw materials; the rural sector moreover provides labor, high rates of savings, and demands for non-agricultural products. Food stability, worker nutrition, poverty reduction (resulting in increased rural consumption), and political stability likewise play importantly in domestic industrialization (Lewis, 1954). In many African states, Lewis argues rural sectors were left underdeveloped or stagnant, widening the income gap and strengthening incentives for urban immigration.

While the subject of urban bias has been widely covered, there is room for further exploration of the role of land and mobility as both instruments and outcomes of urban bias processes; for example, Todaro (1969) assumes a high degree of mobility, and therefore does not consider the advent of migration controls. Urban bias policies in the Chinese case have taken effect through the bounding of rural labor to land through the household registration system (hukou) (Chan, 1994; 2009). In the pre-reform era, land embodied the calcification of social mobility, or approximating a modern form of serfdom within a socialist system. Land and the lack of social and geographical mobility belong to the larger dual system framework that has been in place since the 1950s (Chan, 2010). After the dismantling of the commune system, the continued operation of the household registration system remained an important instrument for limiting social mobility, precluding urban workers of non-urban status from permanently settling in cities.

Concomitant with these constraints on mobility, rural houses have been excluded from reaping the near-full implicit value of their land use rights (Pils, 2005; Washburn, 2011). The existing legal framework precludes rural households from transferring their use rights to commercial interests, instead requiring that ownership first be transferred from the collective to the state, involving the transfer of land from rural to urban construction, and the selling of use rights to commercial interests at a price much closer to its implicit value. Prescribed compensations to dispossessed households tied to agricultural output—and not the potential commercial value of land—ensure (in many cases) a significant residual return for local governments, or what has been termed an "expropriation surplus" (or windfall profits) (Washburn, 2011). It is this aspect of urban bias—the institutionalized exclusionary bifurcation of land markets and the fiscal imperatives that incentivizes the local state to exploit this legal framework—that is need of further exploration.

2.3 Political Economy of the Local State and Urban Planning Regime

To what extent do urban political economy dynamics reflect the above-discussed structural features of a state? More precisely, how do urban planning and urban growth—central processes of an urban landscape and heated spaces of contestation—embody and reflect the larger features of a nationwide polity and associated institutions, and how might these urban processes vary (and why)?

Harvey (1985) argues that urban planning and zoning laws can, and frequently are, politically informed—and how such planning is influenced by capitalist interests. According to Harvey, during the short-lived Second Empire of Louis-Napoleon Bonaparte, Paris underwent large-scale redevelopment. Under Haussmann's planning regime from the early 1850s through late 1860s, Harvey argues Paris was reshaped and new spaces were created to allow for freer circulation of capital, allowing financial power to “develop, build, own, and manage” new spaces (p.79). His work shows the state sought to both maximize revenue and undermine the bases of mass resistance by the poor, directing the planning regime towards the creation of higher value residential zoning—resulting in the marginalization of lower classes to more peripheral and contained sections of the city—and wider boulevards to allow easier access to “troubled zones” for periphery-stationed battalions. According to Harvey's work, increased rents and a push towards deindustrialization of the urban core facilitated a restructuring of the urban production base, with the skilled/trades segment of the workforce falling more under the control and supervision of commerce and industry owners, and the emergence of Parisian slums for low-skilled labor. The eventual re-emergence of the barricades and the fall of the Second Empire, however, showed the limits of urban planning as a strategy of control.

In the modern era, (Harvey, 1987; 1989) correlates changing role of the local state with the decline of modernism (and entry into a post-modernist era) in the 1970s. He argues the Nixon administration's declaration that the “urban crisis was over” (and consequences of this claim), the

recession of 1973-75, and the bankruptcy of New York can all be linked to a more fundamental change in the political economy—the increasing flexibility of capital accumulation. According to Harvey, with the decline in the Fordist production regime, local governments heavily dependent on local capital began to search for new ways to ensure and buttress a steady revenue and tax base and avoid becoming “another New York.” For some urban regions, such as Detroit and many other parts of the Midwest industrial belt, he argues the outflow of capital has been most pronounced. As markets became more integrated, and susceptible, to global trends (such as the global deflation of 1973-75), urbanization played host to these pressures: “a combination of shrinking markets, unemployment, rapid shifts in spatial constraints and the global division of labour, capital flight, plant closings, technological and financial reorganization, lay at the root of that pressure” (Harvey, 1987, p. 263).

Harvey (1987; 1989) elucidates this shift in local governance as a transition from a “managerial state” to a “entrepreneurial state”: driven by the need to adjust to the increasing flexibility of capital, local states make important investment trade-offs between public goods and investments in infrastructure and public use projects that cater to needs of flexible capital, in an attempt to attract outside capital and keep exiting investments and production systems. In reaction to the Nixon administration’s actions (or non-action) in 1972, the onus of economic development and welfare fell more squarely on the shoulders of the local state. Harvey also links this shift with the loosening control of the nation-state over capital flows: “[t]he greater emphasis on *local action* to combat these ills also seems to have something to do with the declining powers of the nation state to control multinational money flows” (Harvey, 1989, p. 5).⁵

⁵ Italicized emphasis added.

According to Harvey, this shift marked a break with modernist planning, with a new agenda of capital *accommodation*. As urban planning increasingly served the needs of an investor class, Harvey argues the state itself became a space of contestation between labor and capital. The results of this contest are critical to the functional purposes of the city, as an internal economy and as part of a much larger system of cities: “The production of new ecological patternings and structures within a spread city form has significance for how production, exchange, and consumption is organized, how social relationships are established, how power (financial and political) is exercised, and how the spatial integration of social action is achieved” (Harvey, 1989, p. 6).

Logan and Molotch (1987, p. 10) introduce the notion of the “urban growth machine,” an arrangement by which various institutions and actors – including owners of capital – press local governments to mold and shape policy to fuel internal growth; urban space is commoditized and the *exchange value* of land, the interest of private capital, is prioritized over residents’ *social value* of land. The authors attempt to nuance the rigid dichotomies of capital versus labor employed at the base of Harvey’s arguments, criticizing such an approach as too functionalist and ascribing no/little agency to local residents, who are categorized only according to their means of production (*ibid.*); instead, a wider spectrum of actors is introduced, including renters, residents, institutions (universities, recreational facilities/services, museums), and organized labor (at times aligned with the land use interests of owners of capital). However, their work characterizes the city and urban space much the same, as a space of contestation between interested actors: rentiers and owners of capital versus those of limited/no capital ownership. This contestation is powerfully played out in urban governance itself, as interest groups compete for influence over politicians and political influence and land use policies. The frequent result of such competition is that “additional local growth under current arrangements is a transfer of wealth and life chances from the general public to the rentier

groups and their associates. Use values of a majority are sacrificed for the exchange gains of the few” (Logan & Molotch, 1987, p. 98).

Harvey’s work on the local state shows how state behavior (in this case planning) is shaped by capitalism, but we should also be concerned with how capitalism can be used by the state for state-centric ends, such as the selective introduction and use of market forces to strengthen the Chinese party-state. Furthermore, the above analysis is implicitly derived from the study of Western capitalist societies. However, even this generalization leaves out many variations in state-economy-labor relations and forms of collective bargaining. For instance, monetary policy (accommodating or not accommodating) and degree of centralization of the labor bargaining regime (firm-based, such as in the U.S., or economy-wide, such as in Sweden, with intermediate bargaining in Germany) shows a strong correlation in advanced capitalist economies (Iversen, 1999). Just as there are varieties of capitalism (Hall & Soskice, 2002), there are also varying degrees to which capitalism, and market forces more generally, are employed by the polity to meet political ends. In the case of China, the actions and interests of the state versus private capital and economic organizations are more difficult to distinguish, as the most important agent in the flow of capital remains the Party-State. In order for neo-Marxist arguments to hold true in the Chinese case, we would need to make two problematic assumptions: 1) China is moving progressively closer to a capitalist state, and 2) we can make the same clear distinctions between capital, labor, and the state.

The local state in China has increasingly become the focus of scholarly interest. Beginning in the late 1980s and continuing through the 1990s, local budgets became hardened and local governments were forced to search for alternative means of procuring necessary revenue for public services and goods, such as infrastructure and education (Wong C. , 1997). This switch led to the emergence of “extra-budgetary” fees, increasing the economic burden on poor households through

various fees and charges (*zha fei*). This was coupled with an increasing role of local governments (and officials) in economic development. With the decline of the command economy of the pre-reform era, local officials became more actively engaged in local industry, often times sitting on the board of new local enterprises and leveraging their influence over local banks to gain access to cheap capital, a phenomenon Jean Oi refers to as “local state corporatism” (Oi J. , 1999).

Is the historical materialist argument congruent with empirical data on China during the reform (and now "post-reform") era, and does it bear fruit in our understanding of China's political economy at the local, urban level? How might the initial conditions out of which capitalism emerges affect the trajectory of the political economy? Unlike Eastern European transition economies, the old institutions were not swept away as they were with the collapse of the Soviet Union. Rather, “China's pre-reform political institutions have remained essentially intact and have left their marks on the functioning of the economy...these political institutions have engendered an incentive system for local cadres whose responses in turn shape the spatial configuration of the economy” (Chan, Henderson, & Tsui, 2008). These institutions influence the degree of responsiveness of the local state to the interests of owners of capital. For instance, the household registration system (*hukou*) was an institution inherited from the pre-reform era. Harvey's dialectic would argue that such a system would disappear with the increasing marketization of the Chinese economy—as such an institution limits surplus labor—but this has not been the case. In contrast, an important change in this institution has been its devolution of control, from the central state down to the local level, with local governments able to use the system more and more for their own planning and development purposes (such as selectively granting urban local status to workers with desirable skills)—in many cases strengthening enforcement and rigidity of the system.

There is evidence that local governments are behaving in ways supportive of local capital, thus giving some support to above arguments. For instance, in the reform era local officials have adopted protectionist measures for the sake of local industry (Bai, Du, Tao, & Tong, 2004). However, these observations should be qualified by: 1) the center-local administrative/ political linkages that tie local official advancement in the party apparatus to the universal performance measures of the *cadre evaluation system*, and inter-personal relationships with upper-tier officials; 2) the often overlapping roles of officials as both government and enterprise managers, especially in township and village enterprises; and 3) the underlying *political relevance* of state-owned enterprises – with the persistence of soft budget constraints and necessity of state enterprises for national programs and social stability, the threat of capital outflow is neutralized. Despite increased exposure to market forces, there is no indication the party-state will relinquish its power, and hence none of these three conditions will likely dramatically change. However, capital flows are still largely under the direction of the state, with regions given differentiated access to foreign capital according to their classification and status as development zone (special economic zone, high-tech development zone, economic trade and development zones, etc.) (Huang Y. , 2003). The city as a growth machine is also uncertain: local officials can employ land use policies to encourage investment, but the political space is not open to contestation from below, but instead under the scrutiny of higher tier leaders. Local-level development zones, like the Dalian Software Park, are designed as a territorially bounded region with special policy incentives to attract successful software R&D and producers; despite the interests of local officials to attract foreign capital into these projects, many of the key actors remain state-owned and managed entities (enterprises, public research institutes, and universities).

Historical materialist and urban growth machine literature argue that the traditional role of the local state becomes undermined with the introduction of more mobile and flexible capital flows,

resulting in a shift in urban governance from “managerial” to entrepreneurial decision making and the tendency towards commoditization and exchange value of land over the residential base’s interest in the social value of land. There are several complications when this framework is applied to China, namely the political structure of the state and the resilience of pre-reform, command economy institutions; while the management of these institutions has changed, they remain in use as controls on labor agglomeration. Politics is also not a space of contestation between/among classes—the party-state remains the hegemonic player in the urban planning and land use regime, and has actually buttressed its strength in various areas of governance through the selective use and leveraging of market forces. New theories on the spatial political economy should be synthesized that consider how different political structures interact with market forces and the net effects on local governance and planning.

Despite the joining of the temporal and spatial as unique determinants of local government behaviors, causality operates in both directions and requires unpacking. Historically, geography has played an important role in shaping of economic development policies and outcomes in the modern era. The “Third Front” policies of the 1960s and 1970s carried out by China’s leadership put a high premium on isolated and secluded regions, moving significant ordnance and related heavy industry investments inland, far from the effective range of potential U.S. and Soviet air and missile strikes. But by the early 1980s, as part of the early phase of China’s open door policies, Shenzhen, Dongguan, and other regions in Guangdong province benefited enormously from their close geographic and linguistic proximities to Hong Kong, eventually making these regions major global export processing centers (Lin, Cai, & Li, 2003). In a reversal of previous, policy-induced fortunes, these and other coastal regions flourished as the primary hubs of international trade and investment. While the east coast grew increasingly affluent throughout the 1980s and 1990s, inland regions, lacking sufficient logistics infrastructure to become export hubs of their own, became disconnected

from the coast and languished as a result, instead functioning primarily as reserves for cheap migrant labor to coastal manufacturing centers. The spatial dimensions of China's reform-era growth thus no doubt helped shape the development trajectories of many inland regions.

2.4 The China "Model"

Scholars have long debated the key driving forces behind China's economic growth over the past three decades. Does this growth represent an unprecedented development paradigm (the "Beijing Consensus") or simply the replication of existing models of economic development found in other developing economies, particularly those found historically in East Asia? Regarding the latter, does China's behavior with respect to prices and the allocation of goods, services, and factor inputs reflect the behavior of a developmental state, or a series of path dependent outcomes that lie outside the direct scope of state control? This section begins with a review China's economic growth of recent years, turns to theories on this growth, and lastly arguments for how local government and local political economic have shaped, supported, and hindered regional economic development.

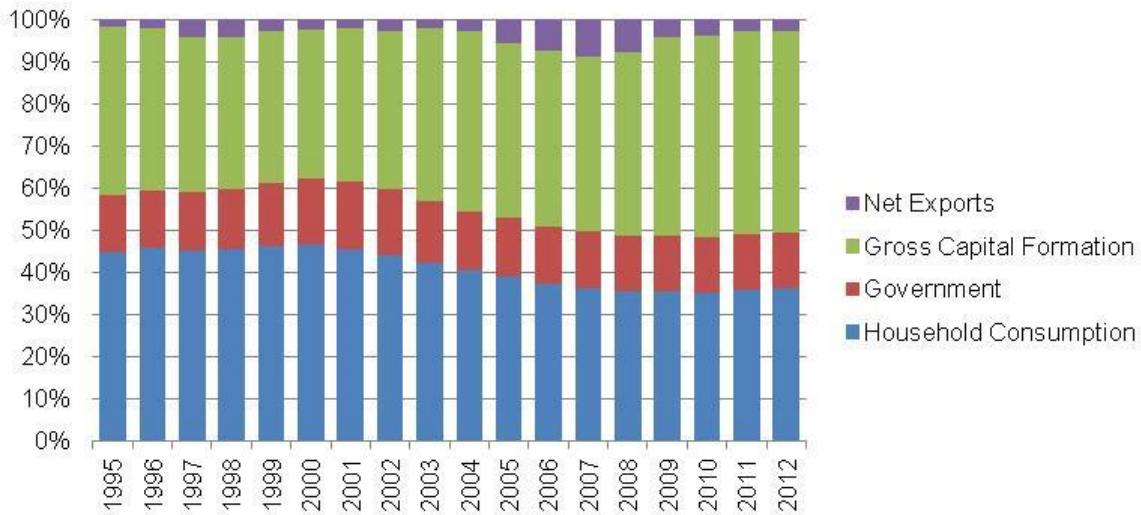
China's growth relies, like other developing economies with large state apparatuses, on the underpricing of key economic inputs, namely land, labor, and capital. The East Asian model is characterized by a purposeful, intention interventionist state influencing prices, or what Wade (1990) has referred to as "getting the prices right." In China's case, the outcome of interest is the heavy reliance on investment as a key component of the economy—much more so than either developing states of the recent past. However, it is less clear that the central state or the local state behaves in the ways described in developmental state literature; local bureaucrats, particularly with respect to land, act as regional monopolists and respond pressures, rather than economic development goals, and the strength of the central state over the local state to effect and enforce national objectives is weak with respect to allocation and pricing of economic factors. China's political economy follows a

path dependent course of development, but the local state behaves in non-developmental ways with respect to land and wields disproportionate influence over land pricing.

2.4.1 Growth since 1978—Causes and Consequences

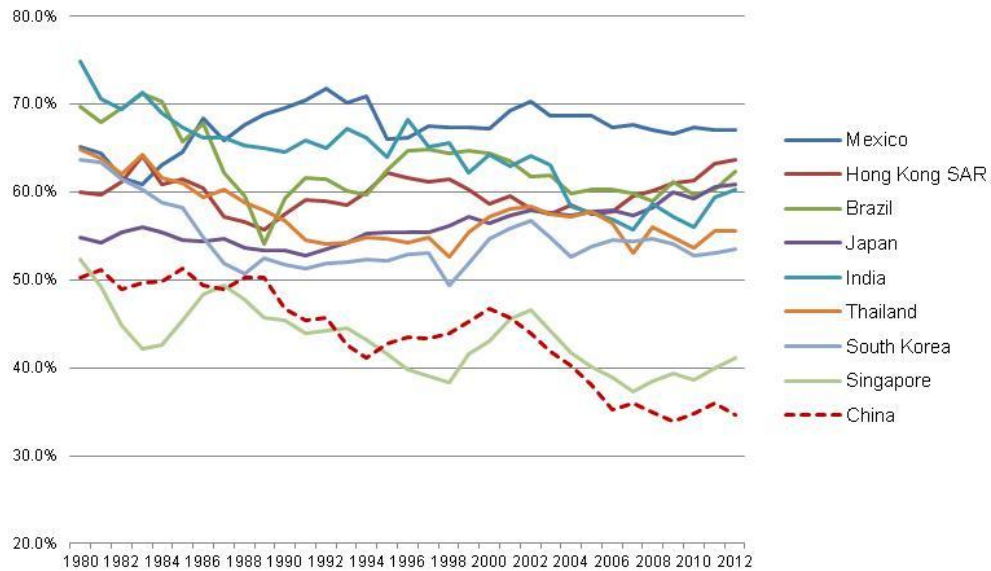
Investment has long been a key component of growth in China. Gross capital formation—the creation of new capital stock and net inventory turnover—averaged approximately 48% of national GDP between 2010 and 2012. Household consumption, despite overall real growth in recent years, has remained at historic levels of between 34.9% and 36.0% of GDP between 2008 and 2012 (**Figure 2.1**). By comparison, China's low level of household consumption is unprecedented in modern history—only Singapore, as a much smaller economy, has approached China's recent lows, while South Korea, widely cited as a predecessor to policies being enacted in China, seldom fell below 50% (**Figure 2.2**).

Figure 2.1 China's Composition of GDP, Expenditure-based Approach, 1995-2012



Source: China National Bureau of Statistics, various years.

**Figure 2.2 Household Consumption as Share (%) of GDP, 1980-2012
Select Countries, Adjusted for Purchasing Power Parity**



Source: World Bank, World Development Indicators, 2014.

Growth across China has moreover been highly uneven, with the vast majority of economic growth over the past thirty years occurring along the eastern seaboard. The eastern seaboard has enjoyed the largest gains in GDP, though these gains have been partially redistributed through migrant remittances of factory income back to the interior. Calculating per capita GDP inclusive of the total population—both permanent registered residents and long-term non-resident, non-hukou population—there is some convergence in wealth across regions, but significant disparities still exist (between local hukou and migration populations).

2.4.2 Explanations of Growth

Constant throughout the extensive literature on China's growth model have been the integral role of institutions in explaining both overall growth and the diversity of economic outcomes regionally. Oi (1999) argues that, instead of national goals, local states in the reform era emerged as important economic organizers and corporate entities; local state corporatism has become a

common form of governance within locales. According to Oi, the state (central and local) continues to heavily influence access and pricing of the major factors of production—land, labor, and capital. Urban land remains under constitutional law the property of the state. Oi argues although rural households since 1982 (some as early as 1978, others since 1984) have had entitlement—albeit leasehold only—to the use of individual plots, local governments acting as “grabbing hands” often expropriate farm land for urban and industrial development, with only modest remunerations in most cases. Likewise, the degree of land parceling has lowered agricultural productivity per unit of land (though farmers in many areas have adapted by informally sharing land use rights to increase productivity and yields).

Whiting (2001) challenges this view of government actors as economic agents (the local corporatist model), instead arguing that local government behaviors are reflective of political motivations and incentives. She argues township and village enterprises (TVEs) thrived through the mid-1990s due largely through cheap credit from the state-run banking system, free land, cheap labor, and soft tax obligations. When these loopholes closed, TVEs collapsed, which cannot be sufficiently explained with Oi’s (1999) corporatist analogue. Moreover, the type of property rights regime can in part be a function of local endowments from the pre-reform and early reform era, such as state investments (e.g., SOEs), resulting in alternative trajectories of economic growth and state support.

Tsai (2002) finds a similar diversity of institutions and state intervention in the realm of banking and finance; regions that previously experienced discriminatory state investment policies, resulting in limited state enterprise investment, saw greater acquiescence on the part of local officials in the development of a non-state, technically illegal private banking system, characterized by loan sharks and other forms of private lending. She argues that regions with strong endowments of state assets, conversely, experienced greater state bias against the private sector.

Huang (2008) goes even further in his analysis of township and village enterprises (TVEs), arguing that they were simply an *ad hoc* solution to a legalistic constraint on the formation of large private enterprises. In the 1980s, he argues TVEs thrived largely because the government, despite laws prohibiting the growth of private firms beyond 9 employees, implicitly allowed for their existence; though many of these firms were “legally” classified as *getihu*, they were in reality often much more sizeable operations. According to Huang, in some instances, the government explicitly supported the growth of private enterprise—Zhao Ziyang⁶ and Hu Yaobang⁷ even encouraged the expansion of the rural credit cooperative (RCC) system to provide needed credit to rural entrepreneurs during this period. China’s reforms in the 1980s effectively allowed Chinese firms to “exit”—the ability for indigenous entrepreneurs to access sound financial institutions in Hong Kong (such as the case of Lenovo).⁸ The 1980s were thus a time when the most significant poverty reductions took place—despite the common belief that globalization and foreign direct investment (FDI) were the primary mechanisms behind poverty reduction, Huang argues that it was increases in rural credit, rural entrepreneurialism, and rural consumption that mattered most, in tandem with early, dramatic increases in procurement prices for agricultural commodities. Huang argues local state corporatism—or a system of concentrated, purposeful, and organizational alignment in a local development objective(s) was not the cause of this early success.

A second important theme in China's economic growth literature is central-local relations.

Prior to 1994, local governments negotiated with the central government over the distribution of tax

⁶ General Secretary of the Chinese Communist Party (CCP) from 1987 to 1989. Zhao was purged during the Tiananmen Uprising.

⁷ General Secretary of the CCP from 1982 to 1987.

⁸ Huang is partially motivated by a conundrum based in institutional economics—that economic growth requires sound economic institutions, but no such institutions existed in the 1980s, especially in the countryside. To get around this problem, Chinese entrepreneurs used external institutions, notably financial, in Hong Kong.

revenues. Before 1979, local planning as a unique, independent activity under the auspices of local government was non-existent—all major capital investments were subject to the central state party approval and guidance. Over 80% of capital construction was funded by the central government, under which "local governments had neither authority nor ability to mobilize capital for its own investment...[that] system allowed the central state to maintain tight control over capital investment to fulfill its developmental agenda" (Lin G. C., 2010, p. 18). The dismantling of the commune system and introduction of market forces brought about significant changes in central-local relations. Lin argues that local governments were given much greater leeway in investment decisions, but with this greater autonomy has come increasing budgetary pressures, made particularly acute following the 1994 tax reform that remitted 75% of the value-added tax (VAT) back to the central government (which would in theory redistribute these funds to smooth differences in development across provinces, though no such mechanisms to efficiently allocate these funds has yet developed). The result by 1994 was a shift in the share of central government contributions to local capital investment from 80% prior to the onset of reforms to less than 10%, with the remainder covered by foreign investment (in coastal provinces) and local governments through a variety of means, including budgetary, extra-budgetary fees and charges, and increasingly bank lending and land sales (ibid).

Local officials faced strong incentives to allocate resources in ways that maximized economic growth and retain a share of associated tax revenues—these incentives spurred local initiative, though at the fiscal expense of the central government through a decline in central tax revenues as a share of total revenues, what some scholars have referred to as fiscal decentralization or "federalism" (Montinola, Qian, & Weingast, 1996; Zheng, 2007). Fiscal decentralization led to what Montinola et al (1996) describe as "competition among local governments, serving both to constrain their

behavior and to provide them with a range of positive incentives to foster economic prosperity" (p. 79).

The 1994 tax reform significantly reconfigured these arrangements through the nationwide implementation of a value-added tax (VAT) and the central government's claim to 75% of VAT revenue collections. Many local governments, faced with a steep decline in revenues and yet little change in public expenditure obligations, began to exploit alternative revenue sources, most notable extra-budgetary revenues such as various fees tied to public services (Wong C. e., 1997). The freeing up of land beginning with the Land Administration Law (1998) initiated the growing exploitation of land to satisfy fiscal pressures. According to Lin (2010), "[T]he role played by local bureaucrats and cadres at the municipal, county, township, and village levels is particularly strong because they are entrusted by the central state to have the direct authority to claim the rights over state and collective property. In other words, municipal bureaucrats and rural cadres often act as both owners and managers of property and can therefore play a pivotal role in the entire process of original capital accumulation" (p. 11).

The Chinese case provides an important and provocative challenge to the concept of capitalism and the market economy. Markets for consumer goods have become prolific, and a growing class of economic elite has emerged in China's east coast cities. However, unlike the developmental state, the Chinese state is not a cohesive bureaucracy and remains rife with local protectionism (Long, 2015). As will be discussed below, central government efforts to rein in, or at least cap, excess investment are frequently countered by local government actions that both undermine national planning and (with some irony) reflect the incentives created by central government policy. Moreover, Chinese officials do not formulate developmental policies for the benefit of the national economy irrespective of localities and local interests.

While China is not a developmental state at the *national level*, scholars have argued that such a state exists at the local level, a so-called “local developmental state” (Oi J. C., 1999). Cannon (2004) attributes this evolution to the reforms of the 1980s: such policies introduced new economic agents at the local level motivated to maximum revenue and minimize upward vertical revenue transfers to the center. Thun (2006) argues that variation in innovation and production outcomes in the auto industry can be explained by variation in institutional arrangements across regions. According to Thun, because Shanghai’s auto industry was relatively new, combined with the city’s status as a core industry region, all major suppliers and final assemblers fell under the same (municipal) ministerial ownership. He argues this arrangement enabled the Shanghai government to effectively encourage joint ventures and pressure local suppliers to increase efficiency through foreign competition. In Beijing and Guangzhou, for different reasons, “laissez-faire” ownership patterns obtained, whereas Wuhan and Changchun, with the oldest auto firms (with continuous central government direct control) lagged behind.

Oi (1999) has argued that, instead of national goals, local states in the reform era have emerged as important economic organizers and corporate entities; local state corporatism has become a common form of governance within locales. The state (central and local) continues to heavily influence access and pricing of the major factors of production—land, labor, and capital according to Oi land remains under constitutional law the property of the state.

Although rural households since 1982 (some as early as 1978, others since 1984) have had entitlement to the use of individual plots, local governments acting as “grabbing hands” often expropriate farm land for urban and industrial development, with only modest remunerations in most cases (evidencing a form of “decentralized predation”) (Washburn, 2011). Likewise, the degree of land parceling has lowered agricultural productivity per unit of land (though farmers in many areas have adapted by informally sharing land use rights to increase productivity and yields).

2.4.3 Workers, Wages, and China's Spatial Economy

Much of China's growth has been shaped by its own variety of urban bias in the form of the institution of the household registration (*hukou*) system, and as a primary tool of its dual system (*er yuan zhi*, discussed further below). The creation of the hukou system has some roots in previous, security-motivated programs during the Qing dynasty (the *baojia* system), but its modern form is modeled to a large degree after the Stalinist development paradigm and resident registration (*propiska*) system (Chan, 1994). The system was first founded in 1958, though its wide-scale implementation did not occur until after the devastating effects of the Great Leap Forward.

The function of the *hukou* system is to control population mobility and effectively enforce a two-class system (as part of the broader dual system framework of the Chinese economy and society). In order to expedite industrialization, Chinese planners followed the urban bias pattern of investing in cities and implementing similar “price twists” as those discussed above (*ibid*). However, by heavily controlling the movement of people through both direct coercion and indirect means (e.g. the denial of train passes and the strict allocation of food rations and public goods based on residence registration), the state was able to avoid the “over-urbanization” dilemma experienced by other developing nations and predicted by Todaro (1969). The hukou system—part of the dual system—created separate societies and economies. The economy became rigidly bifurcated between “industry” and “agriculture.” Industry under central planning was the primary sector, state owned, under state support and control, with profits monopolized through unequal sectoral exchange (the “price twists” effect). Agriculture, in contrast, became the non-priority, non-state sector, was expected to be self-reliant, and functioned as the supplier of cheap resources for the (urban) state sector. The other rigid bifurcation that obtained was between “urban/non-agricultural” households and “rural/agricultural” households. The former enjoyed state protection and state employment and welfare, and restricted entry (the under-population effect). The latter group was encouraged to be

self-reliant, subject to much less central state control, received (much fewer) welfare benefits through local rural collectives, and was tied to land and agriculture (Chan, 1994). Conversion from agricultural to non-agricultural status (*nongzhuangfei*) was very rare and mostly limited to state urban labor recruitment programs and occasional land expropriation (Su H. , 2004).

In the reform era, the state began to gradually loosen many of these restrictions. The household responsibility (HRS) marked the end of the commune system and formation of township and county governments in its wake (Naughton, 1995). Implemented across the nation between 1978 and 1984, the system divided rural land use into household parcels and set procurement quotas per household, with the surplus allowed to be sold in rural markets (the “dual track” system), and encouraged rural households to operate as entrepreneurs/individual cultivators (although the private sale of land entitlements remains illegal). Importantly, the HRS marked the beginning of (limited) factor markets for labor and capital. These changes were contemporaneous with the creation of China’s special economic zones and export processing centers. With the growing influx of foreign direct investment (FDI) and the emergence of township and village enterprises across eastern China, demand for migrant labor increased. Between 1986 and 1993, in what Yang and Cai (2003) refer to as a period of “urban reforms and redistribution,” the urban bias pattern took on a new form. During this period, regional development policies tilted heavily towards coastal regions. The state implemented the contract responsibility system and encouraged SOE profit retention (reducing available redistributable funds), became enmeshed in propping up state-owned enterprises that fell into losses, and supported urban wage increases and subsidies.

Huang (2008) challenged the view that China was moving in the direction of a market-based economy, citing the chronology of government support (or acquiescence) and later bias *against* the private sector. In the 1980s, township and village enterprises (TVEs) thrived largely because the government, despite laws prohibiting the growth of private firms beyond 8 employees, implicitly

allowed for their existence; though many of these firms were “legally” classified as small businesses (*getihu*), they were in reality often much more sizeable operations—“TVE” is more of a *geographic* phenomenon than a manifestation of local state corporatism. According to Huang, in some instances, the government explicitly supported the growth of private enterprise—Zhao Ziyang and Hu Yaobang even encouraged the expansion of the rural credit cooperative (RCC) system to provide needed credit to rural entrepreneurs during this period. China’s reforms in the 1980s effectively allowed Chinese firms to “exit”—the ability for indigenous entrepreneurs to access sound financial institutions in Hong Kong (such as the case of Lenovo).⁹ The 1980s were thus a time when the most significant poverty reductions took place—despite the common belief that globalization and foreign direct investment (FDI) were the primary mechanisms behind poverty reduction, Huang argues that it was increases in rural credit, rural entrepreneurialism, and rural consumption that mattered most.

However, following the events at Tiananmen Square in 1989 and growing concerns over urban unemployment, a form of urban bias re-obtained, with credit again prioritized for the urban state enterprise sector. With property rights poorly defined (perhaps intentionally), many county governments seized ownership of township and village enterprises. In some urban areas, such as Shanghai, economic growth since the late 1990s has been driven in part by state enterprises; Shanghai’s share of private entrepreneurialism is low relative to Zhejiang Province, as well as other developing economies.

The new “urban” population is predominately comprised of temporary workers with limited rights (the 2005 1% sample population survey reports 147 million temporary migrants). These

⁹ Huang is partially motivated by a conundrum based in institutional economics—that economic growth requires sound economic institutions (North, 1981), but no such institutions existed in the 1980s, especially in the countryside. To get around this problem, Chinese entrepreneurs used sound institutions, notably financial, in Hong Kong.

obstacles to permanent residence have caused widespread under-agglomeration in Chinese cities (Au & Henderson, 2006) and the continued persistence of medium-sized cities over the mega-cities one would predict based on the limited scope of the Todaro model. Likewise, the restricted status of migrant workers has led to a third class of rural hukou citizens (as an outgrowth of the rural class), unable to secure long-term residence. In recent years, with the growth of the tertiary sector have come additional employment opportunities, though long-term employment remains problematic.

State policies tend to encourage exports and at times preference for joint ventures, state enterprises, and foreign firms over the indigenous private sector (Huang Y. , 2003). Instead of political compliance and economic integration, much the opposite has occurred in China due to both central state policies and weakened central state authority at the local level.

China's spatial economy is also not reflective of capitalist tendencies. Despite the devolution of various economic and planning powers, the administrative hierarchy continues to influence the allocation of fiscal (budgetary) resources—an inverse relation persists between population share and fiscal resources, as argued by Chan (2007). This allocation bias, conjoined with limited factor mobility and local protectionism encouraged by the system of performance measures used to appraise local officials, has resulted in local protectionism, under-agglomeration of cities, diseconomies of scale, and duplication of manufacturing, all retarding the formation of an urban system in the capitalist mold (ibid).

2.4.4 China's Spatial Administrative Hierarchy

China's spatial economy and administrative system has changed over time. The earliest constructs of the provincial system date to the Yuan Dynasty (1276-1368), though the county unit (*xian*) dates back to the Qin Dynasty (221-206 BCE). Skinner (1985) famously identified the formation of market regions and regional economic centers in China and raising the importance of

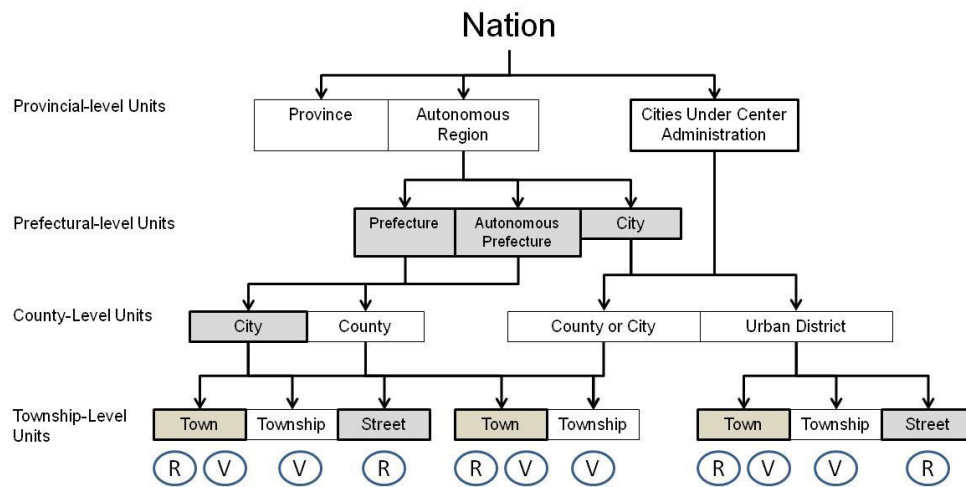
regional and spatial analysis as a critical prism through which to understand the machinations of Chinese society and economy. However, Chinese administrative units in the reform era have come to reflect the nexus of political economy and economic and physical realities. Cartier (2015) describes the movement and fluid annexation and evolution of administrative units as a process of "territorial urbanization," involving mergers of land and administrative spaces and the "[extension of] economic space of the expanding jurisdiction while rolling out uniform governance over larger territories and populations." This process represents "the regime's will to govern relationally and uniformly and, through the extension of administrative capacity, the reproduction of authoritarian power (p. 22)."

The Chinese spatial economy today is a hierarchical system of administrative units, with varying degrees of authority over land and regional economic development policy. A useful compass for navigating these varying levels was developed by Chan and Hu (2003, p. 51) and Chan (2007), and presented in **Figure 2.3** below. At the top of the hierarchy, just below the central government, are provincial-level units, including provinces, autonomous regions, and municipalities under central administration (including Chongqing, Shanghai, Beijing, and Tianjin). Administrative units exist across multiple levels of the subsequent hierarchy. Under both provinces and autonomous regions are prefecture-level units and cities (*dijishi*, 地级市, 381 of which existed in 2014). Under prefecture-level cities are lower level counties or cities or urban districts (*shiqu*, 市区), which are further composed of towns, townships, and street units (*jiedao*, 街道). Centrally administered cities and prefecture-level cities are generally large in size, encompassing an urban core, suburban areas, and some with vast rural areas. Importantly, despite region being defined as a prefecture-level city, under most scenarios towns and townships exist nested within this hierarchy, resulting in a large number of residents within the prefecture holding rural hukou. This situation is more acutely pronounced

with the common instance of "villages in the city" (*chengzhongcun*)—when rural villages are surrounded by urban neighborhoods (*jie dao*)—many of which are under urban district governments (Chen H. , 2012).

During the pre-reform era, the spatial hierarchy of administrative units was organized to facilitate and execute command economy programs of the central government; much of this hierarchy remains in place today, though with much greater devolution of authority to local bureaucrats, as examined by Cartier (2015). Prefectural boundaries have an embedded logic that extends beyond urban urbanization growth more commonly found in Western definitions of municipalities or metro areas. Boundaries and geographies contain both urban and rural areas, and boundaries move and change according to political (administrative) and economic planning considerations (Cartier, 2015). The use of prefecture as a unit of analysis (as an administrative region) in Chapter 3 is done with these considerations in mind.

Figure 2.3 China's Administrative Hierarchy



R = residential neighborhood (urban). V = village (rural).

Source: Chan and Hu (2003, p. 51).

2.4.5 *Capital and the Investment-driven Growth Model*

Although fixed asset investments are not included in GDP accounting, it does serve as a rough proxy for the growing relevance of this form of capital allocation, of which a large share has gone into real estate in recent years; in 2009, fixed asset investment rose to a record 65.1% of GDP, up from 54.9% the previous year and nearly double its levels in 2001 and 2002. In 2010, fixed asset investment increased 23.8% over the previous year, following a 30.0% increase in 2009, with the much of this increase coming in real estate investment (China National Bureau of Statistics, various years).

The recent iteration of the “China model” has been essentially a story of income growth consistently growing at a slower rate than productivity growth (Pettis, 2009; Lardy N. , 2012). There are several important outcomes from the above discussion. As China’s global imbalances increase, savings (household, but even more so corporate) and investment become a greater share of GDP, and consumption a lesser share (as it has for the past ten years). Through this preference for the export sector, there is an effective *transfer of wealth* from Chinese households to enterprises. China’s emphasis on “turbo-charged” growth manifests through a preference for investment over other drivers of growth. State policies to hold down interest rates effectively force the lenders—households—to subsidize the investment-driven, capital-intensive sector (as evident in the net different between savings rates and CPI). While negative real returns on savings occur in many advanced economies, financial repression has constrained the set of alternative assets households can store their savings in, making the impact of such negative rates all the relevant and impactful on overall household income (and consequently consumption).

The result has been GDP growth—and productivity growth—far exceeding wage growth, with consumption, as a function of income, declining as a share of this growth. But herein lies a

potential conundrum in readjustment, at least for the short-term. As Pettis (2009) frames it:

“Removing the subsidies and returning income to the household sector would cause a sharp loss in China’s export competitiveness and could cause a surge in unemployment, which, paradoxically, could slow consumption growth during the adjustment period.”

The People's Bank of China (PBOC, China's central bank) may be finding itself increasingly “trapped”—even if the central bank wanted to raise rates, with so many investment projects afloat due to artificially low lending rates and the ability to continually rollover debt, such a rate increase would lead to widespread exposure for these nonviable projects and a new round of defaults: “One of the problems with a severely repressed financial system, especially one with a rapid credit expansion, is that there tends to be a huge amount of capital misallocation supported by borrowing, and in an increasing number of cases it is only the artificially low borrowing costs that allow these investments to remain viable” (Pettis, 2010). Moreover, if the PBOC appreciated the RMB, it would be running a negative carry value on its current foreign currency-denominated assets.¹⁰

For a country with a seemingly endless pool of cheap labor, China’s growth pattern is unusually investment-heavy—the large share of domestic investment financed by banks is skewing the capital-to-labor ratio and actually holding down employment (Prasad, 2007). State enterprises enjoy subsidized investment: capital is inexpensive, energy and other inputs complementary to capital (e.g. land) are artificially cheap, and state enterprises face no real requirement for dividend payments—all incenting state firm managers to plow their retained earnings back into operations and expansion; this preference is further encouraged through the lack of a mature corporate bond

¹⁰ According to Pettis (2010), the People’s Bank of China (PBOC) is faced with a balance sheet conundrum, as well. On its liability side are RMB-denominated debt accumulated through the sale of sterilization bonds used to mop up excess domestic liquidity created by the undervalued RMB:USD exchange rate and resulting trade surplus, while its assets are largely in the form of USD-denominated Treasury bonds. These liabilities, denominated in RMB, are undervalued, meaning they have nowhere to go in value but up, while their assets, largely denominated in U.S. dollars, are overvalued relative to the RMB, and thus have nowhere to go but down in value.

market. From 2000 to 2005, non-agricultural employment grew less than 3% per annum, while non-agricultural GDP grew 9.5% per annum (ibid., pg.4). Prasad (2009) finds that from 2000-2008, employment grew at only about one tenth the pace of GDP: “[i]n other words, the Chinese growth model, which has relied to a great extent on investment growth, has resulted in limited employment growth and a substantial increase in the capital-output ratio” (pg.8). Anderson (2009) similarly argues that unprecedented state enterprise profits through much of the first decade of the 21st century have been the primary driving factor behind China’s high savings rate: “...Chinese heavy industrial firms made a historically unprecedented global market-share grab. This enabled industrial revenues and profits to rise much faster than the economy as a whole. As a result, industrial profits—that is to say, the saving of the industrial sector—rose sharply as a share of GDP. The domestic saving rate and the trade balance both soared” (Anderson, 2009, pp. 34-35). Consistent with Huang’s (2008) observations, state policies supporting state enterprises over the private sector have further skewed this trend: while productivity levels (and returns to capital) are much higher among private sector manufacturing firms, capital-labor ratios are exceedingly in favor of the state sector, a paradoxical arrangement whereby the least productive sector receives the most investment on a per-worker basis (Brandt, 2010).

Another important feature of China’s investment-heavy growth is the dual operation of low productivity agriculture sector with a high productivity, capital-intensive manufacturing sector. Much of China’s recent rise in productivity has involved the movement of large swaths of the primary sector labor force into manufacturing (Young, 2003). The Lewis turning point describes a process through which the rural sector at first supplies a seemingly infinite (or “infinitely elastic”) pool of low-cost labor, helping to keep wages down and wage growth much slower than increases in productivity due to the switch from the primary to secondary sector (note that this increase in productivity is primarily through a sheer magnitude increase the accumulation of factor inputs—

labor and capital—in the higher productivity manufacturing sector at the expense of agriculture, not in total factor productivity, or TFP). Eventually, this supply of labor begins to peak, pushing up wages, and requiring subsequent growth to be driven by TFP.

China's marginal wage is set by two factors: 1) supply of people willing to leave the farm and work in the cities; and 2) supply of young people entering the labor market, as argued by Kroeber (2010). He argues as China's labor force ages, employers will need to pay a higher premium to attract and keep migrant workers, including better amenities (e.g. better housing for migrants and possibly family members). Local governments, in order to continue to support local industry, will need to do more, including potentially relaxing *hukou* barriers, and “invest far more in affordable housing and social services for an older, more settled urban population than it needed to for the young, risk-taking migrants of the past two decades.” (Kroeber, 2010; Chan, 2010).

Throughout this period of surplus labor, wages have stagnated, and since consumption is largely a function of income, so has consumption as a share of GDP. Bai Chong'en and Qian Zhengjie, for instance, find that household saving as a share of GDP remained constant from 2000 to 2007 (15-17%), but household consumption fell from 46% to 35% of GDP from 2000 to 2008. The authors argue this is attributable to a decline in household income as a *share of GDP*—labor share of national income fell roughly 10.73 percentage points between 1995 and 2004 (Bai & Qian, 2009). If productivity increases faster than wages, savings (namely corporate savings) will go up as a share of GDP. In agriculture, a highly labor-intensive sector, wages make up roughly 90% of GDP, whereas in manufacturing this share drops to 50%—as workers migrate to the cities to work in factories, the income share of GDP will decline. Once the Lewis “turning point” is reached, and labor dynamics push wages upward, wage growth will eventually exceed productivity growth, the economy's ability to consume will grow faster than production capacity, and inflation will rise (Kroeber, 2010; Cai F. , 2008; Cai F. , 2010).

According to Kuijs (2009), between 1995 and 2009, roughly 5.5 percentage points (ppt) of growth per annum can be attributed to capital accumulation, with another 2.7 ppt credited to total factor productivity (i.e. the efficiency in use of inputs, or “technology”). Bosworth and Collins (2008) are more optimistic about the gains from TFP—their research shows TFP grew 3.8% per year and was responsible for roughly two thirds of all growth during the reform era. Others are much less optimistic, however. For instance, Alwyn Young’s (2003) research found that TFP only grew 1.8% per year between 1978 and 1998, and that China was essentially following the low-efficiency growth model of other Asian economies of the 1970s and 1980s, driven primarily by factor accumulation (Krugman, 1994). Brandt and Zhu (2010) challenge Young’s work, instead showing that TFP was a major driver, but only in the non-state, non-agriculture sector; if China more efficiently allocated capital, the economy could maintain high growth without further capital deepening. Their research shows that during the reform period, returns on investment and capital allocations were inversely related (i.e. despite significantly lower return on investment, or “ROI,” the state sector was the overwhelming recipient of bank credit). In a more recent study, the authors found that, “[on] average, misallocation of factors across provinces and sectors resulted a 31% reduction of aggregate [total factor productivity], with the within-province distortions accounting for more than half of the total reductions.” Almost of all these within-province capital misallocations were between the state and non-state sectors (Brandt, Tombe, & Zhu, 2010, p. 2).

But until this “turning point” is reached, labor dynamics along with exchange rate policy and a repressed financial system will continue to facilitate an investment-heavy growth model. Cheap credit, paired with subsidized land and energy, and no dividend payments for state enterprises (waived by Zhu Rongji in the 1990s as compensation for large SOE capacity reductions) enables high profitability for large (often state) firms. Lin (2009) argues that much of this growth is driven by China’s financial structure, dominated by state banks and an equity market with restricted entry,

favoring large firms. Corporate savings has been the largest driver of aggregate savings growth as a share of GDP.

Monetary policy, domestic capital markets, local government budgets, and real estate

Chinese policymakers and planners are primarily concerned with three (inter-related) issues: 1) inflation, 2) economic growth; and 3) employment, but the policy preferences on any of these issues are wrought with political in-fighting. Shih (2008) argues that monetary policy throughout the 1980s and 1990s was largely an outcome of factional politics. “Generalists,” led in the 1980s by Deng Xiaoping along with Zhao Ziyang and Hu Yaobang, pushed for more investment-led growth, greater financial decentralization, and encouraged local development initiatives. The “technocrats,” led by Chen Yun, favored a more centralized monetary policy and retrenchment, with a much greater concern for inflation. The winning faction was often a reactionary outcome, such as the acquiescence of the generalist faction following inflationary cycles in 1980 and 1983-86. While generalists sought to expand credit and investment, the technocrats were responsible following an unhealthy inflationary streak with reigning in investment and credit.

Many of the problems bedeviling banks today can be rooted in this period—for instance, the administrative shifting of many state enterprise entitlements from budgetary line items to loans (Shih, 2008). But although this shift reduced “on-the-books” government expenditures, it was conjoined with two rules that helped crystallize the banks as vehicles for capital injections and away from commercial operations: 1) loans were made secondary to obligatory transfers to the state; and 2) loans could only be repaid with profit margins. Combined, this shift effectively negated the repayment aspect of loans and made them “backdoor” transfers. With the rise of inflation and subsequent retrenchment policies came a surge in state enterprise loan defaults and the onset of largesse of non-performing loans (NPL) (Shih, 2008).

Despite administrative efforts to better regulate the banking sector, such as the creation of the China Banking Regulatory Commission (CBRC) in 2003, the state commercial banks continue to operate as instruments of state industrial policies.¹¹ Commercial banks are also prohibited from engaging in trust, finance, and securities activities (Cousin, 2007). Into the early 1990s, interest on working capital loans to state enterprises was on average 20% lower than for loans to the non-state sector (ibid.). Part of this was driven by the “implicit” state guarantee for these loans—credit to the non-state private sector was costlier because there was such an implicit guarantee (an issue that will be revisited in my discussion of the stimulus below). Even today, banks lack robust tools for credit assessment—through the mid-2000s, only 6% of loans were rated, compared with 44% in the U.S. and Europe. Added to this, most loans to the state sector originally issued as “short-term” ultimately become re-classified as medium- and long-term, effectively rolling over debt and making estimates of the true volume of NPLs nearly impossible (ibid.).

Despite the veneer of corporatization—including listings on the New York and Hong Kong Exchanges—China’s major commercial banks continue to operate as effectively policy banks, i.e., banks tasked with lending to support state objectives. To deal with the large tranche of non-performing loans in the 1990s and early 2000s, the government response was to move these problematic assets to asset management corporations (AMCs). However, much of this debt remains in the system—in a classic case of financial engineering, after assuming debt from the commercial banks, the AMCs then issued bonds that were largely purchased by those same commercial banks (Walter & Howie, 2011).

¹¹ This is made explicit in Article 41 of the Commercial Banking Law: “A commercial bank shall conduct its loan business in accordance with the need for development of the national economy and social progress and under the guidance of state industrial policy...A commercial bank owned solely by the state should provide loans for special projects approved by the State Council. Losses resulting from such loans shall be compensated with approximate measures taken by the State Council” (quoted from Cousin, 2007).

The most recent stimulus and huge expansion of liquidity to support local investment projects has raised serious concerns about the vitality of the commercial banking sector (Batson & Leow, 2009). But much of this is also a function of the rigidity of the banking sector. For instance, many infrastructure projects were financed with two to three year loans, even though many of these projects will not be able to pay back this debt for many years due—loan structuring is thus an important and as yet unresolved dilemma. Another is the state pricing of other key inputs. Lending to power companies to expand or build out new capacity face a similar revenue curve problem, but this is in part due to the mandated underpricing of electricity, reducing the realized returns of these projects.

In summary, China's investment-heavy model of growth is enabled through: 1) an undervalued currency—raising the cost of imports while subsidizing producers in the tradable goods sector and reducing the purchasing power of households; 2) excessively low interest rates—forcing households to subsidize the borrowing costs of borrowers, mostly manufacturers; 3) a large spread between the deposit rate and lending rate—forcing households to pay for recapitalization of banks hit by NPLs made to large manufacturing SOEs; 4) sluggish wage growth, though largely a function of demographic factors, e.g. a large reserve of rural surplus labor; 5) unraveling social safety net and weak environmental restrictions—raising the hidden costs on households, allowing corporations to pass social costs onto workers and households; 6) other direct manufacturing subsidies—e.g. controlled land and energy prices are indirectly paid for by households; and 7) the broad movement of workers from the primary to secondary sector, reducing the share of wages in GDP as workers engage in more capital-intensive production. However, a missing piece of this story is the incentive structure of local governments in promoting investment. The research in this dissertation tells the story of how local governments behave in ways that further exacerbate this invest-heavy growth.

Local government finance and land

The 1994 tax reform had the effect of reducing revenues available to local governments. The division of revenues generated through the value-added tax (VAT) was reconfigured in favor of the central government, with only 25% of revenues retained by local governments. Scholarship has detailed the implications of this shift (Whiting, 2001; Wong C. , 1997; Kung, Xu, & Zhou, 2013). One notable outcome has been the heavy reliance of local governments on “extra-budgetary” revenue sources, such as fees levied on local households to fund public expenditures and payrolls. Another source has been land requisition and conversion. Under the current land conversion regime, local governments that expropriate rural land must compensate rural households with the equivalent of three years’ worth of agricultural output, plus new housing and other amenities (including urban *hukou*). The land use rights are then sold to a developer for either real estate (residential or commercial) or industrial use, the former often coming with windfall profits, according to Kung et al.

For real estate sales, the proceeds are often quite significant, with land use rights auctioned off at multiples of the compensation price paid to rural households (Washburn, 2011). Industrial land, however, is often negotiated at well-below market prices, the primary objective being to attract new plant facilities into the region in competition with other local governments, leading to what some scholars have characterized as a “race to the bottom.” In these cases, the purpose is to attract more sustained revenue sources, through the taxation of corporate income generated from these new plants and other investments, compared with the one-time transaction for real estate development. In 2007 alone, more than 226,500 hectares of land were made available for commercial and industrial use; local governments have in effect made land revenue a “second

budget” (Tao, Su, Liu, & Cao, 2010). Land sales constituted nearly 50% of total local government revenues in 2009, up from around 35% in 2008 (Shen & Peng, 2010).¹²

Due to the growing amount of grievances among rural households (and threats to social stability from these grievances) over land requisitions, some local governments have innovated ways to better compensate farmers. In Beijing, the city government has tried two separate experimental programs in the districts of Dawangjing and Beiwu. In Dawangjing, local households are given large subsidies plus shares of the proceeds from government land-leasing, while the Beiwu model encourages households to urbanize on their own and to organize through urban land collectives (Gong, Zhang, & Lan, 2010). However, it is not clear how successful and relevant these reforms would apply to other parts of China, particularly given the basic function of land transfers as (an increasingly critical) revenue source.

Tsui (2011) characterizes the relationship between land, local government finance, and infrastructure as a “land-infrastructure-leverage trap.” Importantly, though the events of 2008 through early 2010 were massive in scale, they are not a historical aberration—a similar, though smaller-scale, credit expansion for infrastructure projects occurred in 2003. Local governments have been “addicted” to the revenues generated through property markets:

Held hostage by a volatile property market and debt overhang, local governments are very cautious not to rock the boat of a gravity-defying property market, lest they may kill the goose that lays the golden egg; giving time for property bubbles to ferment. With the land-infrastructure-leverage recipe simply too seductive for local cadres, the economy is under the shadow of sporadic investment frenzies, excessive lending, local fiscal crises, real estate market bubbles, and costly bank recapitalizations...

...Instead of weaning the economy toward an environment more congenial to wealth accumulation by the peasant and urban households, the current land management system has skewed the distribution of land windfall towards local governments to fund, among other things, their capital-intensive projects. Banks are eager to tie knots with investment-hungry local governments, channeling large shares of savings to support their ambitious investment plans (Tsui K.-Y. , 2011, p. 33).

¹² Table 5.

With a lack of options to borrow against future earnings, growing uncertainties, and no international portfolio opportunities, Chinese households have an incentive to invest in real estate as a “store of wealth,” creating further fuel for the real estate market (Chovanec, 2009).¹³ The net outcome has been a surge in real estate demand, first in the capital and first tier cities, and now spreading to second tier and interior cities such as Hefei (Pierson, 2010). In late April 2010, the State Council unveiled an experimental, pilot property tax regime in three cities (with a fourth, Shanghai, to be included after the conclusion of the 2010 World Expo). The tax applies to second homes, which are viewed as commercial assets (Green, 2010; Fung, 2010, p. A14). Other administrative measures to stymie possible regional real estate bubbles have also been introduced, such as a new requirement that down payments on second homes cannot dip below 50%, and mortgage interest rates on second homes must be 10 percentage points higher than the standard market rate (Fu & Feng, 2010). The government has also made efforts to limit access to capital for developers, plans to increase the supply of land for development, with 70% designated for welfare housing construction, and recently introduced a stricter definition of “second home” (Yan & Green, 2010).¹⁴

However, as one analyst put it: “China needs to again reform the tax-sharing regime. If they are not able to change the current tax-sharing system, the space for the central bank to control capital bubbles will shrink further.”¹⁵ Green and Yan of Standard Chartered duly criticize the limited scope and efficacy of these administrative measures, noting that: “The tax generates some carry

¹³ Chovanec (2009) summarizes this issue in the following passage: “In China, there is no cost to holding property indefinitely. In fact, it can be a relatively attractive option. Unless they already possess offshore funds, Chinese citizens have limited investment choices: they can gamble on an unstable domestic stock market, buy low-yielding government bonds, or stash their cash in even lower-yielding bank deposits. By contrast, real estate—occupied or not—offers them a visibly reassuring place to park their money, sheltered from inflation...For them, an empty condo is a store of value, much like gold, another asset that performs no practical function besides retaining its worth” (p. 2).

¹⁴ Jimmy Yan and Stephen Green, “China—the all-important Q3 for real estate,” On the Ground, Standard Chartered Bank (China) Ltd., July 6, 2010

¹⁵ Qingmu Changyan (青木昌彦), chair of the China Society of Global Economics, quoted in Fu et al (2010).

costs for those owning numerous (often empty) apartments—and together with other recent measures, will create incentives to sell. However, the tax will not do anything to solve the fundamental problem of local governments’ reliance on land sales to finance their urban development. *This reliance creates hard-to-charge incentives to push up and support land prices, and restrain the supply of land and apartments (italics added)*” (Green & Yan, 2010, p. 1). Without fundamental shifts in the financial sector, including a loosened exchange rate, an inflation-oriented monetary policy, loosening of capital controls for outbound investment,¹⁶ and ultimately a diversification of investment opportunities for households, this pattern of real estate as a wealth-preserving asset will persist, and further exacerbate the gap between the urban rich and poor.

Land conversions are a cornerstone of local government finance in many regions; as Tao and Su (2010) make clear, “[t]hrough ‘managing’ land and urban development, local governments have maximized not only land lease fees but also formal tax revenues” (p. 4). This occurs directly, through the sale of land use rights to developers and industry, and indirectly as a form of collateral in which to backstop loans from local branches of commercial banks and bond issuances. Until the Chinese government restructures the current tax regime, local governments will continue to have a vested interest in seeing real estate prices continue to rise. While this is good for local government in the short run, in the medium and long term it means alienation of a large segment of the population from land ownership and the consequences from the inevitable slowdown or fall in prices.

2.4.6 Understanding China’s Growth Model and Land through the 2008-2009 Stimulus

The 2008-2009 stimulus has in many ways both amplified and unveiled the structure of China’s investment-driven growth model. In November 2008, following a precipitous decline in

¹⁶ In 2009, the Central Government relaxed outbound investment controls through the “going out” policy. Changes include raising the household cap on foreign exchanges for legal purposes and encouraging enterprises to invest overseas, both through facility investments and mergers & acquisitions.

exports and palatable concerns over layoffs in China's coastal export processing centers, the government announced a RMB 4 trillion (roughly US \$586 billion) stimulus program (Batson, 2009). This was conjoined with a dramatic relaxation of monetary policy, resulting in a massive monetary stimulus that has far eclipsed the stimulus in total volume of investment (roughly RMB 9.4 trillion).

Local governments were made fiscally responsible for roughly two-thirds of stimulus spending, though many such governments were already saddled with revenue shortages, budgets constraints, and the lack of a legally sanctioned ability to issue local bonds to raise capital. Often, these governments ultimately resorted to: 1) direct loans from banks, using moral suasion to acquire these loans; and 2) the proliferation of capital-raising vehicles (*rongzi ping tai*)—quasi-state shell companies staffed by local officials with the sole purpose of issuing bonds and borrowing from banks for local, stimulus-related development projects, which usually took the form of fixed asset investments. By the end of 2009, an estimated 8,221 such vehicles were created across the country, accounting for RMB 500 billion in new debt, of which 90% was issued via bank credit, equivalent to more than twice local government annual revenues; 94% of these vehicles are at the urban and county levels. Based on estimates by the China Development Bank, local government debt in 2008 had already exceeded 200-250% of local revenues (Fang, Zhang, Yu, & Zhang, 2010).

For all of 2009, local government investment vehicles issued in aggregate more than 6 trillion RMB of debt. The investment-driven model of growth has persisted—commercial banks loans made for fixed asset investment in township and urban regions approached 3 trillion RMB; investment's contribution to national GDP growth grew from 4.1 percentage points in 2008 to 8 points in 2009 (Shen & Peng, 2010). Shih (2010) estimates total local government debt is now close to US \$1.6 trillion, while estimates based on data from the China Banking Regulatory Commission put aggregate local government debt at 7.38 trillion RMB by the end of 2009, a 70.4 percent year-on-year increase (People's Daily, 2010). In a submission illustrative of the near-term woes of local

government borrowing, the People's Bank of China in July that *only* 20% of outstanding loans to local government investment platforms were likely to default, down from common expectations of 30% (though the latter may still come true). As Qu Hongbin of HSBC Asia framed the issue, “[t]he fact that nearly 80 per cent of those [local government debt-financed infrastructure projects] have at least some capacity to service their debt is quite amazing” (Anderlini, 2010). Notably, a large segment of the state bank-financed investment in 2009 went towards pure public works projects that never showed promise of returns, such as building parks and public toilets.

Much of this investment has gone into less-than-optimally productive uses, particularly industrial capacity in the manufacturing (export-oriented) sectors (Lardy N. , 2012). With cheap capital, state enterprises reinvest their earnings back into fixed assets and the company, increasing capacity at a time of contracting global demand. Despite the mid- and long-term negative impacts of these investments on sustainable growth, local governments operate under short-term time horizons—new industrial capacity will increase or retain (in the short-term) employment and tax revenues.

2.5 Conceptual Model: Local Government Incentives and Behaviors

This dissertation is focused on land finance as a fiscal strategy intended to maximize local government revenues in response to exogenous conditions, including changes in central-local relations. A theoretical model of economic growth is a meta-institutional framework that organizes and defines the mediums through which prices are set, goods, services, labor, and factor inputs are allocated, and total factor productivity is determined.

Tactics evolve out of institutional ambiguity in China's political economy and system of formal and informal rules. Huang (2008), for example, found that China's private sector development in the 1980s was allowed to occur largely through local bureaucrat acquiescence and willingness to allow private sector firms to grow behind the strict constraints of the *getihu* definition;

in many cases, private sector entrepreneurs used TVEs as *ad hoc* solutions to the legal limitations on the formation of large private enterprises. The Special Economic Zones created in the 1980s were likewise geographically bounded spaces where new property rights regimes were allowed and foreign direct investment encouraged (ibid).

China's model can thus best be described as *experimental pragmatism* (Xu C. , 2011).

Institutional ambiguity (or flexibility) as to the rules and their enforcement provide opportunities for local bureaucrats to test new policies and strategies, often with the blessing of the central government; the success of the special economic zones in the 1980s help illustrate this iterative feedback process. As discussed in Chapter 3, this process can be observed with the development of a more transparent property rights regime related to land, or what Lin and Ho (2005) describe as reconciling "paradoxical interests."

The concept of experimentation (Xu C. , 2011) can be applied to land as a fiscal asset and the development of state enterprises tasked with executing on state objectives for infrastructure investment. Similar to the ambiguities of foreign enterprise property rights that were (partially) resolved in the 1990s and 2000s, the need to invest in physical infrastructure and constraints on local government financing for these projects resulted in the institutional innovation of state enterprises specifically tasked with doing these tasks on behalf of local governments. Importantly for the discussion in Chapter 5, practices which are commonly cited as illustrative of the "Chongqing Model"—most notably the deployment of local government investment vehicles and the leveraging of land assets for public sector investments—were actually pioneered by the central government through the China Development Bank and first intensively applied in Tianjin and Shanghai (He, 2010).

Fiscal incentives have shown to have outsized impacts on local bureaucrat behaviors in China, particularly when they align with economic growth imperatives. Kung, Xu, and Zhou (2013) argue that much of local bureaucrat support and tactics with respect to local industrialization and urbanization can be linked to fiscal relations with the central government. In the early period of reform, local governments enjoyed tax extraction control over local enterprise profits; bureaucrats were incentivized to support these activities to their fullest as part of their tax extraction efforts. After 1994, when the central government asserted its claim over 75% of the value-added tax, local government refocused on other sources of revenue, notably the enterprise profit tax, based on corporate profits. According to the authors, this shift in central-local fiscal relations induced local bureaucrats to move away from expansion of township and village enterprises (TVEs) and pivot to greater enterprise efficiency, including the widespread movement to privatize these enterprises in the latter half of the 1990s. The authors further argue that the 2002 reduction (60%) in local government claims on the enterprise profit tax induced local bureaucrats to reorient their revenue maximizing efforts around land and urbanization (ibid).

More recent work by Han and Kung (2015) has further evidenced changes in local state behavior being linked to an exogenous change in central-local relations. The authors find that the reassignment of fiscal rights associated with the enterprise revenue tax spurred more intensive use of land as a primary revenue source, shifting their efforts to land finance strategies.

During the 2008-2010 nationwide stimulus to offset the impacts of the global economic downturn, local bureaucrats were under intense pressure to expedite infrastructure projects as a means of absorbing excess labor capacity in the cities. Fulfilling these demands likewise embodies incentives among local bureaucrats to satisfy national policies. As will be shown later in this dissertation, local government investment vehicles represent another iteration of land finance strategy, responding to fiscal pressures in the same fashion that local bureaucrats adopted to other

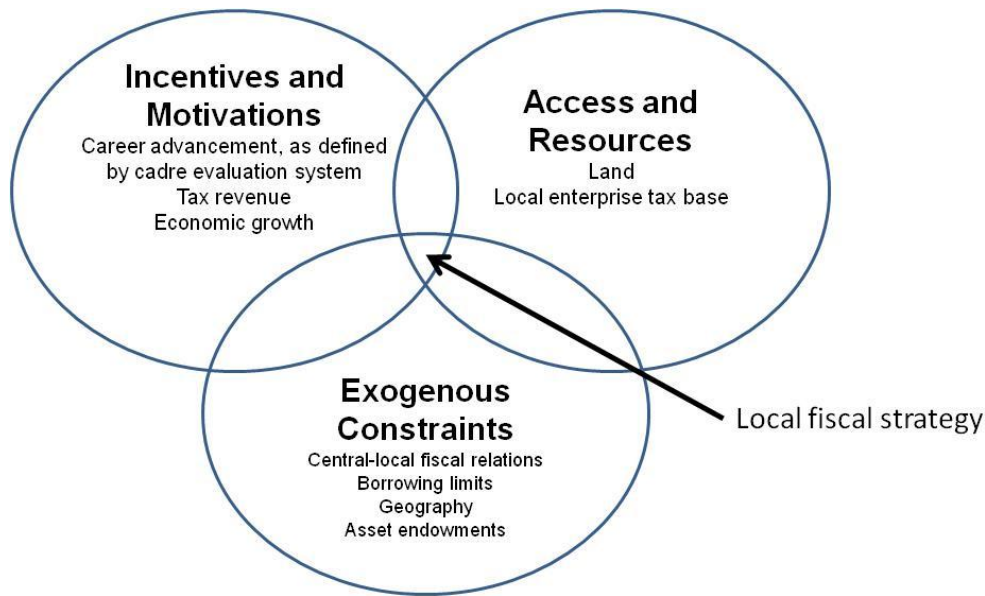
fiscal revenue extraction strategies faced with a change in exogenous conditions, e.g., changes in central-local tax sharing.

Figure 2.4 below presents a schematic representation of the factors shaping local bureaucrat fiscal strategy choices. In order to advance within the Party apparatus, local bureaucrats must satisfy performance metrics such as per GDP growth, fiscal revenues, and other criteria. Local officials face sizable constraints exogenous to their own decision-making abilities, shaping the choices and types of strategies employed to achieve maximum performance as defined by the cadre evaluation system and other top-down criteria. These include the abovementioned central-local fiscal relations, which can vary across time, as seen with 1994 tax reform and later adjustments to the distribution of the enterprise profit tax.

In addition to these exogenous constraints, policy choices also reflect geography, such as the relative proximity to ports and other transportation networks that enable inter-regional linkages and trade. Asset endowments, such as state enterprise investments from the pre-reform era, further shape the types of revenue-generating policies and strategies selected by local officials, including support or bias against private sector activities such as credit markets (Tsai, 2002) and property rights regimes (Whiting, 2001). Borrowing restrictions further constrain local bureaucrats in their ability to raise capital for local infrastructure and public goods investments.

Against incentives and constraints are degrees of access and resources. Local officials may choose, depending on the constraints under which they operate, to leverage their access to local enterprises as an important tax base and source of revenues. In other instances, when central-local fiscal relations limit the accessibility of this resource, officials may instead exploit land as a critical source of fiscal revenues, as Kung, Xu, & Zhou (2013) have argued. A fiscal strategy therefore reflects the intersection of these three conditions.

Figure 2.4 Schematic Framework of Local Fiscal Strategies



The choice of tactics can vary over time, as conditions across each of the above factors change. For example, changes in policies on land expropriation practices, fiscal tax sharing regimes with the central state, and central state initiatives to clean up the balance sheets of commercial banks. **Table 2.1** below provides a chronology of these changes in policies, drawing from literature on central-local relations. The choice of tactics thus represent the changing dynamics and conditions faced by local bureaucrats, all the while seeking to maximize fiscal revenues and advance within the Party hierarchy. Local government investment vehicles, discussed in Chapters 4 and 5, embody the institutional ambiguity of land rights and debt and the pressing requirements of revenue extraction and infrastructure investment. Their deployment, both in type, intensity, and breadth of use, thus represents an important illustration of pragmatic experimentation and local government tactics.

Table 2.1 Local Government Fiscal Strategies

Period	Change	Local Fiscal Strategy	Local Revenue Source
1978-1994	Open door policies, encouraging local economic growth, dismantling of commune system, Hong Kong and overseas investment.	Support rural enterprises, extract value-added taxes from enterprise activities (Kung, Xu, & Zhou, 2013).	Fiscal contract-based tax revenues
1994-2002	1994 tax sharing system shifts 75% of value-added tax to central government.	Shift from supporting enterprise expansion to enterprise efficiencies, including move to privatize local enterprises (Whiting, 2001; Kung, Xu, & Zhou, 2013; Wong C. , 1997).	Business & enterprise income taxes
2002-	Reassignment 60% of enterprise income tax to central government.	Local governments move away from industrialization-based revenue extraction, towards urbanization-based strategies (Kung, Xu, & Zhou, 2013; Ho & Lin, 2004).	Land Finance: Land conveyance fees (introduced earlier, but extensively used during this period)
	Central government push to clean up banks and non-performing debt.	Use land as part of elaborate debt restructuring scheme to clean up local banks (Chapter 5).	Land Finance: land used to capitalize local asset management corporations.
2008-	Economic downturn and central government push to expand stimulus, but mostly through bank lending.	Expand and intensive use of local government investment vehicles (L.GIVs), transfer land use rights to enterprises as form of capitalization, to be used as collateral for bank loans and bond markets (Tsui K.-Y. , 2011).	Land Finance: bank and bond capital acquired with land assets.

2.6 Is China a Neoliberal State?

A second important theme in this dissertation is a critique of neoliberal theory as applied to China. Neoliberal critique has constituted one of the main schools of analytic inquiry in the field of geography in recent decades. This body of thought has articulated the hegemonic role of markets in shaping the political economy landscape, including the disbursement and edifying of property rights, the role of the market as the primary arbiter of class relations, creation of public goods, and the allocation of these goods throughout society, and the primary responsibility of the state as the protector of market institutions.

Harvey (1985; 1989; 2005) has been one of the most vocally critical of China's recent growth as following a neoliberal program. According to Harvey, the state's embrace of foreign capital and opening of the economy to price-based markets is clear evidence—along with more symbolic gestures such as Deng Xiaoping's "to get rich is glorious" sloganistic embrace of capitalism—that China accepted and sought to emulate the broad neoliberal agenda during the late 1970s and 1980, a

trend characterized by state intervention limited to preservation of markets through anti-inflation monetary policy and the philosophical supremacy of markets in bringing about the greatest public good. Wu Fulong (2010) has argued neoliberalism has taken root in China as part of the Party's efforts to modernize society. According to the author, neoliberalism is a process utilized by the central state to achieve political and social legitimacy. Re-pivoting to the market serves as a "fix to consolidate the state's position, although in the process, class interests are realigned." Neoliberalism thus serves as a "system of justification and legitimization for state policy" (Wu, 2010, pp. 621-622). However, the neoliberal critique applied to China is insufficient in explaining China's transition, for several reasons. Firstly, China's hybrid use of markets can more properly be thought of as leveraging of market systems and mechanisms, rather than wholesale embrace of the market logic deeply ingrained in the neoliberal narrative. The government uses market mechanisms and key elements of market economies, such as commercial banking, to facilitate state-guided aims. This is notably evident in the case of Chongqing and its intensive usage of urban development investment companies and the central role of state-owned finance entities (Yufu Asset Management Corporation) to operate within the framework of a market to effect local state policies. Secondly, Harvey chides the state for the broad pervasion of social inequality and what he observes as the "reconstitution of class power," obtaining within communities, between the urban core and its surrounding rural hinterland, and regionally between more affluent east coast provinces and the interior and west. What must be acknowledged, and central to this dissertation, is that much of this inequality has its roots in the structural pre-conditions of China's political economy. More specifically, Chinese society and deliberate state policies well before the advent of incremental reform were already conducive to highly unequal distributions of wealth and well-being, despite the much poorer status of China during the pre-reform era. State policies enforced social stratification that enabled a large share of the population—the rural households that constituted the bulk of the

state's workforce—to be first dispossessed of their assets through land reform, and later to be confined to communes and restricted of movement through the household registration system. By ensuring these populations were held in check and confined to communes, the state could ensure the underpricing of key inputs and commodities critical to its urban-focused urbanization project.

However, state policies during the reform have further muddied the clean story so depicted by the neoliberal critique, including both partial opening of markets as well as strengthening of state participation in certain sectors of the economy, such as telecom (Fan, 2006). During the early stages of reform, the Party introduced several key reform measures, notably the Household Responsibility System (HRS) and land tenure system, gradual reduction in grain quotas, and partial loosening of the household registration system allowed for some wealth accumulation in rural areas. These reforms, combined with *de facto* acquiescence and support by local bureaucrats to private sector entrepreneurialism and development of township and village enterprises (TVEs), brought considerable new wealth into rural communities. It was not until widespread layoffs and social unrest in the late 1990s and early 2000s did the Party reassert the role of state enterprises through a massive consolidation of non-performing debt (Huang Y. , 2008; Walter & Howie, 2011).

Thirdly, the advent of markets does not imply neoliberalism. Polanyi's assessment of markets is more apt to our understanding of China's development—the state creates the market to meet the needs of the state, in a similar logic as the state preserving market institutions for the sake of the irrefutable relevance and primacy of the market. China's growth cannot be easily shoehorned into the neoliberal framework of markets as the primary; the state both creates the market and leverages its framework to maximize revenues. The Chinese government has maintained in public and internal documents all along it is a socialist country, and many of the institutions so eminent during the Mao years, such as the hukou system, continue to operate today.

There is also a constant tension between the extent and degree of market-oriented reforms and the government's efforts to use the market for state-strengthening efforts. Much of this tension—between the market and the entrenched apparatus of the state, helps shape and give form to a hybrid model of growth. Polanyi viewed the outcome of this tension a "double movement," or the response of social groups and interests to resist the fullest reach and movement of the market in shaping the allocation of goods. According to Lim in his review of Chongqing, "[It] is clear that the state-driven social counter-movement in Chongqing is not about the 'state versus the market' or 'politics versus economics'. It is about the interaction between the state apparatus and market mechanisms; it is about politics determining economics through spatial reconfiguration in order to enhance social development (Lim, 2014, p. 485)." China's growth can best be viewed not as emulating a neoliberal development paradigm, but a hybrid constitution, influenced by the dual forces of the market as a primitive allocation mechanism and the legacy inertia of the state apparatus, in part intentionally unreformed in order to maintain the strength of the state.

2.7 Need for Geographic Theory of China's Changing Political Economy

China's model of growth is one deeply embedded with past institutional and structural legacies that continue to effect a lasting impact on local development choices and trajectories. The advent of markets as mechanisms in the allocation of goods and services was born out of a system barren of price signals. Land markets represent an illustrative case for scholars to understand the ways in which the state manages markets.

Economic growth in China has exhibited many of the same elements found in other industrialization processes. Key elements of this process involve:

- 1) Cheap/underutilized labor.** Much of China's growth over the past nearly forty years has been enabled through the mobilization of labor, from agrarian activities to factories.
- 2) Cheap capital.** The state controls key elements of the financial sector.

- 3) **Underpriced and available land resources**, made accessible through a deliberately ambiguous legal and institutional framework around land rights that exposes traditional land use structures as vulnerable to expropriation.
- 4) **Institutional reform** that has permitted the advent of partial price signals in the allocation of goods and services, at first for only surplus above quota requirements, and later across most all goods and services in the economy. An important facet of institutional change has been the role of geographically delimited policy *experimentation* (Xu C. , 2011).
- 5) The creation of what Polanyi (1957) describes as the **fictitious commodities** of land, labor, and capital, enabled through:
 - a. **Land markets.** The commoditizing of land, but at the behest of local state interests with embedded fissures that, similar to the original consolidation of land during the collectivization of the early 1950s, resulted in the exploitation of rural households.
 - b. **Labor markets.** Similar to the economic surplus of land, labor was highly underutilized relative to the productive capabilities of China's rural labor force. The opening of land markets through partial reform of the household registration system and dissolution of the commune freed large numbers of Chinese peasants to participate in the urban labor force, though not in the urban resident population (Solinger, 1999). Given the large number of underemployed workers, for many years China's supply of labor to support urban factory production was what Lewis describes as infinitely inelastic. Despite high levels of capital allocation inefficiencies during the reform era, sustained cheap wages have enabled relatively strong returns to capital, thereby facilitating sustained high

levels of gross capital formation-to-GDP ratios over the reform period (and, conversely, low household consumption-to-GDP ratios), though recent news of increasingly frequent labor shortages suggest that the marginal demand for labor has alas eclipsed the marginal supply of labor, potentially yielding the "Lewis Turning Point."

The remainder of this dissertation explores how the state has created markets to serve the fiscal imperatives of the local state, and the tools and mechanisms availed to execute on these objectives.

Chapter 3: Municipal-Level Land Markets and Local Political Economy

3.1 Introduction

In this dissertation, land finance is defined as a *local government strategy of exploiting the implicit fiscal value of land assets to achieve, either directly or indirectly, greater fiscal revenues*. Direct fiscal benefits refer to the residual net revenues accrued and collected by local governments through the requisition, expropriation, and conversion of land and the selling of land use rights to commercial and industrial interests. Indirect revenues, the subject of this chapter, occur through taxes generated through the economic activities directly tied to the land transferred and tax revenues obtained through ancillary economic activities resulting from these primary activities, also referred to as taxable multiplier effects; the latter can include the both near-term taxes on construction and related activities, and longer-term revenues from vertical supply chain transactions linked with an activity occurring on the transferred land in question.

The analysis in this chapter explores three core questions related to land finance: 1) to what extent do land sales represent a fiscal strategy employed by local bureaucrats to attract and retain streams of tax revenue; 2) is there evidence that public investments in critical areas of local government responsibility depend on land transactions; and 3) what is the geographic diversity of these relationships across China by region and the fiscal-economic status of a municipality?

Recent studies have examined the relationship between land sales and local public finance (Tao, Su, Liu, & Cao, 2010; Ho P. , 2001; Hsing, 2010; Lin G. C., 2010). This chapter begins by reviewing this research, including the broader institutional and legal framework that enables land transfers to play a key and increasingly important role in local government finance, either directly via land transfers, or through alternative, indirect strategies that exploit the intrinsic fiscal value of land. Land has long figured prominently in Communist ideology and the core spaces of social friction

throughout the modern era in China. Prior to 1949, disputes and social tensions arising from land and its ownership and distribution fell within the domain of the private economy and rural land system; social inequities in a primarily agrarian, rural society operated largely through land ownership and its distribution (Ding, 2003). The reform era and growing agency of local government in spurring economic growth have again refined our thinking on the role of land and its socioeconomic value. In the current era, the fiscal value of land has emerged and become a prominent space of contention, dispute, and rights. Yet this fiscal value of land cannot be entirely divorced from its economic and social value—these latter two valuations have created strong entitlements and fuel property rights contentions. In this new system of exploited fiscal value of land, however, it is the local state that plays a dominant role and behaves with respect to land assets in ways that maximize local government fiscal imperatives.

Land transfers provide an alternative fiscal revenue source, though it is hypothesized the intensity by which local bureaucrats exploit this resource varies according to local economic and fiscal factors. Land dependency, or the extent to which municipalities rely on land as a key source and driver of fiscal revenues, is in turn a function of a region's budget position and market conditions that support intrinsic land value. Weak budgetary positions will motivate local governments to intensify the exploitation of land resources to support tax revenues, providing evidence of a land finance strategy.

This chapter is organized as follows: first, a review is provided of the legal and institutional framework for land expropriation, followed by a discussion of the primary mechanisms through which land can be expropriated and transferred to urban users. Hypotheses are then developed and articulated relating land transfers and tax revenues and the changing dynamics of land finance before and after the global recession, followed by an empirical analysis of the extent of land finance and key drivers across municipalities in China.

3.2 Land Sales and Land Finance—Legal and Institutional Framework

Throughout the reform era, land has become increasingly commoditized. After decades of Communist Party orthodoxy that proscribed property ownership, a series of regulatory and constitutional changes transformed land use rights from administrative allocation to a commoditized asset. However, despite these changes, urban land remains under the monopolized control of the state. The current land conveyance regime effectively deprives rural households of potential residual income realized through the sale of land for non-rural commercial purposes—what has been commonly referred to by many scholars as a "dual track land lease system" (Ho P. , 2001).

As a commodity and key factor of production, the regulatory and legal framework governing the ownership and use of land embodies and nurtures important social disparities. In the pre-reform era, the primary value of land was through its productive value. Following a Marxist-Leninist dialectic, land under a planned economy was treated a resource of social and productive value by means of scientific measurement and classification; supply and demand—let alone price—did not inform decisions on land allocation. Land was allocated either to the commune or work team if rural land, or to the state enterprise or *danwei* (work unit) for urban land. In the reform era, land allocation remains under the auspices of the state, but through state manipulation and control of markets.

Karl Polanyi (1957) famously observed more than half a century ago, markets do not self-regulate—even in acclaimed free market societies, market-nurturing institutions cannot self-exist without state intervention. The same logic can be applied to China's land markets today. While land use rights are commoditized and transacted—and increasingly through quasi-market-oriented mediums of auctions, public tenders, and listings—the pricing of land is heavily influenced by state institutions (on the management land, and the evaluation of cadres) and the regulatory framework that governs and controls how land is used, transferred, and economic rents generated. Land prices embody the intrinsic value of land as a factor input, its social value to the initial user, and the extent

to which the state limits its supply and enforces exclusive, bifurcated markets for its ownership and use rights.

Important throughout this discussion, land title is always only owned by either the collective (for rural land) or the state (for urban land) (Ho P. , 2001). What can be transferred are land use rights, or the ability to lease land. Private or state-owned entities may acquire use rights and develop land parcels in accordance with zoned uses. Discussions on the legal and political context of land use rights are provided in more detail below.

Whether as a direct, immediate revenue stream, as collateral to obtain bank debt, or as a "giveaway" to attract long-term basic industry investment, local governments use land for revenue-maximizing purposes. The existing institutional framework incentivizes local bureaucrats to pursue the exploitation of land's intrinsic fiscal value consistent with evaluation criteria, in a weak enforcement environment constraining land conversion and ambiguous restrictions on expropriation, and within the larger investment-heavy development growth model. While land is increasingly transferred under ostensibly market conditions, these markets and prices are constructs of a state regulatory framework and the strategic intervention of local bureaucrats to achieve fiscal objectives.

3.2.1 Land in Historical Context

Land has undergone important changes in since 1949, including changes in the use and exchange of farm land and has long been at the nexus of structural changes in the Chinese economy. The use, leasing, leveraging, and transfer of land and land use rights embody broader legal and ideological contradictions within the Communist Party and Chinese society at large Land before 1949 could be transferred by way of private agreement. In the 1950s, land reform emerged as an integral social and political movement of the Communist Party, first through the dispossession of

landlords and wealthy peasants and later through the calcification of social mobility through the household registration system and the institutionalized binding of rural households to land, resulting in a dual structure of Chinese society (Chan, 1994). Urban land was owned by the state and allocated to the urban work unit, or *danwei*, for production, housing, social services, and other public goods and services for urban households. Rural land was treated as a means of production, and was not permitted to be transacted in a market.

Industrialization was the key orientation of China's development shortly after the establishment of the PRC. To achieve rapid growth, the government emphasized a dual system policy that tied rural residents to the countryside through the household registration system. This process helped to ensure cities, as the foci of Stalinist-inspired industrialization policies, were underpopulated relative to their "natural" populations in the absence of internal migration restrictions (Chan, 1994).

The revolution carried out large-scale land reform, confiscating the pre-1949 land holdings of landlords and wealthy peasants and redistributed land among the previously landless peasantry (Ding, 2003). Private, individual ownership of rural land was codified in Article 8 of the 1954 Constitution.¹⁷ While the language of Article 8 granted the continued private ownership of land and other means of production, these rights were not extended to rich rural peasants, whose economic rights to land were proscribed. Moreover, despite the granting of ownership, rural households were strongly encouraged (on a "voluntary principle"), to "organize co-operation in the fields of production, supply and marketing, and credit" (People's Republic of China, 1954).

¹⁷ Article 8 (People's Republic of China, 1954): "The state protects according to law the right of peasants to own land and other means of production. The state guides and helps individual peasants to increase production and encourages them, on the voluntary principle, to organize co-operation in the fields of production, supply and marketing, and credit. The policy towards the rich peasant economy is to restrict and gradually eliminate it."

In reality land ownership rights were short-lived—peasants quickly lost *de facto* control of land. The onset of the Great Leap Forward in 1958 expedited large-scale collectivization, with land ownership divided between communes, brigades, and production teams. Rural land was formally transferred from peasants to the brigade team, or commune, during the Eighth National Party Congress in September 1962. The revised draft of the Work Regulations for the Rural People's Communes designated the production team as the primary accounting unit and owner of land, an arrangement that would last until the dismantling of the commune system in late 1970s and early 1980s (Ho P. , 2001).

A landmark policy shift early in the reform era was the implementation of the household responsibility system (HRS) (Naughton, 1995). Communes were dismantled and land partitioned and reallocated among rural households under a contract system (*chengbao*, 承包), with peasants regaining partial land rights. Under this system, rural households were contracted with the collective to provide obligatory output quotas and tax payments in exchange for rights to individual household parcels. Farmers were further incentivized with the opportunity to sell output in excess of the required quota in markets, helping to dramatically boost agricultural output.

The 1982 Constitution provided the legal scaffolding for a new, bifurcated land ownership regime (similar to the bifurcation of China's population). According to Article 10, urban land ownership was assigned the state, while rural land was recognized as belonging to the collective; exceptions included land owned by the state by legal regulation. Land owned by the collective included land for rural dwellings, private plots for¹⁸ However, immediately problematic was the lack

¹⁸ According to Article 10 of the 1982 Constitution: "Urban land belongs to the state. Rural and suburban land, with the exception of land by legal regulation owned by the state, belongs to the collective; land for dwellings, private plots for cropland and hilly land are also owned by the collective. The state can, for the needs of the public interest, in accordance with legal regulations expropriate and requisition land and provide compensation. No organization or individual may appropriate, buy or sell, or through other illegal means transfer land. The use rights of land can be transferred according to legal regulations. All organizations and individuals who use land must do so in compliance with the law." 城市的土地

of a legal definition of "collective," which could refer to the village small group, "natural village," or township administration.

As China's economy began to accelerate, a more transparent property rights regime was needed to secure foreign investment. By the mid-1980s, foreign enterprises in special economic zones (SEZs) increasingly required more clearly defined rights associated with land use, eventually prompting the Central Government to amend the Constitution to allow for transfer of land use rights to private sector interests. Lin and Ho (2005) argue that, in the interest of advancing economic development and reconciling "paradoxical interests," the state was prompted to: 1) develop clearly specified land-property rights without violating the constitutional designation of the state as the sole owner; 2) increase the efficiency of land use without fully relinquishing the socialist tradition of public and collective ownership; and 3) promote rural industrialization and urbanization without jeopardizing food security and environmental sustainability (p. 419).

To accommodate these concerns, the first Land Administration Law (LAL) was passed by the State Council in 1986, separating land ownership and land use rights. During the first session of the Seventh People's Congress on 12 April 1988, a clause was added to the Constitution clearing away legal incongruities with the LAL and allowing for legal commercialization of land use rights; Article 10, Section 10 permitted the "right to the use of land may be transferred in accordance with laws." The results of this change were two-fold: 1) the effective separation of land ownership from land use rights, allowing for the granting or conferral of land use rights to commercial interests; and

属于国家所有。农村和城市郊区的土地，除由法律规定属于国家所有的以外，属于集体所有；宅基地和自留地、自留山，也属于集体所有。国家为了公共利益的需要，可以依照法律规定对土地实行征收或者征用并给予补偿。任何组织或者个人不得侵占、买卖或者以其他形式非法转让土地。土地的使用权可以依照法律的规定转让。一切使用土地的组织和个人必须合理地利用土地。

2) the introduction of a market-based mechanism for land use transfers, giving rise to a "dual track" system (Lin & Ho, 2005, p. 420). The policy change ushered in the establishment of an urban land market, and was later followed by additional provisional regulations and notifications that further solidified the advent of urban land use transfers (Xu, Yeh, & Wu, *Land Commodification: New Land Development and Politics in China since the Late 1990s*, 2009, p. 892).

Local municipalities have often been the testing ground for new policy experimentation throughout the reform era. In many cases, policy experiments enacted by local governments, and with the implicit support of central authorities, ran in direct conflict with national law, and land was often at the forefront of these contradictions. Ho (2001) argues that this very "institutional indeterminacy" functioned as the very "lubricant [that allowed] the land system to function at the *current* stage of economic reforms." This institutional incompleteness was implicitly acquiesced and upheld by the central leadership in order to "create leeway for reacting to societal developments" (p. 400).

In other instances, intentional ambiguity in national law and regulations and local exigencies has provided space for local government initiative. For instance, in 1992 during a surge in real estate in Shanghai, the Land Administration Law at the time did not adequately prescribe what land, and under what ownership structure, should be used for residential real estate development. In response, the municipal government promulgated "Methods for the Management of Land Used for Construction,"¹⁹ requiring that residential real estate developments use rural land obtained through a land use transfer, with ownership retained by the collective, and thus not through expropriation

¹⁹ Shanghai City Methods for Construction Land Management (*Shanghaishi Jianshe Yongdi Guanli Banfa*, 上海市建设用地管理办法), January 1992. In 1997, the Central Party and the NPC issued its "Notification on Gradual Strengthening of Land Management and Practical Protection of Arable Land" (*Zhonggong Zhongyang, Guowuyuan Guanyu Jinyibu Jiaqiang Tudi Guanli, Qieshi Baohu Gengdi de Tongzhi*, 中共中央、国务院关于进一步加强土地管理, 切实保护耕地的通知), which called for a one-year moratorium on the use of arable land for non-rural construction projects.

(when actual ownership changes from the collective to the state) (Su & Chan, 2005, p. 8). Since early on in the reform era, "local governments in China, especially the lowest levels of local government, have in fact become the vanguard for driving productivity growth" (ibid, p.11).

However, this same ambiguity has also engendered gross abuses in land conversion, most notably in the proliferation of various types of "Development Zones" (*kafaju*, 开发区) throughout the 1990s and early 2000s. During the high period of rural industrialization, local governments aggressively pursued strategies of land conversion to support and subsidize township and village enterprises (TVEs), even if conversion rates exceeded mandated limits; of the 18,100 hectares of illegal land conversion and sales in 2002, 76% were by state agencies and collectives (Lin & Ho, 2005). Facing growing concerns over food security, unconstrained rates of land conversion and resulting social discontent, an overheating economy, and excess industrial capacity brought on by a glut of TVEs, the Central Government imposed restrictions on land conversion in the late 1990s and again in the early 2000s. A nationwide moratorium on arable land conversion was imposed in 1996 and eventually extended to 1998, and in 2003 on new development zones. In March 2004, the Ministry of Land and Resources issued Document No. 71, requiring that all land leases negotiated privately would be invalidated if lease fees were not fully paid and department approvals not obtained by August 2004 (the "8-31 Cut-Off"); this was followed in December with the State Council decision to tighten control over farmland conversion and transfer through more rigorous mechanisms. Joint audits of development zones by seven ministries led to the abolition of approximately 70% of all development zones nationwide (4,813 out of 6,866 zones), resulting in 24,900 square kilometers of land transferred into the state land reserve (Hsing, 2010, pp. 101-102).

3.2.2 *Land and the Dual System*

China's system of land needs to be framed within the broader dual system orientation of Chinese society. Duality of rights and relationship to both the state and one's participation in land and housing markets is intrinsically tied to the residency classification of a citizen (Chan, 1994; Chan, 2009; Yang & Cai, 2003). The "dual system" (*eryuanzhi*) refers to the bifurcation of society into rural and urban classes, with legal and political institutions and relations to the state unique to each group. Core to the state's development strategy was the Stalin-inspired prioritization of urban industrialization at the expense of rural development. The state's growth policies emphasized high concentrations of capital into urban areas as the primary means of rapid industrializing. The state used three institutions to enforce this urban-centric capital accumulation growth regime: 1) the subsidizing of urban growth through underpricing of rural output sold to cities (and over-pricing of urban output to rural areas) through market boards; 2) the advent of the people's commune; and 3) the household registration (*hukou*) system (*ibid*).

State institutions imposed a pauperizing of rural populations, restricting mobility and wealth accumulation in order to support urban industrialization (*ibid*). Rural households were bound to the commune through the institution of the *hukou* system; all rations, housing, healthcare, and education were allocated based on one's residence and category as either agricultural or non-agricultural. Rural, agricultural households were expected to be self-reliant, subject to little state control, and received all welfare benefits through the communes. By contrast, urban/non-agricultural *hukou* holders received much better welfare entitlements through the work unit (*danwei*), including access to urban education, healthcare, and housing; according to Wang (2011, p. 27), "depriving the peasants [was] the necessary price for initializing industrialization." Employment, as a primary source of food and grain rations, was directly tied to the *hukou* system; rural, agricultural *hukou* powers were denied the ability to find work in urban areas.

The advent of reforms after 1978 has included loosening of the hukou system (Solinger, 1999). The introduction of rural markets and phasing out of state market boards, along with the temporary residence card, has enabled the large flow of rural migrants into the cities to work in factories and service jobs (ibid).

3.2.3 Legal and Political Context of Land Ownership, Expropriation, and Requisition

Land typically falls under one of three categories: 1) rural collective land; 2) state land occupied and *de facto* owned by urban work units; and 3) state-owned urban land, in which use rights can be transferred to users in exchange for payment (Ho P. , 2001; Ho & Lin, 2004; Hsing, 2010). This third form of land is the primary asset of exchange in the land lease system. In all cases, land title is never held in private hands.

Land requisition (*tudi zhengyong*, 土地征用) refers to the legal taking of land use rights, but not a change in ownership. This contrasts with land expropriation (*tudi zhengshou*, 土地征收), wherein both the land ownership and use rights are transferred. The procedures and rules on land expropriation are outlined in Section Five of the Land Administration Law (Articles 43 through 65) (People's Republic of China, National People's Congress, 2004). According to the law, developers and other parties wanting to carry out non-agricultural construction projects must apply with the county or district level or higher People's Government Land Administration Bureau (aka Land Bureau, *renmin zhengfu tudi xingzheng zhuguan bumen*, 人民政府土地行政主管部门) for the use of state-owned land (Article 43). State-owned land refers to land expropriated by the state through the administration of the local Land Bureau. Importantly, Article 43 of the Land Administration Law states that "any organization or individual carrying out construction must by law apply to use state land." Rural land is thus excluded from most types of construction, with the exceptions of township and village enterprises, household home construction, and public facilities. Peasant households are

by law prohibited from directly selling or alienating their use rights to other interests. Under this framework, peasants cannot "exit their position as members of the rural collectives, which are designated as owners of rural land, by getting the collective to sell land, and transfer ownership, of its own accord" (Pils, 2005, p. 241).

If the land being pursued for construction purposes is arable land, the parcel(s) must first be converted to rural construction land by the collective under the supervision of the Land Bureau. Land conversion is constrained by each administrative level's master land utilization plan, which represents disaggregated quotas from above set at the national and then provincial and prefectural levels (Cai M. , 2012). Constraints at the local level are imposed through two (related) utilization plans first established at the national level.

The overall plan of land utilization (*tudi liyong zongti guihua*, 土地利用总体规划) is a long term plan (usually 10-15 years). The plan imposes spatial limits and quotas, including on: conversion of agricultural to construction land; conversion of arable land to construction land (sub category of the first quota); arable land to be created through development and reclamation; and arable land to be maintained (Cai M. , 2012). The first two are upper limits, beyond which conversion is prohibited. The last two are required lower limits local governments must fulfill. The central government sets national quotas and then disaggregates the plan to the provincial governments, which then further disaggregates down to the municipalities and its counties. Provincial government usually reserves some construction land quotas for projects that can be justified as significantly important to the local economy. The annual plan of land utilization (*tudi liyong niandu jihua*, 土地利用年度计划) disaggregates the overall plan into yearly plans. Local governments are required to develop their own annual plans to conform with disaggregated quotas from above (Cai M. , 2012).

To conform to the quotas on minimum arable land, in most cases collectives will rationalize land use by consolidating single family housing into apartments, reclaiming some rural construction land as arable land (ibid). In recent years, municipal governments have developed schemes to transfer quotas across jurisdictions in an effort to free up land for development while maintaining overall minimum levels arable land (ibid)The state enjoys a monopoly on the selling of land use rights for urban construction land, and in many cases accrues windfall profits through the selling of land use rights to commercial interests. The expropriation, after approval, is announced and executed by the People's Government at the county level or above (Article 46).

Compensation for the loss of land use rights is outlined in Article 47, and includes direct payments and subsidies for resettlement when required. According to the law, overall payments, including direct compensation to households and resettlement subsidies, are capped at "thirty times the average annual output value of the expropriated land on the basis of the three years preceding expropriation." Of this, direct compensation for expropriated or cultivated land should equal "six to ten times the average annual output value of the expropriated land, calculated on the basis of three years preceding such requisition." Subsidies for the resettlement of dispossessed farming households are calculated by "dividing the area of expropriated cultivated land by the average area of the original cultivated land per person of the unit the land of which is expropriated," using a standard resettlement calculation of "four to six times the average annual output value of the expropriated cultivated land calculated on the basis of three years preceding such expropriation." The maximum subsidy for resettlement for each hectare of expropriated cultivated land is capped at fifteen times the average annual output value per hectare calculated on the basis of three years preceding such expropriation (Cai M. , 2012; Hsing, 2010).

Once a parcel of rural land is expropriated, i.e., its ownership is transferred from the collective to the state, a developer or construction unit may apply to the relevant Land Bureau to

obtain the use rights to build on the expropriated land (Hsing, 2010). Upon approval from the local (county or above) Land Bureau, the developer or construction unit is required to pay a land conveyance fee (*churangjin*, 土地出让金) to the state to obtain the use rights.²⁰ On 19 May 1990, the National People's Congress issued two regulations that furthered the capitalization of land, or "turning land into capital": 1) "People's Republic of China Provisional Rules on City and Township Land Use Rights Conveyance and Assignments"; and 2) "Provisional Administrative Methods for Foreign Investment Development and Managing of Land Parcels

The implications of the legal framework discussed above are extensive. By restricting land leasing to urban land, rural households are effectively excluded from residual incomes and benefits accrued from the increasingly profitable urban land market. The state, after requisitioning rural land and converting it into urban land, can then lease its holdings for commercial, industrial, or residential purposes based on regulated time periods—" [rural land] despite implicit demand, had no market value as land for purposes of urban development... [However] once it became 'urban,' the peasants no longer had any claims to it. The possibility of decollectivization and transfer of land ownership to the state, in combination with transfers of land use rights regarding state-owned land, provided a legal framework for land seizures" (Pils, 2005, p. 244).

Moreover, land requisition is not only a transfer of use rights, but perhaps more critically the only legal means of affecting a change in land use. As a result of this system, two parcels of land of seemingly identical physical characteristics can have wildly different valuations due to each parcel's legal designation. Washburn (2011) describes this situation as an "expropriation surplus," in essence

²⁰ Exceptions in the payment of land conveyance fees include when the land is to be used for either: 1) military or state department purposes; 2) urban construction projects or public welfare undertakings; 3) major energy, communications, water conservancy, and other infrastructure projects supported by the state; or 4) other purposes as provided for by laws or administrative regulations.

"the product of two separate phenomena; first, the substantial difference between the price of land designated for agricultural uses and the price of land on which private commercial construction is permitted (this difference will be referred to in this article as the "urbanization surplus"); second, a land use regime that requires expropriation for conversion from the former to the latter use" (p. 84).

Through this legal framework, peasants are precluded from accruing economic benefits commensurate with the implicit value of land. As Pils (2005) articulates, "[It] is difficult not to see some duplicity in the current structure of land law, holding out an abstract promise of 'collective ownership by village peasants,' but not allowing this collective economic right as such to translate into concrete economic value" (Pils, 2005, p. 257).

The land leasehold market and the regulatory and legal framework enabling it have furthermore confirmed privileges on certain advantageously endowed actors in an urban environment, namely state enterprises. Hsing (2010) defines "socialist land masters" as representatives of the central state with "exclusive use and management rights over the land they occupy [and since the 1980s have] expanded their use rights over land granted under the socialist system to de facto ownership rights in the new land leasehold market" (p. 34). Since the introduction of the land leasehold market in 1988, these "socialist land masters" have exploited regulatory and legal ambiguities ("gray areas") to engage directly or via commercial developers in the real estate market. The pre-reform urban planning model encouraged manufacturing and industrial concentrations within the urban core—parcels controlled by state enterprises, and in the new urbanization mode of consumption-driven growth the most valuable of all urban land in a given region. State enterprises were able to accumulate large quantities of advantageously situated land through: 1) soft budget constraints and their broader socialist mission of providing housing and other amenities to state workers; and 2) locational advantages through the above discussed state

planning emphasis on industrial activities concentrated in the urban core. Both enabled state enterprises to accrue valuable assets in the reform era.

Su & Chan (2005, p. 5) emphasize four key aspects to land expropriation: 1) the process is inherently compulsory, requiring individuals to subordinate their use rights to the state and prohibiting any form of obstruction; 2) the public interest, for which expropriation is intended to achieve, is ill-defined with consensus on its meaning, leading to abuse; 3) although the central state is the ultimate expropriating party, local governments on behalf of the central state carry out this authority; and 4) compensation to dispossessed households must be provided, following the principle of proper compensation. Under this framework, expropriation, requisition, and land sales have emerged as a key fiscal strategy for local governments; the formal rules serve the interests of those in power at the expense of rural households" (Deng, 2005; Huang & Cai, 2013).

3.2.4 Land Development and Land Use Markets

Land markets can be disaggregated by exclusivity of receiver and transaction medium. Primary markets include acquisition of land by a municipality from rural, urban users or across urban users (e.g., swapping of land between state work units), administrative allocation, or land leasing to developers. The secondary market involves the paid transfer of use rights to end users, e.g., the sale of an apartment by a developer to an urban household. **Table 3.1** outlines these distinctions, based on research by Yeh (2005).

Table 3.1 Types of Land Acquisition

Market Type	Type of Land Acquisition	Type of Land Acquired	Process	Comments
Primary	By work units for project-specific development	Rural	Work unit applies for land acquisition permit from municipality. Acquires land and pays standard compensation to farmers, including LAL-prescribed amounts and new buildings and funds for new arable land (if necessary).	Cannot be further transferred to commercial users.
	By municipal government for comprehensive development	Rural	Large tracts of land acquired and then allocated to state-owned developers for urban housing construction.	Cannot be easily transferred to commercial users.
	Acquisition of existing administratively allocated urban land by municipal government for urban infrastructure.	Urban	Government negotiates with occupants of administratively allocated land needed for infrastructure.	Government compensates current occupants for loss and allocate new urban parcel.
	Rural land by municipal government for land leasing.	Rural	Land expropriated by municipality and then leased to other users through negotiation or market-oriented mechanism (auction, listing, public tender).	For developer, this most expensive means to acquire land.
	Existing administratively allocated urban land for land leasing.	Urban	Municipality acquires land held by urban work units, then leases to users at market prices.	Much more difficult for local government to carry out. Typically prefers acquisition of rural land for large development zone projects.
Secondary	Exchange of administratively allocated land between work units.	Urban	Direct negotiation between units, e.g., swap housing land for unused land.	Very limited, and not reflective of market conditions for land.
	Transaction of leased land between land users.	Urban	Secondary market. Lease price set by market conditions (paid transfer of land use rights).	Between developers and ordinary users.

Source: Yeh (2005, pp. 40-45).

The first step in an expropriation process is for a developer or construction unit to apply for land for a new project, with sufficient evidence that the land needed is not available among the current stock of urban construction land. The county or district-level Land Bureau will review materials, the existing stock of land for construction purposes, and assess the public interest in expropriation. A land expropriation and new land use project is typically initiated by a local government or a developer (Yeh, 2005; Ho & Lin, 2004; Hsing, 2010).

Before land use rights can be sold, the rural land must first be converted from rural construction to urban construction designation in a process referred to as "primary development" (*tudi yiji kaifa*, 土地一级开发). A local government or local government-sanctioned or authorized development company identifies a project of public interest (e.g., a new technology park) and submits an application through the county-level or above Land Bureau for expropriation of the necessary land. The developer is tasked with converting "raw land" (*shengdi*, 生地, i.e., undeveloped rural construction land) to "cooked land" (*shudi*, 熟地, i.e., land with necessary infrastructure and state ownership designation). A government-initiated project must conform to the regional land utilization plan, urban comprehensive plan (*chengshi zongti guihua*, 城市总体规划), regulatory plan, and annual land development plan. The local government is held responsible for costs associated with preparing the land for commercial and/or industrial development, such as demolition of existing structures, the actual land expropriation, and extension of urban roads and other basic infrastructure. The primary development stage includes management of land consolidation of the existing parcels, land reclamation (in the case where arable land was lost due to the expropriation and must be replaced to remain above the minimum arable land threshold), and other related developments (Chen G. , 2008; Hsing, 2010).

Once land parcels have been "cooked," they are then transferred to the local Land Bureau, where the land is listed under municipal registration, affirming state ownership, and added to the Land Bank (*tudi chubei*, 土地储备).²¹ The second scenario (*tudi erji kaifa*, 土地二级开发) involves a

²¹ According to Xu, Yeh & Wu (2009, p. 901), "Land banking is mainly achieved through purchasing sites, expropriating rural land or state-owned land (i.e. unutilized state owned land and occupied state-owned land such as administratively allocated land or leased land), exchanging land, and taking back sites when leases expire. It enables governments to buy up and develop large areas of land, provide roads, water, electricity and telecommunications, and divide the areas into smaller plots for land conveyance. Nowadays, land banking is typically used as a policy tool by a city or county government to retain some control over future urban development and exert state regulatory power on how the land is

developer or other non-state interest initiating a project. In this scenario, land rights have been acquired through a land market. Afterwards, the developer directly engages in a project (ibid).

In the case of rural construction land, the Land Bureau will coordinate with the town or township government to requisition the land and determine appropriate compensation, in conformity with the Land Administration Law. If no rural construction land is available, the collective will be required to rationalize arable land and used rural construction land, for example by relocating rural households from single-family dwellings into a multi-family apartments, the cost of new construction negotiated with the local government. Commercial developers can obtain use rights to development a parcel through one of seven means: 1) administrative allocation (*tongguo xingzheng huabo fangshi qude*, 通过行政划拨方式取得); 2) for the redevelopment of an old city center (*jiucheng gaisao qude zhongbiao dikuai guoyou tudi shiyongquan*, 旧城改造取得中标地块国有土地使用权); 3) transfer of rights (*zhuanrang qude*, 转让取得); 4) the paying of land conveyance fees, either via negotiation or through one of three market-oriented competitive processes; 5) co-development among developers and reporting and application for use rights; 6) court-adjudication; or 7) merger & acquisition or corporate reorganization. The analysis in this chapter focuses on the transfer of rights by way of negotiation or market-oriented mechanisms (ibid).

3.2.5 Land Conveyance Fees and Land Transfer

Land conveyances (出让) in China are reported by type of sale and size of holdings. Because land is owned by either the rural collective or the state, all transactions reflect a transfer of the use rights associated with land, while ownership remains for administrative purposes in the possession

developed. Some cities have been particularly aggressive in using land banking as a way of generating urban development funds."

of the state. Land conveyance fees (*tudi shiyongquan churangjin*, 土地使用权出让金) refer to fees required of developers to obtain the use rights of land, which can then be built on for commercial or industrial use.

There are four primary means by which land use rights are transferred to developers: 1) negotiated; 2) auctioned; 3) public tender; and 4) by listing. Between 2003 and 2008, sales were reported by each type of transaction, though in subsequent years (2009-2011) auction (*paimai*, 拍卖), public tender (*zhaobiao*, 招标), and listing-based (*guapai*, 挂牌) sales were grouped together and aggregated. However, the most important differences in the type of transaction relate to those between negotiated (*xieyi churang*, 协议出让) and all other forms (*zhaopaigua churang*, 招拍挂出让), which are considered more transparent and market-oriented mechanisms.²²

The standard procedure for a public tender first involves land use approval by either the Land Bureau or Office of Land Reserves (*tudi chubei jigou*, 土地储备机构) and the issuance of necessary documentation in accordance with the land use plan, regulations, expropriated land, and related materials (World Bank and Development Research Center of the State Council, 2014; Lin & Ho, 2005). After approval, the Office of Land Reserves will organize a public tender. The government-approved process then includes: 1) authorization of the public tender process and scope; 2) compilation of public tender documents and forms; 3) public notice on the public tender, or invitation for bids; 4) due diligence on qualifications of potential investors; 5) submission of public tender documents and on-site survey; 6) public tender investors compile investment

²² In some cases, the highest bidder may not be selected due to reputation, type of project, or other factors. However, conveyance fees are considered "approximate" to market price signals because multiple bidding parties are involved, whereas negotiated sales involve just one developer.

documents; 7) formation of a selection committee; 8) opening of bids, evaluation, and report on decision; 9) selection of successful bid; and 10) delivery of selection decision notification.

Negotiated sales were the most frequent type of land transaction through the early part of the 2000s. Research by Lin and Ho (2004) found that between 1993 and 1998, land use rights allocated through negotiation constituted 89% of all such transactions, compared with just 11% by way of more "market-oriented" mediums. In 2006 and 2007, the central government issued circulars instructing local governments to employ greater market-oriented mechanisms in the allocation of urban land use rights.²³ Over the past several years, negotiated land sales—characterized as closed-door and opaque—have steadily given way to more market-based mediums for land sales—due to a combination of Central Government decisions and the changing dynamics of China's urban economy resulting in surging demand for commercial and residential real estate (ibid).

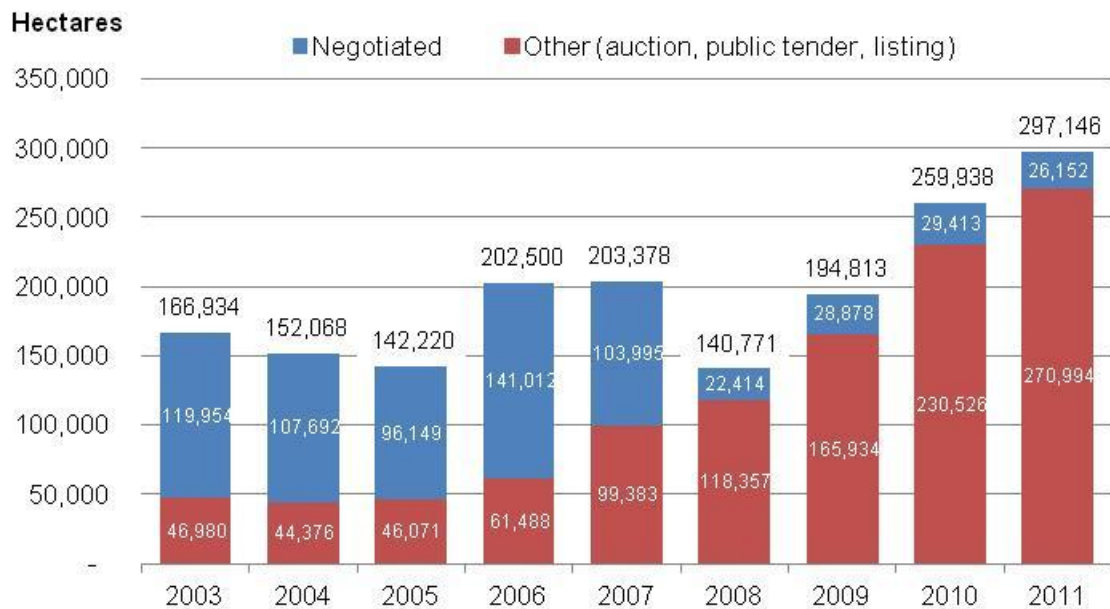
The central government took a series of steps to limit the allocation of land by negotiation, ultimately succeeding by 2008 (see section 3.5 on these trends). The Directory of Allocated Land was issued in 2001, abolishing administrative land allocation to commercial projects. To encourage a shift in land use sales towards more transparent processes, in 2002 the Ministry of Land and Resources (MLR) issued Decree No. 11 (Regulation Governing the Granting of Use Rights in State-Owned Land by Tender, Auction and Quotation), requiring all lands for business purposes (commerce, tourism, entertainment and commodity housing) to be transferred publicly after 1 July 2002, either through tender, auction or quotation.

²³ State Council, Circular of the State Council on Intensifying Land Control (*Guowuyuan guanyu Jiaqiang Tudi Tiaokong Yonguan Wenti de Tongzhi*, 国务院关于加强土地调控有关问题的通知), August 31, 2006, Article 5; Ministry of Land and Resources, Provisions on the Assignment of State-owned Construction Land Use Right through Bid Invitation, Auction, and Quotation (*Zhaobiao Paimai Guapai Churang Guoyou Jianshe Yongdi Shiyongquan Guiding*, 招标采购挂牌出让国有建设用地使用权规定), September 28, 2007, Article 4.

In March 2004, the Ministry of Land Resources issued Decree No. 71, which set 31 August 2004 as the deadline for all cities to ban negotiated conveyances for commercial development (known as the "8.31 deadline") (Xu, Yeh, & Wu, 2009, p. 892). In November 2004, the State Council issued the notice On Deepening Reform and Strengthening Land Administration, viewed by many as the strictest land policy ever to reiterate the orders contained in Decree Nos. 11 and 71. However, despite a significant drop in negotiated sales as a share of total sales since the mid-2000s, such transactional mediums still figure importantly in local government investment attraction and fiscal strategies. The notices are also difficult to enforce. In one illustrative case, after Decree 11 was issued, the Beijing city government approved negotiated land deals "involving more than 10,000 hectares of land, or almost the same amount of land sold through negotiation in the previous 10 years"(ibid).

Negotiated sales have in fact declining steeply since 2004 as a share of total sales, though there is not evident connection between the decline in sales and Decree 11. Among the 287 prefecture-level cities and above quantitatively reviewed in this study, total negotiated sales actually peaked in 2006, with more than 141,000 such deals, and remained at or above 70% of all deals through 2007 (**Figure 3.1**). Conveyance fees through negotiated deals fell from nearly 40% of total sales down to just 4.1% in 2011. While total sales, adjusted for inflation (expressed in 2011 RMB) increased at a trend line rate of 18.7% between 2003 and 2011, negotiated sales fell precipitously from 2007 to 2008 (from more than 235.8 billion RMB down to just 64.9 billion) (Ministry of Land and Resources, various years).

Figure 3.1 Land Conveyance Sales by Area, Prefecture-Level Cities, 2003-2011²⁴



Data source: China National Land Resource Yearbook, various years.

Other transaction mediums are increasingly in the domain of commercial and residential real estate development. Negotiated conveyance fees are often times priced below market value as an incentive to attract industrial investments, while auction, public tender, and listing forms of sales are increasingly reflective of quasi-market pricing.

3.3 Data Sources

Data sources used in this chapter are presented at the prefecture level (see Section 2.4.4 for detailed explanation). Data in this analysis includes land conveyance (transfer) fees and transferred land (measured in hectares), gathered from the Ministry of Land and Resources each year and made available through the Land and Resources Statistical Yearbooks (years 2003-2011). Population statistics, paved roads, budgetary revenues, and economic variables, including gross domestic

²⁴ Municipal-level totals here exclude the four provincial-level cities of Beijing, Tianjin, Shanghai, and Chongqing, as well as county-level cities (though county-level cities are captured in municipal-city totals).

product and share of economic output generated by the secondary (manufacturing) sector were gathered from the City (Prefecture) Statistical Yearbooks also for years 2003-2012.

Gross revenues from land transfers, rather than net sales, were used due to data reliability. For example, there is limited visibility into the costs associated with primary land development and compensation for rural households; absent this information, it is difficult to ascertain the true impact of land conveyance fees on local budgets, as well as the uniform reporting practices required to accurately report net sales. Gross sales are also normalized against budgetary revenue to provide an understanding of the magnitude of land sales across the country at the prefecture level.

Total population and per capita GDP estimates used in this analysis are based on the resident local hukou population and long-term non-local hukou residents. The method outlined in Chan (2009) was used to derive these *de facto* prefecture-level population estimates, in part to adjust for the undercounting. Since 2005, the central government has required local officials to report per capita GDP based on the total *de facto* population, though officially reported population estimates in city statistical yearbooks often still use only the *de jure* hukou population, making the above the preferred approach for population estimates.

3.4 Previous Literature on Land and Local Fiscal Policy

Recent literature (Whiting, 2010; Whiting, 2011; Hsing, 2010; Kung, Xu, & Zhou, 2013; Ho & Lin, 2004; Han & Kung, 2015) has delineated key strategies through which local bureaucrats have leveraged land to achieve fiscal ends. The extent to which local governments use private (negotiated) versus more transparent, market-oriented mechanisms for land conveyance sales reflect a balancing strategy. Commercial and residential real estate sales, while earning the highest net return from land conveyances, represent a one-time revenue infusion. In contrast, sales to industrial interests and the resulting manufacturing investments in a region represent a more long-term strategy of sustained tax revenue, both directly through enterprise and value-added taxes and incrementally through

additional taxes paid on spillover economic activities among suppliers and supporting services, and further (taxable) activities generated by the spending of income earned via direct and indirect economic activities tied to manufacturing (basic) activities. Using negotiated transactions to attract manufacturing investments allow local governments to "[use] the market to relinquish its responsibility, to externalize investment risks, and to overcome hurdles to economic growth (e.g. lack of capital)...[in] this sense, negotiation can be an 'effective' way of kick-starting development and of generating agglomerative economies" (Xu, Yeh, & Wu, 2009, p. 894).

Land-related taxes include the tax on arable land, tax on land value increase, and the property tax (though this has only been implemented on a trial basis in select cities in recent years). However, other taxes can be indirectly affected by land and sales, most often through the use of land for industrial activities, such as the valued-added tax (VAT). For instance, a local government may sell land to a manufacturing interest, which in turn generates taxable business income (Tao, Su, Liu, & Cao, 2010). Likewise, real estate markets can push up land value, creating another revenue stream for local coffers through the "expropriation residual" obtained via the difference in expropriation costs (e.g., rural household compensation, land conversion expenditures) and the demand for urban construction land use rights among commercial interests.

While the latter three types are driven by achieving the highest immediate value transaction, i.e., sales amount, and thus represent a large one-time lump sum revenue transfer to local governments, the former type (negotiated) often represents the use of land as an incentive to attract major employment activities with significant fixed costs. These types of investments, most often manufacturing and industrial activities, often benefit from underpriced conveyance fees as an incentive to make sizable investments in a local jurisdiction (Cao, Feng, & Tao, 2008). The revenue impacts associated with each type of conveyance transactions are notable and reflect local policy goals driving alternative transaction decisions on the part of local governments.

3.4.1 Fiscal Pressures and "Land Finance"

The continued (though declining) importance of negotiated sales reflect a response to greater asset mobility, the economic (and hence fiscal) multiplier associated with manufacturing and secondary-based industrial activities, and the metamorphosis of local governments "into tax collectors [paying] more attention to expanding businesses in their jurisdictions" (Tao, Su, Liu, & Cao, 2010, p. 2218). According to Tao et al, "[in] short, local governments opted for a less revenue-yielding land leasing strategy, not because of the lack of revenue motivation but because of the constraints imposed by asset mobility" (p. 2219).

Throughout the 1990s and early 2000s, increased industrial investment broadened the pool of available recipient locations. Local governments, in efforts to attract capital, became increasingly engaged in regional competition, characterized by incentive offerings to outside investors and local protectionism to preserve existing assets. Greater asset mobility implied that industrial investors—highly sensitive to underlying production costs—exhibited greater responsiveness to lower-cost opportunities (ibid).

The 1994 tax reform and subsequent central government measures to reform tax collection and revenue sharing have importantly altered the budget calculus of many local governments (Wong C. , 1997; Han & Kung, 2015). Prior to the reform, local governments were able to retain a larger share of tax revenue generated via economic activities within their respective regions; central-local fiscal revenue sharing was negotiated, but could also be subject to abrupt changes imposed from above. The 1994 reform introduced nationwide a value-added tax (VAT) that extracted revenues from each transaction in a production process and legislated a 75% claim on all such revenues collected at the local level. The parallel creation of local budget bureaus that report directly to central

authorities helped to curb shirking tactics by local bureaucrats and enforce central government tax collections and remittances (Whiting, 2001; Wong C. e., 1997; Whiting, 2004).

Institutional factors nurture conflict between central and local objectives, notably via government evaluation criteria, better known as the cadre evaluation system, or "target responsibility system" (Whiting, 2001; Whiting, 2004).. Performance metrics have in recent history placed heavy emphasis on economic development and fiscal metrics such as regional GDP and in-budgetary revenues (Tsui & Wang, 2004). Attracting industrial investments helps add to regional GDP and increase in-budget revenues through additional taxable economic activities tied via indirect and induced effects throughout the regional economy. These criteria as a consequence induce incompatible behaviors [between local and central governments] and create conflicts between the demand for and supply of construction land" (Cai M. , 2012, p. 28).

Deng (2005) argues that land leasing represents an important step forward in China's public finance system. Whereas before local government actions were oriented towards maximizing revenues from state-owned enterprises, Deng argues the partial liberalizing of land sales helped transition local government focus more towards the provision of public goods. However, the current regulatory framework has further enabled excessive exploitation of land (and rural tenants), notably the wide gap between low prescribed compensation fees paid during the land requisition process, and the value land can fetch after conversion from agrarian to urban use. Huang & Cai (2013) delineate three main drivers behind local government fiscal dependence on land sales, or what the authors refer to as the "land budget": 1) the current tax revenue-sharing system that decouples local tax fiscal ability and authority; 2) the incentives of local cadres structured by the cadre evaluation system that puts disproportionate emphasis on economic construction (e.g. infrastructure) targets; and 3) an ill-defined, incomplete property rights system for rural land.

Existing research (Whiting, 2001; Wong C. e., 1997; Whiting, 2004) has rightly pointed to the fiscal pressures faced by local bureaucrats and strategies to use land to complement fiscal revenue streams. Fiscal decentralization and the growing gap between local fiscal revenues and expenditures, the latter often mandated by the center, has led to local government budget gaps. During the early part of the reform era, local governments negotiated tax remittances with the central government on a periodic basis and often resulting in a large share of revenues retained locally. The central government, after a sustained declining share of total tax revenues, in 1994 reasserted its control over fiscal revenues through the Budget Law. The new tax sharing system (TSS) enforced the extensive use of the value-added tax (VAT), with the central state taking 75% of VAT revenues. The immediate result of the law was a sudden jump in the central government's share of tax revenue from just 22% in 1993 to 55.7% in 1994 (**Figure 3.2**). Subsequent changes in the tax law have further recentralized revenues, e.g., the 2002 central government reassignment of corporate and individual taxes from "local" to "shared." **Table 3.2** below summarizes revenues assignments by type of government claim. However, while the central state strengthened its position on tax revenues vis-a-vis local governments, expenditure responsibilities have moved in the opposite direction; fiscal expenditures made by local governments grew from 45% in 1981 to 85% in 2012.

Figure 3.2 Local and Central Government Shares of Fiscal Revenues, 1978-2012

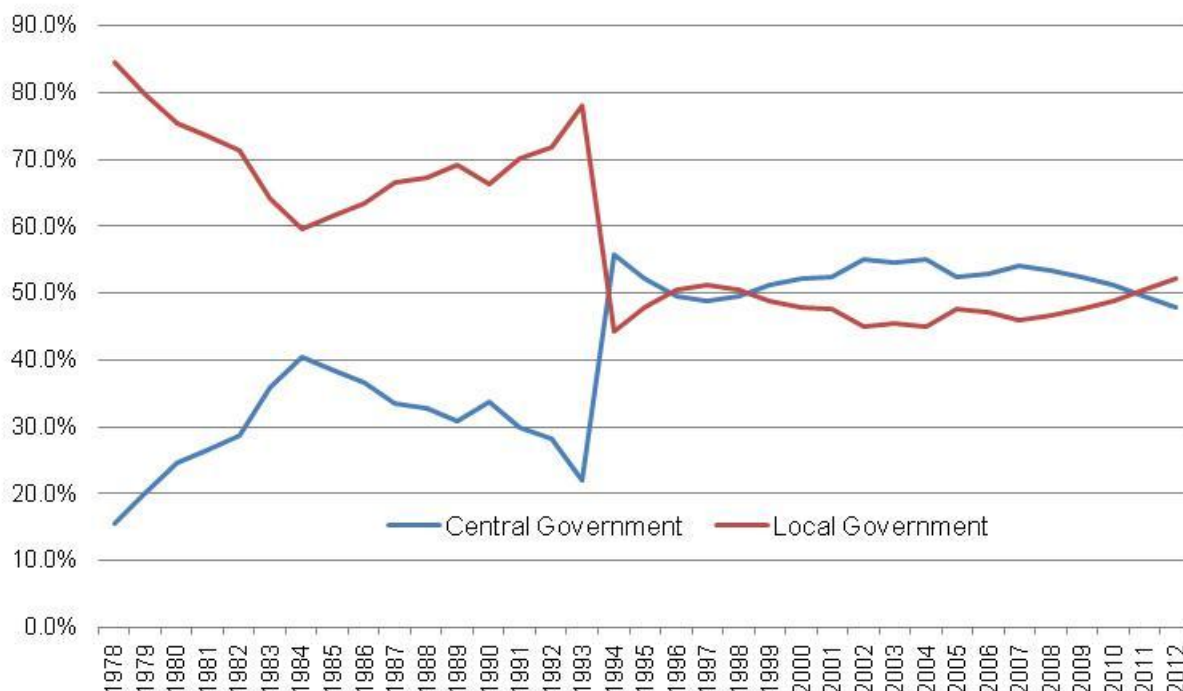


Table 3.2 Revenue Assignments: Central, Local, and Shared as of 2002

Central	Local	Shared
Tariffs	Business tax (except financial institutions and railroads)	VAT (75% central government, 25% local government)
Consumption taxes	Contract tax	Stamp tax (97% central, 3% local)
Income taxes of centrally owned SOEs	Urban maintenance and development tax (except financial institutions and railroads)	Corporate and individual income taxes (60% central, 40% local)
Import-related consumption taxes and value-added taxes	Fixed asset investment adjustment tax	Resource taxes (off-shore oil-central; remainder-local)
Taxes on financial institutions and railroads	Profits from locally controlled SOEs	
Profits from centrally controlled SOEs	Housing property tax	
	Agriculture-related taxes	
	Tax on use of arable land	
	Tax on land value increase	

Adopted from Whiting (2010, p. 129).

Land-based revenues come through the direct transaction of land use rights from the state (and the municipality, acting as the agent of the central state), the leveraging of land to obtain bank

lending and bond issuance, or residual tax revenues generated by users of government-leased land. The first approach represents a one-time transfer; local officials thus aim to maximize the transacted price through one or more revenue-maximized strategies. One approach, discussed above, is the use of land banks to hold reserves of land in anticipation of future demand, and to control the supply of urban construction land for commercial and residential construction purposes to maintain elevated prices.

A second approach, discussed in detail Chapter 4, is to leverage land holdings as collateral to obtain bank loans or capitalize an urban construction or local public investment entity which can issue bonds to finance urban infrastructure. The proliferation of local government investment vehicles since the mid-2000s, and at a much greater rate during the 2009 stimulus program, helps illustrate how land can be leveraged to obtain debt, circumventing legal restrictions prohibiting local government borrowing under most situations. The importance of local government investment vehicles will be discussed further in the next chapter.

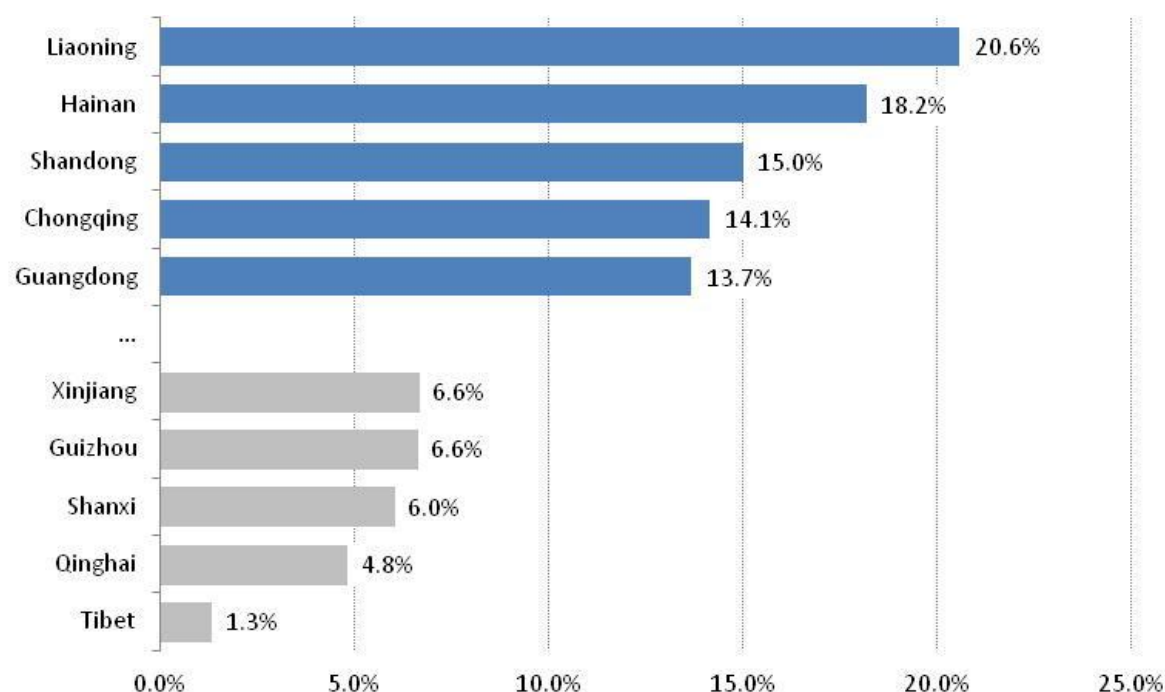
The third approach to land-based revenue generation is through taxation (Tao, Su, Liu, & Cao, 2010). There are two ways through which land and land-related activities can support local government budgets. The first is through the direct taxation on the value of land, either the appraised value or output directly tied to the land used, and the tax on urban land use. There are also economic activities indirectly associated with land, but for which land serves as a critical input, such as the value-added tax (VAT) and the extent to which, by subsidizing the cost of land for a manufacturing interest, new and continuous VAT revenues are generated.

In 2012, the land value appreciation tax (*tudi zengzhi shui*, 土地增值税) contributed 271.9 billion RMB to local government coffers (provinces, prefectures, cities, counties, districts, and townships), equal to approximately 5.7% of total local government tax revenues; urban land use

taxes constituted 3.3% of total tax revenues, while the real estate tax generated 137.2 billion RMB for local coffers, equal to 2.9% of total tax revenues (Table 3.3). Together, the abovementioned taxes contributed 11.9% in tax revenues across all local government fiscal budgets in China, though there is wide disparity in the extent of direct land tax "dependence" by province. For instance, in 2012 20.6% of Liaoning Province's local revenues came from land taxes, compared with 1.3% in Tibet and 4.8% in Qinghai (Figure 3.3). By region, the Northeast in 2012 had a land tax dependence rate of 12.7%, compared with 10.1% among Eastern provinces, 7.5% for Central, and 6.8% in the West.

Figure 3.3 Local Government Revenues from Three Direct Land Taxes as Share of Total Tax Revenues, 2012

Five highest and five lowest provinces



Source: China Statistical Yearbook, 2013.

Table 3.3 Local Government Land-Related Tax Revenues, 2003-2012 (100 million RMB; 2012 RMB)

Year	Land-related					Indirect land-related				Subtotal	All taxes
	Urban Maintenance and Construction Tax	Real Estate Property Tax	Urban Land Use Tax	Land Value Appreciation Tax	Arable Land Use Tax	VAT	Business Tax	Enterprise Income tax	Contract Tax		
	城市维护建设税	房产税	城镇土地使用税	土地增值税	耕地占用税	增值税	营业税	企业所得税	契税		
2003	842.2	498.9	141.1	57.4	138.5	2,789.8	4,263.5	1,815.9	551.7	7,752.7	12,960.6
2004	964.8	527.7	153.0	108.1	173.0	3,464.0	5,000.6	2,299.3	778.1	9,369.0	14,406.3
2005	1,096.6	604.4	190.3	194.5	196.7	3,966.0	5,687.9	2,966.6	1,019.1	11,157.4	17,643.5
2006	1,246.6	687.6	236.1	309.1	228.5	4,268.8	6,635.0	3,580.6	1,158.8	13,085.6	20,344.4
2007	1,425.2	714.0	478.3	500.1	229.5	4,798.7	7,915.3	3,886.4	1,496.7	16,645.5	23,886.8
2008	1,538.5	783.3	940.5	618.7	362.0	5,180.1	8,513.4	4,607.8	1,505.4	18,869.8	26,774.7
2009	1,644.8	931.0	1,066.9	833.6	733.4	5,288.3	10,248.0	4,538.3	2,009.9	22,005.5	30,300.0
2010	1,905.2	981.1	1,101.7	1,402.7	975.0	5,701.8	12,075.2	5,539.5	2,704.7	26,685.0	35,882.9
2011	2,666.5	1,126.3	1,248.8	2,107.3	1,098.8	6,119.1	13,797.2	6,892.6	2,825.7	31,763.1	41,997.9
2012	2,934.8	1,372.5	1,541.7	2,719.1	1,620.7	6,737.2	15,542.9	7,571.6	2,874.0	36,177.3	47,319.1

Sources: National Bureau of Statistics, China Statistical Yearbook, various years; International Monetary Fund and National Bureau of Statistics of China for implicit price deflators.

Local bureaucrats and planners also face institutional pressures and incentives that shape decision-making. The existing legal framework discussed above provides an opening for bureaucrats to exploit land under the guidance of the law. Public interest remains an ambiguous term open to interpretation and meaning, allowing officials to promote land development for commercial projects that do not explicitly tie to overall growth strategies.

Officials also have specific performance targets which must be met for career advancement, shaping their policy decisions and time horizons (Tsui & Wang, 2004). The cadre evaluation system puts strong emphasis on fiscal and economic objectives and with a short time horizon (typically three years). While excess investment and overcapacity is a major concern for China's central leadership, local officials are not macroeconomic policy advisors. Instead, they respond to the incentives as structured by the evaluation regime, and behave as such with respect to land expropriation and sales.

3.5 Trends in Land Sales—Recent History

The analysis in this section makes use of land sales and auxiliary data for 287 municipalities across China. Land sales data were collected from the China Land and Resources Statistical Yearbook for various years. Deal costs and conveyance prices per hectare are inflated upwards to 2011 RMB using implicit price deflators, derived from nominal and real GDP estimates reported by the National Bureau of Statistics.

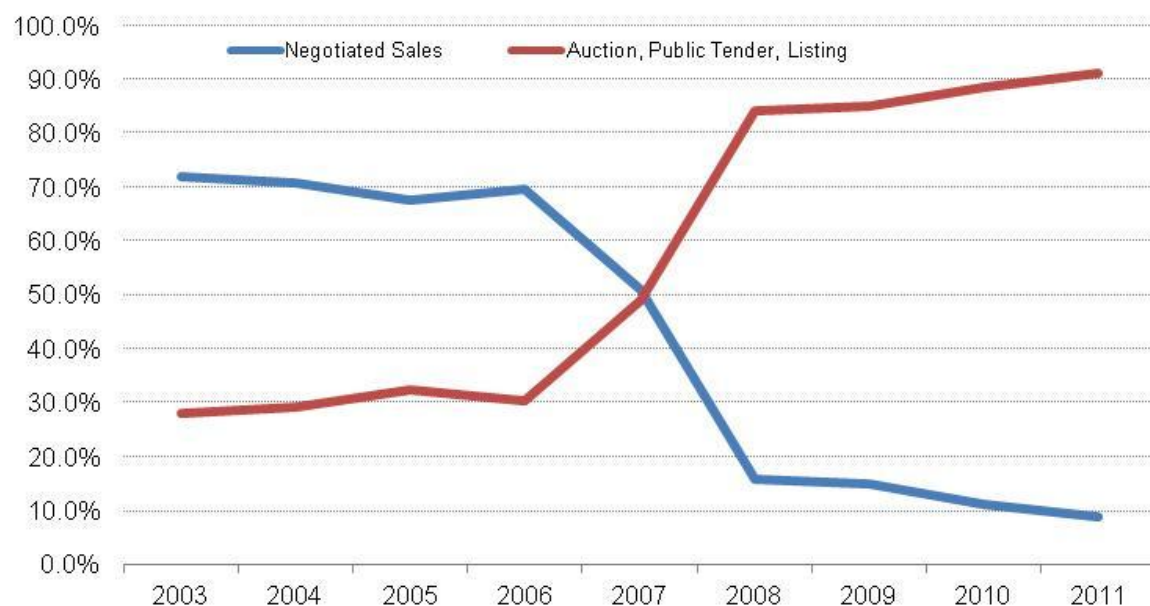
3.5.1 Land Sales

Two major changes have occurred in land conveyance over the past decade: 1) shift in the types of transactional mediums for transferring land use rights; and 2) significant uptick in land value, after adjusting for inflation. Regarding the first trend, negotiated sales among prefecture-level cities have experienced a nearly 50% drop as a share of a total transactions, from 77% in 2003 down

to just 40% in 2011 (**Figure 3.4**). This compares with estimates by Lin and Ho (2005) that, as late as 2002, negotiated sales constituted as high as 86% of total land deals (p.427).

Negotiated deals within prefectures overall fell from 135,812 in 2003 down to just 50,852 in 2011 (though up from 49,416 in 2009 in the aftermath of the global financial crisis), representing a 63% decline. Land area transferred via negotiation fell from a high of 141,012 hectares in 2006 down to just 26,152 in 2011, equal to a 78% fall. Deals by land area (hectares) reflect a more pronounced change, with negotiated sales falling from 71.9% of all transacted land in 2003 down to just 10.4% in 2011. Land transacted by all other recorded means grew at a compound annual growth rate (CAGR) of 29.3% between 2004 and 2011, with continuous year-over-year growth beginning in 2004. Cumulatively, between 2003 and 2011 prefecture-level conveyance fees for nearly 1.8 million hectares have been transacted, of which approximately 43% were sold between the years of 2009 and 2011. Sales by area overall rose from a nadir of 140,771 hectares in 2008 to an historic high of 297,146 in 2011 (Ministry of Land and Resources, various years).

Figure 3.4 Share of Total Area Transacted by Type of Sale, Prefecture-level Cities, 2003-2011 (%)



Source: China Land and Resources Statistical Yearbook, various years.

Across all municipal cities in China (at the prefecture level and above), land conveyance revenues increased from 678.7 billion RMB (adjusted for inflation) in 2003 to 2.7 trillion RMB in 2011, representing a 18.7% trend line²⁵ increase over this period (**Table 3-4**); in nominal terms (current RMB), conveyance fees increased at a trend line rate of 23.7%.²⁶ Negotiated sales experienced the highest transaction volumes prior to the recession, peaking at 256.7 billion RMB in 2004; the years 2008 and 2009 saw a dramatic fall in negotiated sales, owing in part to the significant drop in global investment over this period and decline in demand for industrial-use land. However, this decline was more than offset by other types of activities often associated more with residential and commercial real estate development—sales over this period experienced trend line

²⁵ Based on natural logarithmic slope for years 2003 to 2011.

²⁶ Land sales by prefecture are reported in current (nominal) RMB. To adjust prior years for inflation, GDP implicit price deflators are derived, re-indexed for year 2011, and applied to past years.

growth of 25.4%; after falling 18.3% year-over-year in 2008, sales rebounded with 81.9% growth year-over-year in 2009 and 54.1% in 2010.

Table 3.4 Deal Costs by Type of Sale, Prefecture-Level Cities, (100 million RMB; 2011 RMB)*

Year	Total Deals Cost	Negotiated	Other (auction, bid, listing)
2003	6,787	2,701	4,085
2004	6,644	2,567	4,077
2005	6,929	2,060	4,869
2006	9,258	2,560	6,698
2007	12,758	2,358	10,400
2008	9,146	649	8,497
2009	16,369	909	15,460
2010	24,854	1,033	23,821
2011	27,041	1,117	25,923
Trend, 03-11	18.7%	-15.5%	25.4%

*Estimated real (2011 RMB) values were derived by using GDP implicit price deflators and re-indexing to 2011. Data sources: China National Land and Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators).

Average prices per deal, controlled for inflation, similarly increased over the 2003-2011, though this has been largely due to increasing deal costs for auction, public tender, and listing-based transactions (**Table 3.5**). Over this period, deal costs among all types of sales grew at a trend line rate of 23.3%. Negotiated deals experienced a trend line decline of 1.0% per year, but since a low of 1.1 million RMB per deal in 2008 prices have steadily rebounded, growing at a compound annual growth rate of 25.2% through 2011. In inflation-adjusted 2011 RMB, market-oriented deals have more than tripled over this period, at a per annum compound rate of 15.2% (15.1% trend line growth).

Average cost per hectare (**Table 3.6**) for negotiated deals has grown at less than half that rate of cost per deal (11.7%). Negotiated deals, while declining as a share of total deals, experienced 8.3% trend line growth in price per hectare; since a low of 1.82 million RMB in 2006, prices have continuously grown at a per annum compound rate of 18.7%, compared -2.6% for other, market-

oriented transactions. However, between 2008 and 2010, market-oriented transactions per hectare have growth 20.0% per year (before declining slightly in 2011). Over the entire 2003 to 2011 period, the average conveyance cost per hectare across all prefectures was 6.8 million RMB, though among negotiated deals was just 1.9 million RMB per hectare.²⁷

Table 3.5 Average Price per Deal, Prefecture-Level Cities, 2003-2011 (2011 RMB)

Year	All Deals	Negotiated	Other (auction, public tender, listing)
2003	3,871,233	1,989,017	10,343,147
2004	4,269,954	2,187,246	10,661,651
2005	5,030,910	1,915,529	16,131,997
2006	5,803,549	2,090,208	18,077,828
2007	9,301,075	2,459,180	25,185,911
2008	8,723,819	1,119,406	18,129,999
2009	15,626,301	1,838,857	27,938,975
2010	20,100,071	1,968,912	33,457,662
2011	20,567,191	2,197,438	32,153,552
Trend, 03-11	23.3%	-1.0%	15.1%

Data sources: China National Land Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators). Excludes the four provincial-level cities of Beijing, Chongqing, Shanghai, and Tianjin.

Table 3.6 Average Price per Hectare, Prefecture-Level Cities, 2003-2011 (2011 RMB)

Year	All Deals	Negotiated	Other (auction, public tender, listing)
2003	4,065,477	2,251,963	8,695,955
2004	4,368,798	2,383,407	9,186,940
2005	4,872,094	2,142,633	10,568,394
2006	4,572,053	1,815,465	10,893,826
2007	6,272,865	2,267,046	10,464,580
2008	6,497,313	2,895,408	7,179,415
2009	8,402,438	3,146,682	9,317,120
2010	9,561,472	3,511,248	10,333,419
2011	9,100,209	4,272,821	9,566,077
Trend, 03-11	11.7%	8.3%	0.1%

Data sources: China National Land Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators).

The largest volume of land sales by hectares have occurred in the eastern provinces, though there's been wide fluctuation over the ten year period ending in 2011 (**Figure 3.5**). The Eastern Provinces have historically been the most affluent during the reform era, owing to the role of export

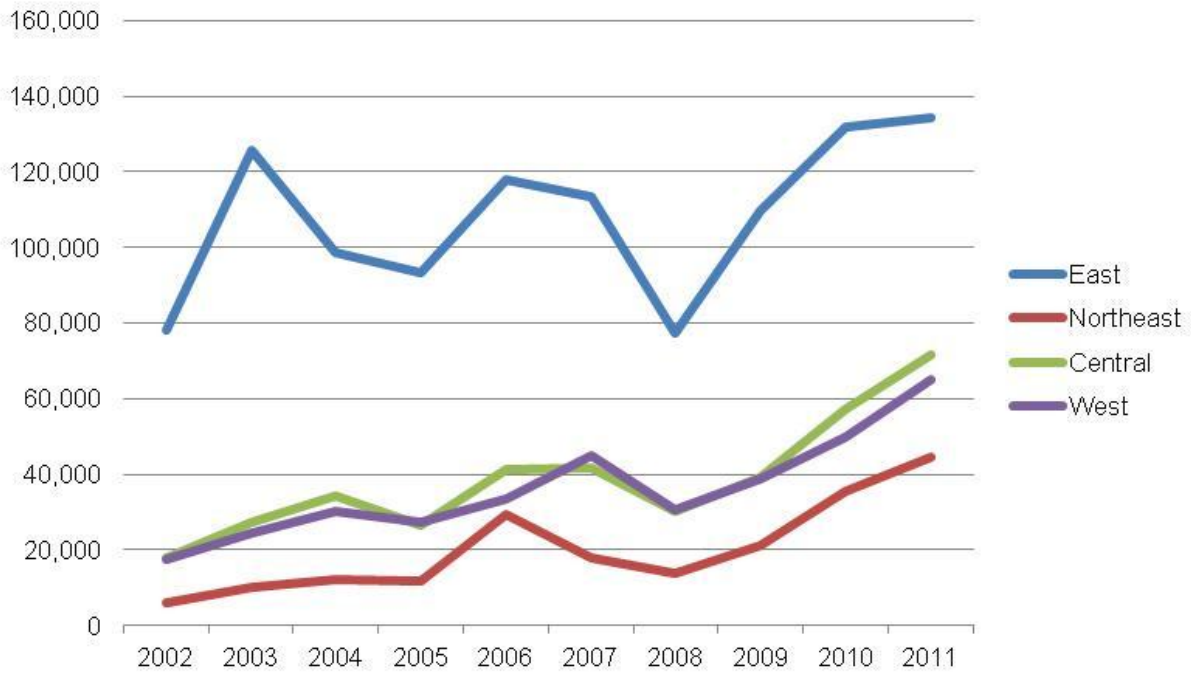
²⁷ Based on weighted average.

processing centers, foreign investment, and earliest locales for open door policies. Among all regions, the largest sudden drop in sales brought on by the global recession in 2008 occurred in the east, when total land transferred (by all transaction types) fell from 113,500 hectares to just 77,300 hectares. However, land transfers quickly rebounding, owing in part to the government's economic stimulus program and expansion of bank lending in 2009, resulting in 2009 land transfers of nearly 110,000 hectares, followed by transfers of 132,000 hectares in 2010 (and further increases in 2011). The largest absolute increases in annual land transfers between 2008 and 2011 occurred among northeastern provinces, where hectares of land transferred grew 221.7% (Ministry of Land and Resources, various years).

Regional differences in land use sales by hectare followed a similar pattern, with prices for land transacted through market-oriented mediums the highest among eastern provinces (Ministry of Land and Resources, various years). Prices similarly fell in 2008 at the onset of recession, but soon recovered along with total land transferred as demand for land picked up after expansionary monetary policy facilitated a strong rebound in investment (**Figure 3.6**).

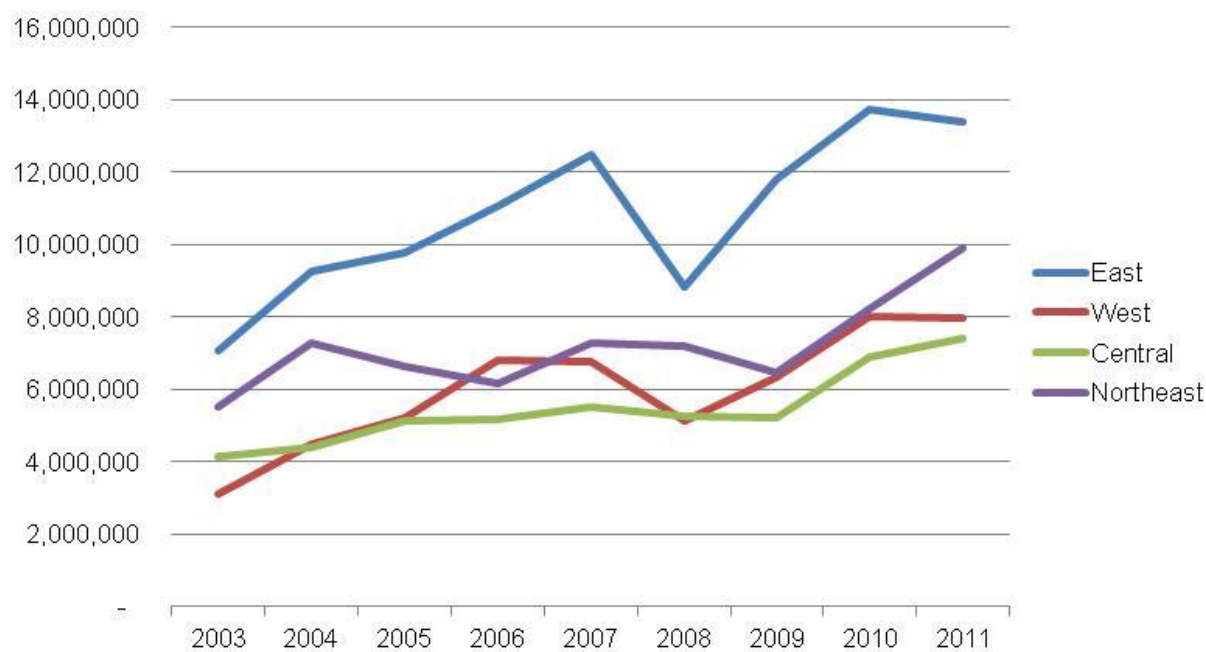
Prices per hectare in the east, despite a slight decline in 2011, were still 51.6% above where they were in 2008, compared with 48.3% among all other regions combined. However, the nature of city-level land transfers may also have changed, as more land has shifted to residential and commercial use over industrial use, the latter often transferred at a below-market price to attract investment into the region. For example, residential building investments as a share of total fixed asset investments increased from 11.7% in 2009 to 15.1% nationwide (among prefectures) in 2011; this increase was even greater in the east, where residential building investments as a share of total fixed assets increased from 12.7% in 2009 to 17.4% in 2011 (National Bureau of Statistics, various years). As more land is used for the former two purposes, the price of land conveyance fees will also rise, with more nearer-term fiscal outcomes for local governments.

Figure 3.5 Total Land Transferred, by Region, 2002-2011 (hectares)



Source: China National Land Resources Yearbook, various years.

Figure 3.6 Average (weighted) Price per Hectare, Market-transacted Land (2011 RMB)

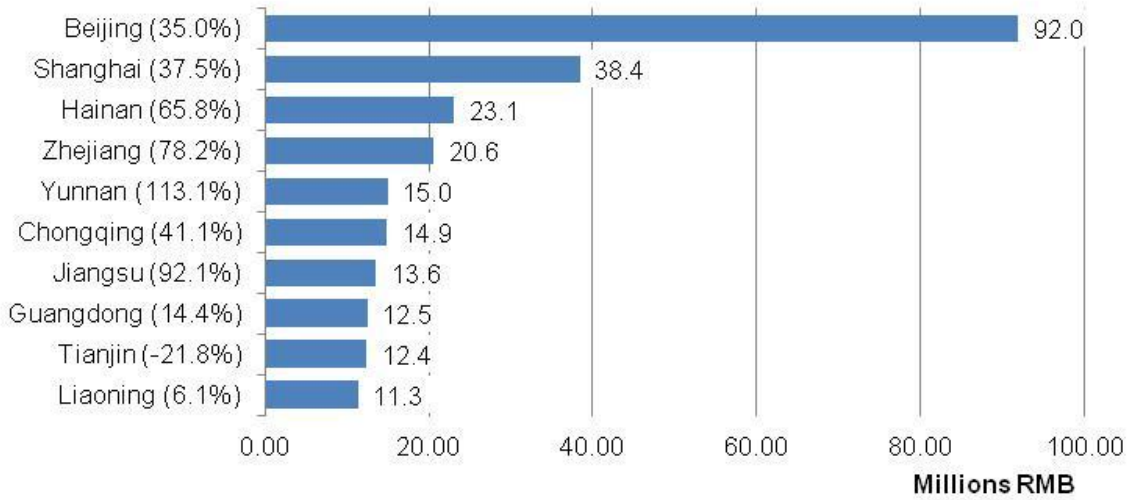


Data sources: China National Land Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators). All prices adjusted to 2011 RMB.

Conveyance fees per hectare (weighted) are compared by province for 2011 for market-oriented transactions. Beijing prices on a per hectare basis far exceeded all other provinces, averaging nearly 92 million RMB per hectare. This compares with Shanghai, which ranked second with an average per hectare price of 38.4 million RMB. Among the ten most expensive provinces for land transfers, the fastest growth between 2008 and 2011 occurred in Yunnan at 113.1%, followed by Jiangsu province. Tianjin was the only provincial-level unit to experience an actual, real decline (controlled for inflation) in land sales per hectare (**Figure 3.7**).

The geography of land prices transacted by market-oriented means has seen some shift west. For instance, in 2008 only Chongqing fell within the three highest classes of land prices among western provinces, yet by 2011 it was joined by Yunnan and Qinghai. Such patterning may suggest a "catching-up" process occurring among western regions, following historically strong economic growth and high land prices along the east coast (**Figures 3-8a and 3-8b**).

Figure 3.7 Real Price per Hectare, Market-oriented Land Sales, 2011 (with 2008-2011 change in parentheses), Top Ten Provinces

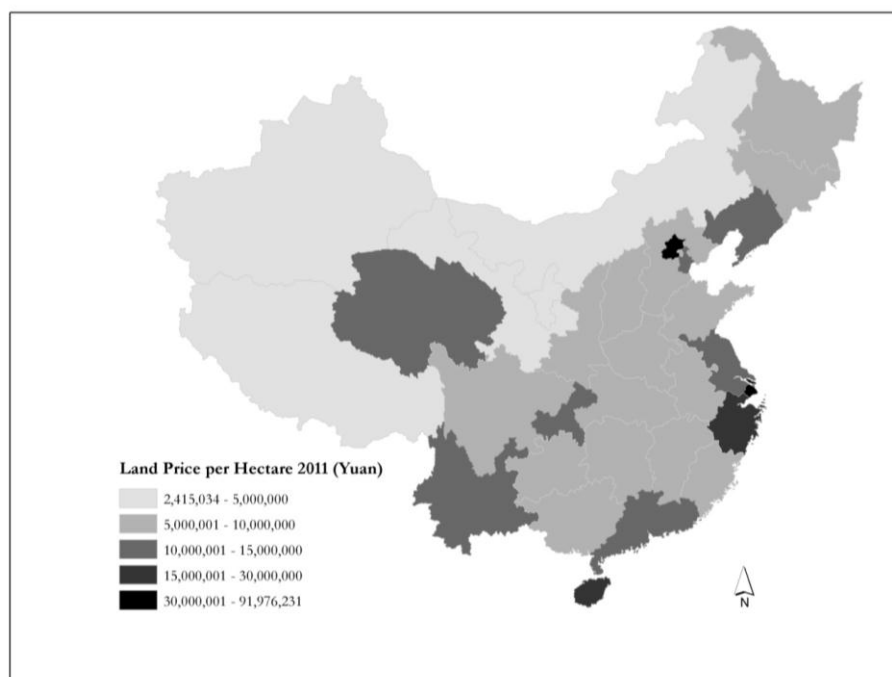


Data sources: China National Land Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators). All prices adjusted to 2011 RMB.

Figure 3.8a Price per Hectare of Transferred Land (weighted), Market-oriented Transactions, 2008



Figure 3.8b Price per Hectare of Transferred Land (weighted), Market-oriented Transactions, 2011



Data sources: China National Land Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators). All prices adjusted to 2011 RMB.

Land sales, particularly those transacted via auction, public tender, or listing, should be closely tied with commercial and residential real estate prices in each region. Among China's thirty-five largest cities, including provincial-level cities and prefectures, prices per square meter averaged 8.2% trend line growth (2011 RMB, adjusted for inflation) and 8.1% for residential properties.

In 2011, Dalian in northeast China experienced the largest monetary volume of land transactions among the prefectures reviewed in this chapter, followed by its close neighbor to the north, Shenyang; adjusted for inflation, land sales in Dalian increased by nearly 500% between 2004 and 2011 (**Table 3.7**). However, in terms of hectares of land sold, Suzhou, Jiangsu led with nearly 40,571 between 2003 and 2011, including 17,631 hectares of land sold via negotiation (*xie yi*).

Table 3.7 Cities with Highest Volume of Land Conveyance Transactions by Value, Municipalities, 2011 vs. 2004 (100 million RMB, 2011 RMB)

Rank	City	Province	2011	2004	Change
1	Dalian	Liaoning	1,043.2	179.4	481.7%
2	Shenyang	Liaoning	897.9	144.1	523.1%
3	Suzhou	Jiangsu	884.5	293.2	201.7%
4	Hangzhou	Zhejiang	729.5	298.9	144.1%
5	Kunming	Yunnan	722.6	71.6	909.1%
6	Wuhan	Hubei	577.1	127.6	352.2%
7	Qingdao	Shandong	529.8	115.7	358.0%
8	Nanjing	Jiangsu	528.7	108.2	388.8%
9	Wuxi	Jiangsu	516.7	166.8	209.8%
10	Chengdu	Sichuan	484.5	272.2	78.0%
11	Ningbo	Zhejiang	478.6	206.5	131.8%
12	Wenzhou	Zhejiang	475.8	85.5	456.8%
13	Changzhou	Jiangsu	466.6	124.9	273.6%
14	Yancheng	Jiangsu	391.9	44.4	783.4%
15	Fuzhou	Fujian	381.0	115.2	230.7%

Data sources: China National Land Resources Yearbook, various years; National Bureau of Statistics, People's Republic of China (for GDP implicit price deflators). All prices adjusted to 2011 RMB.

3.5.2 Land Dependency

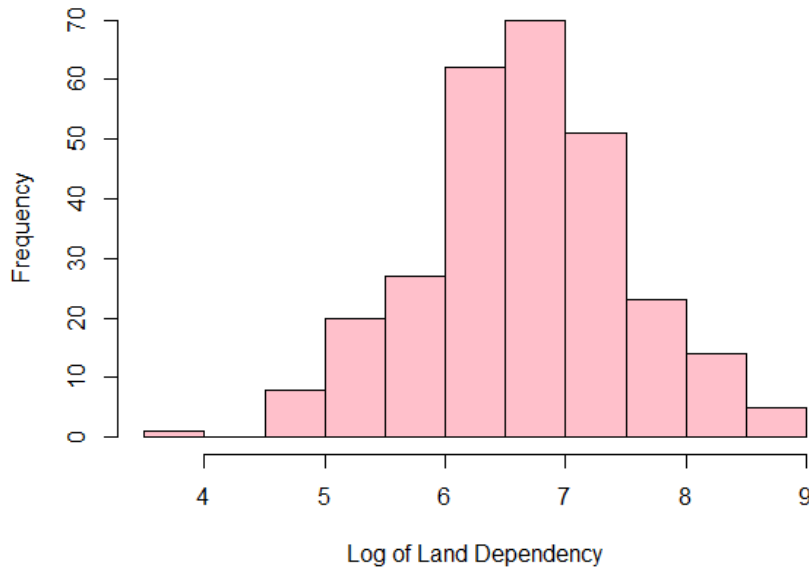
"Land dependency" is indirectly measured through the ratio of gross land sales (*chengjiao daikuan*, 成交价款) to local budget revenues. Preferred measures for land dependency include direct land-related taxes (in sum and as a percentage of total budget revenues) and net land sales retained by local governments. However, both preferred measures are not feasible due to data availability and data quality concerns. For instance, the land use tax (*tudi youchang shiyong shouru*, 土地有偿使用收入) is not reported in city (county and above) budget tables after 2005, despite the importance of this tax. Similarly, data for the land value-added tax was also not obtainable at the municipal level, though national summaries of local revenues from this tax are reported. Net land sales (*chun shouru*, 纯收益) are more readily available, but reported totals are highly suspect. For example, in 2003 Guangzhou reported all land sales transactions by value were equivalent to net sales, i.e., net transactions did not include compensation, land conversion costs, and other associated pre-transfer

costs borne by local governments—a highly unlikely outcome. This compares, just four years later, with net sales for Guangzhou only 2% of gross sales. These inconsistencies appear throughout officially published data on land transfers, and raise serious questions about the utility of using these data.

Gross sales to budget revenues is an imperfect proxy, but in this chapter it is assumed that the general direction of this measure should loosely follow changes in true land dependency; the underlying costs associated with dispossessed household compensation are assumed to be small and largely consistent on a percentage basis, as are land conversion costs.

Prefectures are hypothesized to be more (less) dependent on land as an alternative fiscal revenue source when budget deficits are greater (lesser), while improvements in the economic well-being of a region, as measured by real per capita GDP, should negatively influence land dependency. To test these hypotheses, time series cross-sectional was again used, with regressions for the entire 2005-2011 period and for periods 2005-2006 and 2010-2011 to again account for policy changes in land sales. As a ratio, land dependency is log transformed; **Figure 3.9** presents the distribution of this transformed ratio for 2011.

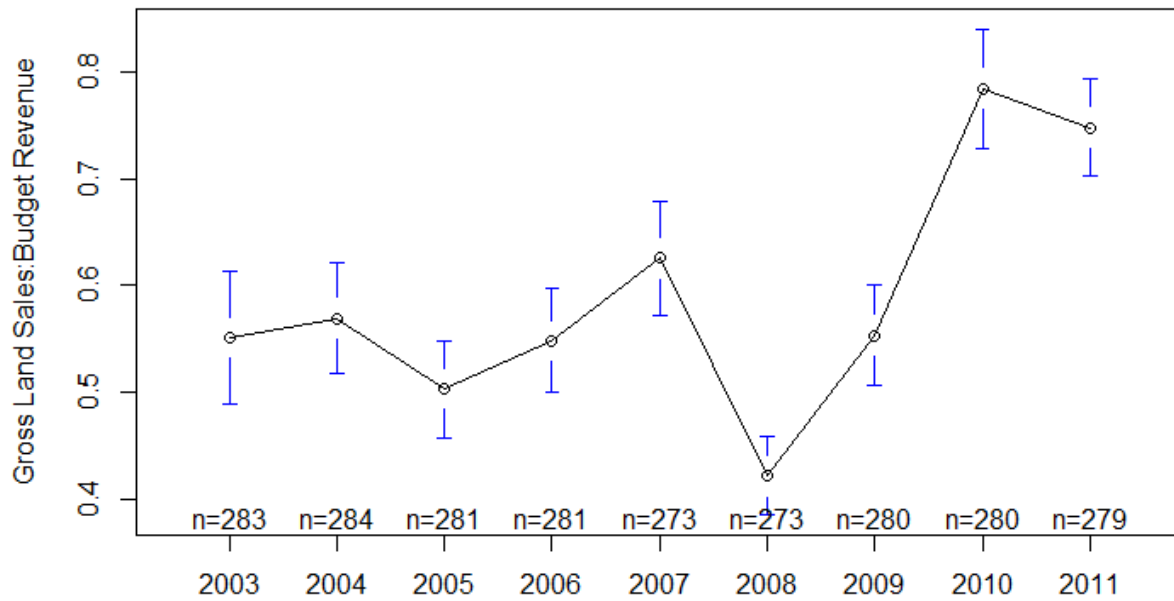
Figure 3.9 Log Transformed Land Dependency, 2011



Sources: Ministry of Land and Resources, China National Land Resources Yearbook, China City Statistical Yearbook.

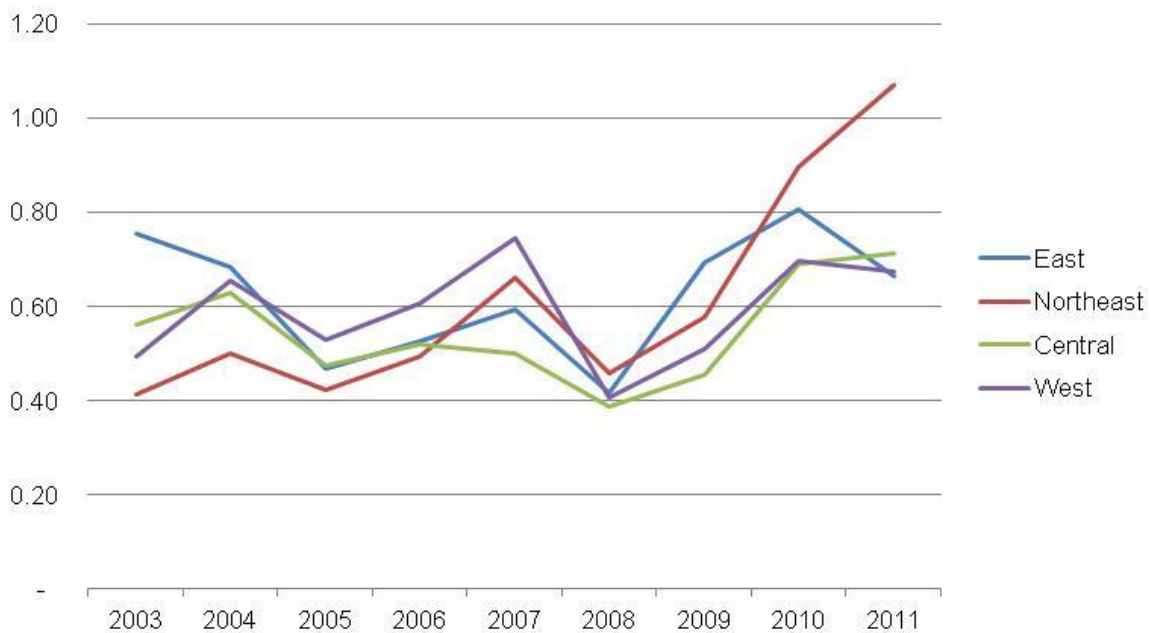
In recent years, land dependency has risen substantially, from just above 0.4 in 2008 to a high of 0.57 in 2010 (**Figure 3.10**); the weighted means for all municipalities peaked at 0.78 in 2010. Comparing across regions, the Northeast has emerged in recent years as the most land-dependent among the four regions reviewed, with a gross land conveyance sales-to-in-budget revenues ratio exceeding 100% in 2011 (**Figure 3.11**). Much of this reflects the surge in real estate prices (and associated land values) during this period, well in excess of budgetary revenues from taxes and other sources. Between 2005 and 2011, the largest changes in land dependency by province occurred in Yunnan, Qinghai, and Liaoning, each with more than a 70 percentage point increase in land dependency (**Figure 3.12**).

Figure 3.10 Heterogeneity in Land Dependency by Prefecture, 2003-2011



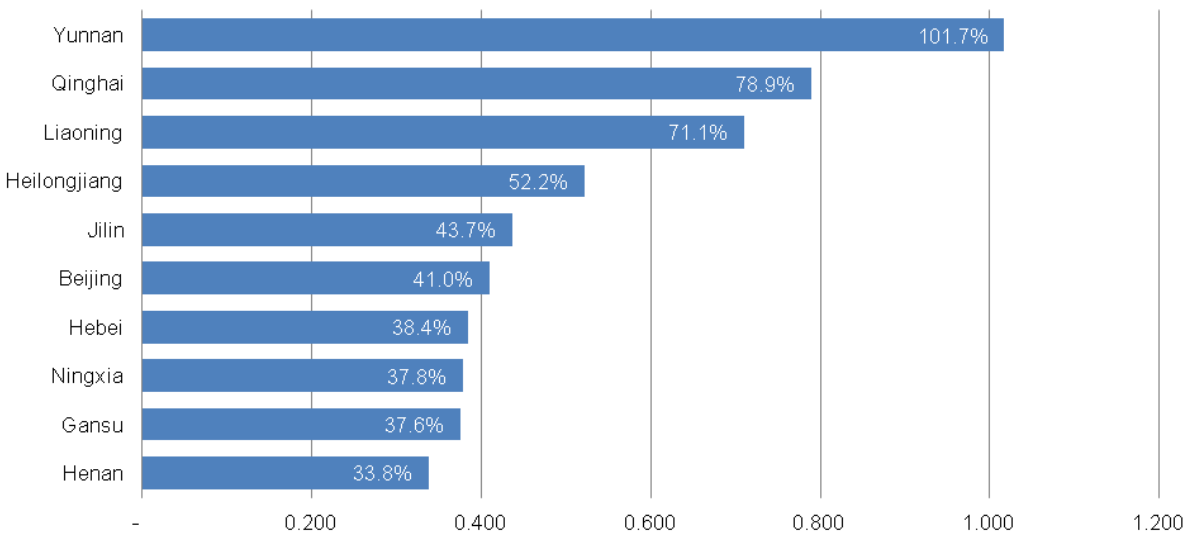
Vertical lines represent 95% confidence intervals. Sources: Ministry of Land and Resources, China National Land Resources Yearbook, China City Statistical Yearbook.

Figure 3.11 Land Dependency (weighted) by Region, 2003-2011



Values represent percentage point change between in ratio of land sales to budget revenues between 2005 and 2011. Sources: Ministry of Land and Resources, China National Land Resources Yearbook, China City Statistical Yearbook.

Figure 3.12 Largest Changes in Municipality Land Dependency by Province, 2005-2011



Values represent percentage point change between in ratio of land sales to budget revenues between 2005 and 2011. Sources: Ministry of Land and Resources, China National Land Resources Yearbook, China City Statistical Yearbook. Provincial-level estimates represent summations of all prefecture sales and budgetary revenues for each year.

In 2005, only Chongqing experienced a gross land sales-to-local budget revenues ratio of more than 1; by 2011, it was joined by Zhejiang and Liaoning (**Figures 3.13a** and **3.13b**). The economic characteristics of each of these regions vary considerably. Chongqing, as a western province, was a central recipient of military and state sector investments during the pre-reform era under the programs of the "Third Front," but during the reform era has largely lagged behind the more affluent eastern provinces in growth; only since the late 1990s has Chongqing reemerged as a major destination for state investments and economic development policies as part of the Develop the West program. More recently, Chongqing has emerged as a primary locale for land system policy experimentation, including large scale implementation of a land-ticket system (*dipiao zhidu*, 地票制度) and the extensive use of local government investment vehicles to enable and scale public finance (discussed in Chapter 4). Zhejiang, in contrast, has been one of the most affluent regions of China, whereas Liaoning has long struggled as part of the "rust belt," or northeastern and northern

provinces of China that experienced industrial decay following the reorganization and rationalizing of the state enterprise sector in the 1990s.

Figure 3.13a Land Dependency by Province, 2005

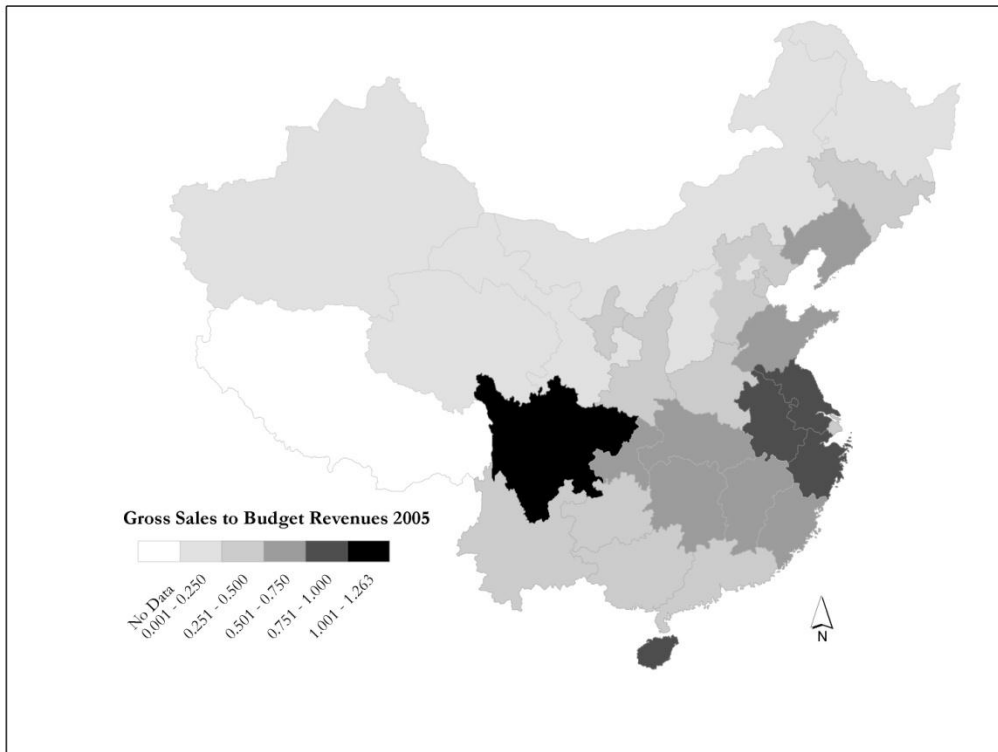
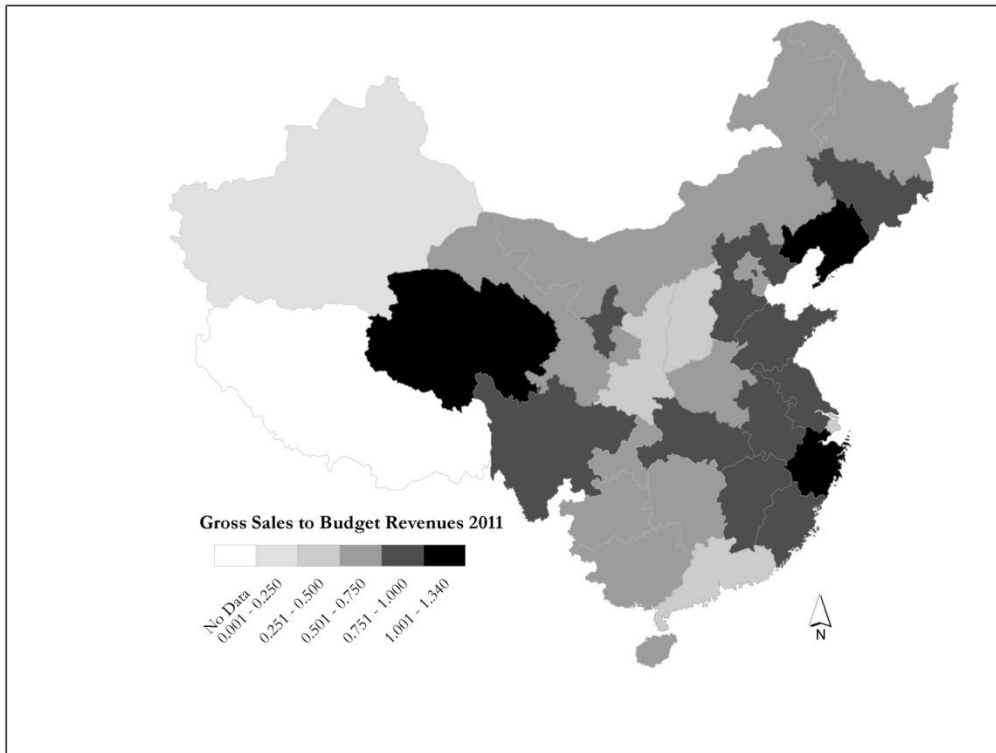


Figure 3.13b Land Dependency by Province, 2011



Sources: Ministry of Land and Resources, China National Land Resources Yearbook, China City Statistical Yearbook. Provincial-level estimates represent summations of all prefecture sales and budgetary revenues for each year.

3.6 Data Analysis

Recent studies have used time series cross-sectional data to investigate the importance of land to local government finance. Ye and Wang (2013) use provincial-level panel data to examine the linkages between land dependency, defined as the ratio of gross land conveyances to budgetary revenue, and a set of socioeconomic and political factors between 1999 and 2009. The authors find that sub-provincial fiscal constraints aggregated to the provincial level have significant effects on land dependency; the dependency of local jurisdictions on land transfers is positively associated with land dependency, whereas as the extent to which budget revenues are redistributed within the province—the amount of provincial revenues redistributed to local governments—negatively affects land dependency, since such transfers help relieve fiscal pressures. However, their findings do not explicitly identify the mechanism through which provincial-level bureaucrats' incentives enable

greater or lesser local land dependency. Future analysis would be needed to examine how such mechanisms operate at the local level.

Tao et al (2010) use time series cross-sectional data at the level of prefecture cities and above for years 2002 and 2003 to estimate the effect of land conveyance transactions on in-budget tax revenues. The authors test the extent to which land sales during the current period and previous periods affect budget revenues, and by type of tax revenue. Their findings suggest that negotiated deals do have an impact, but the effect varies by type of transaction and lag between the transaction and current period tax revenues. For example, each additional negotiated transaction on average supports an additional 116,669 RMB (deflated to 1999 RMB) in value-added taxes at the prefecture level three years into the future; this coefficient is significant at the 1% level. However, their model explains only 27% of variation in VAT revenues. Their model for "other taxes," a catch-all for all other taxes excluding the VAT, enterprise income tax, and the business tax, explains 40% of total variation across prefectures.

An important feature of land finance not accounted for in the above studies is the policy-induced structural shift in how land is transacted, evidenced by a precipitous increase in the share of total land and gross revenues transacted through market-oriented sales (auction, public tender, and listings). Between 2006 and 2008, land in the primary market transacted by auction, public tender, or listings increased from 30.4% to 84.1%. However, despite central government circulars calling for more market-oriented transactions as early as 2004, the decline in negotiated sales as a share of total sales did not begin until 2006. Moreover, analysis is needed to assess the effect of a municipality's budgetary position on its reliance on land sales. For instance, regions with greater budgetary deficits may resort more heavily on land sales compared with fiscally "healthier" cities.

Land finance as a strategy for funding local infrastructure should also be examined. If regions use land to fund local projects, then there should be a strong, positive relationship between land sales and expansion of public infrastructure assets, most likely with some lag period to account for revenue generation and the investment period before additional assets become available (e.g., new roadways). These considerations are fleshed out in more detail below.

3.6.1 Hypotheses

To address expenditure responsibilities and insufficient tax revenues, local officials have commonly resorted to more "creative financing," including the exploitation of land assets. "Land financing" refers to the leveraging and exploitation of land to fund public finance expenditures, either directly through the expending of land-derived revenues for public infrastructure projects, or indirectly through the leveraging of land assets as collateral in the obtaining of bank financing. As is argued throughout this dissertation, local bureaucrats respond to both external, policy-induced public finance conditions and local/regional endowments that shape the subset of realistic strategies for leveraging land as a fiscal asset. Broadly, these strategies can operate in one of three ways, delineated below in **Table 3.8**.

In the first category of land finance, local governments exploit the "expropriation surplus" (Washburn, 2011), i.e., the margin between the cost of expropriating the land from the collective—including primary development remediation costs, household compensation, and related expenses—and the conveyance fees earned through the transferring it to urban users. This form of land finance is the most immediate in terms of its impact on fiscal coffers, though there are non-insignificant costs associated with remediation and land conversion. The second type of land finance refers to the securitizing of land as an asset that can then be used as collateral by a state enterprise to borrow from banks or bond markets. In this case, discussed in further detail in Chapters 4 and 5, the local

state enterprise is making investments and assuming fiscal expenditure responsibilities on behalf of the local state. Negotiated sales, the last type presented in **Table 3.8**, represent a long time horizon for local bureaucrats. Land use rights are transferred to outside investors well below the market rate (i.e., what can be earned by leasing to commercial interests), but with the intent of attracting a long-term manufacturing investment into the region, yielding sustained taxes such as the business and enterprise tax.

Table 3.8 Land Finance Strategies

Land Strategy	Fiscal Impact	Time Horizon
Expropriate land, convert to urban construction, and sell to commercial and real estate developers through market mechanisms (auction, public tender, listing).	Conveyance fees, net of expropriation costs, shared 30:70 with central government and other	Immediate
Expropriate land and subsidize cost to industrial interests through negotiation.	Negative impact through transaction, but future tax revenues through VAT, enterprise tax, and business income tax (direct payments and taxes generated from additional economic multiplier effects in region).	Long-term
Land reserves	Increase borrowing capacity (via quasi-government local investment vehicles) by collateralizing land holdings	Immediate (for bank capital), long-term through revenues supported by new economic activity through debt-financed infrastructure.

The extent to which a given bureaucrat employs one of the above strategies depends on a combination of internal and external factors. It is assumed that in nearly all cases, local officials seek to maximize measures of economic and fiscal performance in response to the cadre evaluation system. In regions with lower economic wellbeing as measured by per capita GDP and a weak endowment of manufacturing and state assets, officials have in the past make extensive use of land as an incentive to attract outside industrial interests. Land conveyances were often underpriced

relative to other, non-industrial land uses as a strategy to attract outside investment. **Figure 3.14** articulates a simple two-variable model of local bureaucrat strategies with respect to the use and deployment of land assets within a land finance framework. Importantly, the model assumes that local officials respond to both economic and fiscal constraints. Economic factors influence both the utility of land, and the priorities of local planners and officials. For instance, regions with strong economic and fiscal positions (scenario I) have the opportunity to deploy land for additional public objectives. These regions are less under fiscal and economic pressures to use land for economic growth and/or fiscal generation purposes, and can instead use land for public affordable housing and other related objectives.

Figure 3.14 Simple Two-variable Model of Local Bureaucrat Land Finance Strategies

		Fiscal Position	
		<i>Strong</i>	<i>Weak</i>
Economy	<i>Strong</i>	(I) Use land for subsidized economic housing and other social benefits, plus large infrastructure projects.	(II) Land banking and related strategies to constrain land supply and drive up price, revenues from difference in compensation and conveyance fees.
	<i>Weak</i>	(IV) Development parks to attract outside investment to boost jobs and investment.	(III) Split between land as incentive to attract long-term manufacturing investment and "flipping" of land to generate immediate, short-term revenues.

In regions with strong economic growth but constrained fiscal capacity (scenario II), expressed as the difference between in-budgetary revenues and expenditures (or budget deficit), officials can make better use of commercial and residential land demand. Strong economic growth should translate into high demand for real estate, due to greater wealth accumulation and the

attraction of in-migration and resulting upward pressures on housing demand and housing prices. In this situation, officials can effectively "flip" land and use the residual difference to buttress local revenues. These revenues should exist under "extra-budgetary" revenues. However, there should be a frontloaded, near-term fiscal effect through the taxation of building-related transactions, e.g., tax revenues generated through the purchase of materials, enterprise income and business incomes taxes, and to a lesser extent the VAT. The fiscal value of land should be observed nearer to the land transfer period, or within one year.

Continuing to scenario III, regions with weak endowments of economic assets in an initial period prior to a land decision may resort to using land as an incentive to attract outside investment, typically through land "giveaways" or significant underpricing of land. This strategy, however, has tapered in recent years with central government directives that land use rights must be transferred through market-oriented mechanisms of auction, listings, and public tender. However, one might expect that, despite the decline in negotiated transfers, areas with weak economic growth may still resort to this form of sale at a higher rate.

Lastly, regions with weak economic growth but strong fiscal positions (scenario IV) may deploy public resources and expropriated land for development parks and other costly investments that do not directly lead to tax revenue increases but represent a long-term growth strategy for attracting investment and jobs.

To further contextualize these alternative scenarios, **Table 3.9** summarizes the number of prefectures in each "bucket" along with illustrative descriptive statistics, based on 2005 data. The cut-offs for each category were the medians for budget balance, defined as the ratio of budget expenditures to revenues, and real (2011 RMB) per capita GDP. For 2005, the median budgetary balance ratio was 2.25 and median per capita GDP of 28,789 RMB. If a prefecture in 2010 had a

budgetary expenditures-to-revenues ratio of 1.2 and a real per capita GDP of 20,000 RMB, it would be assigned to scenario IV, whereas a prefecture with a budgetary balance ratio of 3.0 and a per capita GDP of 15,000 would fall under scenario III.²⁸

²⁸ Due to the small sample sizes for scenarios II and IV, regressions were performed across the entire series, but with variables to control for these attributes.

Table 3.9 Summary City Statistics for Year 2005, by Fiscal-Economic Categories

Scenario	Variable	N	Minimum	Maximum	Median	Mean	Standard Deviation
I (N = 123)	Gross Land Sales to Budget Revenues Ratio	120	3.8%	232.5%	75.1%	82.6%	50.9%
	Real per capita GDP	123	16,234	121,726	26,989	34,257	19,324
	Negotiated Land as % Total Land Transferred	120	0.0%	61.0%	8.1%	11.6%	11.6%
	Secondary Sector Share of GDP	123	0.25	0.88	0.53	0.53	0.11
	Budget Balance	123	0.81	2.11	1.46	1.49	0.33
II (N = 18)	Gross Land Sales to Budget Revenues Ratio	18	30.6%	175.1%	82.5%	87.9%	42.6%
	Real per capita GDP	18	16,092	23,877	17,424	18,281	2,197
	Negotiated Land as % Total Land Transferred	18	0.1%	41.5%	10.1%	11.8%	11.6%
	Secondary Sector Share of GDP	18	0.30	0.59	0.45	0.46	0.08
	Budget Balance	18	2.13	5.41	2.39	2.76	0.82
III (N = 122)	Gross Land Sales to Budget Revenues Ratio	119	4.6%	232.6%	62.8%	72.8%	45.0%
	Real per capita GDP	122	3,293	15,699	10,322	10,222	3,010
	Negotiated Land as % Total Land Transferred	120	0.0%	77.0%	9.4%	14.1%	14.2%
	Secondary Sector Share of GDP	121	-	0.65	0.38	0.38	0.10
	Budget Balance	122	2.13	13.53	3.21	3.66	1.68
IV (N = 19)	Gross Land Sales to Budget Revenues Ratio	18	14.6%	183.0%	76.0%	77.5%	47.0%
	Real per capita GDP	19	9,455	15,738	14,393	13,712	2,114
	Negotiated Land as % Total Land Transferred	18	1.3%	45.5%	9.7%	12.2%	10.5%
	Secondary Sector Share of GDP	19	0.32	0.62	0.50	0.48	0.09
	Budget Balance	19	1.39	2.09	1.85	1.83	0.19

The above breakouts by category are further assessed for regional alignment for a base year of 2005 (**Table 3.10**). In the Eastern region, 75.6% of all municipalities fit within category I, while only 15.1% fell under III. In the Northeast, half (50.0%) of all cities falling under category III, reflecting the legacy of the state enterprise reform in the late 1990s and the slower growth of these cities compared with the remaining east coast. The West experienced the highest concentration of cities suffering below median for both economic status and fiscal well-being—of its 80 municipalities, nearly two thirds (64.6%) fell under category III, with only 21 cities (25.6%) enjoying both above median economic and fiscal status (category I).

Table 3.10 Count of Cities by Region, 2005

Region	I	II	III	IV	Total
East	65 (75.6%)	5 (5.8%)	13 (15.1%)	3 (3.5%)	86
Northeast	10 (29.4%)	7 (20.6%)	17 (50.0%)	0 (0.0%)	34
Central	27 (33.8%)	3 (3.8%)	39 (48.8%)	11 (13.8%)	80
West	21 (25.6%)	3 (3.7%)	53 (64.6%)	5 (6.1%)	82
Total	123	18	122	19	282

*Note: 2005 counts sum to 282 municipalities due to missing values for some cities.

3.6.2 Regression Results

Lagged land transfers and total in-budgetary revenues

In this analysis, land is treated as the primary independent variable of interest. However, rather than testing the impact of land only in the current period, lag effects are introduced. This approach hypothesizes that land sales, in addition to an immediate impact on fiscal revenues, also impact revenues in the future through the contributions of land sales to VAT revenues, business taxes, and enterprise income taxes. Because of a change in policy in 2006, the comparison of negotiated versus market-based sales has less meaning; prior analysis by Tao et al (2010) is not directly applicable for years after 2006. Instead, total land transacted is used. Results are

compared with 2005-2006, prior to the precipitous decline in negotiated sales as a share of total sales.

"Paved roads" is employed as an alternative dependent variable. While there is not consistent, usable data on public infrastructure investments at the municipal level, year-over-year changes in paved roads can serve as a useful proxy for public investments. If land transfers are indeed positively associated with changes in public finance, then there should be an observed positive relationship between changes in paved roads and land sales, but with the effect of the latter occurring with a time lag to allow for land sale funds to be collected, reinvested, and the completion of roads.

In the first stage, total budget revenues are regressed against land transfers from the current period and three previous periods to assess the impact of past transfers on current budgetary performance. Below is the empirical specification for this analysis:

$$Y_{it} = \alpha + \beta_1 L_{it} + \beta_2 L_{i,t-1} + \beta_3 L_{i,t-2} + \beta_4 L_{i,t-3} + e_{it}$$

Y_{it} represents either total tax revenues or paved roads in municipality i in year t . Variables L_{it} , $L_{i,t-1}$, $L_{i,t-2}$, and $L_{i,t-3}$ represent transferred land use rights, measured in thousands of hectares, for the current period and past periods $t-1$, $t-2$, and $t-3$ for given prefecture i . Summary statistics for all variables are presented in **Table 3-11**.

Table 3.11 Summary Statistics for Key Variables

	N	Median	Mean	Std. Dev.	Min	Max
All Budget Revenues	1981	398,793	1,009,565	2,425,457	19,276	34,298,300
Total Land Transferred	1954	480.4	792.7	950.4	0.8	9,086.8
Gross Land Sales to Budget Revenues	1946	0.50	0.60	0.42	0.00	2.76
Real GDP per capita	1988	22,766	29,806	22,468	3,293	188,744
Secondary GDP Ratio	1966	49.8%	49.3%	11.5%	9.0%	91.0%
Budget Balance	2000	2.21	2.77	1.98	0.80	18.41
Population Density	1984	329.5	441.5	455.4	5.1	5,230.8

Note: budget revenues and real GDP per capita inflated to 2011 RMB. Total land transferred in thousands of hectares transferred via either negotiation or market-oriented mechanisms (auction, bid, or public tender). Population density expressed in persons per hectare for the entire municipality, and based on estimates of total residents, including both permanent residents and long-term migrants.

As land has increasingly shifted to market-oriented transactions, the fiscal impact of land has become increasingly "front-loaded," with VAT, business income, and enterprise income taxes generated increasingly from commercial and real estate operations, and less from longer-term manufacturing activities, even without accounting for extra-budgetary revenues through land conveyances. Such transactions can occur through the buying and selling of construction-related materials and related inputs, as well as the spillover, multiplier effects from real estate sales. However, these effects should vary by region in accordance with the economic and fiscal position of each region. These effects should obtain similarly when we replace total revenues with a proxy for infrastructure investments, in this case square kilometers of paved roads.

In the first step, the effect of land transfers on total revenues over time was examined using time series cross-sectional data for years 2005-2006 and 2010-2011. Results are presented in **Table 3.12** below. In the early period, just prior to the new land transfer policy requiring local governments to use whenever possible market-oriented mediums of sale, the lag effects for periods t , $t-1$, $t-2$, and $t-3$ are all found to be significant. With each passing year since land has been transferred, the effect of every thousand hectares on total revenues (transformed by the natural log) grows stronger. For instance, in period t (current period), every 1,000 hectares of land transferred through either mechanism is associated with a 7% increase in total fiscal revenues.

This increases to 8% after one year, 9% after two years, and then doubles to 18% in year 3. However, these dynamics change in the latter period from 2010-2011; the effect of land transfers on fiscal revenues is significant in the current period and through the second year after the transfer, but ceases to have an effect by year 3. Moreover, the effect is strongest in the current period and one year after, suggesting that the mechanism through which land transfers support local budgets has changed and become more "front-loaded."

This analysis is next extended by controlling for both economic and urbanization measures and comparing these results by region for both periods (models c and d). With the introduction of these control variables, the effect of land in the 2005-2006 disappears, suggesting that the overarching driver of fiscal revenues during this period was not land but the economic conditions of the regional economy.

Table 3.12 Fixed Effects (within) Model of Land Transfers on Local Budget Revenues

Variable	(a)		(b)		(c)		(d)	
	2005-2006		2010-2011		2005-2006		2010-2011	
Area Transferred	0.07 (4.17)	***	0.14 (5.52)	***	0.01 (1.11)		0.06 (3.24)	**
Area Transferred, t-1	0.08 (2.63)	**	0.20 (7.42)	***	0.02 (0.96)		0.13 (6.42)	***
Area Transferred, t-2	0.09 (3.10)	**	0.07 (3.38)	***	0.01 (0.60)		0.04 (2.62)	**
Area Transferred, t-3	0.18 (6.40)	***	-0.03 (-1.32)		0.01 (0.69)		-0.01 (-0.31)	
Log of Real per Capita GDP					1.47 (21.58)	***	0.92 (14.72)	***
Population Density					0.00 (3.43)	***	0.00 (3.07)	**
Adjusted R ²	0.208		0.168		0.344		0.314	

"*" significant at 5% level, "***" at 1%, and "****" at 0.01%. Values in parentheses represent t-values. Land coefficients represent thousands of hectares of land. Dependent variable is the natural log of total fiscal revenues, adjusted for inflation. Within fixed effects model. Population density equals *de facto* population of prefecture divided by total prefecture land, the former derived from official per capita GDP estimates by prefecture.

The effects of land sales on fiscal revenues are further tested by region and by the economic-fiscal position of a given municipality, based on the groupings detailed above. Recalling this breakout, regions are hypothesized to behave differently with respect to land in accordance with relative budget and economic status. Municipalities with weak economic and fiscal positions (i.e., above the median of budgetary expenditures over revenues and under the median for real

per capita GDP) are expected to rely more heavily on land sales to attract long-term industrial investments, whereas we should observe a much weaker effect in wealthier regions.

Results from within fixed effects regressions by region are presented in **Table 3.13**. For the 2010-2011 period, the effects of land were greatest among eastern region municipalities, where current and lagged effects were all found to be statistically significant for current, one year past, and two year past land transfers, though the strongest effects were for one year and two years past. Among all regions, the strongest effects of land on tax revenues were for one-year lagged sales among central municipalities, at the one percent level—every thousand hectares of transferred land was associated with a 29% increase in total tax revenues. Replacing tax revenues with paved roads as a proxy for infrastructure investments does not uncover a strong relationship—only land sales from two years prior evidence a relationship with current period paved roads (**Table 3.14**).

Table 3.13 Budget Revenues Fixed Effects (within) Model by Region, 2010-2011

Variable	East	Northeast	West	Central
Area Transferred	0.04 (2.07) *	0.04 (0.83)	0.06 (1.82) .	0.16 (1.81)
Area Transferred, t-1	0.08 (4.06) ***	0.10 (1.60)	0.15 (4.49) ***	0.29 (2.97) **
Area Transferred, t-2	0.04 (4.41) ***	-0.09 (-1.17)	0.07 (1.90)	0.02 (0.17)
Area Transferred, t-3	-0.01 (-0.42)	-0.10 (-0.67)	0.04 (1.31)	0.09 (0.78)
Log of Real GDP per capita	1.11 (10.10) ***	1.18 (4.55) ***	1.04 (13.47) ***	0.77 (3.04) **
Population Density	0.00 (5.77) ***	0.00 (0.77)	0.00 (4.18) ***	0.00 (-1.69) .
<i>Adjusted R²</i>	<i>0.372</i>	<i>0.304</i>	<i>0.38</i>	<i>0.24</i>

"*" significant at 5% level, "***" at 1%, and "****" at 0.01%. Values in parentheses represent t-values. Land coefficients represent thousands of hectares of land. Dependent variable is the natural log of total fiscal revenues, adjusted for inflation. Within fixed effects model.

Table 3.14 Paved Roads Fixed Effects Model, 2005-2006 and 2010-2011

Variable	2005-2006	2010-2011
Area Transferred	0.01 (0.41)	0.02 (0.90)
Area Transferred, t-1	0.03 (0.79)	0.07 (2.94) **
Area Transferred, t-2	0.02 (0.43)	0.01 (0.50)
Area Transferred, t-3	0.03 (0.82)	-0.02 (-0.99)
Log of Real GDP per capita	0.39 (2.66) **	0.32 (4.20) ***
Population Density	0.00 (1.43)	0.00 (0.81)
<i>Adjusted R²</i>	<i>0.027</i>	<i>0.086</i>

"*" significant at 5% level, "**" at 1%, and "***" at 0.01%. Values in parentheses represent t-values. Land coefficients represent thousands of hectares of land. Dependent variable is the natural log of paved roads by municipality, measured in square kilometers. Within fixed effects model.

3.7 Discussion

This chapter began with a review of the legal and institutional framework behind land use rights, including the expropriation and transfer of rights. An important theme distilled from this review is the extensive ambiguity and flexibility in the Chinese law related to land use rights—in many cases, the law on land use rights is insufficient in areas of eminent domain and seemingly designed to ensure urban use rights supersede those of rural households.

This legal and institutional ambiguity has enabled the local state to use land as an important source of land finance, or the use of land assets and use rights to meet fiscal objectives. The current central-local fiscal arrangement, which since 1994 has involved both a relative decline in local state revenues and an increase in expenditure responsibilities, has put increasing pressure on local bureaucrats to explore and exploit alternative sources of revenue for fiscal needs. These bureaucrats, facing performance metrics that emphasize infrastructure spending and economic growth as criteria for evaluation, have increasingly resorted to land finance and exploiting of the above ambiguity as a means of meeting these requirements. Local bureaucrats behave in ways akin to revenue maximizing actors under budgetary constraints.

Data analysis provides some evidence that land conveyance sales continue to support local government finance, though the mechanisms through which this occurs have become weaker. Prior to a policy-induced shift in land sales, the association of land to fiscal revenues was significant for the current year and prior three years, with this association growing stronger each year following the transfer of land use rights. However, the introduction of control variables for economic growth (per capita GDP) and urbanization (population density) removes statistical evidence for these associations for the 2005-2006 period, though in the 2010-2011 period statistical evidence supports such a fiscal mechanism for land transferred in the current period and through two years prior.

Additional regressions uncovered some variation in the effect of land transfers on budgetary revenues by region and economic-fiscal groupings. A positive and statistically significant association between land transfers and budget revenues provides evidence that land is being allocated for activities with longer-term fiscal benefits to a region, such as value-added taxes generated by industrial investment. There is some evidence for this among cities with weak relative economic growth but an above-median fiscal position, but not for other categories.

Using paved roads as a proxy for public infrastructure investments, there is also some evidence that land transfers are associated with public expenditures. As hypothesized, from 2010 to 2011 this effect obtains for land transferred in the recent past, since there is a lag between the transfer of land, revenues collected (directly and through economy-wide multiplier effects), and the completion and reportage of the investment. Empirical evidence of this relationship was found for years 2010 to 2011, but not from 2005 to 2006.

The mechanisms of land finance can be murky and not fully borne out through statistical inquiry. Importantly, in many cases the implicit fiscal value of land is realized through the

allocation of land assets to third-party quasi non-government investment companies that can then leverage these assets for bank loans and bond issuances—activities not captured in the above analysis, yet an increasingly important and prolific strategy of land finance. To explore more deeply how land finance has evolved as a fiscal strategy of local governments, the next chapter examines local government investment vehicles through case study analysis.

Chapter 4: State Enterprise Participation in Land Markets

4.1 Introduction

Statistical analysis in Chapter 3 points to the effect of land transfers on local fiscal revenues. However a deeper understanding is needed of the mechanics of land finance and land resource management beyond the revenues generated from the transaction of land use rights. The following two chapters explore the two new phases of land finance. This chapter examines local government economic development strategies through institutional innovation and land use and the extent to which political economy shapes local government behaviors and the tactics availed to local bureaucrats. Chapter 5 explores the case of Chongqing and how the local government has pioneered the use of the local government investment vehicle structure to strengthen its fiscal capabilities and satisfy infrastructure expenditure responsibilities.

Local governments, in an effort to continue to support local infrastructure investment as a driver of economic growth and fiscal revenues, are forced to address issues of illiquidity and limited sources of funds for large infrastructure projects; local government investment vehicles have evolved as a policy response to these challenges.

China's persistent fissures and rigidities between the requirements and incentives of the central state and local government have catalyzed strategies and institutional arrangements that operate within the existing constraints of China's political economy—a form of institutional innovation. Central to these strategies is land. Similar to the institutional incompleteness that has exposed rural households to the expropriating local state with limited legal recourse, incompleteness of the rules of China's political economy has allowed local governments to indirectly accrue debt and invest heavily in infrastructure—all reliant on the implicit value and currency-like function of land to facilitate transactions and the rationalization of urban space. The transition of land from an input into the maximization of production to a commodity unto itself,

to be exchanged in a market, was created and enabled by the state under the weight of its own fiscal pressures. Land commodification has become the new wellspring of fiscal revenues for local governments, but with the introduction and widespread use of new institutional arrangements that allow for new forms of state enterprise to participate in these markets.

While local governments still heavily rely on land use sales and the margins generated as an important source of revenues, this alternative utility of land, within local state capture, represents the tactical strategy of local governments to selectively "free" land holdings from fettered illiquidity to an asset—the local state selectively exerts its local monopoly power as the only party interest able to convert land from an illiquid asset to a tradable store of wealth. In the case of Chongqing, discussed in the following chapter, the local government fully exploits this role to serve the simultaneous purposes of rescuing insolvent local state enterprises and in the implementation of urban land rationalization policies, with resulting tax revenue impacts.

Chapter 5 examines the evolution of land as a financing instrument through the prism of Chongqing and its robust application of local government investment vehicles to fund urban construction and facilitate land use rationalization.

4.2 Local Government Tactics and Behavior through the Prism of Land

According to Chu (2013, p. 67), "there is no doubt, land is at the heart of urban assets, as managing the city is to manage land. In the primary land market, the government has a monopolist position and can directly transfer land use rights to obtain land conveyance fees, or what is referred to as 'land finance.' In the secondary market, the government controls land through organized state enterprises and uses land use rights as a central asset to conduct business." Land is an asset that can be expropriated, its use converted, its use rights transferred with limited compensation to its previous users. More recently, land has been deployed for a new use—as collateral and currency of exchange between different segments of local government.

Land finance is a fiscal strategy, of which the objective is to exploit the implicit economic value of land to fund core fiscal responsibilities of local governments, namely infrastructure. The collateralization and leveraging of land to fund infrastructure through the auspices of third party, quasi non-governmental corporations—or local government investment vehicles—has given rise to what Tsui (2011) has described as a "land-infrastructure-leverage trap." Qualitative analysis is needed to further uncover how such corporate structures operate, utilize land, and serve the needs of local governments. The extent of their use is also a function of economic-fiscal conditions delineated in Chapter 3.

4.3 Background on Local Government Debt and Local Government Investment Vehicles

According to Article 28 of the National Budget Law, local governments “shall not contain deficit [and] may not issue local government bonds, except as otherwise prescribed by laws or the State Council” (China National People's Congress, 1994). But within the text of the same law, the foundations were laid for an ongoing struggle between central and local governments over expenditure responsibilities. The restructured tax revenue-sharing system has disadvantaged many regions, as more revenues were redirected to central coffers for (partial) local redistribution. This was primarily via revenues generated by the value-added tax, which the new law divided three-to-one in favor of the central government (over local jurisdictions). This—combined with growing pressure on local officials to meet ever-demanding local economic development performance requirements (e.g., local GDP growth) as defined through the cadre evaluation system—created strong incentives for local officials to innovate new means to generating revenues for local expenditure.

Restrained from directly borrowing from banks or local residents and institutions via municipal bond issuances, local governments instead began to adopt investment platforms as a viable means of raising needed capital for local investment projects. In recent years, the central

government has partially acquiesced to this approach; the 2008-2010 4 trillion RMB stimulus was only 30% funded by the central government, with local governments and state-owned enterprises expected to foot the remainder, presumably via bank and bond-based financing, and LGIVs (Batson, 2009; Batson & Leow, 2009; Walter & Howie, 2011; Li T. , 2011; Fang, Man, Yu, & Yuzhe, 2010; Shen & Peng, 2010; Anderlini, 2010) (Batson, 2009; Batson & Leow, 2009; Walter & Howie, 2011; Li T. , 2011; Fang, Man, Yu, & Yuzhe, 2010; Shen & Peng, 2010; Anderlini, 2010).

Liu and Shen (2011) use two measures to rank LGIV indebtedness aggregated to the provincial level in China, using data published by the China Regional Financial Environment Evaluation Group (*Zhongguo Diqu Jinrong Shengtai Huanjing Pingjia Ketizu*, 中国地区金融生态环境评价课题组) for the year 2009: 1) LGIV debt divided by in-budgetary revenue; and 2) LGIV debt divided by the sum of in-budgetary revenue and land conveyance fees. For the former measure, Chongqing ranked the most indebted among all provincial-level administrative units and fifth highest when factoring in land-based extra-budgetary revenues.²⁹ By comparison, Guangdong province ranked the second *least indebted* by both measures, behind only Tibet. Understanding how LGIVs operate and their roles in the regional economy and planning efforts depends largely on the fiscal conditions of local government. This change in Chongqing's debt position—while not a sizable shift—suggests that land revenues play an important role in public finance, though the mechanisms by which this occurs will need to be explored in depth.

The LGIV model is a tactic employed by local governments to fulfill its fiscal obligations, particularly infrastructure investments, under increasingly strained revenue sources. According to

²⁹ The four highest regions for indebtedness by this second measure were: Hubei (#1), Qinghai (#2), Jilin (#3), and Yunnan (#4).

the World Bank, LGIVs "provide one of the few remaining avenues for local government to continue their capital expenditures in infrastructure development. [The] ability of the local governments and their entities to service the off-budget borrowing has been severely reduced since 1993. This is particularly significant because the demand for infrastructure (and the resulting need to raise off-budget financed capital expenditure) has steadily increased over the same period of time" (World Bank, 2010, p. 95). According to the World Bank, "UDIC [Urban Development Investment Corporation, i.e., LGIV] assets are not marked to market on the financial statements, and UDIC borrowing is generally based on direct or indirect [Chongqing Municipal Government] budget support. There are multiple financing support channels made available to the UDICs to help them raise the necessary capital to complete [Chongqing Municipal Government-sponsored] projects, but the revenue sources available to them to service the debt remain limited. Financing is obtained on a project-by-project basis with limited regard to the strength of the UDIC balance sheet, often accompanied by indirect support of the technical commissions and bureaus" (ibid, p. 8)

4.3.1 Early Development of the LGIV Model

Despite the recent attention these financing mechanisms have garnered, the model itself is actually quite old—the first iteration in China dates to July 1992 with the formation of the Shanghai Urban Construction Investment Development Company (Wang D. , 2011). Shortly after the onset of the global financial crisis and a sharp decline in China's industrial output, local governments were encouraged in a joint communiqué by the central bank and China Banking and Regulatory Commission (CBRC) to "support conditional local government organized investment vehicles to issue enterprise debt, medium term bonds, and other financial instruments to expand associated financial channels for central government investment projects" (Ba, 2012). By the end of 2009, an estimated 8,221 such vehicles were created across the country—primarily to finance

stimulus-based spending—accounting for RMB 500 billion in new debt, of which 90% was issued via bank credit, equivalent to more than twice local government annual revenues; 94% of these vehicles are at the urban and county levels. Based on estimates by the China Development Bank, local government debt in 2008 had already exceeded 200-250% of local revenues (Fang, Man, Yu, & Yuzhe, 2010).

LGIVs, also referred to as Urban Development Investment Corporations (UDICs), were first established under the Company Law (World Bank, 2010; Zhou & Zhou, 2012). Local governments are prohibited from borrowing capital with few exceptions (in rare cases, bond issuances accommodated through the Ministry of Finance). In April 1993, the State Council issued its notice to "Ban Erroneous Fundraising and Strengthen Bond Issuance Supervision," which included a prohibition on sub-national government issuing of bonds, either directly or indirectly (Article 3). The Budget Law, passed in January 1995, further emphasized this prohibition (Article 28), while the Guarantee Law later that same year extended this prohibition to "bilateral loans and loans from international monetary institutions" (Article 8).

The broader implementation of the LGIV model before the 2008-2009 global recession derives from public finance practices pioneered by the China Development Bank (CDB) in the 1990s (He, 2010). The CDB, unlike the major commercial banks (e.g., the "Big Four"), has always been intended as a policy bank with economic development objectives, most notably the financing of major infrastructure projects. In the late 1990s, shortly after the start of Chen Yuan's tenure as bank chairman, the bank initiated a series of policy and operating reforms that changed the long-term practices of the bank. These included: 1) moving bond issuances (prohibited from receiving savings deposits, the only form of capitalization for the bank) by way of public tender and away from the Ministry of Finance-imposed obligatory purchases by the other banks, inducing more market-aligned lending practices at the bank; 2) expansion in staff, notably

through acquisition of China Investment Bank and its offices across the country; and 3) cleaning up of non-performing assets.

In 1998, the CDB brokered a deal with the Tianjin government to extend a much larger loan for urban infrastructure in exchange for the municipal government cleaning up a bad loan the CDB had previously made to Xiali, a failing local state-owned automaker. To enable the transaction, the Tianjin government established a LGIV, collateralizing projected tax revenue as part of the loan, thus giving rise to a ubiquitous borrowing structure by the early 2000s (He, 2010).

For many years, the CDB was the only financier of LGIV borrowing. By 2005, the CDB had formalized agreements with 30 provinces, 348 prefectures and cities, and 906 counties. It was only in 2009, when the requirements placed on local governments to finance a large share of the economic stimulus prompted expansionary local government borrowing, did the LGIV model grow from a CDB-related activity to one involving the major commercial banks (ibid, p.4).

The use of investment platforms is also not unique to China—Hong Kong used a similar corporatized mechanism to raise capital for rail projects in the 1980s, and many local governments in the U.S. and elsewhere have used similar vehicles for local infrastructure projects. During the real estate boom (and bubble) of the 2000s, regional U.S. banks often created special purpose entities (SPEs) designed to raise capital to purchase, securitize, and distribute mortgages while evading standard regulatory capital adequacy requirements, and the collapse of real estate prices beginning in 2006 left many of these vehicles insolvent (Chinn & Frieden, 2011). Much of the debt accumulated by Chinese LGIVs is similarly collateralized with land, though as quasi-government corporations they are at least partially backed by local governments (introducing

potential moral hazard risks). But there are growing concerns over the lack of a regulatory framework to monitor and constrain the risk associated with these companies.

In recent years, the LGIV model has proliferated across China, but it has done so in part as an *ad hoc* solution to extend credit for major projects without incremental, more substantive changes in the public finance system (including a robust system for fiscal transfers and broader use of municipal bonds). For instance, the vast majority of credit lent out to LGIVs during the global downturn in 2008-2010 was denominated in 3-5 year loans, despite much of this capital allocated for public infrastructure investments that won't generate good returns for upwards of 10-15 years. In response to these concerns, the China Banking and Regulatory Commission announced in early 2012 it would allow many of these loans to be rolled over an additional four years, temporarily addressing—but not solving—this issue.

Official findings by the State Audit Office show that in 2010, local governments were responsible for more than 10.7 trillion RMB in debt. Roughly 63% of this was in the form of actual direct borrowing, 22% in the form of guarantees (loans backed by the local government), with the remainder funds allocated for bailouts; more than half of this debt originated before 2008, with more than 21% in the form of projects and interest payments (China State Audit Office, 2011). According to the official report, “[through] bond issuance rights yet to be actually granted to local governments, to the already limited extent to which local governments raise capital, each region has various, unique channels through which to raise capital, and there is *no transparency in terms of the number of capital-raising entities and capital raising processes*” (China State Audit Office, 2011, p. 8; italics added by author). As further evidence that many of these entities are designed as extensions of local government (with the implied backing of the state, and its vast holdings of land and state assets), the 2011 report found that 46.8% of existing loans were not backed with any form of collateral (Yang, Han, Pu, & Yang, 2012).

In 2009, the first full year of the stimulus, local government investment vehicles issued in aggregate more than 6 trillion RMB of debt. The investment-driven model of growth has persisted—commercial banks loans made for fixed asset investment in township and urban regions approached 3 trillion RMB; investment’s contribution to national GDP growth grew from 4.1 percentage points in 2008 to 8 points in 2009 (Shen & Peng, 2010). Shih (2010) estimates total local government debt approached US \$1.6 trillion, while estimates based on data from the China Banking Regulatory Commission (CBRC) put aggregate local government debt at 7.38 trillion RMB by the end of 2009, a 70.4 percent year-on-year increase (People’s Daily, 2010). In a submission illustrative of the near-term woes of local government borrowing, the People’s Bank of China in July 2010 announced that *only* 20% of outstanding loans to local government investment platforms were likely to default, down from common expectations of 30% (though the latter may still come true). As Qu Hongbin of HSBC Asia framed the issue, “[t]he fact that nearly 80 per cent of those [local government debt-financed infrastructure projects] have at least some capacity to service their debt is quite amazing” (Anderlini, 2010). Notably, a large segment of the state bank-financed investment in 2009 went towards pure public works projects that showed only limited promise of returns, such as building parks and public toilets. Much of this investment has gone into less-than-optimally productive uses, particularly industrial capacity in the manufacturing (export-oriented) sectors.

In June 2010 the China Banking and Regulatory Commission (CBRC) released an estimate of roughly 14 trillion RMB in local government investment vehicle debt, of which between 200 and 300 million RMB is at risk of default and would need a bail out facility (Li T. , 2011). In response to growing concerns over potential non-performing loans to LGIVs, in April 2011 the CBRC released document “Number 34,” requiring that all loans agreed in principle prior to 30 June 2010 but have not yet been dispersed must meet the following criteria: 1) alignment

with the standards of China's broader macroeconomic policy goals, development planning, enterprise planning, and industrial policy, comprehensive land use planning, and rules relating to credit management and auditing; 2) for financial, budgetary wellbeing, the debt-to-asset ratio must be less than 80%; and 3) debt collateral must be in legal accordance and of sufficient value (Wen, Zhang, Yu, & Tian, 2011).

As of March 2012, debt assigned to LGIVs (both via loans and bond issuances) totaled 9.1 trillion RMB, equivalent to roughly one quarter of 2011 GDP. Much of this debt was issued during the global financial crisis, when local Chinese governments assumed much of the tasks included in the 2008-2010 Chinese stimulus (approximately two thirds of expenditure responsibilities included in the stimulus were assigned to local governments, with a tacit understanding that much of this counter-cyclical investment would be funded via the local branches of the commercial banks). Of this debt, roughly 35% was set to mature within three years (due in 2011), despite the long-term revenue horizons for many of these projects. Policy misalignment is helping to skew the solvency of many of the investments—not only are the revenue horizons, and ability to pay back this debt, much longer than the three year terms, the services offered via many projects are deliberately underpriced, further undermining the long-term viability of these investments (Lardy N. , 2012).

4.3.2 Legal and Regulatory Framework of Local Government Investment Vehicles

LGIVs essentially function as workarounds that allow local governments to raise needed capital for development (primarily infrastructure) purposes. LGIVs are classified as municipal state-owned enterprises, and are thus under the supervision of the municipal-level State-owned Assets Supervision and Administration Commission (SASAC), thus subject to Article 4, Chapter 2 of the Company Law, which includes organizational and administrative restrictions, such as

board appointees and composition of board supervisors (World Bank, 2010; Zhou & Zhou, 2012). According to a 2010 technical analysis by the World Bank (World Bank, 2010, pp. 19-20), the existing regulatory and legal framework related to the existence and operation of LGIVs is insufficient due to the following reasons:

- No specific requirements or recommendations vis-à-vis corporate governance structure to manage the relationship between the local governments and LGIVs.
- No clarification of the nature or limits of the financial liability of the local governments vis-à-vis LGIVs.
- No specific provisions for scope of investment, and no specific risk control measures.
- No specific accounting system—the LGIVs implement the general enterprise accounting system that is employed by all SOEs.
- General regulations on labor and human resources management. As fully state-owned companies, LGIVs' directors, supervisors, and managers cannot be civil servants.
- According to China's land administration system, LGIVs may obtain state-owned land-use rights through various means, such as agreement, bidding, and auction. In the context of SOE reform, the state can authorize LGIVs as government-owned agencies to operate such land use rights. LGIVs can then allocate the land to their direct subsidiaries and controlled enterprises, and share participation enterprises by using the land use right as investment or by leasing.

The World Bank goes on to characterize LGIVs as rooted in "the central government-led directive in the early 1990s recommending the *marketization* of infrastructure development, a policy that required that the infrastructure development responsibility be removed from direct local government departments and corporatized into separate, more market-oriented municipal

entities." LGIVs (or UDICS in the World Bank report) offered local governments, by way of a corporatized government structure, the ability to borrow capital to then quickly implement infrastructure projects (World Bank, 2010, p. 21).

4.3.3 The Mechanics of Local Government Investment Vehicles

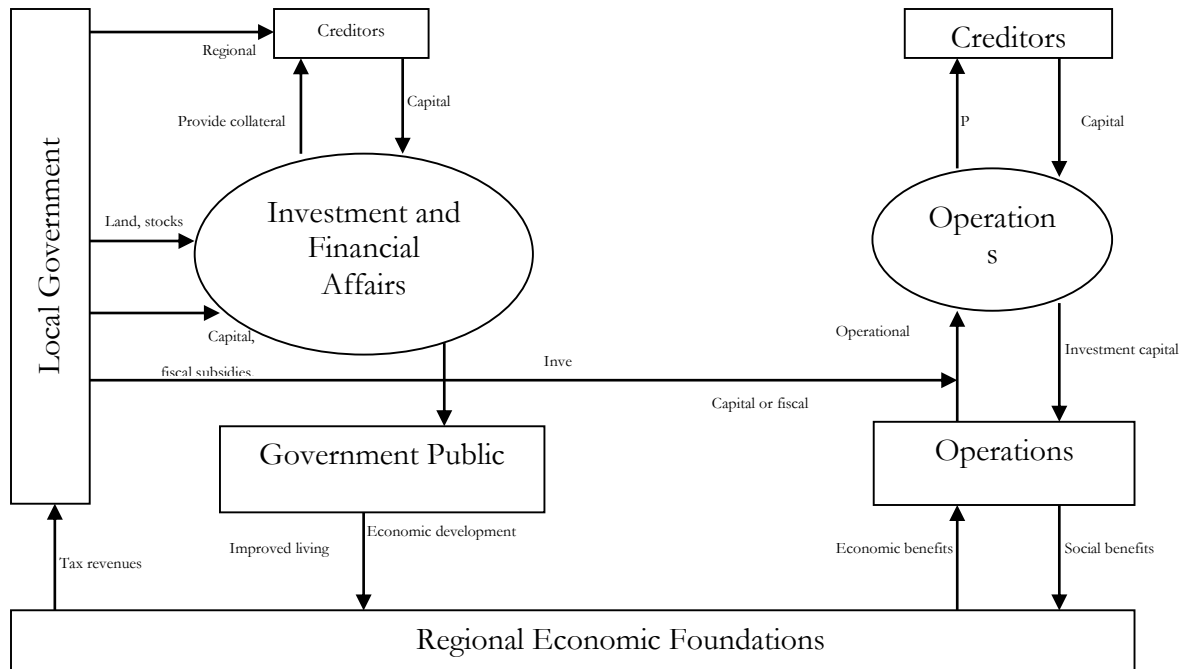
Like many instances throughout the reform period, local government experimentation, with the implicit support of the central state, has been a key driver of broader institutional reform and more widespread policy adoption across the country (for instance, the early development of export processing centers within coastal Special Economic Zones). In the case of LGIVs, the original formula was developed by the China Development Bank, pushed out in specific, targeted, and regulated cases (e.g., Tianjin), and was later more widely adopted when the need for stimulus to offset the sudden, deep drop in demand for Chinese exports during the global financial crisis outpaced and trumped more comprehensive fiscal and public finance reform.

LGIVs represent a new iteration of land finance, following the earlier use of land use rights to either attract mobile assets (e.g., factories) or reap windfall earnings from the transfer by way of market mechanisms. In both processes, land finance serves the needs of infrastructure investment, but the financing of these efforts varies by source of funds. Originally, as discussed in Chapter 3, land served as a primary conduit for local government revenues through conveyance fees (出让金). In this new phase, beginning the late 1990s but expanding dramatically during the 2008-2010 stimulus period, corporatized entities were created to leverage land assets owned by the municipal government to borrow funds to finance infrastructure projects.

Figure 4.2 helps illustrate the flow of funds that enable the functioning of these corporatized entities and their intended contributions to regional economic growth. In the creation of a new LGIV, the local government first establishes a limited liability corporation

(LLC) and then infuses a combination of capital, equity from other, locally owned state enterprises (via the local/municipal level of the State-Owned Assets Supervision and Administration Commission, or “SASAC”), and land-related assets, the latter typically an important form of collateral for LGIVs to then borrow against (Zhou & Zhou, 2012; Ba, 2012; Cao & Yuan, 2011). The newly formed LLC can then raise additional capital via direct borrowing from banks, or issuance of corporate bonds (which in many cases are purchased by banks and inventoried as assets in “trust” funds, which in some instances allow these local bank branches to exceed established capital-asset ratios). These LLCs then invest in public projects that are not being delivered by the private sector or other state-owned enterprises (SOEs), due to limited capital and/or questionable profitability, e.g., social housing. In theory, these investments have positive effects on the broader regional economy, through the raising of living standards and related positive externalities and multipliers—ultimately resulting in an increase in tax revenue—providing fiscal justification for these projects. The other approach is to establish an operations-based company, for instance the construction and management of a public utility or new roadway. In these cases, the projected long-term revenue stream generated through the public usage of a utility serves as guarantee against bank loans and provides security for bond creditors (again, often the banks). LGIVs can follow either build-transfer (BT) or built-operate-transfer (BOT) models of development. In the former case, the LGIV invests in and builds a segment of infrastructure, but then hands over the completed asset to the local jurisdiction. In the latter case, the LGIV will actually operate the asset and collect use-related revenues (e.g., tolls), which can then help the corporation service existing debt payments. To be discussed in more detail in my dissertation, for the latter approach LGIV management has been shifting from a build-operate-transfer model (“BOT”) to a build-transfer model, or “BT.”

Figure 4.2 Flow of Funds via Local Government Investment Vehicles and Regional Economic Impacts



Source: Cao & Yuan (2011).

To this point, local government debt has not emerged as a major problem due to: 1) strong support for the real estate market has kept prices high and enabled significant conveyance revenues via the "land budget"; and 2) LGIVs have been able to use land use rights as collateral to borrow additional outside financial capital, including collateralizing land use rights to acquire loans and urban investment company bonds and trust capital supported by land use rights (Liu & Shen, 2011). The World Bank (2010, p. 31) delineates five key sources of funding for LGIVs, summarized in **Table 4.1** below.

Table 4.1 Sources of LGIV Capitalization (Leveraging Assets Allocated by Local Government)

Financing Source	Description
China Development Bank Loans	Loans for specific projects, as well as “bundled loans” or corporate loans to LGIVs.
Commercial Bank Loans	Stiffer terms than CDB loans, with slightly higher interest rates and shorter maturities.
International Financing Institutions or Foreign Governments	Including World Bank infrastructure loans guaranteed by the Central Government
Corporate Bonds	In rare cases, the Ministry of Finance has permitted bond issuances directly by LGIVs.
Stocks Issuance	IPOs by LGIV subsidiaries, or acquisition of listed firms.

Author's own development.

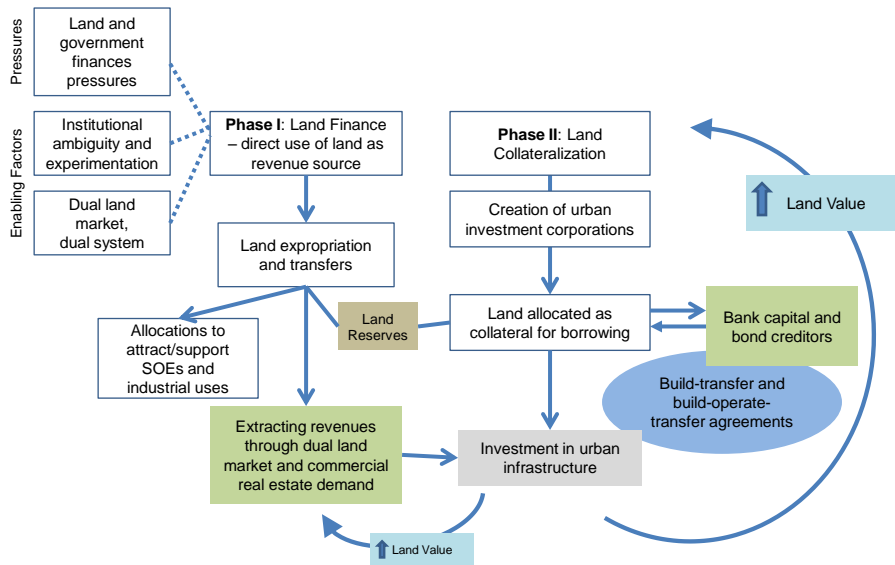
4.3.4 Land Finance and Land Values

There is a strong, symbiotic relationship and codependence between the value of land and the borrowing capacity of LGIVs; **Figure 4.3** helps illustrate these linkages. In the first phase of land finance, land is treated as a commodity good, its use rights bought and sold with net margins supporting local government revenue (Chapter 3). This process involves the expropriation of land, its use conversion, and either the allocation of these assets to a land reserve for later use, or the disposition of the assets by way of either market-oriented transactions or allocation to industrial users or non-commercial projects (e.g., the expansion of a university campus).

In the second phase of land finance, local companies are capitalized through the implicit value of land. This can occur through one of two methods. In the first, local state enterprises that already possess land can use these assets to borrow from local banks. In some cases, as discussed in Chapter 5 with the implementation of land rationalization policies in Chongqing, SOEs sit on vast amounts of illiquid land assets that must effectively be mortgaged in partnership with an asset management company—in the case of Chongqing, Yufu Asset Management Company—to obtain needed cash to finance a factory relocation. In other cases, undeveloped urban land assets

(often obtained through expropriation) held in the local land bank are transferred to a state infrastructure company or LGIV in order to capitalize these firms and allow them to leverage the implicit value of these assets as collateral in order to obtain bank financing for local infrastructure projects.

Figure 4.3 The First and Second Phases of Land Finance in Urban China



Author's schematic representation of land financing strategies.

Through both of these processes, land finance is positively linked with land values in both supporting/enabling land values and strongly tethered to land values; the fundamentals of land finance are precarious (Zhou & Zhou, 2012; Fang, Man, Yu, & Yuzhe, 2010). Land rationalization policies help open up underutilized land assets in the urban core, allowing for commercial real estate development and higher value land development projects within high demand areas. These actions boost local budgetary revenues through both the net earnings from conveyance fees and indirect revenues through the increase in commerce and spending in the urban core and resulting tax revenues drawn from these activities. Moreover, the local state can

control the supply of land available for development, thereby creating upward pressures on conveyance fees paid by developers through listings, public tendering, and auctioning platforms. But when the value of land is deployed as a form of capitalization, the financial solvency of many state enterprises are at least partially tethered to land prices and their ability to continue to borrow and service existing debt. Since 2009, there have been growing concerns that LGIVs have overextended their borrowing through the leveraging of land assets, resulting in the banking system, still recovering from the non-performing loan epidemics of the early 2000s, is once again overexposed to bad assets. And while the local state is perceived as the backstop for these loans, pledging (explicitly or tacitly) to provide capital injections if local SOEs and LGIVs are unable to service their bank debts, many of these local states, too, are highly vulnerable to a decline in land prices and land demand as a core revenue stream, raising the specter of central government intervention.

Going forward, two additional potential issues may arise within this model—illiquidity and insolvency. Illiquidity refers to the possible inability of LGIVs to continue to roll over debt, and the mismatch between short-term borrowing and long-term revenues. The structure of debt is critical—in many cases, debt issued by LGIVs is for 3-5 years, but the ability to repay this debt may take ten to twenty years, depending on the project; when the revenue stream is based on utility user fees, in which prices are often artificially low, this may take even longer. Second, the collateral used to raise additional capital from banks is often in the form of land conveyance fees and land value- and use rights-related assets. While recent central government efforts to stem real estate price inflation have had only limited success, at some point the government will find the appropriate set of measures to clamp down on prices, or prices could fall due to some external events/factors, pricking what many analysts believe to be an asset bubble. If this does occur, the

value of the underlying assets held by LGIVs will fall—and if they fall enough, these entities will be technically insolvent (when the total value of an LLC’s assets falls below total liabilities).

Local government investment vehicles are presumably not the optimal choice of local bureaucrats as a means of funding public works projects. More optimal arrangements would potentially include greater claims on the value-added tax (VAT) and other revenue sources, the ability to finance some share of infrastructure through bond issuances on a more regular and constrained basis (i.e., more widespread use than is currently allowed under the auspices of the Ministry of Finance), and greater and more responsive system of fiscal transfers and central government investment. Absent these alternatives, the LGIV has evolved out of the bottleneck created by central government mandates, local developmental needs, and the limited sources of funding availed to local bureaucrats (Wen, Zhang, Yu, & Tian, 2011).

4.4 Summary

Local government investment vehicles represent a new direction of land finance. As local governments seek to develop new frontiers of land finance and sources of capital, the creation of LGIVs and leveraging of land assets through these new corporate constructs expands the frontier of infrastructure spending availed to local bureaucrats. Similar to laws related to land expropriation and China's recent history of reform through experimentation, officials exploit the ambiguity within national regulations and prohibitions on local government debt, using local SASAC-owned SOEs as proxies for local state borrowing and investment. Unlike other locally owned SOEs, these enterprises are newly formed and not saddled with debt and insolvent. Infused with land transfers from the local government, LGIVs are able to leverage these assets and allow local banks to lend to entities with better balance sheet positions and the implicit backing of the local state.

The LGIV model thus represents a new vehicle through which the local state shapes the land market. By creating an LGIV and purposing it with borrowing on behalf of the local state, the local government has created a new market mechanism by which land obtains value.

Chapter 5: The Chongqing "Model" of Land Finance

There is no [Chongqing] model, only a continuous deepening and exploration of intelligent-based reform.

Huang Qifan, Mayor of Chongqing, responding to interview question on whether there is a "Chongqing Model" that the country can learn from, during interview with China Economic Weekly (Yan & Xia, 2013).

The primary domain of municipal-level investment vehicles is in public affairs, having the special characteristics of capital accumulation, monopolization, and a low degree of marketization, all of which are the bottleneck in Chongqing's rapid economic development.

Zhou Xiaohua and Zhou Qing (2012, p. 153)

Chapter 2 provided an analytic framework for understanding the sources of economic growth and linkages between China's political economic configurations and the specific features of its growth trajectory. Chapter 3 used the example of land fiscalization and land finance to illustrate the relative importance of land to local governments and, conversely, the behavior of local governments with respect to land and land use rights. Chapter 4 framed the development of a newer iteration of land finance, involving the development of new institutions to leverage the value of land as collateral. In this chapter, land finance assumes a more complicated role as a means to rationalize land use patterns and finance debt restructuring of state enterprises.

The case of Chongqing provides an example of how land and its utility to local governments has evolved in recent years. In recent years, Chongqing has gained headlines, both domestically and internationally, as presenting an alternative "model" of Chinese development. But what does the concept "model" mean as an economic development construct, and how does land figure in Chongqing's trajectory of growth? How do LGIVs actually function and use land in this process in the context of an urban economy? This chapter explores these questions.

The Chongqing case provides a useful prism for understanding LGIVs and the broader evolution in public finance for the following reasons: 1) Chongqing was a late participant in the economic reforms and open door policies that were first initiated along the east coast; 2) Chongqing was a major pre-reform recipient of state largesse through the policies of the Third

Front, particularly investments in heavy industry, and thus provides a useful case study for testing the impacts of these legacy investments on the role of the local state in “catching up”; 3) more recently, Chongqing was selected as the financial center and primary node for the “Develop the West” program initiated in 2000; and 4) Chongqing was an early adopter of the LGIV model, as highlighted by its “Eight Major Investment Companies” (“Badatou”), which more recently (2009) grabbed the attention—and praise—of World Bank officials during an international conference on urban infrastructure investment, many of whom went so far as to suggest the Chongqing experience could serve as a “model” for other cities in China (Liu & Shen, 2011, p. 13).

Returning to the varieties of capitalism literature, despite the ubiquitous appending of the word "model" to the Chongqing experience, what has transpired is part and parcel with the broader Chinese political economy and should not be viewed as a new set of institutional arrangements governing the economy and exchange. Rather, Chongqing bureaucrats have shrewdly borrowed from Central Government-pioneered strategies for using local land assets and holdings to support investment in physical capital. The Chongqing "experience," more aptly termed, reflects tactical choices intended to expedite Chongqing's economic growth in line with Central Government policies targeted the interior, most notably the "Develop the West" policies started under the Jiang-Zhu leadership.

While recent debate over the distinctions between a Chongqing versus Guangdong “model” of development may be exaggerated, there are important differences between these two regions and their usage of LGIVs that deserve considerable attention and examination. These differences may in part be associated with, and help illustrate, political considerations and factional politics and cleavages within the party apparatus.

Before the cashiering of Chongqing Communist Party Secretary Bo Xilai in 2012, Bo and Guangdong party secretary (and former Chongqing party secretary) Wang Yang were both vying for a seat on the powerful Standing Committee of the Politburo, the elite nine-member decision-making body within the central party, which includes the Party Secretary, Premier, and Secretary of the Standing Committee of the National Peoples' Congress. Even prior to Bo's assignment to Chongqing (following tenures as head of the Ministry of Commerce, Governor of Liaoning Province, and Mayor of Dalian), the designs on Chongqing's usage of LGIVs were already in place, introduced by Huang Qifan in 2002 following a similar public financing structure under his direction while assigned to the Shanghai Pudong district in the 1990s. As Huang (2008) has argued, Shanghai—despite its modern cityscapes and global brand retailing—has since the 1990s exhibited a highly statist growth pattern. Under Huang Qifan's management, Chongqing may be following such a trajectory, with an important and lasting role for LGIVs in this process.

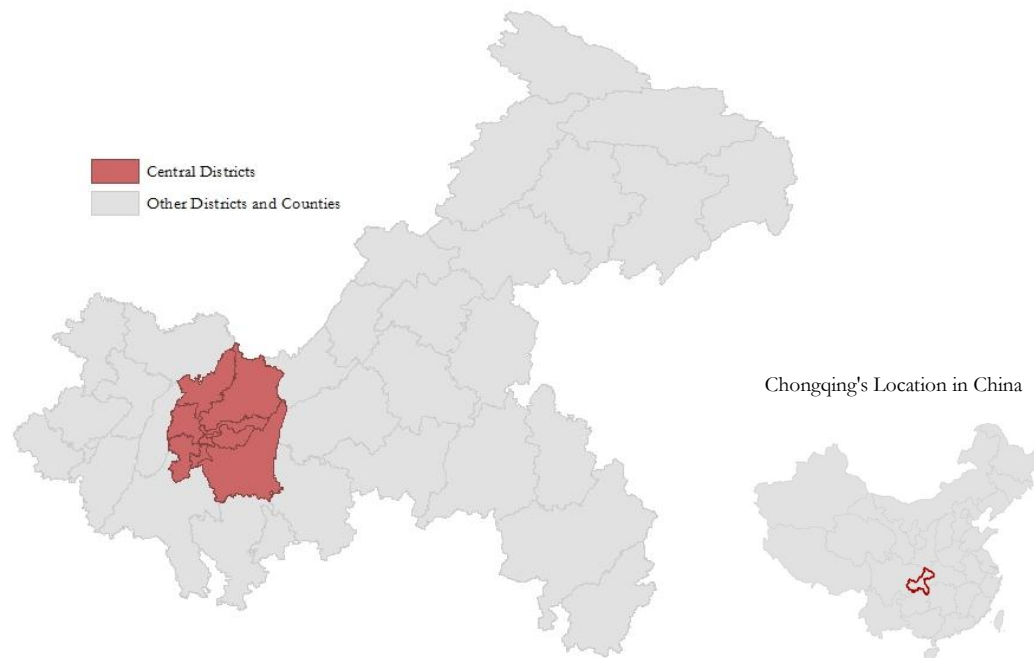
Huang Qifan has outlined how Chongqing's LGIVs have allowed for "five major revenue injections": 1) National debt capital; 2) large-scale user fees, e.g., from road and bridge tolls; 3) land capital infusions, e.g., LGIVs leveraging land as collateral to obtain addition funds; 4) capital accumulation, for instance through the use of government-subsidized construction of major public works assets and subsequent transferring of these assets to related investment companies; and 5) business taxes associated with the investment. According to Huang, the success of Chongqing's LGIV program is due in part to the implementation of the "Three Balances," namely between: 1) assets and debt—the debt-to-assets ratio should be between 50% and 60%; 2) cash flow—every year the investment and interest in borrowing should be balanced with each investment's cash flow; and 3) balance between investment and output, investment and capital sources—no matter if based purely on the market or reliant on government subsidies, all accounts need to be settled. He also emphasizes three areas that must be avoided in the managing

of LGIVs, referred to as the "Three Nos" (*sangebu*, 三个不); government does not provide collateral (investment platforms relying on themselves when entering capital markets), investment vehicles do not provide collateral for each other in order to prevent the linking of debt among platforms, and each investment group's special funds cannot overlap in use, such that central and local government special allocated funds must be only used for their specific intent/project (Huang Q. , 2014).

5.1 Background on Chongqing

Chongqing sits at the western end of the Yangtze River, historically a major grain producing region of China (**Figure 5.1**). During the Second World War, the Nationalist government of Chang Kai-Shek established its war-time provisional capital in Chongqing after being forced inland by Japanese forces. The strategy—to rely on Chongqing's surrounding mountainous terrain as a barrier to invading forces—carried over into the post-1949 Communist government. CCP central planners in the 1960s, fearful of the prospect of a U.S. and later Russian invasion, directed vast amounts of ordnance and heavy industry investments into the interior, including Chongqing, using the west's less-amicable geography as a protective shield—part of a broader policy that became known as the "Third Front."

Figure 5.1 Map of Chongqing (Districts and Counties)



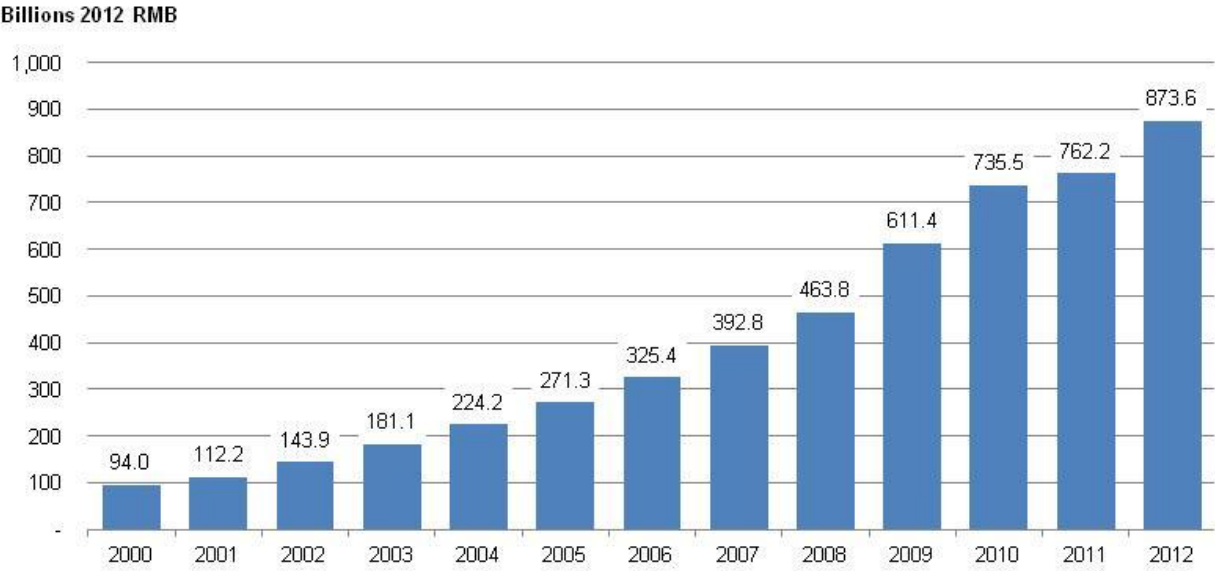
During the reform era, Chongqing lagged behind eastern provinces in economic growth, in large part due to its distance from major trading ports. However, beginning in the late 1990s central policy refocused on developing Chongqing, largely within the broader context of the "Develop the West" program. In 1997 Chongqing was also elevated to a centrally administered municipality, joining Beijing, Shanghai, and Tianjin (but with a much larger territory, the majority of which is rural). Central planners envisioned Chongqing becoming an inland entrepôt for commerce and trade, finance, and science & technology, education, and information, a telecommunications and transportation hub, and base for modern high-tech industry. Chongqing's designation was also part of the much larger initiative of the Three Gorges Dam project, which necessitated significant relocation of rural populations out of the dam site and rising waters and into areas administered by Chongqing.

As a municipality, Chongqing is also a provincial-level administrative unit. In addition to the central city districts, rural areas constitute the majority of land in the municipality.

Chongqing's official population is close to 31 million residents. However, roughly about two thirds live outside city districts across a land mass near the size of Austria (Chan, 2009). In part owing to its legacy as a Third Front industrial center, a large share of Chongqing's economy is heavy industry.

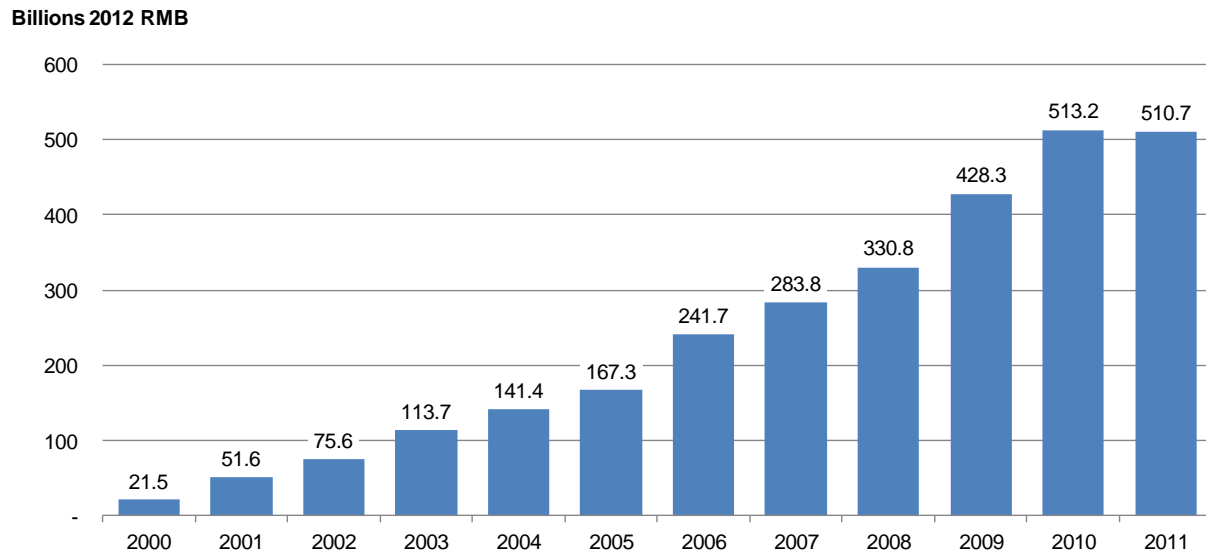
Fixed asset investments in Chongqing, like many regions in China, have grown rapidly. Investments, adjusted for inflation, have increased nearly 26% per year since 2000, reaching 873 billion RMB in 2012 (Figures 5.2 and 5.3). Of this total, state enterprise investments constituted 34.9% by value. The state's share increased sharply between 2008 and 2010, from 29.9% of all fixed asset investment to 36.4% (Figure 5.4); this large uptick in investment suggests the strong role of state enterprises in facilitating the mechanisms of China's stimulus during this period.

Figure 5.2 Fixed Asset Investments in Chongqing, All Areas, 2000-2012 (Based on 2012 RMB)



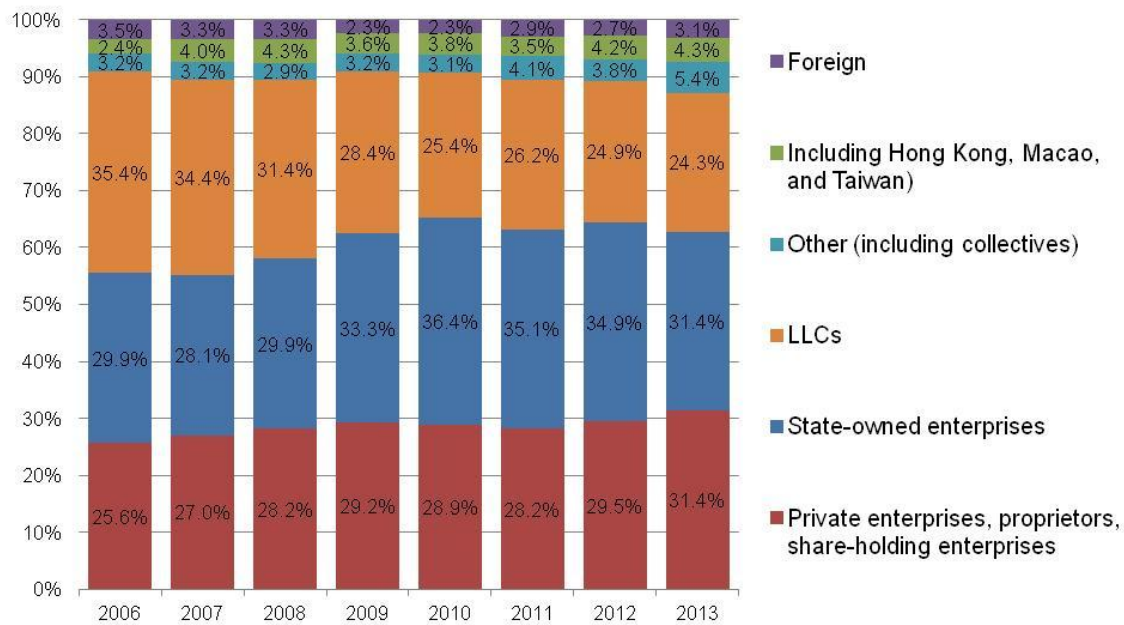
Sources: China Statistical Yearbook, various years; International Monetary Fund (for national implicit price deflators).

Figure 5.3 Fixed Asset Investments within Chongqing City Districts, 2000-2011, Billions 2012 RMB



Sources: China Statistical Yearbook, various years; International Monetary Fund (for implicit price deflators).

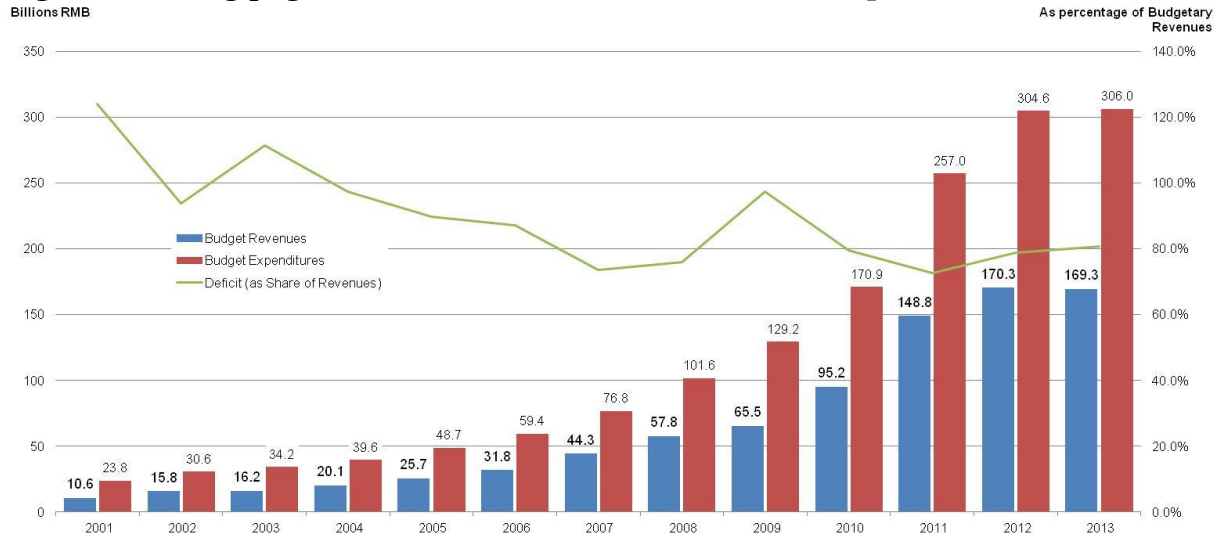
Figure 5.4 Chongqing Fixed Asset Investment by Ownership Category, All Areas



Source: China Statistical Yearbook, various years.

The gap between Chongqing's provincial budgetary revenues and expenditures has remained at or above 74% of total budgetary revenues between 2001 and 2013. In 2001, the ratio of deficit to total revenues was as high as 123% (Figure 5.5).

Figure 5.5 Chongqing Provincial Government Revenues and Expenditures



Source: China Statistical Yearbook, various years; author's calculations.

In 2012, 47% of total local revenues came through budgetary taxes and fees. Of this amount, tax revenues summed to 97 billion RMB, with the largest local tax sources being the Enterprise Tax (36.8 billion RMB, of 10.2% of all revenues), the Business Income Tax (12 billion RMB), and the Value-Added Tax (8.6 billion RMB). The four taxes tied directly to land summed to 19 billion RMB; these included the Property Tax (2.7 billion RMB), the Urban Land Use Tax (3.1 billion RMB), and Land Value Appreciation Tax (7.9 billion RMB), and the Farmland Use Tax (5.3 billion RMB).

Non-tax local revenues, such as administrative and excise fees, were nearly double those of tax-based revenues, summing to more than 17 billion RMB. The largest of these were Administrative Fees (30.1 billion RMB), equal to 8.3% of local government revenues in Chongqing. Revenues from State Asset Management refers in part to the activities of companies

like Yufu Asset Management Company, discussed in more detail below, including revenues generated through debt restructuring activities. More broadly, asset management revenues include all revenues generated by the Chongqing Provincial-level State-owned Assets Supervision and Administration Commission (SASAC), to which Yufu and all other Chongqing government-owned and managed SOEs belong.

Central government transfers constitute not only the largest non-budgetary revenue source, but the single largest revenue source among all types for the Chongqing government, equal to more than a third (35.2%) of all revenues. This is part owes to the provincial-level of the Chongqing government, but also the many relocation projects related to the Three Gorges Dam (**Table 5.1**).

Table 5.1 Chongqing Municipality Budgetary Revenues by Source, 2012

Revenue Source	Revenues (100 million RMB)	Share of Total Revenues
<i>(A) Total Tax-based Revenues</i>		
VAT	86.3	2.4%
Enterprise Tax	368.1	10.2%
Business Income Tax	119.8	3.3%
Individual Income Tax	33.0	0.9%
Resource Tax	8.7	0.2%
Urban Maintenance and Construction Tax	55.6	1.5%
Property Tax	27.4	0.8%
Stamp Tax	14.7	0.4%
Urban Land Use Tax	30.8	0.8%
Land Value Appreciation Tax	79.1	2.2%
Car and Boat Tax	5.2	0.1%
Farmland Use Tax	52.9	1.5%
Contract Tax	85.0	2.3%
Cigarette Tax	3.9	0.1%
Other Tax Revenues	-	0.0%
<i>Subtotal, Tax-based Revenues</i>	<i>970.2</i>	<i>26.8%</i>
<i>(B) Other Local Revenue Sources</i>		
Receipts from Special Items	113.7	3.1%
Administrative Fees	301.1	8.3%
Fines and Forfeitures	29.3	0.8%
Revenues from State Asset Management	125.2	3.5%
Compensation from Use of State Resources (Assets)	113.2	3.1%
Other Sources	50.9	1.4%
<i>Subtotal, Other Local Revenues</i>	<i>733.3</i>	<i>20.2%</i>
Local Revenues = A + B	1,703.5	47%
Other Revenue Sources		
Central Government Transfers	1,276.7	35.2%
Provincial Planned City Revenue Subsidy	-	0.0%
Bond Issuance Revenues Facilitated by the Ministry of Finance	63.0	1.7%
Remitted Central Government Bonds	-	0.0%
Balance from Last Year's Central Government Bond Holdings	0.4	0.0%
Carry-over Balance from Last Year	563.0	15.5%
Budget Stabilization Fund	5.6	0.2%
Capital Injections/Transfers	11.7	0.3%
Financial Assistance Receipts from Other Regions	-	0.0%
<i>Subtotal, Other Local Revenues</i>	<i>1,920.4</i>	<i>53.0%</i>
Total Revenues	3,623.8	100.0%

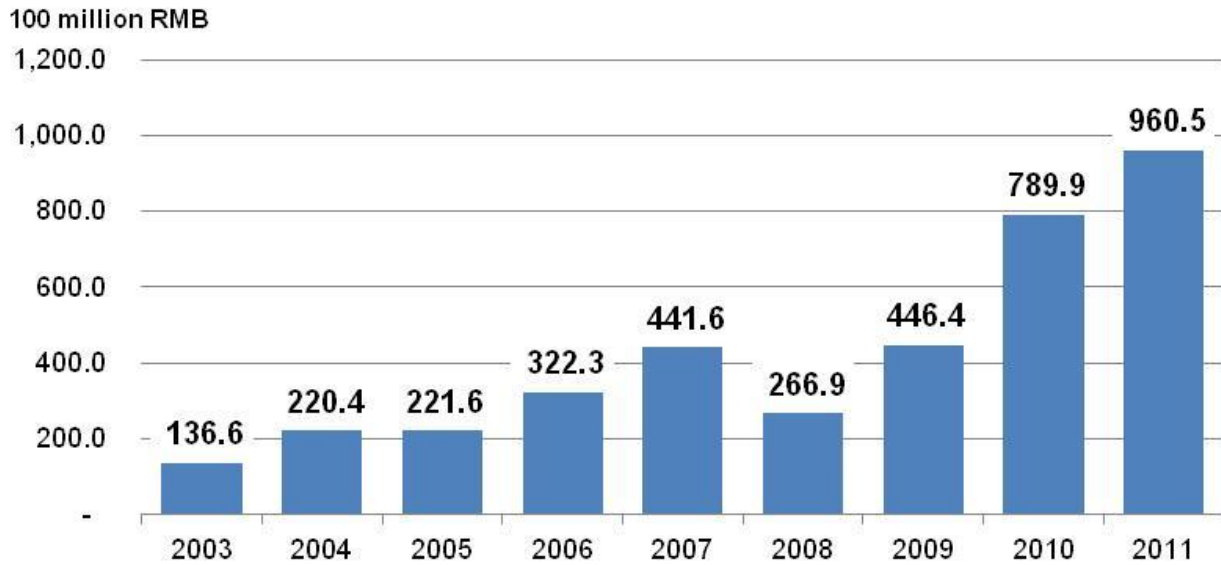
Source: China Statistical Yearbook, various years.

5.2 Land Finance in Chongqing

Land sales have accelerated since 2008. After peaking at nearly 6,100 hectares of land transferred through conveyance within Chongqing city districts in 2007, sales plummeted in 2008, falling to just 2,776 hectares, in part indicative of the decline in demand as exports and industrial activity fell during the beginning of the global financial crisis. Sales increased each year since, exceeding pre-2008 levels with more than 6,500 hectares transferred in 2011. The gross value of these transfers summed to 96 billion RMB, eclipsing 2011 tax revenues of 88.1 billion RMB (**Figure 5.6**).

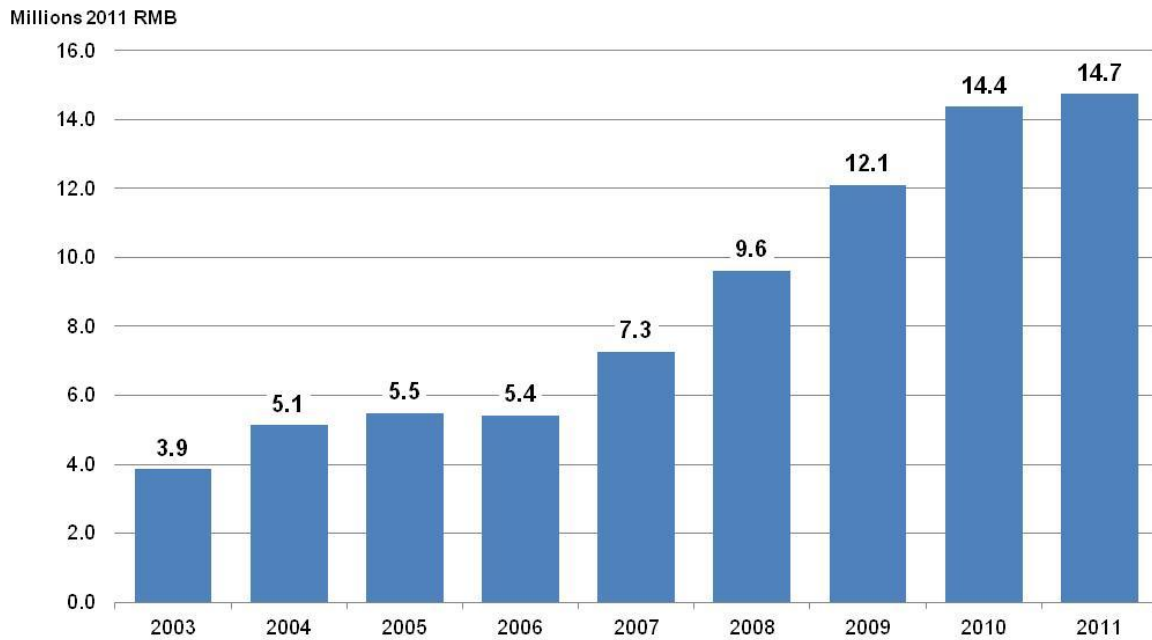
The average price per hectare for land transferred across city districts, adjusted for inflation, reached 14.7 million RMB per hectare in 2011, only a slight increase over 2010 (though substantially higher than 2006; **Figure 5.7**). This average price per hectare puts Chongqing ahead of east coast cities like Shenyang (13.7 million RMB per hectare), Qingdao (14.1 million RMB per hectare), and Ningbo (13.3 million RMB per hectare), but behind Nanjing, Dalian, and Suzhou (Ministry of Land and Resources, various years). Chongqing's land prices increased 16.3% per year (based on a compound annual growth rate) between 2004 and 2011, adjusted for inflation, putting it ahead of many east coast cities and just behind Nanjing and Dalian (*ibid*).

Figure 5.6 Total Land Sales in Chongqing City Districts by Value, all Land Sale Types, Based on 2011 RMB



Source: China Land and Resources Statistical Yearbook, various years.

Figure 5.7 Average Price per Hectare in Chongqing City Districts, all Land Sale Types, Based on 2011 RMB



Source: China Land and Resources Statistical Yearbook, various years.

5.3 LGIVs and Land in Chongqing

Chongqing has been a pioneer and intensive user of local government investment vehicles to advance local state policy initiatives. Land finance in the context of Chongqing involves the commoditizing and collateralization of land assets. Land during the reform era has undergone a gradual commoditizing process, whereby traditional uses are being converted for commercialization and industrialization purposes, the emergence of state and non-state property development interests and concomitant land markets, and the necessary development of institutions and practices that facilitate land asset transfers.

As illustrated in **Chapter 3**, land commoditization has played an important role in filling the vacuum in local state revenues brought on by the budgetary revenue restructuring and tax sharing policies that first went into effect in 1994. However, the Chongqing experience introduces a new, more advanced degree of land commoditization—the allocation and leveraging of land to advance local government infrastructure investments and land use rationalization policies. State enterprises in the urban core have long been the caretakers and rights owners of urban land parcels. This new phase of land finance entails realizing the value of traditionally illiquid land assets and leveraging of these assets by state enterprises to obtain needed cash, either for public investments and/or relocation of existing facilities to comply with local state urbanization policies. At the core of this new iteration of land finance are illiquidity, the need for cash, and non-performing debt. While the state cannot directly intervene through financial markets to support its locally owned enterprises, it can forge new corporations and institutions that can carry out its desired policies and objectives.

Many of the strategies employed by the Chongqing government to advance its policy objectives related to land use rationalization and its support for local enterprises are not new—its

deployment of local government investment vehicles follows models pioneered by the China Development Bank and used in both Tianjin and Shanghai. Similarly, Yufu Asset Management Company ("Yufu") was designed to function much like China's national-level asset management corporations (AMCs), as facilitators of debt restructuring.

5.3.1 Chongqing's LGIVs

Chongqing's use of LGIVs was early and robust relative to other regions in China. Chongqing's "dragon head" enterprises, also referred to as the "Eight Major Investment Enterprises" (*badaton*, 八大投) were established in 2002, well before the broad adoption of the LGIV model across China during the stimulus period of 2009-2010, and modeled on a similar policy effort in Shanghai during Huang Qifan's tenure in the Pudong District in Shanghai. Each LGIV is primarily purposed with a general area of specialization, such as rail infrastructure, highway construction, and real estate development. For example, the Chongqing Expressway Development Company was formed to deal with the construction, operation, and managing of Chongqing's expressways (Table 5.3).

Table 5.3 Chongqing LGIVs and Functions

Name	Function
Chongqing Expressway Development Company	Constructing, operating, and managing expressways.
Chongqing Transportation and Tourism Investment Company	Constructing, operating, and managing highways; developing and managing tourism attraction.
Chongqing Urban Construction Investment Corporation	Urban infrastructure construction, e.g., bridges, tunnels, and roads in primary urbanized districts.
Chongqing Energy (Construction) Investment Corporation	Investing, operating, and managing energy-related power projects.
Chongqing Real Estate Group	Restoring, rehabilitating, and developing lands.
Chongqing Development Investment Corporation	Building and operating rail transportation and other infrastructure projects.
Chongqing Water Works Controlling Group	Providing water supply and drainage integrated service to the main urban area.
Chongqing Water Resources Investment Company	Investing in and constructing water conservancy projects, small hydropower plants, and water supply and drainage projects.

Source: World Bank (2010, p. 29).

Most LGIVs rely on land assets as an important component of their balance sheet. The Chongqing Real Estate Group, by 2011, had amassed 185,000 hectares of use rights, while Chongqing Urban Construction Investment Corporation's land reserve had reached 80,800 across several districts (**Table 5.4**). Yufu Capital Management Corporation, discussed below, acquires much of its land assets through either local government transfers or through a debt restructuring process with a local state-owned enterprise.

Table 5.4 Land Assets held by Yufu and Chongqing LGIVs by end of 2011

LGIV	Land Under Reserve
Yufu Capital Management Corporation Ltd.	By the end of 2011, amassed 34,200 mu of land through SOE bankruptcies, relocation of industrial activities outside the urban core (and rationalizing of urban space; 退二进三), and city government allocations.
Chongqing Real Estate Group	By 2010, 185,500 hectares of land, most of which in support of the company's future performance.
Chongqing Urban Construction Investment Corporation	By 2011, across several districts in Chongqing held 80,800 hectares of land.
Chongqing Expressway Development Company	By the end of 2011, negotiated for 21,200 hectares of land.
Chongqing Urban Transportation Development Investment (Group) Ltd.	By March 2012, amassed a land reserve of 26,733 hectares.
Chongqing Transportation and Tourism Investment Company	By 2011, held 25,140 hectares of land.
Chongqing Energy (Construction) Investment Corporation	None
Chongqing Hydro Power Investment (Group) Ltd.	By the end of 2010 amassed a land reserve of 30,570.9 hectares, which includes land with the highest potential for appreciation.
Chongqing Water Works Capital Management Ltd.	None
Total Land under LGIV Reserve	415,510 hectares

Source: Peng Yuan Credit Rating Company (2013, p. 11).

Land is an asset to resolve issues of illiquidity in China's local political economy. LGIVs have access to corporate borrowing but lack assets, while local governments are beset with the opposite problem. Land functions as both an asset to leverage and/or as compensation to the corporation for funding a local project. Land is treated as a transactional asset for public infrastructure, but within government entities. Huang Qifan describes the role of LGIVs in the Chongqing context as follows:

My view is, where the market signals are insufficient, Chongqing initiates the investment through state enterprises; the formation of "Eight Major Investment Firms" is a necessity. They are absolutely not for achieving a monopoly, nor for dividing and distributing the cake among the private sector, but rather when government must raise debt through investment platforms to do things the private sector is not ready or is not willing to do.

Huang Qifan, Major of Chongqing. Interview with Caijing Magazine (Huang, Zhang, & Bi, 2014)

What makes the Chongqing experience unique is the extent to which land is transacted between traditional state enterprises and capital management firms owned by the City government. Zhou and Zhou (2012) detail at length the role of local investment platforms as a critical feature of the state's support and investment in urban infrastructure. According to the authors, there are several subsequent steps involved in the circuitous movement of capital based on this public financing model, namely: "obtaining sufficient capital through either land allocated by the government of project authorization; using this land or project as collateral to obtain bank loans; using this newly obtained loan for infrastructure projects or construction project; through land value appreciation or returns from these projects, the Chongqing government then selling its equity in these projects or earnings to pay back the bank loan." The primary domain of municipal-level investment vehicles is in public affairs, having the "special characteristics of capital accumulation, monopolization, and a low degree of marketization, all of which are the bottleneck in Chongqing's rapid economic development (Zhou & Zhou, 2012, pp. 152-153)."

Huang Qifan, in an early 2014 interview, argued that Chongqing's "Eight Major Investment Corporations," or "Badatou" (八大投) are a critical sources of infrastructure finance, and represent a mixed form of ownership. Over the past ten years, Chongqing's *badatou* have facilitated investments in infrastructure of more than 600 billion RMB. Examples cited by Huang include: 1) 3,000 kilometers of highway, with an investment of 200 billion RMB; 2) repairing more than 1,000 kilometers of rail line—a national government investment, but matched by local government land expropriation and relocation costs of 30 billion RMB; 3) 10,000 kilometers of highway and other public roadways, with an investment of more than 70 billion RMB; 4) borrowing 100 billion RMB in debt to finance 170 kilometers of mass rail transit lines; 5) 100 billion RMB invested in city-wide agriculture land irrigation, which was financed—in addition to central and local government multi-year appropriations of more than 40 billion RMB—with more than 50 billion RMB in debt to close the financing gap; and 6) investments of more than 100 billion RMB to finance urban street, bridges, and tunnel construction (Huang, Zhang, & Bi, 2014).

Xie (2009, p. 61) delineates six major sources of Chongqing LGIV financing for infrastructure projects. The first of these are loans from the China Development Bank. LGIVs can also borrow from commercially oriented lending institutions, such as from any of the five major banks (Bank of China, Industrial and Commercial Bank, Construction Bank, Commercial Bank, Agriculture Bank), but also from smaller lenders such as Chongqing Commercial Bank. LGIVs have borrowed from international institutions such as the World Bank and Asia Development Bank to fund investments. A fourth means is through bond issuance; while local governments are usually prohibited from selling debt, permitted on only special cases and through the auspices of the Ministry of Finance, LGIVs face no such capital raising constraints. A fifth method is through the transferred of property rights to existing completed projects to trusts

in exchange for funds. Lastly, LGIVs have increasingly participated in built-operate-transfer (BOT) and build-transfer (BT) arrangements. The following sections will review examples of how these operations work in Chongqing.

5.3.2 Chongqing Urban Construction Investment Corporation's "Heaven-facing Gate Bridge" Project (Zhaotian Menqiao, 朝天门桥)

Chongqing Urban Construction Investment Corporation's role and function was redefined by the municipal government in 2002, primarily for bridge and road construction. The company uses both build-operate-transfer (BOT) and build-transfer (BT) models for bridge construction projects. BT models are employed when the bridge cannot self-operate, whereas BOT models apply to instances where the projects do not have to be directly linked hand-in-hand with land, but capital can be raised directly through operation of the completed project (so called "time for space"); developers and financiers are recompensed with rights to operate the completed infrastructure and collect toll revenues, instead of land or other capital or assets (Chu, 2013).

Chongqing Urban Construction Investment Corporation employed the BT model. Prior to the start of construction, the company was able to acquire a reserve of more than 7,000 mu (acres) of land directly adjacent to the bridge construction site. These lands invariably appreciated following completion of the three year-long project, thus serving as a return for the company on the infrastructure investment. Throughout 2004, Chongqing Urban Construction Investment Corporation made total investments of 12 billion RMB on five Yangtze River bridge projects, using both BOT and BT projects (ibid).

5.3.3 Chongqing Real Estate Group's Chongqing University Town Project

Chongqing Real Estate Group was brought on to construct a university town for Chongqing University. The construction plan included investment of about 4 million RMB (Chu, 2013). However, even if all land was liquidated to raise funds, the project would still be short by 2 billion RMB. In order to move forward with the project, Chongqing Real Estate Group used the existing land reserves as collateral to obtain a bank loan, which was then used to fund the construction. In the end, the construction dramatically increased the value of the land, with each acre of land appreciating from 2 million RMB before construction, or when the land was still "raw," to 6 million RMB after the project was completed (Chu, 2013). This "cooked" land was then entered into the municipality's land exchange system (*tudi jiaoyi zhongxin*, 土地交易中心) and its use rights sold via auction, bid, or public tender, with sizable profits for the company (Chu, 2013).

5.3.4 Chongqing Transportation and Tourism Investment Group

The Chongqing Transportation and Tourism Investment Group operates under the management of Transportation Commission. The company's main business model is to profit from land appreciation through road construction projects. For a given investment project, the company will secure a line of bank credit by co-signing with another LGIV and then reaches an agreement with the relevant county government on a bridge or road project. For the road or bridge project the company is undertaking, the county government does not need to directly fund the project; instead, land adjacent to the project is used as compensation and serves as an investment return for the company. After the company receives the land, within a short period it will sell the land through auction, with the land sale revenues used to pay back the bank loan for the construction project.

In 2004, Chongqing Transportation and Tourism Investment Group was brought in to fund the construction of the Jialin River Peidong bridge. In exchange for the ownership of bridge, the district government (Beipei District) transferred to the company 4,000 mu (acres) of land adjacent to the project, which later appreciated 30 to 50% (due in large part of the bridge construction), resulting in a 400 million RMB profit for the company (Chu, 2013).

That same year, the company followed a similar approach in building a bridge over the Yangtze River in Changshou District. Chongqing Transportation and Tourism Investment Group obtained 5,000 mu (acres) of land adjacent to the project site from the district government, which it then used as collateral in applying for a bank loan to fund the project. After the project was complete the bridge was transferred to the district government. The company earned profits of 300 million RMB (ibid).

In each of the above cases, land is being transferring land from the "left hand to the right hand." The strategies of Chongqing's LGIVs concern flexibility and the means to accommodate varying degrees of liquidity (or illiquidity) among various parties in the infrastructure financing system.

5.4 Yufu Capital Management Corporation

The case of Yufu Capital Management Corporation ("Yufu") provides an instructive example of the ways in which the local state intervenes in land markets to protect the viability of state enterprise assets. Founded in 2004, Yufu is primarily purposed with facilitating the restructuring of state enterprise debt; land serves as a critical asset in this process.

Figure 5.8 Yufu Capital Management Corporation's Headquarters in Yubei District, Chongqing



Picture taken by author, November 2014.

According to the company's website, Yufu by early 2014 held 10 billion RMB in registered capital and 80 billion RMB in assets. The company was established in March 2004 by the Chongqing Municipal People's Government as an independently operated asset management corporation. Its primary activities are the "buying, selling, and managing urban government industrial assets, providing investment information, financial advising, enterprise reorganization, advising, and representation, enterprise and asset trusteeship, land reserve buying and selling, and enterprising overhauling." More broadly, Yufu's primary objectives are: 1) consolidating and managing non-performing state assets; 2) through land banking, facilitate financial activities with state-owned enterprises in bankruptcy or relocating due to environmental regulations ("tui'er jinsan"); and 3) investment and engaging in local equity financing and stock ownership (Yufu Capital Management Corporation, Ltd., 2014).

In 2012, Yufu held more than 96 billion RMB in assets, of which 78.56% were current assets (i.e., relatively liquid and can be converted to cash holdings within the year). Total assets by value increased by 20.1 billion RMB in 2012, a 26% year-over-year increase (**Table 5.5**).

Table 5.5 Yufu Capital Management Corporation Total Assets, 2011-2012 (10,000 RMB)

Asset Type	2012		2011	
	Total	Share of Total	Total	Share of Total
<i>Current Assets</i>				
Cash Holdings	1,800,218	18.7%	1,451,947	19.1%
Convertible Financial Assets	600,410	6.3%	557,172	7.3%
Accounts Receivable	236,470	2.5%	122,632	1.6%
Prepayments	411,303	4.3%	55,440	0.7%
Other Payments	354,265	3.7%	327,474	4.3%
Repo Financial Assets	172,933	1.8%	270,030	3.6%
Stock	3,653,147	38.0%	2,773,607	36.5%
Other Convertible Assets	214,214	2.2%	255,632	3.4%
<i>Total Convertible (Current) Assets</i>	<i>7,544,590</i>	<i>78.6%</i>	<i>5,956,569</i>	<i>78.4%</i>
<i>Non-Current Assets</i>				
Available-for-Sale Financial Assets	216,660	2.3%	228,501	3.0%
Long-term Receivables	254,194	2.7%	181,634	2.4%
Long-term Equity Investments	1,322,787	13.8%	998,839	13.2%
<i>Total non-Current Assets</i>	<i>2,059,164</i>	<i>21.4%</i>	<i>1,640,492</i>	<i>21.6%</i>
Total Assets	9,603,754	100.0%	7,597,061	100.0%

Source: Peng Yuan Credit Rating Company (2013, p. 11)

Revenues at Yufu in 2012 totaled 6.4 billion RMB in 2012, a 28% nominal increase over 2011. Importantly, land-derived income constituted the largest (and growing) share of total revenue—in 2012, land conveyance fees totaled 3.4 billion RMB, or approximately 53.8% of total revenues at Yufu (**Table 5.6**). Much of this land was allocated to Yufu by way of municipal government allocations and/or the transferring of land from bankrupt SOEs or state enterprises with inadequate cash flow and liquidity to finance physical capital investments or factor relocations (discussed more below).

Table 5.6 Yufu Capital Management Corporation Revenues (10,000 RMB), 2011-2012

Revenue Source	2012		2011	
	Amount	Share of Total	Amount	Share of Total
(1) Primary Business Activity Revenues	449,499	70.1%	297,678	59.3%
<i>Land Conveyance Fees</i>	341,585	53.3%	233,935	46.6%
Guarantee Business (担保业务)	106,140	16.6%	63,278	12.6%
Contracted Resource Management	896	0.1%	-	-
Retail	878	0.1%	-	-
Non-performing Asset Management	-	-	465	0.1%
(2) Other Businesses	8,580	1.3%	3,687	0.7%
(3) Business Revenues (1+2)	458,078	71.5%	301,366	60.1%
(4) Interest Revenues	84,729	13.2%	81,028	16.2%
(5) Handling Fees and Commissions	98,302	15.3%	119,454	23.8%
Total Revenues (3+4+5)	641,109	100.00%	501,847	100.0%

Source: Peng Yuan Credit Rating Company (2013, p. 6).

By the end of the 2012, Yufu had acquired of total of 42,900 mu (acres) of land in its land reserve. Yufu acquires land primarily through one of three processes, either: 1) land assets from SOE bankruptcies and liquidations; 2) municipal government transfers; or 3) through facilitating the process of "moving industry activities out of the urban core and repurposing land for tertiary uses" (退二进三), discussed further below. Yufu can then use these land assets as collateral for loans, or sell the use rights to pay off existing debt obligations or cash finance new projects. For example, in 2012 the company transferred land use rights for 292 mu (acres) of land outside the city center to the Three Gorges Lacquer Company in two phases worth nearly 2.1 billion RMB (Table 5.7).

Table 5.7 Yufu Capital Management Corporation Land Transfers (10,000 RMB), 2012

Land Site Name	Area (mu)	Land Transfer Price (10,000 RMB)
Three Gorges Lacquer Company Phase I (三峡油漆一期)	165.08	119,773.00
Chongqing Beer & Beverage Factory (重啤饮料厂)	27.2	16,227.00
Thread and Seal Factory (丝印厂地块)	23	11,000.00
Dragon Source (龙源地块)	4.74	
Heavenly Friendship (天友地块)	25.83	13,419.00
Jiaben (嘉本地块)	150	69,000.00
Three Gorges Lacquer Company Phase II (三峡油漆二期)	126.92	86,796.00
Sha District Twin Tablet Special Steel (沙区双碑特钢地块)	7.36	1,967.88
Northern New District Fourth Link (北部新区四联)	20	1,614.40
Total	550.13	319,797.28

Source: Peng Yuan Credit Rating Company (2013, pp. 6-7).

Among Yufu's primary functions is facilitating the relocation of industrial activities outside the urban core and the repurposing of urban parcels for tertiary land use and residential real estate development (Ren, Wang, & Liu, 2005). A common scenario involves Yufu, with large cash holdings, acquiring land outside the urban core and exchanging these holdings with a city-owned SOE located within the urban core. Yufu then repurposes the land for commercial and/or residential real estate use, often with a sizable profit margin. Land is often the asset the insolvent state enterprise must part with through a debt restructuring process, which Yufu is able to add to its land bank and eventually convert to non-industrial use. Yufu's actions thus accomplish three objectives: 1) facilitating the relocation of industrial activities outside the city center; 2) repurposing of urban land for more profitable tertiary and residential uses; and 3) earning a corporate profit for Yufu itself.

5.4.1 How Yufu Functions

Yufu operates as both a land reserve and debt financing institution (Yufu Capital Management Corporation, Ltd., 2014). There are eight departmental functions under Yufu, those being: 1) asset management; 2) real estate management; 3) investment; 4) engineering; 5) finance;

6) consulting and planning; 7) administrative activities; and 8) the internal party apparatus. Stock and asset management activities are carried out by one of six of the following subsidiary companies: 1) Chongqing City State Land Assets Management Company Ltd.³⁰; 2) Chongqing Yuchuang Credit Guarantee Ltd.³¹; 3) Chongqing International Industry Investment Stock (Ltd.) Company³²; 4) Chongqing Yin Hai Leasing Company³³; 5) Chongqing Putian Communication Infrastructure Ltd. Company³⁴; and 6) Chongqing Dongyuan Industrial Development Stock (Ltd.) Company³⁵ (Du, Ran, & Wang, 2008; Yufu Capital Management Corporation, Ltd., 2014).

When Yufu was initially founded, it was capitalized through a combination of direct local government allocations/transfers and bank lending. Roughly 70% of the Chongqing government's transfers were in the form of local state equity in local SOEs and land use rights held within the government's land reserve. The China Development Bank loaned nearly half of all Yufu's debt (47.5%), with another 38.6% of total debt coming from the Chongqing City Commercial Bank (1.4 billion RMB), 300 million RMB from the Chongqing Rural Credit Cooperative, and 210 million RMB from the Chongqing branch of the Construction Bank of China (Du, Ran, & Wang, 2008; Li & Zhang, 2006). Early on in its existence, Yufu was not able to list stock or issue corporate bonds; to raise additional capital, the company exploited reverse merger tactics and securitized its land holdings (Du, Ran, & Wang, 2008).

Yufu participates in land markets primarily through debt restructuring (Zhou X. , 2007). In a typical case, the local branch of the Industrial and Commercial Bank of China (ICBC) will have non-performing loans with SOEs under the administration of the Chongqing SASAC. Yufu

³⁰ *Chongqingshi Guodi Zichan Jingying Guanli Youxian Gongsì*, 重庆市国地资产经营管理有限公司

³¹ *Chongqing Yuchuang Xinyong Danbao Youxian Zeren Gongsì*, 重庆渝创信用担保有限责任公司

³² *Chongqing Guoji Shiyè Tóuzì Gufèn Youxian Gongsì*, 重庆国际实业投资股份有限公司

³³ *Chongqing Yinghai Zupin Youxian Gongsì*, 重庆银海租赁有限公司

³⁴ *Chongqing Putian Tongxin Shebei Youxian Gongsì*, 重庆普天通信设备有限公司

³⁵ *Chongqing Dongyuan Chanye Fazhan Gufèn youxian Gongsì*, 重庆东源产业发展股份有限公司

will negotiate with the ICBC to purchase the bad debt at a deep discount, conditioned on approval by the national leadership to allow, as part of the process, the bad assets be treated as write-offs. Yufu then agrees through a repo contract with the insolvent enterprise in question, at which time the enterprise will buy back the bad debt from Yufu through its land holdings or available remaining cash. Yufu then participates in the land market through its newly acquired land assets (Li & Zhang, 2006).

The origins of Yufu lie in failing state enterprises, non-performing debt, and land rationalization policies (Zhou X. , 2007; Li & Zhang, 2006). In 2004, the local branch of the Industrial and Commercial Bank of China (ICBC) had excessive levels of non-performing loans with local SOEs. After the transition of debt to stock among SOEs in the 1990s, each of Chongqing's SOEs separated from 30 billion RMB in debt, but there was still 27 billion RMB in bad debt held by the banks, of which the Chongqing branch of ICBC held 15.7 billion RMB. Based on the existing practice/convention, this bad debt was auctioned off to asset management companies, and then through the latter entity was further restructured and consolidated through a market clearing process (Zhou X. , 2007).

The initial role for Yufu was to clear bad debt from the banks and balance sheets of local SOEs. In the first phase, Yufu used a 1.7 billion RMB loan from the China Development Bank to purchase 80.1 billion RMB in debt from ICBC. First, China Development Bank evaluated the bad debt, and upon approval loaned the corresponding amount to Yufu to purchase the debt. Yufu then used the loan to buy the bad assets, and transferred the bad assets to the China Development Bank as collateral. The insolvent enterprise repurchased the bad assets (from Yufu) at an (often preferential) rate agreed upon between Yufu and the enterprise; the enterprise then, as a consequence of this, reduced its debts and debt-to-asset ratio. The enterprise was then able

to repurchase the debt from Yufu one of two ways, either: 1) with cash; or 2) the sale of land held by the SOE.

In 2004, the Chongqing Commercial Bank held 10 billion RMB in assets, of which a third were non-performing loans, and with total cash reserves of only 200 million RMB. Yufu was charged with consolidating and restructuring the local bank's debt. In the first phase, Yufu made emergency cash injections into the bank and purchased new stock issued by the bank; these two steps resulted in the bank's cash reserves increasing to 2 billion RMB, of 400 million RMB were loans made by Yufu using funds borrowed from the China Development Bank, with an eight year repayment schedule (with strong fiscal backing from the local government). Next, Yufu purchased 1.25 billion RMB in bad debt from the bank using capital provided by the Chongqing Municipal government; by 2005, Yufu has assets acquired from the bank totaling 2.1 billion RMB, primarily financed by the CDB. Yufu was able to borrow these funds through the leveraging of bad assets acquired in the first phase of this restructuring and its 5,000 hectares of land reserves; the local government pledged to fill the gap through additional capital injections into Yufu if this collateral was still insufficient.

However, the local government's injections were not cash. Of the 1.25 billion in capital allocated to Yufu to facilitate the restructuring, roughly half was in the form of 2,000 hectares of land reserves. Yufu was then able to use as collateral for additional borrowing with the China Development Bank, with remainder in the form of the cash equivalency of 6 years' worth of tax exemptions for the Chongqing Commercial Bank. At the beginning of 2005, Yufu was able to recoup 900 million in bad debt; the remainder (1.2 billion RMB) was depreciated by 25%, through agreement between Yufu and its shareholders and the bank, and 400 million RMB worth of assets sold to strategic investors. The restructuring resulted in Chongqing Commercial Bank emerging as a "top 20" commercial bank for scale and quality of assets, despite no actual change

in lending practices. The Chongqing government essentially provided a bailout for the bank through the functions of Yufu (Zhou X. , 2007).

Land is often the currency of these restructuring tactics. When it was originally formed, Yufu was not explicitly designed to handle/manage land assets. But this changed early on when it negotiated with ICBC to purchase 15.7 billion RMB worth of bad assets at the discount price of 2.17 billion RMB. As part of the restructuring arrangement, Yufu obtained the land previously held by the bankrupt enterprise behind the non-performing assets. Yufu managed and consolidated these land parcels, and through the Chongqing city land and mining rights market exchange was able to publicly auction off these assets to raise capital.

The role of land in Yufu's restructuring tactics was codified and expanded in 2005 when the Chongqing government issues its "Notice on Chongqing Yufu Asset Management Ltd. Corporation Functions of Increasing Land Reserves and Land Consolidation."³⁶ Yufu overnight became one of the largest and most important land reserve entities in Chongqing (Zhou X. , 2007). Its holdings would include: 1) policy-based holdings in support of the city government's industrial restructuring and development plans; and 2) land acquired through SOEs in compliance with the governments "tui'er jinsan" policy (退二进三), as well as from land acquired from bankrupt SOEs and idle lands purchased by Yufu for development purposes.

In acquiring land, Yufu first consolidates the parcels and invests in the necessary upgrading of infrastructure and conversion costs to enable the land to be used for commercial, residential, or industrial use. It then sells off the land use rights to a secondary market developer

³⁶ "A Response Regarding Yufu Capital Management Corporation Ltd.'s Growth in Land Reserves and the Political Functions of Land," (Guanyu Chongqing Yufu Zichan Jingying Guanli Youxian Gongsi Zengjia Tudi Chubei he Tudi Zhengzhi Zhineng de Pifu, 关于重庆渝富资产经营管理有限公司增加土地储备和土地政治职能的批复)

(*erji kaifashang*, 二级开发商) at a market-based rate, through listing, auction, or public tender (招牌挂). The land use fee is paid by the developer to the Municipality Budget Office, which then, after deducting relevant taxes and fees, transfers a share of the conveyance revenues to Yufu. Early on, Yufu needed to self-finance its purchases of land. However, over the past several years it has relied on bank loans and corporate bonds (Wang Z. , 2011).

5.4.2 *The case of Chongqing Steel*

In 2010, Yufu facilitated Chongqing Steel Group's relocation from Dadukou District to Changshou District. Like many other SOEs, Chongqing Steel was compelled by the *tui'er jinsan* policy to relocate from the urban core to the urban fringe as part of a city-wide effort to move noxious, polluting industrial activities out of the urban core, freeing up land in higher population density areas for commercial and real estate uses (and with greater conveyance fee revenues). Chongqing Steel was an obvious target—it accounted for 50% of all particulate emissions with the urban core, and was sitting on land that had significant more profitable use potential once the factory was relocated (Wang Z. , 2011; Huang Q. , 2014).

The relocation would be expensive, entailing construction of a new plant and the removal and transfer of heavy industrial equipment and machinery. Like many other SOEs subject to this policy, Chongqing Steel lacked the cash reserves to finance this relocation, and was already highly indebted. Chongqing mayor Huang Qifan directed Yufu to facilitate the move (Du Y. , 2014). In this case, Yufu did so through the large-scale purchase of Chongqing Steel's land assets within the urban core—an amount totaling 7,837 hectares, purchased with 7.57 billion RMB. Once the land was acquired and Chongqing Steel had the cash resources to relocate, more than 2 billion RMB in additional funds was invested in land remediation to make the land suitable for commercial and residential uses (Wang Z. , 2011; Du Y. , 2014).

Of the nearly 10 billion RMB Yufu invested in acquiring and converting the land, 2 billion RMB was financed through a corporate bond issuance, with the remaining 8 billion RMB financed through bank loans; in February 2011 the corporate bonds for the 2 billion RMB were issued, with Chongqing Steel Group as the guarantor. Although the 2 billion RMB was intended to be extra cushion for the transaction, but by May of 2011 more than 1.8 billion was already spent.

However, Yufu's restructuring tactics rely on the appreciation in land values. While recent history has supported this strategy, changes in the market value of land holdings have raised concerns over Yufu's heavy reliance on these assets and land prices. Prior to Yufu's purchase, market insiders valued the land for which Yufu invested 10 billion RMB in as worth upwards of 20 billion RMB; however, these expectations were unrealistic. Shortly after the transaction was completed, the local land market began to cool, making it more difficult for Yufu to liquidate these land assets. Chongqing real estate development companies had purchased 3.682,200 square meters of real estate in 2010, a year-over-year increase of 11.5%, but prices paid for these land assets totaled only 23.2 billion RMB, representing a year-over-year decline of 18.2%.

In 2010 Yufu was able to sell 909 hectares of land, but this was a 72% decline compared with 2009. Throughout 2012, Yufu and the Dadukou District government were busy marketing the land to developers, and there were rumors the Hong Kong real estate magnate Li Jiacheng's real estate development company was interested in purchasing the land. Yufu's goal for the year was to transact 500 mu of the land acquired in the deal (Wang Z. , 2011; Chu, 2013, p. 72).

The possibility of a softening in the real estate market and heavy reliance of Yufu on land values as part of its restructuring services to SOEs has raised concerns over the near-term viability of Yufu. Corporate management and the Chongqing Municipal government have begun

discussions on how Yufu might transition from an asset management company serving failing SOEs to a financial services operation with broader suite of services (Wang Z. , 2011).

5.4.3 The Case of Chongqing Machinery & Electronics Holding Company Ltd.

Chongqing Machinery & Electronics Holding Company Ltd. ("Chongqing Machinery & Electronics") was established in August 2000 through the merging of several failing local state enterprises. These companies collectively had debt obligations equal to 127% of asset value and annual losses in 2000 of 300 million RMB. After the merger was completed, Chongqing Machinery & Electronics implemented multiple cost-cutting measures, including layoffs, but by 2003 its debt-to-asset ratio was still 110.2% and the company continued to lose money. By 2004 the company had debt obligations of 2.5 billion RMB with the Chongqing branch of the Industrial and Commercial Bank of China (ICBC), of which 15 billion RMB was principal and 10 billion interest payments (Ren, Wang, & Liu, 2005).

Shortly after its formation, Yufu was brought in to help restructure the company's debt. In the first phase, Yufu used 557 million RMB to buy a share of the company's obligations to ICBC. Chongqing Machinery & Electronics, like many large SOEs located with urban areas, was land rich but cash poor and with no immediate means to liquidate its land holdings to pay back debt. Even by the company's own estimates, its urban land holdings were worth at least 2 million RMB per hectare at the time, with total holdings worth more than 2 billion RMB (ibid).

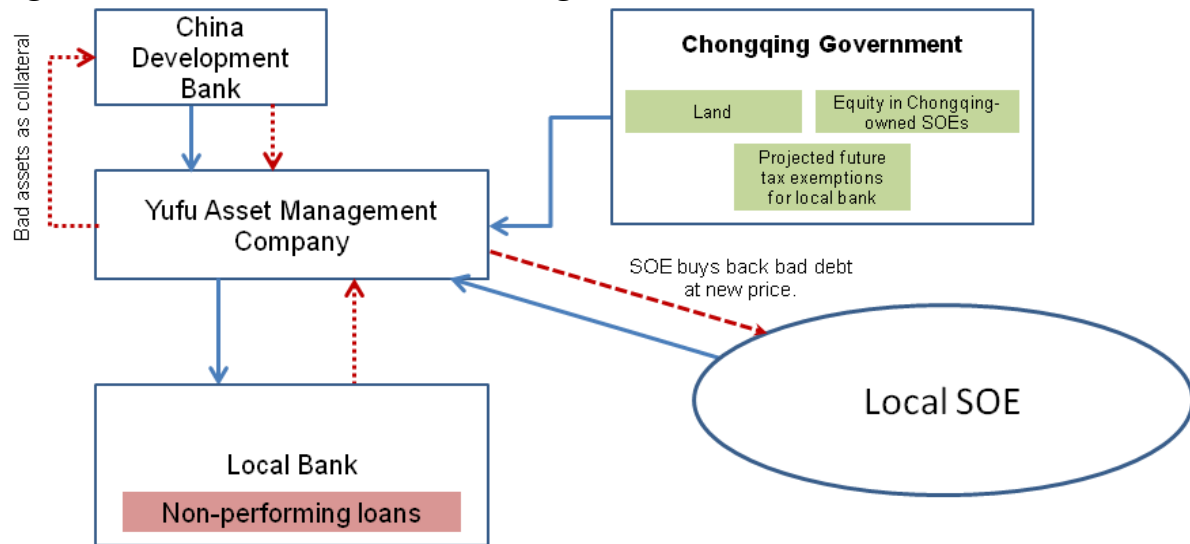
As part of the debt restructuring, the company agreed to participate in a relocation program (the "tui'er jinsan" initiative) and to sell its land holdings to Yufu as a means to help finance its obligations and relocation. By purchasing the land holdings within the urban core, Yufu was then able convert the land for more profitable uses and sell its use rights to commercial interests at an elevated price level. As a result of the restructuring, the debt-to-asset ratio for

Chongqing Machinery & Electronics declined by 14.2%; the company also experienced a 200 million RMB profit by the end of 2004—the first profits earned by the company since its formation in 2000 (Ren, Wang, & Liu, 2005).

Yufu's role in this instance was a facilitator between the China Development Bank as the primary lender of cash and the local bank saddled with bad debts and the SOE itself. The Chongqing government, in addition to its involvement through ownership of Yufu as administratively subordinate to the municipal-level SASAC, capitalized Yufu with non-cash assets—equity in other Chongqing SASAC-controlled SOEs, projected future tax exemptions, and land assets—that served as collateral allowing Yufu to back its loan from the CDB. Moreover, once the assets were purchased from the local branch of the ICBC, these same assets—the assets Yufu originally needed borrow cash from in order to acquire from the ICBC—were then deposited as further collateral with the CDB (**Figure 5.9**).

The circuitous cycling of bad assets is akin to national policies implemented in the early 2000s to move bad assets off the balance sheets from the four major commercial banks in order to improve the balance sheet performance and be better positioned for to raise capital through IPOs. Yet also similar to these national policies, the bad debt never quite goes away, and in fact systemic risks become socialized rather than isolated. In this case, the CDB is lending funds for the purchase of bad debt that will ultimately be used as collateral to buy additional bad debt. The analogue in a national context is the curious case of the newly formed Asset Management Companies—tasked with buying non-performing loans from the major banks—raising capital through the sale of bonds to those same very banks they will then use these funds to buy bad assets from; the banks never quite separate themselves from the bad debt, since the bonds they now possess are exposed to these same bad assets.

Figure 5.9 Yufu's SOE Debt Restructuring Process



5.5 Comparisons with the Land Rationalization in Guangdong

With the increasing attention given to Chongqing—well before the downfall of Bo Xilai in 2012—commentators have begun drawing comparisons with a "Guangdong Model" (The Economist, 2011). The two growth experiences have some noteworthy differences (the greater role for foreign capital and earlier start to reforms and open door policies in Guangdong, for example) and similarities (the stewardship of both regions by Wang Yang, first in Chongqing and later in Guangdong as party secretary). How does land policy differ and/or show similarities between these two regions?

The role of local government investment vehicles expanded beginning during the early period of the global financial crises of 2008-2009. Guangzhou, for example, established seven such LGIVs to facilitate capital project investments as part of the national economic stimulus program, under the authority of the local government's "Notification on Urban Construction Investment System Reform Program" (Document 39). The new LGIVs were tasked, similar to Chongqing, with specific physical capital portfolios for urban construction, water affairs, transportation, railways, waste management, gas, and projects related to the upcoming (2010) Asian Games to be held in Guangzhou. From the start, these new SOEs ran into problems. For

example, the Guangdong Sun Group (广日集团) was burning waste instead of properly managing and disposing of it. According to a 2012 audit, the SOE had net losses of 386 million RMB. This followed annual losses in 2011 of 407 million RMB, 347 million RMB in 2010, and 179 million RMB in 2009.

Guangzhou Water Investment Group (水投集团) has been under significant financial and budgetary pressure. Based on a report issued as part of the first quarter 2013 medium-term note issuance, the company has seen a significant increase in its debt-to-asset ratio following several major capital investment projects and no concomitant revenues from existing projects; by the end of the first quarter of 2013, the company's cumulative debt obligations reached 35.754 billion RMB (Nandushi Bao, 2014). The Transportation Investment Group (*Jiaotou Jituan*, 交投集团) has lost money for three straight years, with 2012 losses totaling 840 million RMB. In another case, the Urban Investment Corporation (*Chengtou Gongsi*, 城投公司), a subsidiary of the Guangzhou Municipal Urban Construction Investment Group Ltd. (*Guangzhoushi Chengshi Jianshe Touzi Jituan Youxian Gongsi*, 广州市城市建设投资集团有限公司), had its bond rating downgraded from AA+ to AA by Lianhe Credit Rating in 2013, based on meager and declining profitability (ibid).

These and other issues raised serious questions about the powers granted to LGIVs and details of Document 39 (notification authorizing their formation). The local government agreed in 2014, under pressure, to provide further clarifications and, even more importantly, to begin a transitioning the seven SOEs from stimulus-focused corporate entities to regular SOEs, relinquishing their designated infrastructure organs to the local government (Nandushi Bao,

2014).³⁷ Since 2013, new officials have not been permitted to serve as either heads (or deputies) of government offices and run/manage an LGIV. For example, during the Asian Games in Guangzhou, the two largest LGIVs for raising capital on behalf of the local government were the Urban Investment Group and Water Infrastructure Corporation. Prior to 2013, the deputy director of the Guangzhou City Construction Committee, Tao Zhenguang, simultaneously served as chairman of the Urban Construction Group. However, after the Games, Tao resigned from his role with the UIG while remaining with the City Construction Committee. The next chair of the UIG, Zhu Zhigang, was not able to serve on the citywide committee. Similarly, the chair of the Water Investment Corporation, Luo Ning'an, stepped down from his simultaneous role as Vice Director for the City Department of Water Management. However, these reforms do not imply that either: 1) these newly transitioned SOEs cannot raise debt from banks. Rather, they will simply not be backed by the local government; and 2) local governments can continue to raise debt through other means (ibid).

Not long after new measures were put in place separating the LGIVs from direct government control, the local government began using insurance companies to finance infrastructure, securing the gap created by the LGIV policy. For example, three insurance companies signed an agreement in 2013 with the Guangzhou government to lend more than 40 billion RMB insurance capital earmarked for basic infrastructure and urban construction projects (Nandushi Bao, 2014). These three insurance companies now function as a new source of city government capital, in addition to bank loans and bond issuances.

³⁷ "Guangdong Province Notice on the Trial Case for Strengthening the Management Work of Local Government Finance Platforms," *Guangdongsheng Jiaqiang Difang Zhengfu Rongzi Pingtai Gongsi Guanli Gongzuo Shishi Fang'an de Tongzhi*, "广东省加强地方政府融资平台公司管理工作实施方案的通知."

Guangzhou Industry Fund (广州产业基金) established in 2013 under the guidance of Deputy Mayor Ouyang Weming—who had earlier been involved in the finance industry—as a government industry investment platform. The fund was formed with registered capital of 100 million RMB and purposed with the "promotion regional economic transformation, strategically guiding industrial development, and elevation of industry transformation." During the 2013 ceremony establishing the fund, Guangzhou Party Secretary Wan Qingliang³⁸ and Mayor Chen Jianhua jointly unveiled the new fund (Nandushi Bao, 2014).

One departure from previous LGIV financing is that, instead of bank borrowing, the fund's financed were based on equity investment, therefore relieving the city government of the need to annual make payments on principal and interest; the insurance companies have a claim on projected revenue generated by the investment after completion, with the Guangzhou City Government's creditworthiness serving as collateral.

The most comparable land use policy to the "tui'er jinsan" (退二进三) initiative in Chongqing is the "sanjiu" (三旧) policy in Guangdong. The "olds" refer to "old towns, old villages, and old factories." As part of the policy, the local state has committed to gradually relinquishing monopoly rights to land, and allows for the development and/or redevelopment to be done by the land owners or with other parties. At its root, the sanjiu policy represents a similar effort to rationalize land use, though the implications extend to stakeholders beyond SOEs—many "villages in the city" are directly impacted (Wan & Cheng, 2012).

³⁸ Currently under investigation for corruption.

5.6 Discussion: A "Model" or a Response?

The city itself is a national asset worth money, and in fact money can be made by using these urban national assets. (城市本身是国有资产，是值钱的，而且可以通过经营城市这份国有资产来挣钱.)

Bo Xilai (2003), at the time Mayor of Dalian, Liaoning Province

The recent emergence of Chongqing as a new source of economic development in the West has given rise to what some scholars both inside China and abroad have termed the "Chongqing Model" (Huang P. C., 2011; Xie, 2009). Scholars have identified two major illustrative examples of the Chongqing experience that make it unique from other municipalities in China: 1) land reform, including a highly publicized hukou reform and the enacting of a "land ticket system" (*dipiao zhidu*, 地票制度); and 2) the leveraging of public assets to broaden the funding sources for infrastructure investments, most notably the extensive use of local government investment vehicles discussed above. Authors cite the experimentalism employed in Chongqing as a major source for these divergent practices with the national growth model. But are these really emblematic of a new paradigm of economic development—one inclusive of new institutional arrangements and rules governing the market—or is Chongqing simply responding to its own existential conditions, borrowing from existing tactics employed elsewhere in China, and behaving in ways shaped by a path dependency linking geographic and historical conditions? Or, framed differently, have the "rules of the economic development game" really changed? This chapter has examined the extent to which the Chongqing experience represents institutional change and break with the broader Chinese political economy and questions the degree to which institutions innovate and are spawned anew versus the piecemeal selection and implementation of "off the shelf" tactics that best serve the needs of Chongqing's existential economic conditions and challenges, born of geography and history.

To discern the extent to which Chongqing's growth evidences a unique model, the term model itself first needs to be scrutinized. In this analysis, economic models represent a

configuration of variables in an economy that incentivize certain forms of behavior and resultant economic outcomes. Models are commonly a function of socioeconomic norms and rules, such as those imposed through an authoritarian state guided by ideology, social and historical precedents that value and embrace markets and price signals as the primary means of allocation of labor, inputs, goods, and services, socialist and statist economies that feature state ownership of the means of production, and many hybrid mixtures in between.

Models represent new institutional arrangements. Institutional flexibility occurs when actors within a bounded economy under a set of associated parameters behave according to these constraints, though behaviors will vary based on the weighted set of factors shaping existential conditions. For example, the East Asian Developmental Model so widely studied exhibits characteristics of a model—the political economy of Japan during the post-war era involved policies that forced down the level of consumption and, the obverse, forced up the level of domestic savings. Other research has compared varieties of capital, again pointing to strong institutional foundations, some dating back before the Second World War, that have given rise to unique domains of price setting for labor and the educational provision. Importantly, in all such models, configurations reflect state-society relations and how state policies affect the price of labor, capital, and goods and services for final demand.

In China, capital is cheap for state enterprises—a phenomenon near universal across the country. Chongqing has exploited tactics pioneered elsewhere (e.g., Shanghai, Tianjin) to maximize its exploitation of cheap capital, cheap land, and strong demand for real estate under a constrained budgetary environment. Models ultimately describe how prices are set and which segment of society has greater access to desired goods and factor inputs. Chongqing has very little means to set prices. But what Chongqing can do is tactfully operate in China's broader political economy—and hence China's growth model—to its own advantages by maximizing its

exploitation of inexpensive resources, those being land and capital, for a segment of society—state enterprises. Its goals are to rationalize urban land while maintaining a strong role for the state in the economy.

Institutional innovation in the Chongqing case is more aptly compared with the French and German institutional innovations in the nineteenth century elucidated by Gerschenkron (1962). In neither case, however, I argue that Chongqing represent a geographically unique set of institutional relationships that shape market and economic outcomes thereby deserving of the moniker of "model." Chongqing represents a local government response to fiscal constraints and the long tradition of central state-sanctified local experimentation.

Observed Characteristics in Chongqing and Arguments for a "Model"

Much of the discourse on a Chongqing "model" coalesces around one of two lines of observation and reasoning. The first is the investment-heavy nature of Chongqing's growth compared with other parts of China. Qu (2012) highlights the heavy reliance on fixed assets, even for within China, as a characteristic feature of Chongqing's recent growth, equal to more than 8% of Chongqing's budget in 2011 (compared with less than 5% nationally and about 2% in Guangdong). Compared with Guangdong, trade occupies a much smaller share of GDP. In Guangdong, there is a much larger role of small and medium-sized firms and joint-stock firms, compared with the resilience of large state enterprises in Chongqing; despite a recent decline, state enterprises still contribute approximately 40% of total industrial output in Chongqing, 10 years behind GD. In Chongqing, the state remains heavily engaged in the regional economy: "There is a very evident and clear difference between the economic composition and growth drivers in Chongqing and Guangdong Province. Chongqing's economic growth is primarily through the support of the government, whereas in Guangdong, market mechanisms play an

important role in economic growth" (Qu, 2012, p. 2). You (2012) characterizes the Chongqing "model" as the "three highs" of: 1) high land finance revenues; 2) high fixed asset investments; and 3) high budget deficits.

Xie (2009) lauds the "Chongqing Model" as a new form of urban infrastructure financing. The author delineates four important aspects to the model, those being: 1) local government construction investment enterprises that operate with corporatism, conglomeration, specialization, and scale in making infrastructure investments; 2) in a break with traditional financing models that relied on budgetary allocations, the Chongqing Model exploited five new, marketization-based sources of capital injection into projects; 3) again, breaking with the traditional system, investment, construction, and management functions for a infrastructure projects are separated and not under the single control of the local government; and 4) from the perspective of risk, Chongqing Model is based on the preventative system, characterized by the "Three Prohibited Guarantees" (三个不担保) and the "Three Balances." The former concept refers to prohibitions against local government guarantees on LGIV debt, LGIV lending amongst themselves, and the movement of funds between LGIVs to influence balance sheets for borrowing purposes. The "Three Balances" refer to requirements that LGIVs in Chongqing maintain a minimum 50% capital-debt ratio, a sustainable balance between inflow of investment capital and output returns, and balanced cash flow (Xie, 2009, pp. 60-61; Huang Q. , 2014).

According to Xie (2009), the most important differences between the Chongqing experience and more common urban models for urban infrastructure relate to the sources of capital and investment process; **Table 5.8** below helps delineate these differences. Financing infrastructure has been a significant challenge for many local governments throughout the reform era. The Chongqing "Model" and deployment of its "Ba Da Tou," plus the intermediating role of

Yufu Capital Asset Management Corporation, represents one local government strategy for addresses the above discussed liquidity challenges and drive to rationalize urban land. But again, as discussed earlier in this chapter, infrastructure financing in Chongqing in recent years reflects the adoption of pre-existing options availed to local bureaucrats (and encouraged) by the Central Government.

Table 5.8 Comparison of Traditional Reform-Era Model and Chongqing Model for Infrastructure Investment

	Traditional Model	Modern Model
Finance	Funds directly allocated and distributed from the budget.	Capital injected into conglomerates.
	Capital injections are only dependent on budgetary allocations.	Five major means to inject capital.
	Financing is difficult due to very limited funds.	Project financing more grounded in a market-based process.
	Financing requires government budgetary guarantees.	Means of financing are much broader and diverse.
Investment	Only one investing entity.	Multiple financing entities.
	Investment, construction, management, and use all under one entity (多位一体)	Investment, construction, management, and use functions separated.
	Temporary conglomerates, with very little specialization.	A construction agent bidding system.

Source: Xie (2009).

Other scholars, notably Huang (2012) and Cui (2011), see Chongqing's more recent growth as illustrative of a new configuration of state institutions and the relationship between the state and society. Cui Zhiyuan, a leading scholar in China and prominent thought leader for many of the policies implemented in Chongqing, has described Chongqing's undertakings as representative of a "model." According to Cui (2011), what differentiates a Chongqing "Model" from China's broader growth trajectory are: 1) the leveraging of public assets as sources of revenue in lieu of more burdensome taxes levied on private businesses; and 2) policies that help realize the intrinsic value of land and more fairly distribute the economic rents associated with these plots. Regarding the latter of these two, the land ticket system introduced in 2007 is in part intended to both preserve land quotas while ensuring a share of the developable value of land

accrues to rural households when land is consolidated and/or reconverted from non-agricultural (e.g., dwelling or rural factory) to agricultural use.

Huang (2011) goes further than Cui in elucidating a new political economy unique to Chongqing. According to Huang, the Chongqing experience is characterized by use of government assets—primarily state enterprises and LGIVs—to effectively allocate resources to achieve public policy and social equity outcomes, representing a new paradigm in state economic guidance and control, or what Huang refers to as a "Third Hand." According to Huang, the Chongqing experience shows "that such government firms can operate by market signals and forces but be directed toward public benefit rather than private gain" (2011, p. 571). Huang cites Chongqing's tactful use of LGIVs—or "dragon head" enterprises (龙头企业)—as illustrative of this new developmental paradigm, one that contrasts with the more widespread pattern of historic misallocations of resources under a planned economy. Chongqing—and China, by extension—has found a way to retain state ownership of property rights while responding to market signals and break the rigidities of a planned economy.

Huang attempts to develop a new theoretical explanatory model of economic growth that resists the dichotomous framework of state versus market. Chongqing, according to Huang, presents an intermediary alternative model that involves a deliberate, pro-active state participating in a regulated market and redistributing profits for a public good through a state enterprise. The Chongqing model thus draws on the profits of state enterprises to fund social development and the many social initiatives and programs during the Huang Qifan and (recently deposed) Bo Xilai leadership. As Huang explains (2012, pp. 621-622),

The Chongqing experiment is based on a simple enough idea. The market appreciation in the value of assets brought by urbanization, especially of urban development land, should not devolve only to the private developers and the local government (namely, local officials' pockets, or their advancement up the official ladder, or the government for its showcase buildings and offices and such) but rather should be used for the public good ("people's livelihood"): such as providing inexpensive public rental housing for 30 percent of

the urban population, extending urban-resident benefits to migrant workers, and allowing peasants to capitalize on (i.e., use as security for bank loans) their land rights.

Huang's argument hinges on an important assumption undergirding his conclusions about the Chongqing experience—that the local state is behaving in a deliberate, proactive fashion. Rather, as has been argued throughout this dissertation, local states behave within a cauldron of externally imposed constraints on available policy actions. Seldom do local bureaucrats innovate in ways that do not reflect the incentives as presented before them, namely those imposed by way of performance measures. To suggest in Chongqing's case that local bureaucrats, even those as skilled as Huang Qifan—Chongqing's crafty Deputy Mayor with extensive experience deploying and managing a similar LGIV-centered growth model in Shanghai—institutions and incentives matter importantly. Chongqing's reliance on LGIVs reflect fiscal and economic realities that cannot be divorced from the broader institutional constraints of China's bureaucracy and central-local relations. However, while "model" may be excessive in describing the Chongqing experience, "fiscal-economic behaviors" of Chongqing's political economy can be further unpacked.

Szelenyi (2012) challenges Huang's description of the Chongqing model as a new, lasting model of state intervention and market "integration" of public and private sector ownership. According to Szelenyi, Chongqing's SOEs reap profits primarily through rents bequeathed from the local state in the form of reduced red tape and other cost-reducing measures; rents are thus the monetary equivalent of profits lost by the private sector through these state-endowed advantages for SOEs. I would add to these the allocation of land, since these transfers help to reduce SOE borrowing costs and/or costs of expansion.

During the Maoist era, China's mode of economic growth was grounded in a system of state-imposed under-consumption while maximizing investment in productive activities, largely

following the Stalinist model of investment in urban-based state-owned manufacturing activities. Scarce resources were allocated to those deemed "particularly important for the political stability and economic growth of the system (high cadres)." There was no welfare system, per se, and the absence of institutions purposed with extracting revenues through taxation and redistribution for welfare programs become more acute and exposed during the reform era. The Chongqing model lauded by Huang, through the use of SOE rents to fund social programs, is not a durable economic model, but an interim response to the growing role of the market as a redistributing mechanism for wealth and factors of production. Szelenyi describes the model (along with local state corporatism) as merely a temporary, transitory solution "to the devastation the absence of a welfare system caused during the phase when the market was becoming the dominant mechanism" (Szelenyi, 2012, p. 661).

Lim (2014) provides an alternative perspective, raising the gross spatially uneven distribution of wealth and development as a primary factor in the emergence of a set of policies and programs unique to the Chongqing experience. According to Lim,

The 'Chongqing experience' is thus more accurately an expression of and a potential solution to the underlying socio-economic tensions associated with the Communist Party of China's (CPC's) seemingly contradictory approach to 'liberalizing' the Chinese economy on the back of institutionalized uneven spatial development (Lim, 2014, p. 457).

Socio-economic reforms in Chongqing are re-conceptualized as efforts to counter or ease tensions brought on through institutionalized uneven development that has left Chongqing and much of the interior and west significantly behind the more affluent coastal provinces. Lim invokes Polanyi's metaphor of the "double-movement," suggesting that Chongqing's policies represent a response to social tension arising from these social inequities. Lim's position on the Chongqing model conflicts with Szelenyi's (2012, p. 661) with respect to the motivations behind recent social welfare policies. While both authors see these initiatives as in part responsive to

years of gross economic and social dislocations, Szelenyi views efforts as temporary and fleeting, whereas Lim argues a new paradigm shift in state-society relations may be unfolding.

I differ in this approach in that I argue the Chongqing urban government's behavior with respect to land is: 1) path dependent, leveraging state control of key assets and factor inputs to elevate growth in line with central government mandating targets; and 2) capital accumulating at the local state level, evidenced by the state's use of LGIVs to exploit economic surplus as well as avoid potential losses from failing local state enterprises

This chapter began with an effort to delineate between model and tactic; while the latter is commonly used to describe Chongqing's policies in recent years, the Chongqing experience should be better understood as a set of policy choices and tactics in response to historical endowments, land assets and the extent of geographical constraints, and the set of policy options availed to bureaucrats in pursuance of Central Government development agendas.

The evolution of land markets and land finance within Chongqing helps illustrate these tactical behaviors. Starting in the early 2000s, Chongqing began deploying its newly created Eight Major Investment Companies ("*Badatou*," 八大投), capitalized with land holdings from the Municipality's land reserve, to make investments in needed infrastructure in the region, much of this as part of the Central Government's larger program of relocating rural families within the Three Gorges Dam zone.

The case of Yufu Capital Management Corporation helps illustrate the evolution and leveraging of land as a fiscal asset, or what has been referred to above as the second phase of land finance in urban China. Underutilized land holdings held by state enterprises under the Chongqing State-owned Assets Supervision and Administration Commission (SASAC) were transferred to a newly created local state asset management corporation, Yufu Capital

Management Corporation ("Yufu"), as part of a debt restructuring process. The state was able to convert these holdings within the urban core from industrial use to commercial use. Through a complex series of transactions, the local state through Yufu was able to simultaneously achieve three inter-related policy objectives: 1) rescuing insolvent local SOEs; 2) the relocating of dirty, polluting SOEs from the urban core to the outskirts, thereby increasing the efficiency of land use; and 3) through the new commercial value of urban land, engineering a margin on the conveyance sale that directly supported Yufu's further restructuring programs, SASAC, and Municipal revenues.

Varieties of capital literature, while perhaps over-prescribing the taxonomy by which markets obtain and persist as functioning sets of institutions, nonetheless help provoke substantive discussion on the disparate and heterodox development of markets and economic systems of exchange and allocation. Polanyi's work has helped bring to bear the importance of societal embeddedness of historical legacies, institutions, and the class divisions in the development of market institutions. In recent years, sinologists within the economic geography field have embraced the varieties of capital literature as initial—yet incomplete and non-exhaustive—framework for understanding economic heterodoxy while scrutinizing its application to China, both as a monolithic economic model in contrast or in similarity with the East Asian Developmental Model, and across multiple sub-national geographies and scales within China itself. Regarding the former comparison, fitting the Chinese political economy within the taxonomic framework articulated in the varieties of capitalism literature obscures key elements of the Chinese model not represented within a highly European and Japanese-centric construction; "[China's] trajectory can hardly be reduced to a (mere) variant of those exhibited, for example, by Japan, Singapore or South Korea...[it is not] the quantitative 'weight' of the state, but its qualitative form, role and posture" (Peck & Zhang, 2013, p. 374).

Despite the irregularity of the Chinese trajectory of development over the reform period—one swaying from statist, to moderate liberalizing of markets and *de facto* acquiescence to non-state actors, and back again to statist guardianism and retrenchment and the leveraging of markets to achieve state aims—does a multi-scalar ontology obtain across sub-regions within China? Scholars, pursuant of efforts to scrutinize the ontological simplicity of the varieties of capital framework, have perhaps overly committed to the concept of "model" in the attribution of divergent patterns of economic growth.

This chapter has explored the notion of "model" as distinguished from "tactics" through the prism of land. I argue that the local government behavior with respect to land resources will vary in accordance with several factors, ranging from pre-existing exogenous resource endowment—such as land supply and central government development policy—to the development of land markets. The rationalization of urban land, interpreted as the repurposing of land resources from lower to higher value uses within the urban core, and thus responding to high opportunity costs borne by the use of this urban core land for industrial activities, has created the policy framework and impetus for local governments to restructure debt and reap margins from land assets. In other words, local state planning policies such as Chongqing's "*tui'er jinsan*" and Guangzhou's "Three Olds" have acutely exploited underlying illiquidity and insolvency problems faced by poorly performing state enterprises. These industrial interests sit on valuable parcels of land that can be repurposed for higher return residential or commercial uses, but do not have the necessary cash resources on hand nor credit to finance these expensive relocations. While the state sees greater concentration of higher value land uses within the urban core, the debt restructuring agent—in the case of Chongqing, Yufu Asset Management Corporation—is able to both serve the needs of the local state and earn a profit by way of acquiring previously industrially held land. While local state enterprises, either industrial or financial in nature, such as

Yufu, are ultimately owned by the local state through the Chongqing State Assets Supervision and Administration Commission, their interests are also further aligned by the cooperative nature of these land asset-enabling debt restructurings.

Chapter 6: Conclusion

There is wide variation in the extent and role of markets across an economy, even among nations commonly understood to be capitalist systems (Hall & Soskice, 2001). What facilitates and nurtures the development of markets as the primary space for the allocation of goods and services in an economy? A large and lively corpus of academic literature has probed the importance of institutional change and the relative economic position of an economy vis-à-vis its nearest peers in the performance and growth of markets, and the role the state assumes in supporting market development. Most famously, Gerschenkron (1962) pointed to economic backwardness as a key explanation for divergent industrial policies, observing the administrative scale of these policies between France, Russia, and Great Britain in the nineteenth century. It was the impetus to "catch up" that shaped national policies and efforts to channel factor inputs, particularly capital, to industrial users.

This dissertation does not try to answer the more sweeping question of whether or not China has emerged as a capitalist economy. In fact, such a question assumes a grandiose view of capitalism as a discreet state of economic affairs belonging to a typology of economies, akin to Rostov's (1962) stages of growth culminating in mass consumption. Rather than viewing capitalism in the proper noun in investigating the machinations of the Chinese economy, it should instead be used as a qualifier, with a wide band of economic institutional arrangements that qualify, by degree, as capitalist, i.e., market-driven, in nature. The object of analytic inquiry should focus on the extent to which: 1) markets operate, through the mechanism of price signals, as the means by which items of value—goods (assets) and services—are allocated amongst consumers and producers; and 2) the state intervenes to shape the outcome of these allocations, and thus the allocation of assets divergent with unfettered price signals. These two questions motivate the analysis presented in this dissertation.

In this concluding chapter, I begin by revisiting existing literature on economic growth, with focused attention on scholarship that points to the penetration of neoliberalism in reform-era China. While markets have evolved in China since the opening of the economy in the 1970s, they have done so through the careful, selective support and shaping by the state. Findings from this dissertation point to the active, deliberate, and capital accumulation-motivated objectives of the local state, evidenced through the development and evolution of land markets in China. I review these findings, followed by a discussion on future areas of research.

6.1 State-created Markets versus Market-shaping States—Does Neoliberalism Explain China's Economic Ascent?

Scholars such as Harvey (2005), Wu (2010), and Lin (2009) have interpreted China's rise as illustrative of a market-oriented pivot. Findings from this dissertation problematize the assumption that China's growth during the reform era represents a deepening of neoliberalism and embrace of market logic. I offer a more nuanced view of markets in the Chinese context: the state selectively, deliberately supports and fosters market development to the extent the state's needs, namely local fiscal revenues, are satisfied. In the case of land, it is not whether markets exist per se, but to what extent the local state guides, shapes, and participates in land markets to achieve local state objectives.

As Haila (2007) points out, scholars on the left and right have often failed to clearly define and conceptualize what a "market" means in the Chinese case. She delineates three meanings of the term "market," those being: 1) a place for where producers sell their products; 2) as a mechanism, a "mode of regulation," different from state and reciprocal regulation; and 3) the power to "coordinate decisions and form prices [which] carry information that guides buyers and sellers (Haila, 2007, p. 5)." However, the role of markets will vary in intensity and extensiveness of use and positioning within society. Real estate markets are saddled with numerous

imperfections, such as asymmetric information between buyers and sellers, non-uniform and emotional preferences, the inherent immobility of the good being transferred, and the influence of local authorities in shaping the relative demand and accessibility of land parcels (Haila, 2007, p. 6).³⁹

However, theories pointing to neoliberalism as the primary explanation for the gross fissures in Chinese society do not consider: 1) the longer, pre-reform history of state-society relations that disadvantaged rural households by way of the hukou system and dual system institutions; 2); the exploitative and wealth-accumulating orientation of the local state and 3) the growth of China's political economy out of—but not away from—the planned economy and its hallmark institutions. Findings presented in this dissertation directly challenge many of the underlying assumptions of more recent Marxist and neoliberal assessments of China's growth. I discuss each of these fallacies in turn.

Firstly, institutions matter, not only for their role in directly shaping economic outcomes through the establishing of rules and incentives (North, 1990), but in the continuity and evolution of institutions over time (Whiting, 2001; Xu C. , 2011). The dual system continues to shape and determine the course of China's land markets, as discussed in Chapter 3. Tang (2014) is poignant in his critique of Western-derived theories applied to China's recent growth period during the reform. In many such cases, such as explanations of China's growth and local state behavior as following a neoliberalism paradigm, scholars often characterize a strong, abrupt "break" between the Mao and reform eras, heavily discounting the continuity and legacy of institutions in shaping

³⁹ According to Haila (2007), the urban economics field has long delineated numerous imperfections in the property market, ranging from "imperfect knowledge, the uniqueness of each site and building, emotional preferences, unwillingness to sell, immobility, time-absorbing and costly search periods, the legal complexity of transferring property, the length of the construction process, the monopoly power of planning authorities and mortgage institutions (p. 6)."

future development and local state behavioral incentives and outcomes. According to Tang, "the literature on mega-city, inter-city competition and place promotion has unjustifiably emphasized changes in the late 1970s at the expense of continuity" (Tang, 2014, p. 46).

A second concern with neoliberal theory applied to China is the often implicit assumption of state capture and misinterpreting of the state as a responsive actor in the growth and pervasion of markets. Neoliberal critics work from the perspective, developed through exploration and theoretical inquiry into the Western capitalist experience, that local states dispossess rural households of their land due to state capture by capitalist interest groups. However, this line of reasoning ignores the very institutional framework of incentives and structural demands placed on local bureaucrats, such as the cadre evaluation system—land is the most exposed and vulnerable asset availed to local bureaucrats within the legal and political economy framework of the Chinese system (Kung, Xu, & Zhou, 2013). During the Third Plenary of the Seventeenth Communist Party Central Committee in 2008, there was wide speculation on the prospect of allowing rural households to sell their use rights directly to other users (Wong E. , 2008). In the case of privatization as speculated at that time, rural households would be able to sell their use rights directly to other users, circumventing the local state and its institutionally enabled profit margins through the transaction.⁴⁰ To the disappointment of many advocates of this policy shift, no such change occurred, yet this is consistent with the broader themes of this dissertation that refute the argument that China has embraced neoliberalism and the market logic as a governing principle.

⁴⁰ There are additional reasons for not allowing such as market to take form, notably the potential risk of cheating and rural land accumulation by powerful interests, resulting in large-scale dispossession of the peasantry. See, for example, Zhang and Donaldson (2012).

Other scholars have acknowledged the state's use of markets, but have framed the state's behavior as reactive rather than proactive and deliberate. Xu, Yeh & Wu (2009) argue the Chinese state has reasserted its regulatory control over markets through a reconfiguring of the administrative and regulatory regime in response to markets and neoliberalism and its expansion into the Chinese political economy. The state is viewed as reflexive and responsive to the pervasion and growth of the market, reclaiming its role in fostering market development and regulation (ibid). Xu and Wang (2012) go further, arguing the state's new means of participating in the commoditization of urban space is through "regulatory land control and planning interventions that emphasize hierarchical relationships for a more centralized power (p. 18)."

Implicit in the above arguments is the reconstituting of Chinese state power in response to the overextension and penetration of the market and the neoliberal paradigm. My arguments presented in this dissertation challenge this assumption. Rather than conceptualizing the state as retreating and then reasserting itself, in the case of land lease markets, the allocation and market-oriented mechanisms used to transfer land use rights are borne out of the state's land system and the institutions carried over from the pre-reform era, notably the dual land system. The market and market mechanisms for allocating land are embedded within a broader political economy framework and the strong position of the state in managing and using land towards state ends. Yufu Capital Management Corporation's leveraging of land use assets as part of a broader effort to restructure SOE debt and rationalize core urban space simultaneously illustrates the state's deliberate participating in land markets to achieve state aims.

Thirdly, markets are not only managed and regulated by the state, they emerge out of the state and state experimentation (Naughton, 1995; Xu C. , 2011). Referring again to Tang's (2014) critique, understanding land markets in China requires an understanding and appreciation of the continuity and evolution of state institutions, rather than the view that the reform era represents

an abrupt break with pre-reform institutions. Ambiguity (and arguably intentional) and weakly defined property rights with respect to land enable the development of markets for land use rights while ensuring the local state has significant control and capture over the economic surplus associated with land. Rather than view the state as acceding to a momentous advance of neoliberalism, state institutions and structures are retooled to achieve the state's broader development and political economy objectives. This retooling is consistent with similar piecemeal changes in the household registration system and capital markets that evidence management of factor inputs, not wholesale departures from existing legal and institutional frameworks. Land markets in China represent one such form of this retooling.

Land transfers in China provide evidence of local government revenue maximization strategies. Local bureaucrats support and participate in land markets to achieve fiscal objectives, either through buttressing revenue streams and/or to indirectly access loans and bond credit to fulfill local investment and urban planning and enterprise restructuring objectives. At least in the space of land, the acquisition, value, and use is ultimately shaped and determined by the local state. The story of China's growth during the reform era can be framed across two core axes of change in state-society relations: 1) the growing agency of the local state in economic affairs; and 2) the "liberating" of otherwise illiquid assets and factor inputs, but with the selective exploiting of these assets and inputs through the machinations of the local state. To the degree that the Chinese government permits the allocation and transacting of goods and services through a market-like mechanism, the state creates such a market to its own ends.

The evolution of China's spatial administrative hierarchy is similarly closely tied with the growth of the state-created market construct. While the central government continues to wield significant influence and power over local state bureaucrats through administrative transfers and the cadre evaluation system (Tsui & Wang, 2004), what has emerged during the reform era is a

dynamic tension between the central and local state, particularly in the space of economic affairs. With the advent of the planned economy has come what Liu (2010) has called an "Administrative Region Economy" structure (ARE). This system has, since the late 1980s, been characterized by intense regional competition for capital, resources, and other factor inputs and widespread duplication of infrastructure investments and industrial structures. This new political system has given rise to "the privileging of personal interests, [increase in] self-centeredness of local municipalities, and [the] duplication of infrastructure, fragmentation of markets and municipal isolation." Regional growth has become highly dependent on "the institution of administrative regions" (p. 64).

This devolution of authority and increased regional competition has emerged in parallel with the loosening of the fixed, illiquid and/or immobile nature of factor inputs in China. Changes in the household registration system, discussed in Chapter 2, have led to the large-scale movement of underemployed rural migrants to the cities, though local governments can leverage their authority to severely restrict the opportunities for these migrant workers to become permanent legal residents with the same rights and access to urban public goods as urban residents. Similarly, the local state has wielded influence through moral suasion over local banks to finance the sustained operations of many locally owned state owned enterprises.

Land represents perhaps the most illustrative example of what Polanyi has called the "fictitious commodities." As with labor and capital, before 1978 there was no existing market for land use rights. The onset of reforms introduced a legal and political economy framework that allowed, through its institutional (and by design) ambiguity, the exposure of rural households to the predatory inclinations of a wealth accumulating local state (Pei, 2006; Washburn, 2011). The evolution of land use rights as a commodity during the reform era helps illustrate the broader, and deeper, relationship between the state and the market. Local officials seek the development

of markets, and their operation, as an important tool for accumulating capital under a fiscally constrained institutional relationship with the central state. The Party continues to find ways to retool existing institutions and structures, often under the motivation (among local bureaucrats) to maximize revenues. Referring back to work by Xu & Wang (2012, p. 10), changes in regulatory and planning interventions as illustrative of the state being "reconstituted to play a potent, medicating function in delivering a variety of regulatory policies and necessary facilities to lubricate capital flows (Xu & Wang, 2012, p. 10)." However, this position asserts, akin to Lim's invoking of Polanyi's "double movement," that the state having retreated from the market, now must reassert its place by way of select interventions. Rather than view the state as having retreated from its role in certain spaces of the economy, it should instead be seen as retooling its means of managing the economy. The embedded exploitative nature of land markets, despite multiple rounds of legal reform, illustrate the state's careful, paced retooling of the land system to ensure a large share of the economic surplus tied to land accrues to the local state.

6.2 Summary of Findings and Arguments

The analysis and findings presented in this dissertation suggest that the local state behaves in ways aligned with institutionalized incentives, such as the cadre evaluation system and the central-local relations that often place significant fiscal pressures on local governments. Local state bureaucrats are driven, through mandates established either explicitly or through the expectations bestowed, to maximally exploit the value of land and behave in ways reflective of state-led capital accumulation. The cadre evaluation system, path dependent growth shaped by pre-reform asset endowments and state development programs, central state mandates, and the unique configuration of China's spatial economy, combined with a (by design) ambiguous and incomplete legal framework of rural land use rights encourages a pattern of land expropriation and other multiple permutations of land finance. The widespread use of LGIVs in Chongqing in

recent years and the roles and functions of Yufu Capital represent only the most recent and sophisticated iteration of this capital accumulation process. As land becomes increasingly scarce as an immediately or quickly and easily accessible asset for urban governments, local bureaucrats explore alternative methods of seeking economic surplus. This was most evident in the case of Chongqing through the policy of "*tui'er jiansan*"—the local state's effort to further exploit economic surplus value in urban core land parcels through the facilitating of locally owned state manufacturers to the periphery and acquisition of urban core land parcels to redevelop at a much higher value.

Common debate among the spheres of China scholars and watchers is the extent to which China is either embracing the market or strategically leveraging market mechanisms for state aims and objectives. Both arguments find validity in recent events, as well as contrary examples of the state's motives and actions. A hybrid approach is needed to help explain the seemingly paradoxical actions of the state, on the one hand pro-market, on the other retrenching under statist tendencies. Land markets help illuminate these contradictions, and provide insight into the broader machinations, tendencies, and orientation of a "China model," one both unique to other developing economies yet borrowing institutions and practices through a process of pragmatic experimentation.

Land markets offer a useful window into the workings of China's growth model for the following reasons. Firstly, land represents a core asset that held no explicit market value until only very recently; the transition from a purely non-tradable asset that served as an input into a production maximizing economic model offers scholars the opportunity to observe change in its transactional value and use over a well-documented period of recent history. Land is also at the intersection of old and new institutions and the governing logic of local governments, often faced with intense fiscal pressure. Under heavy pressure to fulfill fiscal obligations for the promotion of

economic growth—and more recently to maintain employment levels in the wake of a global recession and steep decline in demand for Chinese exports—local governments have exploited ambiguity in the written law and its only partial enforcement to exploit the existing land supply for fiscal ends. Lastly, as a revenue maximizing local state searches for land assets, the local state not only leverages market institutions, it creates the market and supply of land assets (i.e., use rights) availed to market participants. Following Polanyi's insights into the role of the state as a champion of select market institutions and the necessary force behind market preservation, local governments create and ensure the existence of a land market, but motivated in large part by the need to exploit land assets for fiscal aims. Local states create markets in China, as much as they participate in markets and use market institutions.

Findings in this dissertation use both statistical methods and archival and qualitative analysis to demonstrate the active role of the state in nurturing the growth of the market. Local states have found the expropriation and conversion of rural land an important—and often addictive—source of government revenues. While local governments rely on land transactions, there is also an alignment of interests between commercial activity locating on converted land and the local state. Data analysis in Chapter 3 has helped demonstrate these linkages, suggesting that the local state has a strong interest in promoting continued economic growth through land conversions as these transactions ultimately lead to greater taxable revenues, thereby supporting local coffers and the state's ability to finance infrastructure and other major investments.

The advent of local government investment vehicles, first developed by the China Development Bank, opened new opportunities for local governments to exploit the implicit fiscal value of land. Under this new arrangement, municipal governments were now able, through proxy state enterprises solely purposed with local infrastructure investment, leverage land assets already converted from rural to urban use and in reserve to borrow from banks to help finance

major investments. As cities' expropriation behaviors moved them closer to the land quota established and enforced by the central government, local governments began increasingly to rationalize usage of existing parcels to gain greater returns on land use. The case of Chongqing helps illustrate this process. Under the municipality's policy of "bringing in the tertiary industries, and pushing out manufacturing activities" (*tui'er jinsan*, 退二进三), the state was able to achieve the twin tasks of: 1) relocating local SOEs to the urban fringe and repurposing parcels within the urban core for commercial use, with much greater fiscal returns through auctioning, bidding, and public tendering of its use rights; and 2) with the intervention of a new, locally purposed asset management corporation, Yufu, restructuring the debt insolvent local SOEs that had no cash reserves and/or were over-saddled with debt to finance their own relocations. Contrary to more common references to the Chongqing Model as an enlightened new form of state intervention in the market, the unique attributes of the recent Chongqing "experience" lie in the local state's ability to use land assets as a key instrument in the restructuring of bad debt and opening up previously unexploited land value within the urban core. Yufu Asset Management Corporation and Chongqing's "Eight Major Investment Corporations" (*badatou*, 八大投) represent institutional innovations that expanded the supply of marketable land and achieved the local state's objectives of greater fiscal revenues and the financing of infrastructure investments. The exploitation of land value, its explicit transactional and less overt, leveraged forms, played crucially into these developments.

China's growth during the reform era has largely been a story of freeing illiquid and immobile inputs through quasi market mechanisms. Land is but one crucial example of how this process operates, akin to the development of incomplete labor and capital markets. An ambiguous legal and institutional framework for land rights, local state agency and initiative, and

pragmatic experimentation combine to enable and induce the sustained high levels of investment as a source of growth that has become a hallmark feature of the China "model."

6.3 Future Research

The study of markets and their development is an expansive field. China's economic rise and the transforming role of the state have garnered academic and journalistic attention. Within this scholarly space, there is a growing need to differentiate the roles of the state between the central and local governments. While central governments establish macro frameworks with codified norms and institutions for local cadre behaviors, local officials must also negotiate and reconcile national economic policies and agendas with the stark realities on the ground. In doing so, a panoply of local state tactics is observed.

This dissertation has focused on land lease markets and land finance as one such space of local government initiative and intervention to shape and form a local market; many other spaces may be analyzed to better flesh out the extent to which local initiative and tactics determine market outcomes, such as in capital markets and local state in-migration regulations and their effect on the labor market, among many other such areas of inquiry. This dissertation has used tactics related to land sales and LGIVs as approximate empirical evidence of local government behaviors. However additional exploration is needed as to the measurement and observation of local government behaviors.

The forces of economic growth include both factor accumulation and the productive means and efficiency by which these factors are utilized. The character and mechanisms of China's own course of development are shaped by its own path dependency and the legacy of pre-reform institutions. Future analysis must consider the state's own role in facilitating, nurturing, and shaping markets to achieve the state's own fiscal self-interest. Economic

geography must do the same, considering the role of past institutions as a critical feature and influence over the type and direction of growth of economies.

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