

Article

The Local Land Finance Transformation with the Synergy of Increment and Inventory: A Case Study in China

Yuzhe Wu ¹, Huiqiong Zhu ^{1,2} and Sheng Zheng ^{1,*}¹ School of Public Affairs, Zhejiang University, Hangzhou 310058, China² Center for Balance Architecture, Zhejiang University, Hangzhou 310063, China

* Correspondence: shengzheng@zju.edu.cn

Abstract: Since 1998, the land finance model based on residential and commercial land transfer revenue has played an important role in Chinese social and economic growth, especially in urban infrastructure construction. With China's population peak and stable urbanization, the "incremental" land-transfer-heavy development paradigm is unsustainable. At the same time, as a developing country, local governments in China must have enough fiscal revenue to encourage high-quality growth. The transformation of land finance is a practical issue that needs to be explored urgently. This article, which was based on the local government financial balance theory, proposed supporting the optimization of the land finance incremental model with the reform of the property tax system. A local land finance transformation mechanism with increment and inventory synergy was then created. Specifically, to avoid a cliff-like fall in the local government's land-transfer fee, it was proposed that the land-transfer fee change from the original collection, from ordinary commercial housing to improved housing. The property tax should be levied on the second set of ordinary commercial housing to obtain fiscal revenue from the "inventory". Concurrently, the fiscal money from property taxes could be utilized to build cheap rental housing or to support housing vouchers for new urban residents and young people.

Keywords: increment and inventory; land finance; property tax; balance of revenue and expenditure



Citation: Wu, Y.; Zhu, H.; Zheng, S. The Local Land Finance Transformation with the Synergy of Increment and Inventory: A Case Study in China. *Land* **2022**, *11*, 1529. <https://doi.org/10.3390/land11091529>

Academic Editors: Hossein Azadi and Richard C. Feiock

Received: 6 July 2022

Accepted: 7 September 2022

Published: 10 September 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Urbanization has become the most influential social process in the 20th century. Urbanization is accelerating in many parts of the world, and countries are (actually, individual cities) fighting to remain competitive in the global marketplace [1]. Each nation will experience three stages of urbanization: initiation, acceleration, and stabilization. Mercantilism and capitalism are vigorously developing during the acceleration stage, since they enquire a vast number of populations, resources, and technology to continue developing cities and economies [2]. A majority of developing nations are rapidly urbanizing. The rapid urbanization process typically manifests as industrialization lagging behind urbanization because of poor economic foundation, a lack of capital, and high natural growth rates of population in developing countries [3]. As a result, the expansion of employment opportunities does not adapt to the population transition. The development of urbanization cannot occur without financial support [4]. How to obtain and meet the financial needs of urbanization development in a scientific and rational manner has a direct effect on the urbanization process of both the city and the nation.

China is the largest developing country in the world. It is crucial for it to obtain sustainable and stable funds to promote high-quality development according to the different stages of the Chinese urbanization process [4]. Since the reform and opening up, Since the reform and opening up, China's urbanization process has been steadily advancing; the economies of scale and spatial correlation effects released by cities, as well as the continuous development of urban agglomerations, have created a significant amount of "urban

wealth” and played a significant role in advancing the urbanization process [5,6]. However, as urbanization has advanced rapidly, house prices have also increased. In addition to various non-policy factors, such as demand, supply, and speculation, the rise in housing prices was also driven by the strategic behavior of local governments, particularly the pursuit of a long-term land finance strategy [7]. Local government’s land incremental fiscal model, which is based on income from the transfer of residential land, has created a large amount of initial capital accumulation for the start-up stage of urbanization. However, it has also resulted in a number of problems, such as resource waste, rising housing prices, a widening gap between the rich and the poor, and financial risks caused by leasing a large number of industrial lands [8]. According to the “National Population Development Plan (2016–2030)”, the Chinese overall population will peak around 2030, after which it will stabilize or even fall. As a result, population fluctuations will consequently contribute to a decline in the country’s housing demand. The trend of urbanization in China has achieved an accelerated phase, future urbanization must not only meet the “quantity” objective, but also the “quality” transition. It is inevitable that the population and the speed of urbanization will decline in the future, and the current major modes of income will not be able to continue. Future large-scale urbanization funding requirements cannot be met by the current urbanization-finance-support approach. Whether to improve the transformation based on the current model or to give up entirely is a crucial decision that will determine the fate of the nation [9].

Keeping fiscal revenue and expenditure in balance and having sufficient funds for infrastructure construction is the governing goal in various countries [10]. With the arrival of China’s population peak and urbanization-stable period in 2030, the growth power of the existing “land finance” model will inevitably be exhausted, and the contribution of real estate and land elements to local fiscal revenue will also continue to decline. Due to the need for balance in local fiscal revenue and expenditure, it is necessary to develop new sources of revenue for local governments. Therefore, it is inevitable to accelerate the transformation of the main revenue mode of local finance, and the real-estate tax reform should play an important role in this transformation. How can land increment financing be transformed and local land finance with synergy between increment and inventory made to function on a regular basis while taking fiscal revenue and expenditure balance and social stability into account? This study analyzed the problems in the current land finance system, based on the theory of balance of revenue and expenditure in local finance; investigated the countermeasures for the smooth transition of land finance, based on Chinese national conditions, thoroughly considered the challenges that may occur during the transition process; and proposed the possibility of high-quality economic development and social stability following the transition. China’s experience in land finance transformation can also provide experience for many developing countries.

The rest of this paper is organized as follows. Section 2 presents an in-depth review of different opinions about land finance, land finance transformation, and property tax. Section 3 provides a comprehensive analysis of the weaknesses of land finance and the potential fiscal crisis from the inventory finance. Section 4 proposes the land-finance-transformation mechanism of increment market and inventory market based on the theory of local fiscal revenue and expenditure balance. Sections 5 and 6 conclude this study by specifying recommendations for future research.

2. Literature Review

2.1. Land Finance

With the rapid development of the real-estate industry, the proportion of land-transfer fees in local fiscal revenue continues to expand, and the name “land finance” gradually enters the public view. China’s land finance, in particular, refers to the imperfect fiscal decentralization system between the central and local governments after China’s tax-sharing reform in 1994. The government relies on the income from the transfer of land-use rights to maintain local fiscal expenditures and alleviate financial pressure [11]. As a way

for the government to increase revenue, land finance is very common at home and abroad. Modern foreign scholars use the theory of fiscal decentralization to study land finance issues. This theory presupposes that there is information asymmetry between different levels of government; that is, that different governments have different understandings of pertinent information. In the past six decades, the idea of fiscal decentralization has evolved. The first generation of fiscal decentralization theory was founded on the theories of public expenditure and public finance [12,13]. It examines ways to maximize the allocation of authorities and responsibilities among different levels of government by treating them as black boxes. Montinola et al. (1995), Qian and Weingast (1997), and McKinnon and Nechyba (2001) established the second-generation theory of fiscal decentralization [14–16]. It studies how to develop incentive systems to ensure a sufficient supply of public goods and fiscal parity among regions.

During a time when political opposition to economic reform remained strong, Qian and Weingast (1996) contended that China's type of decentralization provided the crucial framework for market success [17]. China's "land finance" is primarily dependent on the sale of more land to produce fiscal revenue to meet fiscal needs via land-transfer fees. Under this theoretical framework, the phenomenon of "land finance" is primarily caused by two factors: The first is financial incentives; that is, the financial deficit of local governments caused by the reform of the "tax-sharing system". Aside from adjusting the balance of financial resources across regions, the tax-sharing system also had indirect and prospective effects, reshaping local governments' behavior patterns [18]. According to Shirk (1993), fiscal decentralization is the primary cause of land finance, whereas local fiscal imbalance is the direct cause [19]. The second type of incentive is political, or, in the context of regional competitiveness, the key drivers are GDP, investor attraction, and local fiscal revenue. Important indicators for higher-level evaluations include the primary indicators of the performance-evaluation mechanism for local officials, financial-revenue turnover, GDP growth rate, and foreign-investment attractiveness [13–15]. Indicators' incentives for political promotion have encouraged municipal governments to strive for economic growth. Because China's economic growth strategy is primarily investment-driven, local governments compete primarily on the basis of investment promotion. As a result, local government officials' overwhelming preference for short-term land-rental income is directly responsible for the current land-finance paradigm [18].

Land finance has a substantial effect on local government revenues and expenditures, economic development, urbanization growth, and government debt financing issues. From the standpoint of fiscal revenue, land revenue has made a substantial contribution to the second finance outside the budget and the first finance within the budget, which has promoted the enhancement of local disposable financial resources [20]. Land finance has an effect on the availability of local public goods and public services from the perspective of fiscal expenditure. Li (2013) conducted an empirical investigation of the effect of land sales income expenditures on the availability of public amenities in various regions of the country, and the analysis demonstrates that the rise of local government property sales has increased the availability of public goods, while there are regional structural disparities [21]. Tang (2014) performed an experimental examination of the effect of land finance on municipal fiscal-spending preferences, and the findings demonstrated that land finance exacerbated the local government's fiscal-expenditure preference of "emphasizing infrastructure investment and disregarding public services" [22]. Simultaneously, the spillover effect of fiscal spending and the effect of growing land value encourage local governments to chase additional land revenue. In terms of economic benefits, Lv et al. (2016) investigated the relationship between residents' real-estate demand preference and land finance and economic growth by creating a dynamic stochastic general equilibrium model that included the government, industrial businesses, and residents [23]. Fiscal policy promotes the general prosperity of the economy, but the short-term prosperity of the real-estate industry due to the influence of people's demand preferences will result in a recession of the real economy and a lack of overall economic demand. The impact of land finance

on urbanization is primarily manifested in two aspects: financing urban construction and driving up house prices and urbanization costs [24]. Land finance increases labor costs via transmission mechanisms such as land-rent and housing-price increases, which, in turn, increase urbanization costs [25]; simultaneously, land finance pushes up housing prices, thus significantly reducing residents' spending power and Happiness Index [26]. The local government's land financing improves the economic worth of land through land capitalization, but it also bears debt financing concerns due to the land's financing role [27].

The biggest drawback of local governments' "generating money from land" revenue is the lack of sustainability, which is not conducive to maintaining fiscal revenue and expenditure balance in the long run. At the same time, the "profit margin" of land sale is shrinking. Some scholars predict that the period for local governments to obtain large-scale land-transfer revenue has come to an end, and the need to develop new revenue channels has become increasingly urgent. It is very important to actively study various paths of local fiscal-revenue transformation.

2.2. Land-Finance Transformation

In view of the unsustainable mode of "generating money from land", we must accelerate the transformation of local financial revenue from the realistic need of fiscal revenue and expenditure balance.

Currently, in the academic debate over whether land finance should be abandoned, a majority of scholars believe that land finance should be continuously improved and finally withdrawn as urbanization advances and is completed [28]. "Land finance" is a way that local governments try to obtain corresponding income by renting out land-use rights to maintain local financial expenditures. Local governments have raised a substantial amount of money through the leasing of property, and land finance has become a key driver of economic growth and rapid expansion [29]. Simultaneously, land is an essential instrument for leveraging bank funds, urban infrastructure, and real-estate investment and financing. The notion that transitions in governance are outcomes of the fiscal-tax-capacity of the state has been a persistent, if not permanent, theme in the urban literature for over 40 years [30–32]. By moving from one land-finance crisis to another directly, national solvency may experience a long trough of recovery between crises. It is tantamount to political suicide to abandon land finance before locating other sustainable sources of funding for urban infrastructure construction. Regarding the transformation of land finance and alternative financing, the majority of scholars mentioned that they could follow the example of developed nations and shift from land incremental finance to land inventory finance. In China, the essence of "land finance" is "financing", and its replacement must be a credit of equal value. To convert tax into a comparable credit basis to land, it is necessary to overcome a significant technical barrier: a tax system dominated by indirect tax [33].

2.3. Property Tax

Real property tax is also known as property tax. There are two theoretical bases for real-estate taxation. According to one viewpoint, real-estate tax is a "benefit tax". Tiebout (1956) believes that the choice of residents to live in a community is their vote on the community's public goods and services, so the "free-rider" problem on other public goods may not occur for the public goods provided by local governments in administratively rigid districts [34]. Another viewpoint is the "capital tax" equivalent to the "income tax". Guo et al. (2010) proposed that property owners must pay property tax; high-income earners have gradually mastered more real-estate resources as a result of the development of the economy, society, and their own personal assets. Private-property tax collection is an inevitable aspect of social development [35].

According to Beswick and Penny (2018) and Christophers (2017), the collection of real-estate tax can provide independent fiscal revenue for local governments, promote the improvement of local government's public financial efficiency, and play a positive role in promoting government transparency and citizen engagement in government affairs [36,37].

Tax policy can also have some unintended consequences in terms of the location, type, and availability of housing. The use of the tax system to incentivize the devaluation of land and property, to “democratize” real-estate investment, and to construct affordable housing creates new geographical locations and often creates or reinforces undesirable incentives that run counter to the state’s desired goals, with gentrification and urban financialization being prominent examples [38]. Part of the reason for gentrification is that homeowners can get tax benefits by systematically devaluing their properties [39]. Making real estate more valuable for investment through the tax system has led to turbulence in the real-estate market, price inflation and the global financial crisis [40]. Elsewhere, tax credits, such as the Historical Tax Credit (HTC) and the Low-Income Property Tax Credit (LIHTC), have become the primary mechanism for affordable-housing construction in the United States. Tax credits, real-estate investment trusts (REITs), and depreciation deductions show that changes in tax laws create perverse incentives that ultimately affect urban form and housing stock in many cities in the global North [41].

In the transition stage of land finance in developing countries, real-estate tax can play an important role in maintaining local fiscal balance. First of all, the real-estate tax is less elastic to the property price, and this is conducive to maintaining income stability [42]. The reality that the real-estate tax is the main tax of local governments can be sustained. Secondly, different regions of the same country can set real-estate tax rates according to their own actual conditions to maintain fiscal balance according to the actual local conditions [43]. Third, real-estate tax is helpful to reduce GDP-deficit-to-GDP ratio and promote sustainable fiscal development. Through research, it is found that, for countries with a higher proportion of real-estate tax in total tax revenue, the deficit-to-GDP ratio is smaller. Chang and others have stated, regarding the implementation of the property tax, that the application of the tax system in China at this stage did not occur overnight; instead, it was the result of numerous adjustments and improvements, and it was determined by the economic level of nation [44,45]. Therefore, when levying real-estate tax, the impact of real-estate tax on regions should be considered, and tax rates should be differentiated based on each region’s economic development [46].

3. The Dilemma Confronting the Existing Land Incremental Fiscal Model

3.1. Incremental Land Finance Is Unsustainable

The reform of the tax-sharing system in 1994 apportioned land income to local governments, laying the institutional groundwork for local governments to transition to “land finance”. Since then, relying on the monopoly of the primary land market, the local government has acquired agricultural land at a low price and then sold it for a profit after leveling and developing it [21]. This allows for the collection of a substantial amount of land-transfer fees, which can be used to acquire new land and combine funds for urban construction. Currently, a majority of cities are overly dependent on land-tax revenue. According to the Ministry of Finance’s annual fiscal revenue and expenditure data, national land sales’ revenue in 2021 reached CNY 5.6 trillion, accounting for 27.65 percent of the national general public budget revenue, 50.42 percent of the local general public budget revenue, and 32.43 percent of the national-tax revenue. According to the 1998–2020 *China Land and Resources Statistical Yearbook* (Figure 1), local government land-transfer income grew at an average annual rate of 49.9 percent, from CNY 50.77 billion in 1998 to CNY 1.04 trillion in 2008. In 2021, the local government’s land-transfer revenue amounted to CNY 8.71 trillion, representing 50 to 60 percent of the local public finance revenue.

The emergence of “land finance” came with the rapid advance of urbanization in China, and the two complement each other. The local government gains rapidly increasing income from the real-estate industry’s development, and this income has gradually become the main source of local disposable financial resources; however, selling the land gradually reduces the “margin” of land transfer, and as a result, the scale of future land sales and earnings will shrink. At the same time, the excessive reliance of the local government’s financial model on land increments has led to high prices for commercial and residential

land in China. Developers transfer these costs to consumers at the end of the transaction chain. Therefore, the high housing prices in China are disproportionately high compared to their actual value. In recent years, China's M2 growth rate has continued to accelerate, but it has not triggered the hyperinflation anticipated by economists. The fact that the size of M2 is supported by actual demand is an important factor. As a result of their expectations and confidence in housing prices, Chinese residents utilize a substantial amount of working capital to purchase commercial real estate [28]. Enterprises are more willing to invest in the real-estate market due to their belief that real-estate investment yields a higher return than physical investment. The completed investment in real-estate development has increased from CNY 490.173 billion in 2000 to CNY 14,760.21 billion in 2021, as reported by the National Bureau of Statistics; the number of real-estate development companies will increase from 27,303 in 2000 to 103,200 in 2020, a yearly increase. The increase in asset allocation in the real-estate market will have a “crowding out” effect on investment in the real economy, resulting in serious structural imbalances in the development of the real economy in China [47]. In recent years, the continuous increase in real-estate prices and the massive influx of working capital into the real-estate market have had an incalculable negative effect on innovation activities, as well as the transformation and growth of the real economy.

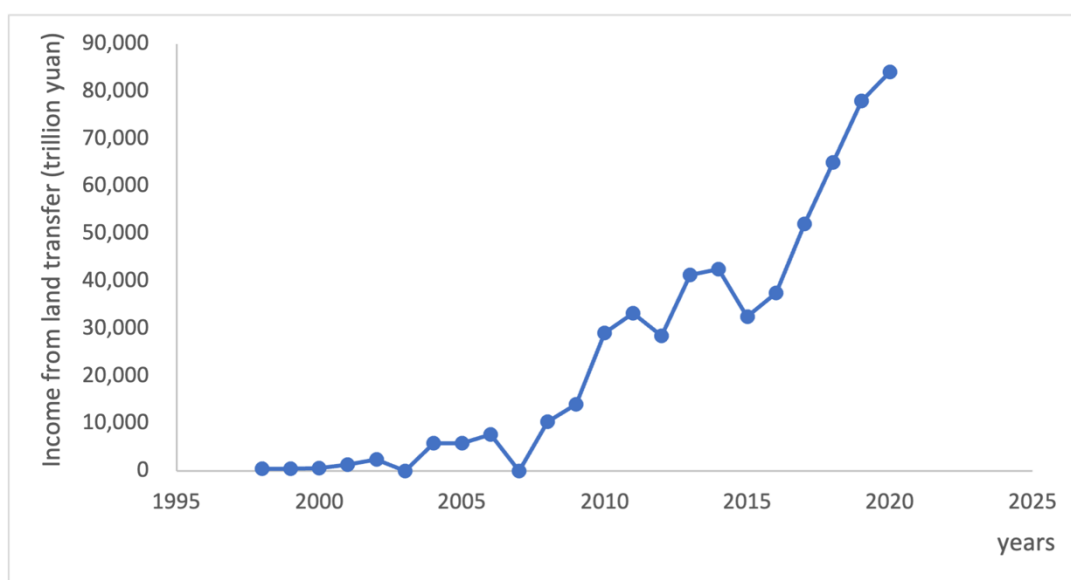


Figure 1. Local government land revenue in China, 1998–2021. Data source: Compiled according to the 1998–2020 *China Land and Resources Statistical Yearbook*.

In 2030, as the total population stabilizes or declines, the incremental housing demand will decrease. Despite the fact that people still prefer to buy new houses in terms of house-purchase psychology, the absolute value of the transaction volume in the inventory housing market is constantly increasing. This is due to the high housing prices in the incremental market and changes in the concept of housing consumption [48]. According to the “National Population Development Plan (2016–2030)”, China’s total population will reach its peak around 2030, after which it will stabilize or even decline. Some experts predict that this turning point could occur sooner. People’s willingness to have children has not increased proportionally despite the three-child policy, and the population’s stability renders the incremental housing supply unsustainable. According to the housing filter model, as the number of years that first-time homebuyers live in their homes goes up, non-residential factors such as too small of an area, an unreasonable layout, moving to a different place, municipal construction needs, and other things will cause a wave of better living conditions and the peak of second-home purchases [49]. This will also help the

housing market because it will lead to a huge number of new listings. With the gradual completion of urbanization in China, housing inventory will become the focal point of the real-estate market.

3.2. The Government Cannot Provide Sufficient Affordable Housing

Due to the government's high-priced sale of commercial and residential land, control of land supply, and housing-purchase restrictions, housing prices have risen dramatically in recent years. The prevention and control of COVID-19 have increased market liquidity significantly. When residents decide to invest in the more secure real-estate market, this causes a new round of house-price fluctuations, and some developed cities have seen a surge in new high housing prices. According to data from the National Bureau of Statistics, the national average home price in 2020 has reached CNY 9980/m². The average housing prices in Beijing, Shanghai, Guangzhou, and Shenzhen all increased by more than 5 percent, with Shenzhen leading the nation with a 14 percent rise. The highest housing price per square m in Shenzhen was CNY 87,957. Excessive housing prices have significantly exceeded the purchasing power of ordinary residents, particularly the purchasing power of middle-income earners, thereby endangering social stability and the viability of urbanization.

In search of a greater quality of life, a substantial number of migrant workers migrate to the city, bringing with them numerous laborers who raise the demand for urban housing. According to the results of the seventh national census provided by the National Bureau of Statistics, the number of people separated from homes in China is 49,276 million, or 34.90 percent of the overall population. Compared to 2010, the number of people living alone has climbed by 88.52 percent. The population separated from households within the jurisdiction grew by 192.66 percent, the floating population grew by 69.73 percent, and cross-regional migration remained active. This information continues to exhibit an upward trend, and the floating population will continue to grow. Behind the separation of permanent residence and household registration is the urgent need to address the inequitable distribution of resources caused by the traditional household registration system, which bundles public services such as healthcare, schooling, and housing with household registration. The National Bureau of Statistics test report indicates that, in 2021, the per capita dwelling space of migrant workers in cities would be 21.7 square m. The per capita living space in cities with more than 5 million inhabitants is only 17.0 square m, which is significantly smaller than the urban per capita living space (39.8 square m).

According to the architecture of China's housing-supply strategy, commercial housing is purchased by people with high incomes, while the government provides affordable housing for low- and middle-income families to purchase or rent [50]. The land for affordable housing is allocated administratively; that is, local governments cannot generate revenue from the sale of affordable-housing land. Therefore, local governments are more willing to invest less in building land for housing security when total construction land control and fiscal revenue are considered. Due to the lack of motivation for the government to provide affordable housing after the housing-system reform in 1998, compared to the rapid development experienced by the commercial housing market, the government-led construction of affordable housing has been in short supply for a very long time, and this has become a significant factor in the imbalance of the housing system and the rapid increase in housing prices. Particularly, the strategy for affordable housing based on the household registration system cannot accommodate the high number of farm migrants involved in the urbanization trend. At the same time, in order to increase land financial earnings, local governments are more likely to use land with superior locations for commercial land transfer and land in suburban or rural places with low market prices for affordable-home building. In the process of implementing housing-security land supply and policy, there is frequently a lack of long-term development plans; even in the process of implementing affordable-housing projects, the quality of housing is decreased to substandard levels. In addition, issues such

as unused special funds and deficiencies in the distribution process have contributed to the inability to meet the affordable-housing needs of low- and middle-income groups.

3.3. Social Class Solidification

In 1998, the welfare housing system was abolished, and the housing monetization reform was formally initiated; urban housing prices, especially in first-tier cities, continued to rise. Land finance transformed real estate into investment products with high returns and great liquidity, bringing enormous benefits to local governments and facilitating the rapid accumulation of wealth by people. As housing prices continue to climb, the wealth gap between individuals who purchased real estate early on and those who do not have the means to do so continues to grow. Residents who own property can reap the rewards of real-estate appreciation without exerting any effort; non-homeowners' wages, even if the non-homeowners work hard, are increasing at a far slower rate than property costs. Real estate distributes additional societal wealth automatically. The faster the rate of inflation in housing prices, the larger the disparity between the wealthy and the poor. Real-estate ownership has a distinct advantage over the self-inflicted component of hard work. Social-mobility routes are blocked; social mobility between classes, especially upward mobility, has slowed or even stopped; and "advantaged" groups have more and more power over how society changes.

One of the most intuitive results of the expanding gap between the rich and the poor is the spatial separation of the rich and the poor, establishing the so-called "class-based community" of "rich region" and "poor area". In urban areas, the difference between wealthy neighborhoods, middle-class neighborhoods, and low-income neighborhoods is becoming more obvious. As a special commodity, housing has a significant function of class consolidation, so that wealth, prestige, and rights are concentrated in its use value and exchange value. While the wealthy use existing funds and social incremental income to accumulate wealth in a "snowball" fashion, a large number of low-income people reside in urban-rural fringes and low and narrow old communities with inadequate living facilities, chaotic social security, shabby quarters, and limited appreciation space.

A direct consequence of class solidification is slow or even static social mobility, particularly the obstruction of upward mobility chances, an effect that is severely destructive to social classes in relatively disadvantaged circumstances. In addition, it may cause the elite cycle to deteriorate into elite replication, which is analogous to the economic phenomena "bad money drives out good money". As a result, the stagnation of social mobility produced by the constant increase in home costs caused by land finance will inevitably diminish social vitality, create "social inertia", and deprive society of its impetus for advancement.

4. The Land-Finance Transformation Mechanism of Increment Market and Inventory Market in China

According to the analysis in the previous chapter, the scarcity and uneven distribution of land resources will inevitably reduce the land available for local governments to sell. At the same time, the slowdown of the population growth rate and the gradual stabilization of urbanization process will fundamentally reduce the demand degree of the whole society for land and real-estate resources and then affect the fiscal revenue. Land will be gradually shrinking as an inevitable trend of the income scale, and the sustained, healthy, and rapid development of society and economy will need plenty of fiscal income funds to safeguard it. Such a contradictory situation will lead to local fiscal imbalances, and social development in the country is about to enter a new stage. Promoting local finance means that the transformation of the main source of income is the reality of the new stage of socialist construction requirements.

At present, land-transfer revenue occupies a considerable proportion in local land fiscal revenue, which is fundamentally different from the real-estate tax as the main revenue source of local governments in the United States [51]. Relying on the mature and perfect real-estate tax system, local governments in the United States have formed a revenue

system with real-estate tax as the main source of revenue. The focus of the whole local fiscal revenue is based on tax revenue. In view of the current composition of local finance revenue, although the contribution of real-estate element revenue to the local finance is greater, its focus is not on the tax of the real-estate element, but on the land-transfer fee. According to the data in Table 1, the ratio of land-transfer fee to real-estate tax in China from 2015 to 2020 is 1:067, 1:062, 1:052, 1:046, 1:042, and 1:041, respectively, with the land-transfer fee occupying an absolutely dominant position.

Table 1. Revenue of national general public budget and land-transfer funds from 2009 to 2020 (Unit: CNY 100 million).

Year	General Public Budget Revenue	Tax Revenue	Property Tax Revenue	Land-Transfer Fee
2009	32,602.59	26,157.43	803.66	17,179.53
2010	40,613.04	32,701.49	894.07	27,464.48
2011	52,547.11	41,106.74	1102.39	32,126.08
2012	61,078.29	47,319.08	1372.49	28,042.28
2013	69,011.16	53,890.88	1581.50	39,142.03
2014	75,876.58	59,139.91	1851.64	40,479.69
2015	83,002.04	62,661.93	2050.90	30,783.80
2016	87,239.35	64,691.69	2220.91	35,639.69
2017	91,469.41	68,672.72	2604.33	49,997.07
2018	97,903.38	75,954.79	2888.56	62,910.55
2019	101,080.61	76,980.13	2988.43	70,679.31
2020	100,143.16	74,668.06	2841.76	68,593.68
Average annual growth rate	11.88%	20.91%	13.45%	31.65%

Data Source: Compiled according to the 2008–2020 *China Land and Resources Statistical Yearbook*.

In order to maintain the balance of fiscal revenue and expenditure of local governments, under the condition of constant expenditure, the revenue of land-transfer fee decreases, which needs to be supplemented by more stable and sustainable property-tax revenue. To prevent the government's land-transfer revenue from experiencing a cliff decline, the local government's land-transfer revenue originally from ordinary commercial housing can be converted to the improvement housing, and the second ordinary commercial housing can be levied real-estate tax to supplement the fiscal revenue. With the gradual maturity and improvement of the real-estate-tax policy, the proportion of land-transfer fees in fiscal revenue gradually decreased, and the proportion of real-estate tax increased, which replaced the financial effect of land.

4.1. Shifting Residential Land-Transfer-Fee Income from Ordinary Commercial Housing to Improved Housing

Unlike the high prices of general commodities, which are a result of scarcity, the commercial housing market in China has gone through a period of shortage and a substantial amount of inventory has emerged. According to the International Bureau of Statistics, the sales area of commercial housing in 2021 was 1794.33 million square m; by year's end, the area for sale was 510.23 million square m, representing 28.4 percent of the total area. Commercial housing for sale is only a portion of the vacant housing, and there is still a significant problem with resident-owned vacant housing. China's housing has been able to accommodate 4 billion people, and the country's housing stock is now saturated; however, developers continue to introduce new homes to the market each year. As a result of a high demand and a huge supply of common commercial housing in various locations, housing costs have increased significantly. To some extent, Chinese housing market lacks effective demand; however, due to speculation, demand is strong, resulting in high housing prices in the country.

To combat the phenomenon of real-estate speculation, profit tax can be imposed on newly added ordinary commercial housing in order to realize "housing without specu-

lation". The local government's land-transfer-fee money can be used to convert regular commercial property into upgraded housing in order to keep the government's budgetary balance and ability to offer public services intact. In general, improved housing has a large area, favorable location conditions, comprehensive surrounding service facilities, and a high community-greening rate compared to ordinary commercial housing; it occupies more land and is situated in a more desirable area. In addition, consumers who purchase improved housing typically have strong purchasing power, and the primary reason for their property purchase is to improve living conditions and quality of life; therefore, it is reasonable to charge land-transfer fees. The proportion of these groups to the total urban population is low, and tax resistance is relatively small. However, because China has a large population base, the scale of the total demand created cannot be understated, and it is conducive to the redistribution of resources. In addition, the "Catalogue of Restricted Land Use Projects (2012 Edition)" policy stipulates that the floor-area ratio of residential projects cannot fall below 1.0. (including 1.0); this restriction cannot satisfy the actual and effective demand for luxury commercial housing on the market. Long-term, the government's taxation revenue, the housing rights of low-income groups, and industrial chain development will all suffer losses, and the value of land development will not be fully optimized and utilized. Therefore, economic means can be used to manage and regulate high-end commercial residential development projects, and appropriately high and progressive tax rates could be adopted for high-end housing with a plot ratio below 1.0 (exclusive) and a single set of construction area exceeding 144 square m (exclusive). Simultaneously, policies have been implemented to encourage households that have purchased improved housing to enter the rental market with the original inventory of ordinary commercial housing in order to accomplish both rental and purchase.

4.2. Optional Property Tax

"Land financing" is a particular system created to solve the lack of original credit in the early stages of urbanization. When the initial accumulation of capital has been completed, the reliance on land increments must be gradually phased out and replaced with a more sustainable growth model [52]. How to transform land incremental financing into land inventory finance and make land inventory finance function normally is crucial for high-quality development in the current context of common prosperity. The objective of inventory planning differs from how to allocate and combine resources for optimal public service level in incremental planning. To maximize social benefits, the objective is to transfer existing resources to users who can contribute the most to the city, while also minimizing the cost of factor transfer. One solution would be to switch from "land finance" to "tax finance" and impose property taxes on improved housing and second sets of ordinary commercial housing. The goals are to promote the rental of inventory, to encourage the purchase of improved housing, to encourage the second set of commercial housing households to rent out their original houses, to reduce or even exempt property tax for rented commercial housing, to revitalize the inventory and give full play to the housing function, and to ultimately realize both rental and purchase.

Real-estate tax, also known as property tax, is a tax on the property ownership link. It is not uncommon for property values to rise because of increases in land value that do not belong to the proprietor but rather are the result of community efforts and government services [53]. Land value, strictly speaking, is the remaining value after public-service charges have been deducted. Currently, however, the purchase of real estate in China requires only a one-time purchase cost and applicable taxes. As long as a city's real-estate market remains buoyed by buyer money, it may continue to fund public infrastructure projects (such as roads and bridges) and make further investments in public services (education, greening, and community security). The greater the residual value transferred to the land, the faster the price of urban real estate will rise [54]. Residents who hold real estate can also own the appreciation of urban assets for free through real-estate appreciation. The collection of property tax is analogous to compelling residents to pay for government-provided public

services. At the same time, residents can choose the most suitable residential area according to their own needs and tax affordability, as in the case of consumers who have no special needs for certain types of public services (the elderly do not need to be close to the school); they can choose such properties with incomplete services but lower property taxes; or they can use the property tax savings to solve the missing public goods in the market themselves.

The property-tax collection requirements and rates should be differentiated or exempted based on regions, groups, and housing kinds. Considering the affordability demands of the low- and middle-income groups, the transaction profit tax should be exempted from the property tax for the first house of the household, while the property tax should be collected for the second house and above. Tax-free measures can also be applied based on the size of the family's newly purchased home. In the specific implementation process, differential taxation should be adopted based on the number and size of homes purchased by households, and exemptions for certain special groups or residential areas should be explored. While the incremental property tax is levied, it is suggested that the inventory be sold or rented, particularly for homeowners who purchase improved housing and second or more typical commercial housing. The rental inventory can be used to minimize or even exempt property tax, to rejuvenate the inventory, and to give full play to the dwelling function.

The property tax is a reliable source of revenue for local governments, which can give financial support for sustainable urbanization and enhance the government's ability to provide security. The implementation of property tax will diminish the role of land financing, thus reducing the value of housing as an investment commodity [55]. However, because the property tax is assessed yearly, if public services are upgraded annually, the government will collect the property-tax rate annually, and taxes will increase proportionally. It is reflected in the government account that the current government's income will decrease, but the future government's income will increase. To gain a sustainable and stable source of revenue, local governments must focus on the development environment's creation, thereby encouraging the long-term operation of local fiscal policies and fiscal habits. To gain a sustainable and stable source of revenue, local governments must focus on the development environment's creation, thereby encouraging local fiscal policies and fiscal habits to last in the long run. In addition, the establishment of a property tax will support the regulation of income distribution, the prevention of speculative real-estate transactions, the modification of the situation in which land and housing prices are inflated and rigid demands cannot be met, and the promotion of social equity. Consequently, property tax is not only a solid source of tax revenue for the local government but also favorable to optimizing the structure of local government tax and fee income, and it can encourage the adjustment and transformation of the economic structure.

4.3. Using Property-Tax Funds to Provide Affordable Housing and Housing Vouchers

China's most serious challenges are stability and domestic demand. As a result of the dual structure of urban and rural areas, migrant workers do not receive the same treatment as citizens in public housing, basic education, and healthcare, and this has a negative impact on China's population urbanization. However, the establishment of stable financial sources is necessary in order to improve the security mechanism. On the other hand, if the new urban population is treated better through the provision of affordable housing, the establishment of a comprehensive medical-insurance system, and the elimination of institutional discrimination in children's education, the demand will be stimulated. To maintain social stability and stimulate domestic demand during the transitional phase of land finance, the correct strategy is to shift the primary consumer from a small number of citizens who have completed wealth accumulation to the majority of the remaining citizens, particularly new citizens who have moved into the city but do not have housing. Through the collection of real-estate tax from certain groups, stable financial resources are obtained. These resources are then used to construct affordable housing and distribute real-estate vouchers; the particular implementation procedure relies on city-specific policies.

For cities with a large floating population, the housing pressure of citizens can be relieved by providing affordable housing, which can be divided into rental housing and “rent-before-sale” housing. Rental housing is owned by enterprises or the government; it is rented to specific groups of people at a price below the market rate in order to alleviate their housing difficulties. When the income of low-income households’ changes, the government can stop issuing subsidies at any time, thus providing a degree of flexibility and allowing for low-income groups to effectively meet their housing needs. Moreover, “rent-before-sale” housing is initially leased to the lessee and then sold according to the contract, which not only reduces the housing pressure of certain groups but also stimulates housing demand. The “rent-before-sale” housing policy designed for Huawei employees by the municipal government of Dongguan is a relatively successful example. In December 2015, the Dongguan Government sold Huawei the land at cost on the condition that Huawei relocate its factory from Shenzhen to Dongguan. On this land, Huawei can construct housing for the company’s employees and then rent it out for CNY 32 per square m per month for five years; the price (considerably lower than the surrounding commercial housing price of CNY 30,000/m²) is paid to acquire the house’s full property rights. For employees, it is equivalent to working for Huawei for 5 consecutive years to redeem the housing option. For enterprises, because of the low housing cost, employees are more likely to accept lower wage levels and control wage costs. For the Dongguan Municipal Government, it appears that the land-use rights are sold to Huawei at the cost price, but Huawei creates tax revenue. In reality, this practice is to convert the original one-time “land finance” into a continuous “land finance”. Particularly significant is the fact that the infrastructure required to support housing construction generates an enormous demand for loans, thereby generating a substantial amount of liquid money. This approach is essentially equivalent to discounting the future labor of employees through housing, thereby generating a substantial demand for loans. The “rent-before-sale” affordable-housing system is an important tool for capitalizing labor, as it not only increases the real-estate market’s inventory and reduces labor costs but also attracts labor, thereby promoting urban economic growth and stable development.

For cities with a large inventory, the fiscal revenue from the collection of property tax will be converted into low-income-housing vouchers. Low- and middle-income-housing applicants can apply to the government, and after examining their eligibility, the government will give real-name housing vouchers. Buyers can use the housing vouchers as part of the purchase price or rent price to go to the market to purchase or rent a house or develop businesses; owners can also exchange housing vouchers for cash with the government. If low-income individuals utilize government housing vouchers as part of the house payment to acquire property rights, the government will repurchase the house if it needs to be transferred in the future. The buyback price is the original sales price plus the same-period bank-deposit interest, which does not climb in tandem with house prices. Housing vouchers will relieve the strain on low- and middle-income families to purchase homes, consequently encouraging the demand for homes and assisting towns with a significant inventory of vacant commercial properties to sell to individuals in need. Simultaneously, housing vouchers incorporate the market competition and free-choice mechanisms into the housing security system, allowing participants to freely pick housing and guiding healthy rivalry among developers. Owners of housing vouchers can choose their own houses in the real-estate market based on their own family’s economic conditions and actual conditions, which not only can save on commuting costs but also improve the living community environment, increase the family’s comfort and safety level, and avoid the defects of affordable housing.

Based on the above analysis, we establish diagram of the local land-finance transformation mechanism with synergy between increment and inventory, as shown in Figure 2.

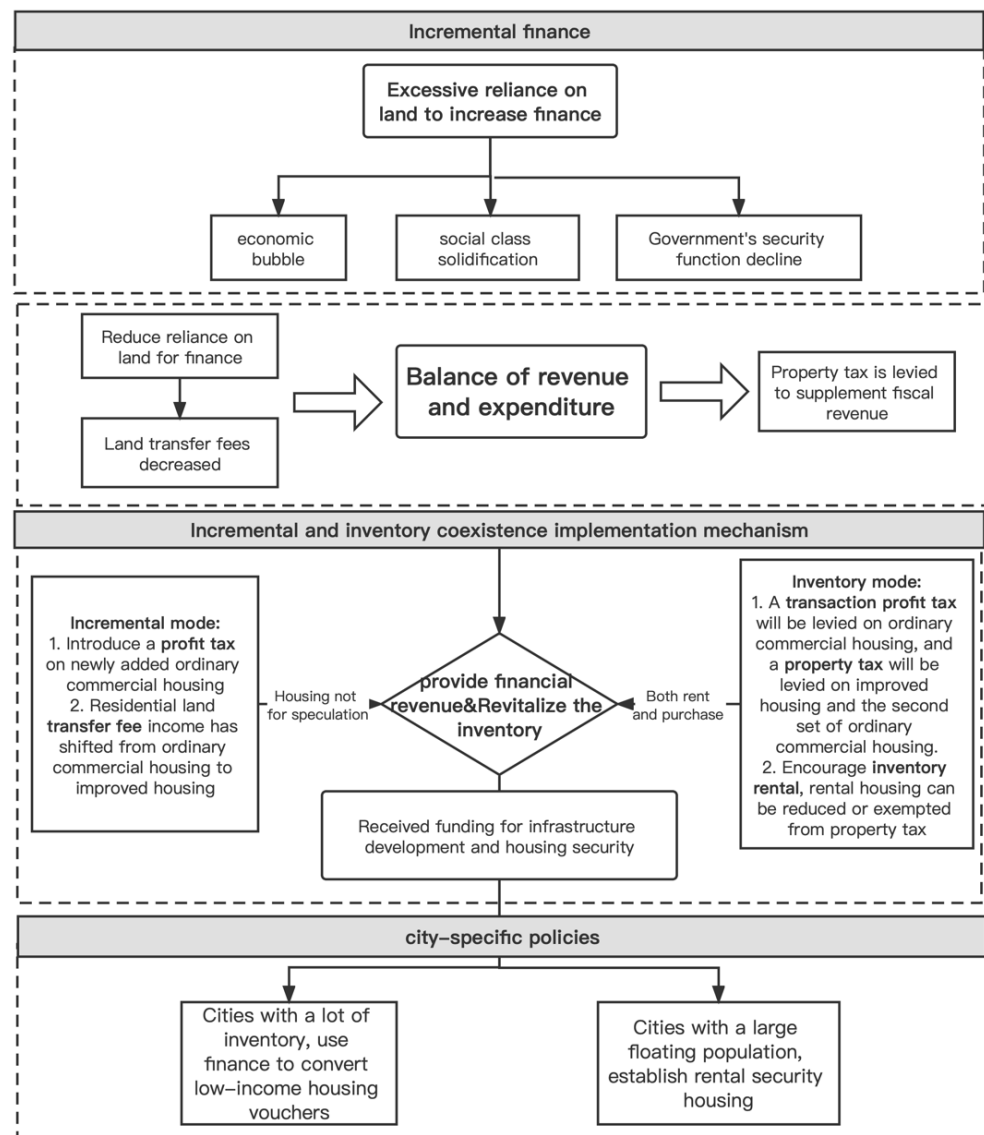


Figure 2. Diagram of the local land-finance transformation mechanism with synergy between increment and inventory.

5. Discussion

5.1. The Social-Risk Avoidance of Levying Property Tax

Collecting real-estate taxes carries important societal ramifications, as well. When it comes to taxes, real estate is the first one to come to mind. The tax on property is based on the fact that we have the right to only use our homes, not own them. Second, because a considerable quantity of taxes was collected throughout the housing transaction process, there will be a problem of double taxation if the property tax is collected again. The third aspect is the purpose of property tax, how to use it, and how to make the real-estate tax system in the specific implementation process.

Property-tax revenue is utilized not just for the construction of affordable housing and the distribution of housing vouchers in the region but also for infrastructure development. Housing security and local infrastructure-construction budgets are given based on local reality. After a portion of the property-tax revenue is utilized for housing security, the remainder is used for local grass-roots building, which is gained from the people and must be used for the people. The property-tax funds are utilized to gradually promote the equalization and improvement of public services. Local supporting schools and police

stations are also relatively good in areas with high property taxes, allowing the house price to be supported. Residents pay a property tax similar to the regular property tax. The first is to pay property taxes to cities/towns, while the second is to pay property-management fees to residential quarters. As a result, the payment and application of property tax necessitates the change of government services. People service means providing something to the general population, while also accepting criticism and oversight from the general public. Specifically, aside from the welfare effect of collecting property tax, the government is always the main beneficiary of property tax, even without considering the tax externality. When tax externalities are taken into account, the main beneficiaries of a type of property tax depend on the specific property-tax system (see Table 2). When the land-tax rate is higher than the building-tax rate, residents are the main beneficiaries of the property tax; in other cases, the government is the main beneficiary of the property tax. From the perspective of total social welfare, the higher the tax rate of land relative to buildings, the greater the total social welfare [56].

Table 2. Comparison of advantages and disadvantages of different real-estate tax systems (under land public ownership).

Tax System	Advantages	Disadvantages	Major Beneficiaries
Tax on land	The total social welfare is the highest; The total welfare of residents is the highest	The government has the least tax revenue	Residents
Tax on buildings	The government gets the most revenue from taxes	The total welfare of society will lose the most	Government
Uniform tax on land and buildings	To some extent, it takes into account the interests of the government and residents and is more flexible than land tax and building tax	Without considering the tax externality, the welfare of residents suffers	Government
Differential tax rates are levied on land and buildings	The most flexible; it can maximize the interests of the government and residents	Land and building values need to be assessed separately, which is the least feasible in reality	Government or Residents

There is no optimal real-estate tax system in practice, and the main objectives of real estate-tax reform need to be clearly introduced. There is no tax system that takes into account government tax revenue, residents' and total social welfare, and practical feasibility. Therefore, different local governments are encouraged to choose the tax system in line with their own realities during the implementation of real-estate tax.

5.2. Insufficient Money Supply due to Transition

For a long time, the Chinese economy has been in a state of currency shortage. In the era of physical currency, export surplus is the main way to generate currency. After the reform and opening up, the renminbi was pegged to the US dollar, and China's currency generation was mainly based on export settlement. After 2008, affected by the slowdown in exports, the growth rate of China's foreign-exchange surplus has been narrowed, but the money supply has grown rapidly. The reason for this phenomenon is that China's currency has changed from exogenous to endogenous; land finance created unprecedented credit, making lending the primary means of generating money. After 2008, the largest contribution to M2 is credit, which is about 75%, and one of the main channels for credit

growth is real-estate mortgage loans. With the expansion of land credit, China's ability to generate money from domestic loans has increased significantly. The result was a rapid increase in loans and an increase in the amount of money in the market. the more money there was, the more developed the division of labor in society. However, once the loan obtained from the bank cannot find the investment target, the loan demand will decline accordingly. At this time, even if real estate can create more credit, money cannot be created through financing. The consequence of this is the sudden disappearance of money, the emergence of deflation, and ultimately the shrinking of the division of labor in society.

Faced with this risk, a new way to obtain liquid money must be found to replace land finance, while creating a matching capital market for the new way. With the transformation of economic growth, the proportion of the real-estate market in China's capital market will gradually decrease, while the proportion of the inventory market should gradually increase. However, due to the inherent insufficiency of the inventory market, it must be redesigned according to the characteristics of China's system.

5.3. Reform of Government Performance Appraisal

Since the reform of the tax-sharing system in 1994, local governments have made large-scale investment promotion at all costs. On the one hand, the manufacturing industry can generate stable value-added tax revenue. More importantly, the development of the manufacturing industry will also indirectly promote the development of the local service industry and increase the service industry. The demand for land will bring about related business tax, commercial and residential land-transfer fees, and other income. Considering that the performance appraisal with GDP as the main indicator is more willing to solve the employment problem than the housing problem, the introduction of new enterprises with low rental prices can fundamentally solve the employment problem, so officials avoid facing the problem of excessively high housing prices in the real-estate market. This leads to serious housing problems for low-income families. The GDP-performance-appraisal system for government officials has seriously hindered the development of new urbanization and brought huge environmental costs [57]. Therefore, the original evaluation system of local government officials with GDP as the main evaluation standard is not conducive to officials to better consider social issues such as welfare and environmental protection; it cannot adapt to the development of the new stage of coordinated development of incremental and inventory. At the same time, if the government collects property taxes to obtain a more sustainable and stable source of funds, the government will change from a landowner to a public-service provider; politically, it will also need to transfer some rights to the owners (residents). Before the middle class was formed and made up the majority of the members of society, democracy meant a huge cost. This cost often led to the stagnation of social development, officials tended to avoid costs to obtain higher performance within a limited term of office. In order to encourage officials to take more long-term choices, government's performance assessment should not use GDP as the main indicator, but should include assessment indicators such as the environment, future benefits, and social stability, which have a more long-term perspective.

6. Conclusions

The local land finance system, as "the disposable financial resources of local governments are highly dependent on incremental land and related industry rental tax and fee income", has provided significant financial revenue to local governments in recent decades, but the problems caused by the development of the real economy, the government's inability to provide sufficient affordable housing, and the increase in financial risks have also been serious. After China's total population stabilizes around 2030, the demand for extra dwellings will fall, and the housing supply model based on land increments will result in an oversupply of housing, leading to local government fiscal revenue and expenditure imbalance and impeding the country's economic transformation. As a result, the government must devote more attention to land inventory financing, shifting from

the original overreliance on incremental land finance to a local land-finance mechanism in which increment and inventory are integrated; the property tax should play an important role in this transformation. In the incremental mode, it is necessary to limit speculation in the real-estate market to avoid a cliff-like decline in the income of the local government's land-transfer fees; increase the inventory mode and obtain fiscal revenue, while also revitalizing the inventory; and realize both rentals and purchases. Moreover, the fiscal revenue should be used for the construction of affordable rental housing or for housing-voucher funds in accordance with city policies. Citizens are more likely to consume once they have the security of a home, which will promote consumption in other marketplaces and, eventually, dissolve the dual structure of urban and rural areas and attain universal prosperity. A system's change necessitates a lengthy period of exploration and testing. During the transformation, consideration should be given to the objective and methods of implementation of the real-estate tax, recurring taxation, and the expiration of land-use rights that may result from the implementation of the real-estate tax. Make decisions on insufficient money availability and be cautious at all times. Simultaneously, it is necessary to innovate the government's performance-evaluation system, with GDP as the primary evaluation indicator, so that government officials are more motivated to improve the living environment and the living environment of citizens, while also caring about issues such as fiscal revenue and employment. To sustain social stability, we shall conduct recurrent investigations and make attempts to determine the most appropriate transformation path for national conditions.

The urbanization transformation of China, the world's largest developing nation, can serve as a benchmark for all developing cities transitioning from rapid urbanization to stable urbanization. To sustain social stability, each city should perform repeated research into the transition process and seek to identify the most appropriate transformation path.

Author Contributions: Conceptualization, Y.W. and H.Z.; methodology, Y.W.; investigation, H.Z.; data curation, H.Z.; writing—original draft preparation, H.Z.; writing—review and editing, Y.W. and S.Z.; supervision, Y.W. and S.Z.; funding acquisition, Y.W. All authors have read and agreed to the published version of the manuscript.

Funding: The research was funded by National Natural Science Foundation of China (Grant No. 71874155).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data in the article are detailed in Section 3.1. All the data used are reflected in the article. If you need other relevant data, please contact the author.

Acknowledgments: We are grateful to the data provider of the Nation Bureau of statistics (<http://www.stats.gov.cn/tjsj/ndsj/>) (accessed on 20 May 2022), and the anonymous reviewers and the editor for their constructive comments and suggestion for the paper.

Conflicts of Interest: The authors declared that they have no conflict of interest to this work.

References

1. Batten, D.F. Network cities: Creative urban agglomerations for the 21st century. *Urban Stud.* **1995**, *32*, 313–327. [CrossRef]
2. Berry, B.J.L. City Size distributions and economic development. *Econ. Dev. Cult. Changes* **1973**, *9*, 573–587.
3. Cohen, B. Urban growth in developing countries: A review of current trends and a caution regarding existing forecasts. *World Dev.* **2004**, *32*, 23–51. [CrossRef]
4. Wu, Y.; Luo, J.; Zhang, X.; Skitmore, M. Urban growth dilemmas and solutions in China: Looking forward to 2030. *Habitat Int.* **2016**, *56*, 42–51. [CrossRef]
5. Wu, Y.; Sun, X. Retrospect and Prospect of China's Land Policy in the 40th Anniversary of Reform and Opening up: The Perspective of Urbanization. *Chin. Land Sci.* **2018**, *7*, 7–14. (In Chinese)
6. Foley, J.A.; DeFries, R.; Asner, G.P.; Barford, C.; Bonan, G.; Carpenter, S.R.; Chapin, F.S.; Coe, M.T.; Daily, G.C.; Gibbs, H.K. Global Consequences of Land Use. *Science* **2005**, *309*, 570–574. [CrossRef] [PubMed]

7. Albright, L.; De Rickson, E.S.; Massey, D.S. Do Affordable Housing Projects Harm Suburban Communities? Crime, Property Values, and Taxes in Mount Laurel, NJ. *City Community* **2013**, *12*, 89–112. [\[CrossRef\]](#)
8. Cai, H.; Treisman, D. Did Government Decentralization Cause China's Economic Miracle? *World Politics* **2006**, *58*, 505–535. [\[CrossRef\]](#)
9. Zhao, Y.; Song, T. From Land Finance to Land Finance. *Financ. Account. Mon.* **2019**, 155–161. (In Chinese)
10. Wu, Y.; Wang, W. Policy Suggestions on Classification and Guidance of Sustainable Development of Urban Housing System. *J. Zhengzhou Univ.* **2018**, 42–47. (In Chinese)
11. Du, X.; Huang, Z. Simulation of China's Real Estate Tax Reform Effects. In Proceedings of the 2010 International Conference on Construction & Real Estate Management, Brisbane, Australia, 1–3 December 2010; Volume 3, pp. 1106–1111.
12. Musgrave, R.A. *Theory of Public Finance: A Study in Public Economy*; McGraw-Hill: New York, NY, USA, 1959.
13. Samuelson, P.A. The pure theory of public expenditure. *Rev. Econ. Stat.* **1954**, *36*, 387–389. [\[CrossRef\]](#)
14. Montinola, G.; Qian, Y.; Weingast, B.R. Federalism, Chinese style: The political basis for economic success in China. *World Politics* **1995**, *48*, 50–81. [\[CrossRef\]](#)
15. Qian, Y.; Weingast, B.R. Federalism as a commitment to perserving market incentives. *J. Econ. Perspect.* **1997**, *11*, 83–92. [\[CrossRef\]](#)
16. McKinnon, R.; Nechyba, T. Tax competition in federal systems: Political accountability and financial constraints. In *The New Federalism: Can the States Be Trusted?* Ferejohn, J., Weingast, B., Eds.; Hoover Institution Press: Stanford, CA, USA, 1997; pp. 3–61.
17. Qian, Y.; Weingast, B.R. China's transition to markets: Market-preserving federalism, Chinese style. *J. Policy Reform* **1996**, *1*, 149–185. [\[CrossRef\]](#)
18. Zhou, F.Z. Ten years of tax distribution: System and its impact. *Soc. Sci. China* **2006**, 100–115. (In Chinese)
19. Shirk, S. *The Political Logic of Economic Reform in China*; University of California Press: Berkeley, CA, USA, 1993.
20. Fu, S.; Hong, J. Testing urbanization economies in manufacturing industries: Urban diversity or urban size? *J. Reg. Sci.* **2011**, *51*, 585–603. [\[CrossRef\]](#)
21. Wu, Q.; Li, Y.; Yan, S. The incentives of China's urban land finance. *Land Use Policy* **2015**, *42*, 432–442.
22. Liu, Y.; Fan, P.; Yue, W.; Song, Y. Impacts of land finance on urban sprawl in China: The case of Chongqing. *Land Use Policy* **2018**, *72*, 420–432. [\[CrossRef\]](#)
23. Lv, W.; Gao, S. Housing price volatility, land finance and China's macro economy. *Comp. Study Econ. Soc. Syst.* **2016**, 54–67. (In Chinese)
24. Zhu, Q. On the lack of theoretical basis of China's inter-governmental fiscal allocation System: From the perspective of the Comparison of German and American systems. *Comp. Econ. Soc. Syst.* **2007**, *5*, 98–103. (In Chinese)
25. Li, X.; Hong, G. Household registration system, capital accumulation and urban economic growth. *Urban Reg. Plan. Res.* **2013**, *2*, 63–81. (In Chinese)
26. Liu, L. Research on land finance and its sustainability of local government. *Macrocon. Res.* **2014**, 3–9. (In Chinese)
27. Hong, Y.; Guo, P. Research on debt risk of local government financing platform from the perspective of "land finance"—A case study of financing platform in C city in central China. *J. Xian Univ. Financ. Econ.* **2012**, 73–79. (In Chinese)
28. Zhao, Y. Land Finance: History, Logic and Choice. *Urban Dev. Res.* **2014**, 1–13. (In Chinese)
29. Wu, Y.; Mo, Z.; Peng, Y. Renewal of land-use term for urbanization in china: Sword of Damocles or Noah's ark? *Land Use Policy* **2017**, *65*, 238–248. [\[CrossRef\]](#)
30. Harvey, D. *A Brief History of Neoliberalism*; Oxford University Press: New York, NY, USA, 2007.
31. Hinkley, S. Structurally adjusting: Narratives of fiscal crisis in four US cities. *Urban Stud.* **2017**, *54*, 2123–2138. [\[CrossRef\]](#)
32. O'Connor, J. *The Fiscal Crisis of the State*; St Martins Press: New York, NY, USA, 1973.
33. Grover, R.; Törhönen, M.-P.; Munro-Faure, P.; Anand, A. Achieving successful implementation of value-based property tax reforms in emerging European economies. *J. Eur. Real Estate Res.* **2017**, *10*, 91–106. [\[CrossRef\]](#)
34. Tiebout, C.M. A Pure Theory of Local Expenditure. *J. Political Econ.* **1956**, *64*, 416–424. [\[CrossRef\]](#)
35. Guo, W.; Liu, J. On the tax reform of Property ownership: From the perspective of taxpayer rights protection. *Tax Res.* **2010**, 51–56. (In Chinese)
36. Beswick, J.; Penny, J. Demolishing the present to sell off the future? The emergence of 'financialized municipal entrepreneurialism' in London. *Int. J. Urban Reg. Res.* **2018**, *42*, 612–632. [\[CrossRef\]](#)
37. Christophers, B. The state and financialization of public land in the United Kingdom. *Antipode* **2017**, *49*, 62–85. [\[CrossRef\]](#)
38. Tapp, R.; Kay, K. Fiscal geographies: "Placing" taxation in urban geography. *Urban Geogr.* **2019**, *40*, 573–581. [\[CrossRef\]](#)
39. Netzer, D. *Economics of the Property Tax*; Blockings Institute: Washington, DC, USA, 1966.
40. Bimonte, S.; Stabile, A. Local taxation and urban development. Testing for the side-effects of the Italian property tax. *Ecol. Econ.* **2015**, *120*, 100–107. [\[CrossRef\]](#)
41. Ryberg-Webster, S.; Kinahan, K.L. Historic preservation in declining city neighborhoods: Analyzing rehabilitation tax credit investments in six US cities. *Urban Stud.* **2017**, *54*, 1673–1691. [\[CrossRef\]](#)
42. Alm, J.; Buschman, R.D.; Sjoquist, D.L. Rethinking local government reliance on the property tax. *Reg. Sci. Urban Econ.* **2011**, *41*, 320–331. [\[CrossRef\]](#)
43. Lyytikäinen, T. Tax competition among local governments: Evidence from a property tax reform in Finland. *J. Public Econ.* **2012**, *96*, 584–595. [\[CrossRef\]](#)
44. Chang, L. Thoughts on the Construction of tax culture. *Bus. Cult.* **2007**, 262. (In Chinese)

45. Oxley, M. Development land Tax. *Int. Encycl. Hous. Home* **2012**, 335–340.
46. Kalkuhl, M.; Milan, B.F.; Schwerhoff, G.; Jakob, M.; Hahnen, M.; Creutzig, F. Can land taxes foster sustainable development? An assessment of fiscal, distributional and implementation issues. *Land Use Policy* **2018**, *78*, 338–352. [[CrossRef](#)]
47. Zhang, C.; Zhang, B. The Mystery of the Decline of China's Industrial Investment Rate: The Perspective of Economic Financialization. *Econ. Res.* **2016**, *12*, 32–46. (In Chinese)
48. Zhao, Y. Inventory Planning: Theory and Practice. *Beijing Plan. Constr.* **2014**, 153–156. (In Chinese)
49. Wu, Y.; Wang, W. Research on the Synergistic Mechanism of Housing Security and Urban Economic Growth. *J. Hohai Univ.* **2016**, 27–33. (In Chinese)
50. Anderson, L.M.; Charles, J.S.; Fullilove, M.T.; Scrimshaw, S.C.; Fielding, J.E.; Normand, J.; Task Force on Community Preventive Services. Providing affordable family housing and reducing residential segregation by income: A systematic review. *Am. J. Prev. Med.* **2003**, *24*, 47–67. [[CrossRef](#)]
51. Song, Y.; Zenou, Y. Property Tax and Urban Sprawl. Theory and Implications for US Cities. *J. Urban Econ.* **2005**, *60*, 519–534. [[CrossRef](#)]
52. Bird, R.M.; Slack, N.E. *International Handbook of Land and Property Taxation*; Edward Elgar Publishing Inc.: Northampton, MA, USA, 2004; pp. 98–106.
53. Garza, N.; Lizieri, C. A spatial-temporal assessment of the Land Value Development Tax. *Land Use Policy* **2016**, *50*, 449–460. [[CrossRef](#)]
54. Milan, B.F.; Kapfer, D.; Creutzig, F. A systematic framework of location value taxes reveals dismal policy design in most European countries. *Land Use Policy* **2016**, *51*, 335–349. [[CrossRef](#)]
55. Hamilton, B.W. Zoning and Property Taxation in a System of Local Governments. *Urban Stud.* **1975**, *12*, 205–211. [[CrossRef](#)]
56. Fisher, R.C. *Property Taxes for Local Finance: Research Results and Policy Perspectives*; Lincoln Institute of Land Policy Working: Cambridge, MA, USA, 2009.
57. Wang, H.; Wang, Y.; Zhang, S. Numerical simulation on property tax reform: Evidence from China. *Appl. Econ.* **2019**, *51*, 2172–2194. [[CrossRef](#)]