Research Proposals on the Reform of Real Estate Tax in China
Based on China's Actual Situation and International Experience

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ABSTRACT
The real estate tax is a local tax widely set up all over the world, providing local governments with stable and sustainable tax revenue. Through the analysis of the pilot policies of the real estate tax in Chongqing and Shanghai, it is shown that real estate tax in Chongqing and Shanghai is not the most effective tool to regulate the housing price, although it can reduce the growth of housing price. The real estate tax in Chongqing and Shanghai is still inadequate in the rationality of policy and the ability to regulate the housing price. This paper outlines three problems in the real estate economy: uneven distribution of wealth, an imbalance between supply and demand, and speculation behavior leading to economic bubbles. Given the current situation of China's real estate market and drawing lessons from foreign experience, the recommended solutions for the reform of real estate tax are: determining tax base, formulating tax rate, making reasonable preferential policies, establishing a complete national real estate information system and introducing formal laws to legalize real estate tax activities. This paper summarizes the existing policies and puts forward feasible suggestions for large-scale implementation of real estate tax in China.

Keywords: real estate tax, real estate economy, tax base, tax rate, reasonable preferential policies.

1. INTRODUCTION
China's real estate tax started late, and based on China's current situation of families owning multi-family properties, real estate tax trial is more difficult. So, the Chinese government proposed a pilot real estate tax. Chongqing and Shanghai real estate tax pilot started on January 28, 2011. The Chongqing pilot areas are Yuzhong District, Jiangbei District, Shaping Dam District, Kowloon Po District, Dadukou District, South Bank District, Beibei District, Yubei District, Banan District total nine areas in Chongqing. Shanghai pilot areas are the scope of the administrative area of Shanghai city. Up to now, China's real estate tax pilot cities are still Chongqing and Shanghai. The real estate tax is conducive to stabilizing real estate market expectations Unlike transactions, real estate taxes are levied annually as long as they are held. This requires market buyers to consider the long-term cost of holding property in the future, combined with their own economic conditions reasonable decision-making, to help form rational demand, the implementation of the real estate tax system can limit speculation and increase government tax revenue, for the healthy development of China's real estate market has important significance.

In order to analyze the give reasonable suggestions to the reform of China’s real estate tax, the articles related to the current situation and existing problems can be served as a solid foundation. According to Zheng, the synthetic control method of Abadie, Diamond, and Hainmueller is applied to analyze the real estate tax directly influences the house price of Shanghai but no significant evidence shows it has the same influence on Chongqing. Shanghai's relatively modest real estate tax makes its home prices have low influence due to real estate taxes, while Chongqing's tax on luxury properties
has little impact on ordinary prices [1]. Besides, Jiang takes Shanghai as an example to analyze the influence of the real estate tax pilot program. It’s concluded that the pilot didn’t affect the housing prices greatly and it promoted income redistribution to some extent. The introduction of real estate tax can also stabilize housing prices in the short term, which is beneficial to the housing of middle and low-income groups [2]. To research real estate tax further, Wen-hu used HCW and DID methods and found that real estate tax can be a policy method to control housing prices, but need careful execution [3]. Kaldor gives the definition of speculation, which is the purchase of real estate primarily for the purpose of obtaining capital gains, rather than to enjoy the benefits of using it [4]. For the existed problems, Wang points out that the reform of comprehensive socialization, commercialization, and marketization of housing affects not only the housing market itself but also the uneven housing ownership of residents. Marketization helps increase the wealth value and the income gap of residents, which is not conducive to social stability and development [5].

Based on the existing policies and problems in China's real estate industry, the following literatures provide us with help in thinking about how to effectively solve the problems. Firstly, Liu shows that a lower tax rate could be used to allow time for ownership adjustments, encourage prepared governments to continue to reform land leasing structures, or defer tax payments for low-income people [6]. In addition, Li elaborates some typical and thorough real estate tax policies of various countries in the world, providing a reference experience for the design of China's real estate tax system [7]. What’s more, Liu & Liu point out the basic content of real estate tax reform and compare the measures under different principles, such as tax rate based on "revenue is determined by expenditure" and fixed tax rate [8]. Zhou further discusses how to determine the tax rate under the method of “revenue is determined by expenditure”: the local government determines the public expenditure to be borne by the real estate tax and it as the real estate tax income in the next year. Then, divide the required fiscal revenue by the tax base of the real estate tax, calculate the tax rate of the real estate tax, as well as the rationality and advantage from the perspective of government fiscal revenue [9]. Last but not least, Li indicates that establishing a complete national real estate information data statistics system is conducive to the establishment of real estate tax nationwide, increasing the cost of speculation and curbing speculation [10].

The article is divided into five parts to study the real estate tax reform that is suitable for China's current situation. The first part is the introduction, which describes the background of the topic and related research. The second part analyzes the policies and limitations of the pilot cities of the real estate tax in China. In the third part, this paper expounds on the existing problems of China's real estate market, which are considered as the necessity of real estate tax reform. The fourth part is policy recommendations. The mature real estate tax system of the United States, Britain, and other developed countries can be used for reference. From the perspective of China's actual situation and international experience, this paper studies the content and reasonable policies of China's real estate tax reform. Thus, the real estate tax can promote the healthy development of the real estate market and the improvement of people's life.

2. EXISTING REAL ESTATE TAX POLICIES IN CHONGQING AND SHANGHAI

2.1. Current real estate tax policy in Chongqing and Shanghai

Nowadays Chongqing real estate tax collection methods use a progressive tax rate system, different unit prices, and Different types of real estate to make a reasonable distinction, high residential prices of higher real estate tax collection and low tax on lower-priced homes. There are two kinds of real estate tax objects in Chongqing: The first ones are Individual-owned single-family homes and personal new high-end housing. Second, at the same time meet the no household registration, no enterprise, no work three conditions of individuals who newly purchased a second set (including the second set) of ordinary housing.

Among them, high-end housing refers to the construction area transaction unit price reached the previous two years in the main city nine districts of the new commercial housing transaction average price of 2 times (including 2 times) more than housing.

For the real estate tax in Shanghai, the real estate tax is aimed at two kinds of objects. First, the housing newly purchased by the resident families in this municipality and belonging to the second set or above of the resident family. Second, the newly purchased housing in Shanghai by non-resident families.

For the tax rate in Chongqing, there are two standards to collect real estate tax in Chongqing, one is Ad valor tax, which is paid based on the residual value of the original value of the property after deducting 10%-30%. The tax rate is 1.2%, the other is rent collection which is based on real estate rental income, the tax rate is 12%. However, for residential homes rented by individuals at market prices, the real estate tax can be temporarily reduced by 4%. people can calculate the tax cost by Equation (1):

\[
taxable = \text{taxable building area}
\]
For the tax rate in Shanghai, if the market transaction price of the housing per square meter is less than two times the average selling price of newly built commercial housing in this municipality in the previous year, the tax rate will be temporarily reduced to 0.4 percent; for the price of housing higher than that, the tax rate will be 0.6 percent. The real estate tax will be contributed to building basic-need housing.

2.2. Impact of real estate taxes house prices of Chongqing and Shanghai

Although the direct purpose of the real estate tax is not to reduce house prices, its direct purpose is to increase local fiscal revenue. But people also need to recognize that the real estate tax will significantly curb speculation because the real estate tax will significantly reduce the value-added properties of the house, as well as reduce the investment properties of the house. In the 2009-2019 Chongqing Statistical data, it can be found that the average transaction price (RMB / per square meter) for each year and the annual increases were respectively shown in Figure 1, that the average transaction price for Shanghai for each year is and the annual increases were respectively shown in Figure 2.

As shown in Figure 1, Chongqing residential prices in the first three years after the trial of the real estate tax policy, although the housing prices are still growing, the annual growth rate is slow, only 1.01%, 0.03%, 6.61%, far less than the staggering 23.80% and 23.65% increases before the 2009 and 2010 real estate tax pilots. This shows that the implementation of the real estate tax collection policy on the rapid rise of residential prices in Chongqing has played a certain role in slowing down and curbing. And in 2014 and 2015, there was a new breakthrough in the effectiveness of house price control, with negative growth not seen in many years. Despite the surge in average residential transaction prices in 2017 and 2018. From the data of Shanghai, Figure 2, Shanghai and Chongqing house prices change trend is generally the same, in 2011 a sharp decline, in 2013 and a slight rebound, then there were fluctuations, the overall seems to a W-shaped. Therefore, the real estate tax cannot reduce the price in essence but can reduce the growth rate of housing prices.

2.3. The limitations of real estate tax in Chongqing and Shanghai

2.3.1. The policy for tax is not reasonable enough

As mentioned above, both the real estate tax of Shanghai and Chongqing is only for a specific group of buyers, not all of the housing transactions, so that people who already own property will avoid real estate tax, they both lack solid support from the law. The tax in this pilot program is called real estate tax, which is defined as the tax levied on the holding of property. The definition of the tax in this pilot program is different from that in the regulation in 1986. For Chongqing, the real estate tax on high-end buildings is more tax, to offset the building tax is lower, but the average home buyer to buy property for living, the rich will not care about the real estate tax expenditure, but may further expand the asset allocation extreme. For Shanghai, the pilot program Shanghai is decided by the local government, and the regulations of the program are based on ‘The 136th Executive Session of The State Council’. Therefore, the tax revenue in this program does not conform with legal regulations and lacks the support from law, making it difficult to carry out.

2.3.2. The regulation of housing prices exceeds the growth rate of house prices

As mentioned above, both Shanghai and Chongqing’s real estate tax are not a tool to regulate housing prices, but China’s housing price control policy often limits the right of most people to buy housing, real estate tax can become a more practical tool of house price control, Chongqing real estate tax has not effectively affected local housing prices, housing prices are obviously
affected by other economic factors. Besides, because of the limited range of the objects involved. The pilot program of Shanghai is solid and prudent. It focuses on new-constructed housing. The program also has six tax deduction regulations. Therefore, the program does not have significant effects on house price adjust.

3. PROBLEMS IN REAL ESTATE ECONOMY

3.1. Real estate development leads to uneven distribution of wealth

At present, real estate has become an important part of residents' households' wealth. In 2018, the net property value of urban households in China accounted for 71.35% of the per capita wealth of households. Therefore, the growth of real estate net worth is an important factor in the growth of family per capita wealth. Households, who possess higher housing property net value, will get more wealth from the great increase in house prices. In contrast, low-income people are unable to afford increasingly expensive housing properties. Therefore, the sharp rise in house prices has brought both positive and negative wealth effects. It increases the wealth accumulation of high-income families but leads to the decline of house purchase ability and consumption-ability of low-income families. The Income Gini coefficient of China from 2015 to 2019 is shown in Figure 2. According to the research and survey of Peking University, China's Wealth Gini coefficient reached 0.78 in 2016. These data reveal that China's income distribution is unbalanced and the gap between the rich and the poor is large. Real estate is one of the important factors causing this phenomenon.

Figure 3 2015-2019 Income Gini coefficient of China

3.2. Imbalance between supply and demand: the large scale of real estate in inventory

At the end of 2020, the area of commercial housing for sale in China was 498.5 million square meters. The inventory decontamination cycle was 48.9 months, which exceeds the relatively reasonable decontamination cycle’s upper limit of 18 months. This indicates that there is a marked oversupply in China's real estate market.

This is because the national policy encourages urban expansion, which promotes the construction of real estate and the growth of real estate enterprises. However, China's real estate development has not been adjusted according to local conditions. Cities all over the country have invested in building housing property, leading to an imbalance in the real estate market. On the one hand, economic development and rising house prices stimulate the large-scale construction of real estate enterprises, resulting in the continuous increase of real estate inventory. On the other hand, high housing prices cause insufficient demand for the real estate industry. Due to the residents’ limited income and purchasing power, a large number of increasing houses cause oversupply. This imbalance between supply and demand is not conducive to the healthy development of real estate economy and intensifies the competition among real estate enterprises.

3.3. Speculation has a negative effect on the development of real estate

According to Kaldor, speculation is defined as the purchase of real estate primarily for the purpose of obtaining capital gains, rather than to enjoy the benefits of using it [15]. Land hoarding, speculation, and other phenomena have seriously affected the normal development of the real estate market in China. Real estate prices are artificially inflated by speculators, which increases spending by consumers who want to buy homes to live in. As the cost of buying a house increase, consumers will need to reduce their spending on other things, which will have a negative effect on the growth of other industries. The speculative behavior of a large number of economic subjects will develop into economic bubbles, and once the real estate bubble bursts, the decline of property prices will bring great pressure on the consumer market and employment, thus affecting the normal operation of the whole national economy.

In early April 2021, netizens publicly reported illegal real estate speculation by "Shenfangli", which aroused widespread public concern. Shenfangli has been certified as a "real estate expert" on Weibo, where its account has 1.46 million followers and more than 3,000 members. It publicly publicized "work useless theory" "everyone can buy a house, until the financial freedom" and so on to attract members. With the focus of speculation in Shenzhen part of the hot real estate, 2.3.2. The regulation of housing prices exceeds the growth rate of house prices appreciation to its members. However, Shenfangli violates public order and instigates members to evade the purchase policy by means of "fake marriage". It is suspected of illegal fund-raising by soliciting funds from
an unspecified group in the name of mutual funds and promising to guarantee the bottom line. In addition, there are also suspected of fraudulently obtaining credit funds, false advertising, and other illegal acts. According to the investigation of Shenzhen Market Supervision Bureau, Shenfangli seriously violated the central government's spirit of “housing not speculation” and caused an extremely serious social impact. The bureau imposed a fine of 2 million yuan on it according to law, and the administrative penalty has been implemented.

4. MEASUREMENTS

4.1. Measures to alleviate the existing problems

4.1.1. Tax rate

There are two main forms of real estate tax rate, which are namely proportional tax rate and progressive tax rate. According to China's actual situation, the real estate tax system is in the early stage of development, and a mature collection system has not been established. Therefore, a proportional tax rate is suitable for China to facilitate real estate tax.

Real estate tax belongs to the local main tax, and the local government has autonomy in the use of real estate tax revenue. Thus, the Chinese government can adopt the method of determining income by expenditure to determine the tax rate standard. The local government determines the public expenditure to be borne by the real estate tax in the next year and takes it as the real estate tax income in the next year. Then, divide the required fiscal revenue by the tax base of real estate tax, which calculates the tax rate of real estate tax. Zhou indicates that this method can flexibly set the tax revenue of real estate tax according to the actual situation of each year [9]. It avoids the contradiction between changes in economic development and taxation.

At the same time, due to the different economic levels of each region, the fiscal expenditure budget for the provision of public services is different. Therefore, China can adopt a differentiated tax rate. The central government determines the tax rate range. Then, according to the local economic level, local governments set reasonable tax rates for taxation. Differentiated tax rates are more easily accepted by the public, which is conducive to gradually promoting the implementation of real estate tax. Through the differentiated real estate tax rate, the real estate holders of high-priced houses will pay more real estate tax, which presents the principle of tax fairness. The tax rates of American States fluctuate between 0.3% and 2.21%. Japan's tax rate ranges from 0.3% to 1.4%. Considering that China is in the early stage of real estate tax reform and the situation of pilot cities, the tax rate range is estimated to be 0.6% - 1%.

4.1.2. Tax base

Taking the market evaluation value of the real estate as the tax base is generally common. The real estate value is the realizable value of the real estate under open market conditions. It includes the use-value of the real estate and the expectation of future appreciation. Local governments should set up specific departments to evaluate the value of real estate with reasonable evaluation methods. And the government should ensure that the evaluation is fair and impartial. According to Liu, in order to avoid excessive appraisal costs and cumbersome evaluation work, the government can set a fixed period and regularly update the evaluation value of the real estate [8]. It is comprehensive to levy taxes on the value of real estate. Regular updating of tax base can more accurately reflect the economic value and time value of real estate. In this way, the real estate tax can promote the redistribution of wealth and benefit social equity.

Taking Guangzhou as an example. In 2020, the per capita housing construction area of urban residents in Guangzhou was 34.61 square meters, and the permanent resident population was 18.68 million. In December 2020, the average house price in Guangzhou was 33364 yuan per square meter. Assuming that the collection range is 70% and the tax rate is 0.6% - 1%. According to 80% of the market value, the Guangzhou government can obtain a real estate tax income of 72.5 billion to 120.8 billion.

In the pilot program in Shanghai and Chongqing, the real estate tax wasn’t able to play an important role in raising fiscal revenue and the house prices didn’t have obvious changes. The small range of objects of taxation should be considered as one of the reasons. Therefore, enlarging the range will be an effective and significant method to solve the existed problem. To make full use of the real estate tax in raising fiscal revenue, adjusting income distribution, and regulating the operation of the economy, stocking houses can be included in the range of objects of taxation to enlarge the tax base. It’s believed that improving the aspect of tax base can enrich the tax source of the real estate tax as well as solve the problem of the unfairness of tax burden between the owners of stocking houses and the owners of new-constructed houses. In addition, take the pilot program in Shanghai as an example, a family of three members can achieve a 180 square meters deduction in total, which leads to the small range of taxation. The policy of tax deduction and exemption is a measure to help some people with special situations reduce tax pressure as well as take the ability to pay taxes into consideration.

4.1.3. Preferential Policy

Many countries have implemented real estate tax preferential policies. Measures are usually to reduce the tax burden of low-income or specific groups to ensure
their basic living standards and lighten the tax burden on specific types of real estate (such as residential) to support such uses. According to Jia, the U.S. government provides tax relief items, that is, when the real estate tax exceeds a certain maximum, taxpayers can deduct individual income tax. Britain gives special preferential tax policies to special groups, such as students, soldiers, the disabled, and other social groups that can receive municipal tax relief policies.

Among various tax reduction and exemption policies, the Chinese government can choose to link the tax burden with the income of taxpayers and set tax rate reduction or exemption measures for low-income people. This measure is highly targeted and fairer [11].

4.2. System and Law

4.2.1. Establishing a complete national real estate information data statistics system

In essence, houses have two natural attributes at the same time, one is the residential attribute of durable consumer goods, and the other is the investment attribute of financial investment goods. These two attributes generally coexist and cannot be separated. However, there is a primary and secondary relationship between the two properties. Among them, the residence attribute is the basic attribute of houses, and the investment speculation attribute belongs to the derivative attribute of houses. Therefore, China should adhere to the positioning of "houses are for the living, not for speculation", require the return to the residential property of housing, curb the demand for investment models, and curb the rapid rise of housing prices.

Compared with financial and land policy tools, the adoption of fiscal and tax legislation should be the most interesting and core content of the long-term mechanism of real estate regulation in the next step. Taxation of housing ownership is an international practice and an effective means to prevent excessive speculation in the housing market. Especially for the most populous country in the world, land resources are very limited, and each individual must not occupy too many land resources, otherwise, it will erode the interests of others, resulting in runaway housing prices. Therefore, China can establish a complete national real estate information statistics system, which is conducive to the exchange and sharing of real estate information in various regions. According to Li, establishing a real estate information system can improve the efficiency of data utilization and develop important support for marketing strategies [10]. It is conducive to the establishment of nationwide real estate tax, increases the cost of speculation, and curbs speculation and investment demand.

4.2.2. Law

As for Chongqing and Shanghai. In view of the current real estate tax policy in Chongqing and Shanghai are the municipal government's policy, at the legal and financial level has a lot of shortcomings. There is no formal law on real estate taxes, real estate taxes in Chongqing and Shanghai are only provisional, which has led to the real estate tax in both places to a certain extent. There is a legal study and legal supervision gap the absence of comparisons from other cities has made it impossible for Chongqing and Shanghai to make a broad assessment of real estate tax policies, real estate tax revenue also produces information asymmetry, people do not know whether the real estate tax revenue is really used for urban construction and other projects for the benefit of the people. Based on the above problems, the following measures are proposed: the introduction of sound real estate tax laws and regulations, the majority of policy-making power transferred to the national government, local governments retain a small part of the power to formulate policies, the establishment of additional monitoring bodies, open the use of real estate tax revenue so that everyone pays taxes, everyone uses taxes.

5. CONCLUSIONS

This paper illustrates the real estate tax policies implemented by China's pilot cities, Chongqing and Shanghai. It points out that the real estate tax measures in the pilot cities have limitations, including insufficient ability to regulate house prices, the rationality of policies to be improved, and so on. The article also analyzes three problems existing in the real estate market: the polarization of real estate development, the imbalance between supply and demand of real estate, and the economic bubble caused by speculation. These are the necessity of real estate tax reform.

Many developed countries, such as the United States and Britain, already have mature real estate tax collection systems. According to the international experience and the actual situation of China's real estate market, this paper puts forward some suggestions on the content of China's real estate tax reform from different aspects. Including tax base, tax rate, and preferential policies. Taking the real estate market in Guangzhou, China in 2020 as an example, this paper estimates the city's real estate tax revenue under these conditions. On the other hand, from the perspective of standardizing the collection of the real estate tax, the paper suggests that the government establish a national real estate information system to realize the information sharing of all cities. In addition, relevant laws are necessary for the rationality and standardization of real estate tax collection. These measures will help to reduce speculation and adjust
China’s real estate prices, increase local fiscal revenue, and make the real estate market develop healthily.

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