# Thoughts on Some Issues of the Imposition of Real Estate Tax in China

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Abstract: Along with the full realization of the unified real estate registration in China, the preparation for the imposition of real estate tax goes one step further. This paper first analyzes the expected functions of real estate tax in China, including raising fiscal revenue, improving wealth distribution and regulating the housing market. Further, the paper indicates that the imposition of real estate tax needs to be based on a national real estate information registration and management platform, which should also enable the identification of households and real-time tracking of property values built upon the unified real estate registration. Finally, this paper discusses three specific issues on revenue attribution, pilot scope, and detailed deduction method for tax exemption for the imposition of real estate tax in China providing concrete suggestions on how to impose real estate tax in China.

*Keywords:* Real Estate Tax, National Real Estate Information Registration and Management Platform, Deduction on the Basis of Per Capita Area

# 1. Introduction

On December 13, 2021, one report related to the pilot reform of real estate tax was published on the website of the Chinese National People's Congress, which is drafted by the Constitution and Law Committee of the National People's Congress on the deliberations results of the "Decision on Authorizing the State Council to Launch Pilot Reform on Real Estate Tax in Some Areas (Draft)". In particular, the report states that it is necessary to advance real estate tax legislation and reform process in a positive and steady manner on a bid to guide reasonable consumption of housing and economical and intensive use of land resources, and to promote the sustainable and healthy development of the real estate market. On April 25, 2023, Wang Guanghua, Minister of Natural Resources, announced that China has fully realized the unified real estate registration, ranging from urban housing to rural homesteads, from immovable property to natural resources, covering all territorial spaces and encompassing all real estate property rights. The establishment of the unified real estate registration system will help promote the networking of housing information of national properties and eliminate the main technical obstacles for the full imposition of real estate tax. The issuance of the pilot policy and the establishment of national unified real estate registration system shows that the imposition of real estate tax in China has become an imperative.

This paper focuses on the imposition of real estate tax in China, starting from the expected function of this tax, and trying to provide some dialectical thinking for the imposition of real estate tax by

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exploring issues such as the necessary prerequisites to impose real estate tax, the allocation of tax revenue and the tax system design.

# 2. Expected Function of Real Estate Tax

Internationally, the direct function of real estate tax is providing stable fiscal revenue for local government. However, with increasingly prominent problem of high property prices and the widening wealth gap in China, real estate tax may have more certain related functions, which are discussed below.

# 2.1. Raising Financial Revenues

Countries that have imposed real estate tax mostly make it as a major source of local government revenue due to its broad tax base, clear tax sources, and low tax collection and management cost. According to Cui et al. [1], in the short term, China's real estate tax is designed to increase fiscal revenue. Zhang and Lu simulates the potential revenue from real estate tax on existing housing stock in China from 2011 to 2020 [2], and then empirically analyzed the simulated data with the local fiscal revenue in these years, drawing a conclusion that real estate tax will generate a certain amount of financial revenue and effectively alleviate local government funding gaps. As the era of real estate development is coming to an end, China's land finance is unsustainable and the shift from land finance to real estate tax is becoming increasingly necessary and urgent. Through imposing real estate tax, the government can raise additional fiscal revenue and reduce its reliance on land finance to a certain extent

# 2.2. Improving Wealth Distribution

On October 16, 2021, Chinese president Xi Jinping indicated in the fourth part of "Solidly Promoting Common Prosperity" that "real estate tax legislation and reform should be actively and steadily advanced and pilot work should be carried out", which implies that one of the objectives of China's real estate tax reform is to narrow the wealth gap. Based on the data of Chinese households, Cai and Lin find that real estate tax has a relatively strong redistribution effect on household real estate value [3], but its redistribution effect on household property value is weakened. On the other hand, Yao, and Niu find that real estate tax plays a positive role in improving wealth distribution and have a relatively obvious effect in regulating the distribution of urban housing wealth [4]. Zodrow points out that properties with higher value faces higher transaction cost and lower liquidity compared to properties with lower value [5], therefore real estate tax is progressive and able to regulate the redistribution of wealth among citizens. In summary, the imposition of real estate tax in China is expected to regulate the distribution of social wealth.

However, it should be noted that since households with lower levels of wealth (such as middle-class) may have a relatively higher proportion of real estate assets, if the government imposes real estate tax and does not use it properly for basic public services, real estate tax may have a certain reverse effect on regulating distribution of social wealth, which is not in line with the vertical equity of taxation and widen the wealth gap. In Qian and Wang's research [6], by using the panel data of 97 cities in China from 2007 to 2019 and adopting DID model, the effects of real estate tax pilot programs in Shanghai and Chongqing on the income gap between urban and rural residents are discussed. The research shows that the real estate tax pilot policy in Shanghai widens the urban-rural income gap while the pilot policy in Chongging narrows it. Consequently, tax exemptions as well as the allocation of tax revenues of real estate tax should be well designed.

# 2.3. Regulating Housing Market

Since "housing is for living in, not for speculation" was first proposed in 2016, the annual report on the work of the government cites it to set the tone for the real estate market each year. Real estate tax could be an effective tool to help achieve this goal.

The imposition of real estate tax will insert a tax wedge between the supply and demand curves in Chinese real estate market, increasing the cost of holding property and causing the demand curve to shift downwards, thus stabilizing housing prices. However, whether real estate tax can actually bring down the house prices remains uncertain and depends on specific analysis of different cities. For cities with continuous population influx in the future, the demand curve is steeper due to the strong demand for housing and investment, and the downward shift of the demand curve due to the increase in the cost of property ownership will have less impact on housing prices. On the contrary, for cities where demand for housing is weaker and less sustained, the demand curve is relatively flat, the housing supply tends to be saturated, and housing prices may fall back to some extent.

It should be noted that real estate tax cannot play a decisive role in determining housing prices after all, as Ma and Zhu point out that the impact of real estate tax is always limited and difficult to be used as a long-term means of regulating housing prices based on international experience and Chinese practice and that the demand for housing and preserving value of property against inflation are the main reasons for high housing prices in major cities in China [7]. However, government can enhance social expectations for the government's adherence to the "housing is for living in, not for speculation" policy by imposing real estate tax and imposing higher taxes on multiple suites for speculation and mansions, which can help to curb speculation in the housing market and reduce the asset bubbles caused by housing market speculation, gradually regulating the real estate market.

# 2.4. Improving China's Existing Tax System

Real estate tax mainly taxes household housing holdings, but the national real estate information registration and management platform, which has been gradually improved along with real estate tax, can also assist in taxing household housing transfers, such as individual income tax on property transactions. Under the current regulations, if the taxpayer cannot provide purchase invoice or calculate the original cost accurately, tax authorities can assess the individual income tax on deemed basis. Due to the complexity of calculating property values and the rapid rise in housing prices in China in recent years, so in practice, the approved levy method has become a tax avoidance tool for many taxpayers investing real estate. Regarding this question, the platform can provide assistance in acquiring the original value of property and make a screening of the properties traded by a household for investment (e.g. the total area of housing owned by a household exceeds a certain percentage of the total living area of the family that can be deducted for tax exemption), and then appropriately increase the corresponding tax rate. The individual income tax on real estate transactions can be separately considered as supplement for the local government revenue. In addition, the conditions for imposing inheritance tax have also been improved along with the growing maturity of the platform. Furthermore, the imposition of real estate tax is beneficial to the formation of "a good governance system with connected residents' supervision, government governance and social harmony" [8]. China's tax structure is dominated by indirect taxes currently, most consumers lack a concept of the value-added tax and consumption tax they pay, and the majority of individuals do not know how much income tax they pay due to individual income tax withholding on wages and salaries. Real estate tax, as a type of direct tax, will greatly increase residents' awareness of taxpayers and their willingness to monitor the government, promoting the institutionalized management and transparency of the government.

## 3. An Entry Requirement for Real Estate Tax

An entry requirement for the introduction of real estate tax is the establishment of a national real estate information registration and management platform. At present, the establishment of a unified real estate registration system in China has merely laid a foundation for the platform which should achieve at least two more functions to realize the imposition of real estate tax.

#### 3.1. Identification of Households

This paper suggested that a household should be the primary unit for filing and paying real estate taxes. On the one hand, the size and quantity of properties owned by most individuals depend on the housing needs of their families. Even if a household member does not own any property, they still benefit from living in the property owned by other household members or obtaining other economic benefits derived from these properties. Therefore all the members should share the real estate tax burden as a whole. On the other hand, this approach is conducive to matching the tax burden of households with their capacity to pay tax. In China, the smallest unit that actually bears the tax burden is the household rather than the individual. Setting the small household as the unit of declaration and deduction can make the tax burden borne by the household and the actual ability to pay taxes be measured more accurately and matched better. Therefore, only through the identification of households and the clarification of the composition of each household can we clarify the nationwide residential housing ownership of each household and impose real estate taxes.

What's more, it is proposed that households should be defined as small households rather than large households. Firstly, small households better correspond to the most common living habits and family structure in China nowadays. The data from the seventh national census shows that the average population per family is 2.62 persons, implying that most households in China are simple two-generation or one-generation households, and the situation of multi-generational households and family clustering has decreased since the beginning of the century. Secondly, in order to reduce tax collection and management cost, with the help of immediate family relationship, the platform can more easily identify the potential reasonable range of each household, while if relaxed to large households, the complex relatives in China will make the platform clueless to distinguish a single household. Finally, choosing small household is conducive to curbing the risk of tax evasion, where large households would be used as the declaring and deduction units providing opportunities for some taxpayers to implement tax evasion by including certain relatives in their families. Undoubtedly, China can expand small households under some special circumstances.

As for the specific identification criteria, this paper advises that the unmarried adult individual or husband and wife should be the starting point for identification who would be regarded as the head of the household. Their immediate family[] may join the household, but adult siblings can join only if they can provide relevant evidence that all parties share the same dwelling. The process of identifying households shall begin with the voluntary declaration of the head of the household, who may choose which immediate family to include, as minors will normally be automatically bound to their parents. The inclusion of siblings, immediate family of siblings and other individuals requires verification. Unmarried individuals or couples can join only one household. If an unmarried adult individual or a couple is in two or more households simultaneously, it should become a separate household and minor children will be relocated accordingly. The platform will electronically review household registration and civil affairs information to verify household declarations. If there are no objections, the declarations will be approved. If there are objections, the platform will return the opinion to the head of the household, who may resubmit the revised declaration for a second review. If there are still objections, the head of the household can choose to repeat the aforementioned process for further revision or submit to manual review (with fees starting at the second review) until there

are no objections. In addition, the platform shall automatically build simple new households for undeclared unmarried adult individuals and couples, members of households that do not pass the registration within the specified period, and unmarried adult individuals and couples in two or more households simultaneously.

# 3.2. Real-time Tracking of Property Price

Real estate tax is basically levied on an ad valorem basis, so it is crucial to obtain the real-time property price. Firstly, the platform can adopt the existing dynamic house value appraisal system, which has become increasingly mature through years of pilot simulated tax assessment by the Ministry of Finance and the tax authorities in Beijing, Shenzhen and Jiangsu, and has been used in the tax collection and management of the second-hand house transaction. Secondly, the relevant data of the platform can be enriched by associating the housing value information from other government departments, real estate transaction intermediaries, professional appraisers and other sources. Finally, in cases where property valuation information is temporarily unavailable, local governments may provide transaction guidance prices based on local average property transaction prices to calculate the property price.

## 3.3. Follow-up

Based on the two functions mentioned above, the platform can directly derived a user-side application for each household. At the end of the year, the head of each household can confirm the household members and property ownership status for the current year on the platform, and make declaration and tax payment within the deadline. If the head of the household is unable to carry out the annual settlement, other members of the household can perform the above operations on their behalf with the authorization of the head of the household and passing the relevant verification procedures.

## 4. Some Specific issues of Real Estate Tax Pilot

## 4.1. Real Estate Tax Should Be Central Tax

This paper argues that real estate tax should be central tax for three reasons. Firstly, the imposition of real estate tax requires the establishment of national real estate information registration and management platform. This platform should not only include information about all residential properties across the country, but also identify households and make the housing situation of each one clear. There are many types of special problems across areas, such as households may own houses in multiple places and members of a household may not be registered in the same place. Most of the tax collection and administration cost of real estate tax comes from the establishment of this platform and its daily information update and management, which are not feasible to be completed by local government, but rather a central dedicated department takes charge of it. If the party bearing most of collection and management cost is more entitled to obtain the corresponding tax revenue, then real estate tax should be classified as central tax. Secondly, the ability of real estate tax to raise revenue is likely to be weak, so it cannot act as the main force of local tax. Despite the increasing amount of real estate tax revenue generated in Shanghai and Chongqing, it only accounted for less than 5% of total fiscal revenue until 2017. Li Wen measured the ratio of real estate tax to local tax assuming imposition [9], such as a low tax rate and wide tax base, accounting for less than 15%, and even if a high tax rate and wide tax base are set, the proportion cannot reach 30%. Thirdly, if real estate tax is local tax, it may cause disputes regarding the attribution of tax revenue in cases where households own properties in different places across the country. If tax exemption is granted for some properties,

whether or not to grant it becomes a matter of dispute between the local governments involved. It would be easier to avoid such disputes by classified real estate tax as central tax.

After obtaining real estate tax revenue, the central government can transfer all or part of the revenue to local government in the form of transfer payments according to need for basic public service expenditures and the total value of all properties, so as to relieve local financial pressure and realize that what is taken from people should be used for people.

year	2011	2012	2013	2014	2015	2016	2017
Shanghai							
Tax Revenue (million)	317,272	342,679	379,716	421,905	485,816	562,590	586,551
Real Estate Tax Revenue (million)	7,366	9,256	9,305	9,995	12,381	17,096	20,369
Ratio	2.32%	2.70%	2.45%	2.37%	2.55%	3.04%	3.47%
Chongqing							
Tax Revenue (million)	88,107	97,017	111,262	128,183	145,093	143,845	147,633
Real Estate Tax Revenue (million)	2,089	2,743	3,140	4,037	5,246	5,688	6,490
Ratio	2.37%	2.83%	2.82%	3.15%	3.62%	3.95%	4.40%

Table 1: Real Estate Tax Revenue in Pilot Cities (2011-2017)

# 4.2. The Pilot Scope Should not Be Narrow

The pilot scope of real estate tax should cover as many areas as possible. On the one hand, real estate tax is a tax on housing owned by households nationwide, and it is important to expand the pilot scope as much as possible to test the policy effect, find potential problems, and optimize the tax system. On the other hand, if the pilot scope is too limited, some taxpayers may choose to sell their properties in the pilot areas and buy new ones in places other than the pilot areas for investment purposes to avoid taxes, which may greatly reduce the effectiveness of the policy. Such activities may cause distortions in the real estate market and have a significant negative impact on land transferring income in the pilot regions. Since land transferring income is a critical part of local government revenue, the fiscal capacity of the pilot regions may be affected during pilot period, and the limited revenue from real estate tax alone cannot offset the impact on land transferring income. In addition, local governments are effective price takers for the national average capital tax rate, and when local governments set a higher tax rate than the national average capital tax rate in a given fiscal year, it leads to an outflow of capital and population from their jurisdictions. As a result, local governments may be less cooperative with the real estate tax pilot. This paper suggests that the Yangtze River Delta, Pearl River Delta, Beijing-Tianjin-Hebei, and some regional center cities (Chongqing, Hangzhou, Ningbo, Suzhou, Sanya, Haikou, Chengdu, Xi'an, Xiamen, etc.) should be included in pilot scope.

## 4.3. Deduction on the Basis of Per Capita Area

This paper argues that in order to reflect the ability-to-pay principle of taxation ,to exempt or reduce the middle and low-income groups from the corresponding tax burden and to reduce tax collection and management cost by appropriately narrowing the tax base, tax deductions should be set for real estate tax. Among the three tax deduction methods of per capita area, per capita value, and first set, Yue et al. found that the "first set deduction" is least desirable for improving income distribution [10],

raising fiscal revenue and regulating supply and demand in the real estate market. this paper suggests that the deduction on the basis of per capita area should be chosen.

First of all, the deduction on the basis of per capita area can protect the basic housing needs of residents and this deduction method is more acceptable to the public than the deduction on the basis of per capita value. Compared with the deduction on the basis of first set, it avoids the problem of tax equity because the area of a single set of housing may vary greatly.

Secondly, the deduction on the basis of per capita area can exclude some properties from tax scope simply by calculating household housing area, thereby reducing tax collection and management cost and improving efficiency. Compared with the deduction on the basis of per capita value, the workflow is greatly simplified and the workload is significantly reduced.

Thirdly, by adopting deduction methods on the basis of per capita area, the tax base is easy to adjust. All housing areas other than the deducted part can contribute to tax revenue, which may help to raise more fiscal revenue than the first set deduction[].

Additionally, negative externalities of deduction on the basis of per capita area is smaller. First set deduction may drive households with multiple houses to choose fake divorce so as to avoid taxes, and may also lead residents to prefer purchasing and developers to tend to develop larger-area housing, which is not only contrary to the current macro-control tone of real estate market, but also detrimental to the intensive use of land. By setting the standard of deducted area, the government can guide consumption tendency, reduce some luxury residential consumption, influence the development plan of land developers and improve the efficiency of land resources utilization and allocation.

Finally, some potential problems of deduction on the basis of per capita area can be solved by reasonably setting the per capita deduction area. For example, this approach may have problems of tax equity since the prices for the same area of housing may vary greatly due to the difference of location. For example, the price of property in the urban area is higher than ones with the same area in the suburban area, and small property in the urban area may have the same value as the large property in the suburban area, as a result, the tax burden of households owning small property in the urban area may be lower than that of households owning large property in the suburban area. This paper proposes that the problem can be solved by setting the per capita deduction area of properties in urban areas to be smaller than that in suburban areas.

Regarding how to deduct on the basis of per capita area, central government can stipulate the upper limit of the per capita deduction area, and the local government can finalize the local per capita deduction area based on certain factors such as the level of housing prices. Each household can calculate the deduction area based on the quantity of household members confirmed by the platform. For example, if the household owns a property in one place, the deduction area of the family equals number of household members multiplied by per capita local deduction area. If a household owns properties in different places with different per capita deduction area, the household can choose the how to allocate total deduction area. If the family owns two properties in both A and B, both of which are 120 square meters, the per capita deduction area in A is 60 square meters, and the per capita deduction area in B is 40 square meters, and the quantity of household members confirmed by the national real estate information registration and management platform is 4, then the family can allocate the deduction area for two persons to A and the deductible area for two persons to B. The household only needs to pay real estate tax on the remaining 40 square meters in B (A:120- $2\times60=0$ ;B:120-2×40=40); the family can also choose to allocate the deduction area for three persons to B and the deduction area for single person to A. Then the family only needs to pay real estate tax on the remaining 60 square meters in A (A:120-1×60=60;B:120-3×40=0).

## 5. Conclusion

The full realization of the unified registration of real estate has laid a solid foundation for the imposition of real estate tax in China, so it is significant to deepen the understanding of real estate tax in China and discuss the specific tax system design. In addition to raising fiscal revenue, China's real estate tax is expected to have the functions of improving wealth distribution and tax system and regulating the housing market due to China's national conditions and government policy objectives. What's more, the existing unified real estate registration system cannot meet the needs of imposition of real estate tax, and a national real estate information registration and management platform should also enable the identification of households and real-time tracking of property values. Finally, this paper discusses three specific issues: revenue attribution, pilot scope, and deduction method, and concludes that the real estate tax should be central tax, the pilot scope should be as large as possible to include major cities in China, and the tax exemption should be calculated in the method of "per capita deduction area".

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