

Recommendation of Residential Property Taxing For the City Of Wenzhou

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**Abstract**

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The objective of this thesis is to make recommendations for a residential property tax mechanism for the city of Wenzhou, China. The research question is “ Given what can be learned from the U.S. system, how can we improve the property tax system in China to be more complete and how can the Shanghai and Chongqing pilots be made current to be more appropriate for Wenzhou?” To conduct the research, the first step is to investigate the Chinese property tax system. Then, it examines the U.S. property tax system, including an analysis of the legal background, land ownership, and process of taxation. In addition to the U.S. property tax model for insights, recommendations for Wenzhou also draw on the current Shanghai and Chongqing pilots, which are studied as part of this thesis. The recommendations are: combine ad valorem tax and specific tax; decentralize and leave autonomy for local government; address land-transferring fees issues; establish a personal properties registration system and properties assessment system; tax taxpayers in same circumstances alike; implement general homestead exemption and other more comprehensive abatement; create appeal process; address use of tax .

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## **1. Introduction**

### **A. Objective, motivation and scope of discussion**

The objective of this thesis is to make recommendations for a residential property tax mechanism for the city of Wenzhou. The reason that the property tax becomes an issue to discuss is due to the following reasons. First, the current tax system is incomplete in regards to the lack of property tax, in the scope that we are discussing in this thesis. Second, the gap between the wealthy and poor is huge in China and the property tax has high hopes as a solution to resolve it. Third, a big portion of the government revenue is unsustainable and property tax will provide a sustainable source for it. Lastly, irrational behaviors are currently common in the real estate market among the public in China, a proper property tax is a reasonable and effective way to rationalize people's behavior. The reason Wenzhou was chosen is because it is a typical city in one of the most developed areas in China (See Figure 1). From the perspective of population, Wenzhou is already a "megalopolis", according to "The green book of small and medium-sized city". Economically, Wenzhou has become modernized and is a very business-driven place. As a result, Wenzhou plays a leading role in the area and works as one of the core cities in the regional metropolis. This makes it a representative of regional cities in China. (Yongxing Jin 292) Interestingly, even though Wenzhou is still a mid-size city, its housing prices exceed those in much larger Chinese cities like Beijing and Shanghai. An article in the journal called Wenzhou Property Market suggests that high prices may be due to the fact that more than 2 million Wenzhou business people are pouring capital into the small place. Regardless of the reasons for the inflation in housing prices, the end result has created a number of public, livelihood issues related to the gap between wealthy and poor which needs to be resolved. One of the mechanisms for addressing this issue may be a property tax system which could help constrain speculative pricing and provide revenues for public services which could offset

some of the problems faced by the poor. However, since a residential property tax system would be new in China, it is necessary to look to other countries to understand how it should be set up and how it might affect the market.

Figure 1 Location of Wenzhou



Source: Google map

The property tax system in the U.S. provides a useful frame of reference for a model property tax system in China. The US property tax system has been practiced for more than 200 years and has thus been tested in one of the most powerful and developed nations. As such, the system is mature and stable and has addressed many of the issues that arise when the property tax systems are introduced to a country. The US system also has appeal since it contains a number of features that are typical among western property tax systems.

The current property tax system in China, especially the residential part we are discussing, is incomplete in China and may contribute to some of the social issues surrounding real estate development and pricing. Thus, it is recently a hot topic for the public. Critics of change insist that added taxes would create a severe double tax situation since the property tax has many intersections with the taxes and fees in the real estate industry. For example, owners already pay a form of

property tax in the sense that land-transferring fees must be paid upon sale. They argue that since China is still in the phase of rapid and massive developments with a lot of transactions, new fees are not necessary.

In some respects, fees and taxes during development and transactions do feed the government very well which suggests that there might not be a need to impose a property tax at this time. This argument is supported by the fact that the average real estate taxes and fees cover 30% to 40% of the housing price (Xianping Lang, par.10). While these fees are significant, supporters of change insist that a residential property tax would have a number of benefits. They suggest it could stimulate and moderate reasonable housing expenditure and reduce waste of land and living space, balance the cost for acquisition, transaction and holding phases, and enhance marketization of the real estate market. This will enhance the efficiency of the inventory and share the premium generated from the added value of properties with the public. (Yan Cen 10) The literature suggests there are four reasons to impose a property tax in China: it completes the Chinese tax system; it is good for narrowing the gap between the wealthy and poor; it is good for the reform and structural improvement of government fiscal revenue; and it rationalizes the real estate market. These four reasons become the four targets of the property tax model, which will be discussed in Chapter 2.

This thesis and its research findings are based in large part on previous research into property taxes and related issues conducted in China and in the U.S. It is important to note that in China, there are current regulations for commercial property taxes. Thus, the focus of this research is on a residential property tax system and the impact such a system could have on the residential market, which is a major issue for the public. In addition to focusing on residential property taxes, this thesis also focuses on urban areas rather than including rural areas. This decision is based on the fact that lower income levels and less development would make it hard to impose and implement property taxes without disrupting the

market. In addition, relatively low values of properties make it less important to impose property taxes on rural areas. Finally, from a political perspective, the central government, along with other levels of governments, is promoting the policy to cut taxation in the countryside. Therefore, it is unlikely that added property taxes will be applied to rural areas. These points above are also regarded as the reasons why both of the Shanghai and Chongqing pilots are not imposing property taxes on rural areas. The Shanghai and Chongqing pilots are testing property tax policies, which will be discussed in Chapter 3.

### **B. Research question**

The key research question for this thesis is: “Given what can be learned from the U.S. system, how can we improve the property tax system in China to be more complete and how can the Shanghai and Chongqing pilots be made current to be more appropriate for Wenzhou?” This summary statement focuses the research and provides guidance related to the scope of research.

### **C. Research process**

The research process applied in this thesis involves several stages. To solve the problems and work out the property tax model for Wenzhou, the first step is to investigate the Chinese property tax system. This will include the history of property taxation and the current condition, including land ownership and legislation background. Based on this foundation, the elements that are missing from the property system will be addressed. In particular, elements that are missing from the Chinese tax system will be identified in part by investigating the U.S. property tax system.

The investigation on the U.S. property tax system will include analysis of the legal background, land ownership, and process of taxation. Since the U.S. system differs from that of China, terminology will also be explained, as well as how

property tax is used. This line of analysis will take advantage of the hundreds of years' experience of the property tax in the U.S., which will provide a number of takeaways that can be built into Chinese models.

In addition to looking at the U.S. property tax model for insights, recommendations for Wenzhou will draw on the current Shanghai and Chongqing pilots. These pilot programs will serve as the closest examples that have already included many specific Chinese conditions and legal restrictions that do not apply to the U.S. model. In addition, an explanation and comparison between the two pilots will highlight potential differences between the Chinese model and the U.S. model. Based on this comparison, the research will continue analyzing the influence of the two pilots regarding the tax system, public, real estate market, and government fiscal system. This discussion will include a summarization of the comments and criticisms of the two pilot programs.

The conclusion of this thesis will present a summary of the social and market statistics that have been collected for Wenzhou. Drawing on these data and the insights from the pilot programs and the U.S. experience, a preliminary recommendation will be given in regards to how the property tax model should be built. This recommendation will outline how the residential property tax should be designed, theoretically, as well as the implementation process and estimation of its influence on the public, the market and the government.

## **2. Property Tax Systems**

### **A. General overview**

The governments in most of the mature market economy countries in the world are imposing property taxes or other taxes that have a number of similar characteristics. However, they also have different tax bases, different standards of tax, different names, and in some cases impose taxes on land and structures

separately while in other cases land and structures are taxed together.

In most systems, property taxes are imposed and paid based on a consensus in which the government affirms, protects, and enhances the value of properties. The proceeds of these taxes are used to provide institutional systems and public services, including infrastructure, national defense, education, fire service, and public security. Since these services enhance property values, property taxes are paid by the landlord in lieu of the service from the government.

According to the article, Property tax, an overview, from Cornell University Law School, property taxes can be classified into two categories, specific and ad valorem. According to the dictionary, the former tax has a specific amount or rate that is applied to standard of weight and measurement, which is fixed. The latter one is based on the value of the property which can change over time as the value changes. In most counties, the ad valorem tax is more common than the specific tax, especially in property taxation. The theoretical rationale for the ad valorem tax is the fact that it represents a fair system, one in which a portion of the positive impact of services provided by the government which affect value are recaptured. The property tax in the U.S. is an ad valorem tax; the Chinese current property tax for commercial properties and the newly published property tax pilot in Shanghai and Chongqing are combinations, an ad valorem tax after the proceed of sale and a specific tax.

Generally speaking, property taxes in other countries are mainly collected for land, housing and other real estate that is privately owned. In an ad valorem system, the lessee or owner has to pay a variable amount of tax according to changes in the property value.

While property tax systems in most of the developed countries have similar characteristics and are assigned to both the buildings and the lands by their assessed value, there are differences occurring among developing countries. For

example, in some of the developing countries property taxes only apply to land. In other countries property taxes focus on the value of the construction while the tax base is mostly according to the assessment value which may not reflect the market value.

In most of the countries that have property taxes, the tax is collected at the local level. Commonly, the benefits from a local tax are geographically constrained and allow the local government to solve the social and economic problems of the area for its own people. A tax that is applied to property fits this requirement very well because of its immobility. The problems in a specific area can be solved within the area by adjusting the tax rate or other elements, without affecting the places outside the area. Another benefit from focusing on the local level is that when properties are diverse and have a high cost and are difficult to implement, having the local government implement the tax will be more efficient. And the property tax has its elasticity, which means the tax base and revenue will go up along with the development of the society. This relationship is an important element of property taxes and allows the local government to put more money into the fiscal budget to improve social infrastructure and well-being, and the safety of the public. As a result, this will lead to the appreciation of the property tax base.

In addition to the issue of fairness, there are many other advantages of having a property tax system work at a local level. According to the Food and Agriculture Organization of the United Nations, in most situations, the administration cost is lower than 2% of the revenue, which is difficult to avoid or evade because of the character of property. In addition, the concept of the property tax is relatively easy for the public to understand, and if designed appropriately, the tax can be progressive; these two points make it easier for the public to accept the tax. Finally, the revenue is predictable and buoyant according to the economy and the development of society, which makes it a good main source for local revenue.

There is no perfect tax, but regardless of if there was, taxation of any form is

seldom popular. As presented by the Food and Agriculture Organization of the United Nations, this is especially true of the system that is subjective, which can cause inequity and inappropriate taxation. To avoid these issues, the implementation of a new property tax system can be difficult, especially at the beginning. For example, before a tax system is created, the local government must first establish the comprehensive taxable properties list, which will require significant costs and require administrative and infrastructure support. Despite these challenges, the advantages of property tax systems are much more obvious and attractive and often overcome the disadvantages.

## **B. Situation in China**

### *i. History*

The property tax system in China has undergone a number of major revisions since the establishment of the People's Republic of China in 1949. In 1950, the National Council issued "the implementation of the National Tax Administration" and real estate tax became one of the 14 taxes. In August 1951, the Government Administration Council issued the "Provisional Regulations of the People's Republic of China on Urban Real Estate Tax", according to which building and land taxes were combined into a single tax, called real estate tax. In 1973, the simplification of the tax system incorporated urban real estate tax into the business tax. Thus, only business taxes are collected. In 1984, the reform of the industrial and commercial tax system was conducted and the government decided to restore the real estate tax. Thus, real estate tax is divided into two taxes, the property tax and urban land use tax. On September 15, 1986, the State Council issued the "People's Republic of China real estate tax Provisional regulations" which went into effect on October 1<sup>st</sup> of the same year, applicable to domestic units and individuals, but individual housing not for business use or rent was an exemption. This prevented most individual housing units from being imposed a

property tax. During the Third Plenary Session of the Sixteenth CCP Central Committee in 2003, the property tax was for the first time showed on the document "A number of resolutions of the CCP Central Committee on perfecting the socialist market economic system". At the Taxation Forum on China in 2005, the Finance Minister Jin Renqing further clarified that the property tax would be gradually introduced during the "Eleventh Five-Year project" period. In 2007, the State Administration of Taxation issued the "2007 National tax work points" which deepened the reform of the tax system, including the study of the property tax programs. The document also announced a property tax assessment simulation pilot, approving Anhui, Henan, Fujian and Tianjin as the property tax assessment simulation pilot areas. This included the first batch of Beijing, Liaoning, Jiangsu, Shenzhen, Ningxia and Chongqing; more than ten provinces and cities began the property tax "idle" operation.

As of 2013, property tax reform is being discussed theoretically, and is being tested through the pilot property tax to test the reform of the property tax system under "People's Republic of China real estate tax Provisional regulations" that was issued on September 15, 1986. This set of tax published in 1986 levies only the commercial properties and rental housing, while all the private properties for personal living are exempted. As stipulated by the original regulations, the amount of the property tax is based on the residual value of the property tax, which is deducted 10% to 30% from the original property value. The annual tax rate is 1.2%; for rental properties, the annual rental income determines the tax basis of the property tax, the tax rate is 12%. For example, a \$100,000 valued property will be taxed  $\$70,000 \times 1.2\%$  to  $\$90,000 \times 1.2\%$  per year; if the property was for rent and generates \$10,000 rental income per year, the tax to be collected would be \$1,200.

## ***ii. Current condition***

### ***1) Land ownership***

Throughout China's history; land ownership has been regulated. The focus of research for this thesis is the land ownership regulation set up after the Chinese communist party established the People's Republic of China in 1949. Since then, the land in China has either been owned by collectivities or by the central government. The Property law of the People's Republic of China, which was passed in 2007, was deemed as a great evolution of civil law. This law clearly and definitely, for the first time, "protects the interest of private investors to the same extent as that of national interests" as presented by Angela Wang in the article: Property rights in China: New property law.

### ***2) Constitutional***

In the Chinese constitution, the tenth clause describes the land ownership and other issues related to land. It generally states that the urban land is owned by the nation; rural land and suburban areas, except those owned by the nation, are collectively <sup>1</sup>owned; house sites and private plots of cropland and hills, are also owned by collectives. The nation can expropriate or collect the land, in accordance with law, for public uses, but should give compensation. Any private organization or individual is not allowed to seize, exchange or by any other forced or illegal ways force the transfer of land. The use rights of land can be transferred in accordance with the law. All organizations and individuals who are using land must use the land in a reasonable way.

### ***3) Tax system condition***

In China, the tax system has kept changing and improving. Before the

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<sup>1</sup> Collective is a psychology term from the Soviet Union which is used in socialist states to describe a group of people. In China, a village or a corporation can be a collective.

economic reform of 1979, the tax system was the central planning system, which meant the central government had absolute control on tax and revenue. From 1980 to 1993, the tax system was called the fiscal responsibility system. Under this system, local governments turned in all the revenue and were given back a specific portion from the central government. The amount of budget that local governments could get back from central government depended on their achievement.

In 1994, a tax distribution system, which had been used using for a long time in most of the developed countries, was put into effect in China. The most significant element in the tax distribution system is the uniformity of fiscal power and administrative authority. Thus, each government received taxes according to what they fulfilled. This also required dividing the responsibilities each government was supposed to fulfill. When the uniformity of fiscal power and administrative authority are imbalanced, compensation will be transferred. Taxes are also categorized to be taxed by the central government and local government. Taxes with affluent and concentrated source are often central taxes. For example, the product tax and value added tax collected by customs are affluent and are concentrated within the customs department. All or a part of central taxes are handed in to the central government. Taxes with scattered sources, less revenue or wide range of income are often local tax. Real estate related taxes including property taxes are often local taxes, summarized by Ranzi in her online posts, since they have geographical characteristics and require local management.

#### *4) Real estate related taxation*

In China, the level of real estate related taxation is growing relatively fast. An index called level of taxing, which is calculated by the ratio of real estate industry tax revenue and the added value of the industry, indicates a 30% for the year of 2007 and is getting higher and higher. But there is an imbalance in taxation among

different areas, from the lowest being less than 10% to the highest of more than 57% (Cheng 4). In 2013, the real estate industry faces a number of taxes including the appreciation tax, corporate income tax, personal income tax, stamp duty, deed tax, business tax, urban maintenance and construction tax, urban real estate tax, property tax, rural land occupation tax and urban land use tax. Table 1 explains the basic interpretation of these taxes, summarized from Askci.com.

**Table 1 Real estate related taxation in China**

<b>Categories</b>	<b>Interpretation</b>
<b>Rural Land Occupation Tax</b>	The occupation of cultivated land for housing or other non-agric
<b>Appreciation Tax</b>	Income of property transactions deducted by prescriptive items
<b>Corporate Income Tax</b>	Enterprises that have production, operating income and other income in China
<b>Personal Income Tax</b>	Personal income (both in and out of China) of individuals who have properties in China or have been living in China for more than one year
<b>Stamp Duty</b>	Enterprises and individuals who execute or receive specified economic documents in China
<b>Deed Tax</b>	Enterprises and individuals who received land or properties' rights
<b>Business Tax</b>	Enterprises and individuals who are offering taxable laboring service, transferring immaterial assets or selling real estate properties
<b>Urban Maintenance And Construction Tax</b>	The sum of value added tax, consumption tax and business tax for enterprises and individuals
<b>Urban Land Use Tax</b>	Enterprises and individuals who are using lands in city, county, towns, industrial and mining areas
<b>Property Tax</b>	This exempted individual owned properties
<b>Urban Real Estate Tax</b>	Foreign nationals, foreign enterprises and foreign investment enterprises who are holding properties in China

As a result of these taxes, the total amount of tax is huge. According to the statistics from the National Federation of Real Estate Chamber of Commerce, in 2012 in Beijing 42.42% of the real estate developers' sales income went to government taxes, and the number in Shanghai was even higher, 61.84%. The large amount of revenue from the real estate industry has made local governments heavily reliant on this industry, which has become a problem for land owners and may be a dangerous sign for local government as well.

### *5) Land-transferring fee*

The original model of the land-transferring fee came from Hong Kong. The colonizers from the U.K. charged rental fees, from the occupiers, from people living in Hong Kong, and the fee for long periods of time was collected at once. To some, these are the tools of British colonizers to plunder people's wealth.

Currently in China, the land-transferring fee is charged by the government, as the owner of the land, paid by the party who is acquiring the land and obtaining the right of use. After the tax system reform, the distribution tax system significantly reduced revenues of local government. Thus, local government started transferring lands for development to collect land-transferring fees as well as to improve their GDP. The land transferring fee has become a large portion of local fiscal revenue, ranging from 30% to 50% or more.

#### *iii. What's missing and targets*

In 2011, China chose Shanghai and Chongqing for pilot run property tax programs. The pilot programs caused vehement discussion. The proponents argued the programs helped control real estate speculators and housing prices, improving the real estate tax system, producing fund for affordable housing development, etc. The protesters argued that the real property registration system was incomplete, and the property tax would not have the effect of controlling the real estate market. On the contrary, the property tax would shift the tax payment from spectaculars to normal market buyers or renters. As the Chinese old saying indicates, "everything is hard in the beginning"; that's a major reason to have the pilot program tested. The four most significant targets that the property tax pilots were given responsibilities are as follows:

#### *1) Tax system improvement*

Property has the characters of geographic and immobility which makes tax systems based on them a stable and sustainable source of revenue for local

governments. Currently, local governments often encounter fiscal problems related to the system of tax distribution. For example, in China, there is no method to regulate the distribution of wealth from an income and expenditure perspective. A property tax could help local governments improve tax systems and enhance the ability of local governments to balance fiscal systems. In addition, the advantages of an improved property tax system could help integrate Chinese fiscal and taxation systems.

## *2) Narrow the gap between wealthy and poor*

In China there is a mathematic standard, the Gini Coefficient that describes the gap between wealthy and poor. The Gini Coefficient ranges from zero to one. Zero means a perfect equal situation of people's income; one means a totally unequal situation of people's income.

In Chinese society, social wealth distribution is a severe problem. According to the Gini Coefficient Index released by the State Statistical Bureau of Chinese government, the coefficient ranges from 0.474 to 0.491; it is much higher than the internationally recognized safety level, 0.4, which means the gap between the wealthy and poor could cause social unrest. In addition to the government, there is another Gini Coefficient result, 0.61, calculated by a nongovernmental institution, the Southwestern University of Finance and Economics. Even though both of the two numbers are controversial, they indicate that the gap between the wealthy and poor needs to be narrowed to curb the trend of concentrating social wealth on relatively few wealthy people, which could lead to instability and a serious drag on economic development.

China's current tax system is having a hard time influencing the adjustment on the stock of wealth in part since it is difficult to adjust the gap between the rich and poor. Once the residential individual housing is taxed, the government might have an appropriate means of tax regulation to achieve multiple goals including

balanced income, consumption and stock of wealth. Some argue this improvement is essential to the development of the Chinese fiscal and taxation system.

### 3) *Government fiscal revenue:*

The current tax reform charges a business tax which is local and a value added tax, which is national; thus, this would result in reduced local tax revenue by losing the part of valued added tax. Also, currently, the land-transferring fees are one of the main parts of government revenue, but land is not a renewable resource. Thus, this type of revenue cannot be a stable and a sustainable source of revenue. These points are some of the reasons that the public wants the property tax to take the burden of supporting local fiscal revenue, along with the individual income tax.

### 4) *Rationalize real estate market*

Another target of collecting the individual residential property tax is to curb the excessive share of housing that has been affected by real estate speculators actions. Since 2010, the central government has been guiding local governments to publish a series of regulations to control the soaring housing prices and curb investment-oriented real estate. However, housing prices are still going up more than the public's expectation and people continue speculating real estate. Levying an individual housing property tax would increase the cost of holding properties to help rationalize housing consumption. Residents would be buying properties rationally based on income, and only to buy the amount needed and affordable. Investment-oriented buyers would have to re-weigh the cost of holdings and future benefits. The result of such changes is still a mystery and most real estate market experts have concluded that housing prices will not be affected heavily by publishing a property tax. However, some argue the property tax can at least reduce the waste of living space and lower housing vacancy rates. It can also help

to guide the rational use of land resources, thus, enabling China's real estate market to be more sustainable and stable. However, according to the experience from the U.S. and other countries, this target should not be a main purpose of a tax behavior; this will be discussed in Chapter 4.

### **3. The Property Tax Pilots in Shanghai and Chongqing**

#### **A. Introduction of the pilots**

On January 28, 2011, Shanghai and Chongqing started levying the property tax under the new pilot systems. In Shanghai, the tax model only aimed at properties that were bought after the policy was published and the tax was only levied for buyers who were not a Shanghai resident and who had one or more properties.

In Chongqing, the new policy was aimed at high-end housing. The policy applied to single-family housing, both existing stock properties and incremental new properties. For high-grade multi-family housing, a tax was levied for those who were non-residents of Chongqing, not working and not investing in Chongqing. These three categories of property owners were levied from the second property they are holding. The tax rate for different categories of taxpayers and properties were ranging from 0.5% to 1.2%. The Chongqing property tax affected about 10% of the population.

These two pilot models combined the two tax classifications, special and ad valorem. They both levied taxes on a selected subset of properties, using the ad valorem theory as the tax standard.

#### **B. Comparison of Shanghai and Chongqing model**

Table 2 shows the key elements in the Shanghai and Chongqing tax pilot programs.

[Table 2 Shanghai and Chongqing property tax pilots](#)

	Shanghai		Chongqing □	
Tax Object	Resident of Shanghai	New purchase of housing that are not the family's ① first housing □	The policy will proceed step by step: Phase I	Condition 1: Private owned single-family housing ②
	Non-resident of Shanghai	New purchase of housing		Condition 2: High-end residential housing ③: Price/m <sup>2</sup> >2*market average of newly constructed properties
			Phase II	Condition 3: Properties newly purchased by non-resident of Chongqing, no business and no job in Chongqing, and it is not their only property. □ Individual high-end housing, multiple sets of ordinary housing owned by the same person may be taxed later
Tax Basis	Transaction Price for now, market value for later (Value should be re-accessed periodically)		Transaction Price for now; will be using assess value when available	
Taxable Value	70% of Tax Basis		Transaction Price for now; will be using assess value when available	
Tax Rate	Temporarily set at 0.6%		Below 3 times of THE AVERAGE	0.5%
			Between 3 and 4 time of THE AVERAGE	1.0%
	0.4% for properties with price lower than two times of annual average transaction price		Above 4 times of THE AVERAGE	1.2%
			Properties in condition ③	0.5%
Tax Allowance and Exemption	only New purchase of housing which exceeds 60m <sup>2</sup> /person will be taxed		Housing built by farmers on their homestead is exempted	
	Tax could be returned if the family's original only property was sold within one year		Due to natural disasters and other force majeure, the taxpayers cannot afford the levy, one can apply to local tax department for tax relief or holdover	
	Qualified non-residents of Shanghai's one-property owner		180m <sup>2</sup> for single-family housing purchased before, 100m <sup>2</sup> for newly purchased	
Use of tax revenue	Affordable housing		The construction and maintenance of public rental housing	

Table 3 Notes for the table of Shanghai and Chongqing property tax pilots

Notes	
① Family	Including spouses and minor children
②	For single-family housing and high-end housing, when included to be taxed, regardless of transaction afterwards, tax rate will remain the same before the new regulation had published.
③ High-end Housing	Housing price/ m <sup>2</sup> reached the twice the average of new constructed market residential housing, within the previous two years, in Chongqing's main city, nine districts. (This average price will be called THE AVERAGE in this section)

Source: Shanghai.gov.cn and Zx.cq.gov.cn

According to the 2012 market report from Shanghai, the tax rate for 2013 was

0.6%, for properties with price per square meter higher than ¥27740 (\$4489); The tax rate would be 0.4%, for properties with price per square meter lower than ¥27740 (\$4489). According to The Shanghai Tax Bureau, in 2012, the line of demarcation was ¥26896 (\$4352). For Chongqing, the threshold was ¥12779 (\$2068) in 2013 (2 times of the average market price per square meter) compared to ¥12152 (\$1966) in 2012. ("The people's Government of Chongqing")

### **C. Influence of the pilots**

#### ***i. On the tax system***

The revenue of the two pilots was collected by the local tax departments, as is common in most other countries. This is partly due to the geography and immobility factors of the property tax which helps ensure control by local government and leads to a more efficient use of resources. In the current tax system, one of the main problems is the lack of involvement of local government and the excessive revenue allocated to the national and provincial levels. The pilot projects are based on the assumption that properties can be a sustainable and predictable source for local government revenue. The programs also assume local governments will have more comprehensive methods to address more aspects of public life, including income, expenditure and property taxes balance.

#### ***ii. On social wealth distribution***

In China, the huge gap between the wealthy and poor is a major problem. From the political perspective, the lack of governmental adjustment or offset is one of the reasons for the instability. Since tax is one of the easiest ways to adjust the gap between the wealthy and poor in a market economy, the property tax is a very symbolic policy to help reduce instability by applying a tax to the value of holding properties. The change will be difficult to accept as noted by the Chinese old saying, "Things are harder at the beginning." However, the fact that the tax scope is relatively narrow should help with acceptance. Also, the taxable value is based

on transaction value, not assessed value which will help current owners. After the symbolic policy and the pilots are more fully tested; more comprehensive and improved tax models that address concerns will be created. At this point, taxing privately owned properties opens a new chapter that the government may use as a new method to balance more aspects of public life by tax, including income, expenditure and holding properties. In other words, this may become a foundation for a more successful fiscal and taxation system. This change may be crucial for China which is in the economic and social transition period, and may help Chinese tax system to become more complete.

Personal wealth is usually held either by cash assets or real property assets. In China, the tax system imposes tax for holding cash assets but not for holding real property assets. Thus, the wealthy are more likely to evade taxes by holding properties.

On the other hand, neither of the pilots taxes the stock of existing properties, which decreases the impact on social wealth distribution. Since housing prices have grown rapidly for the last several years, many people who held multiple properties for several years became very rich. However, since they are excluded from this property tax model for the properties they bought before the policy was implemented, the pilot systems do not address this imbalance which might be included in revised systems.

### ***iii. On government revenue***

For the first three months the pilot was taken into practice, Shanghai had only ¥1 million (\$161,812) of revenue and Chongqing had about ¥790,000 (\$127,831) of revenue (Qiu 4). Till the end of 2012, the Shanghai tax department had about 50,000 taxable properties confirmed, among those, about 20,000 were confirmed in 2011 and about 30,000 were confirmed in 2012. Overall, 90% of them were charged the applied rate of 0.4%. The revenue for the year of 2011 was ¥2.21

billion (\$0.36 billion), while the total fiscal revenue for 2011 was ¥342.98 billion (\$55.50 billion), and the property tax covered only 0.64% of the total fiscal revenue. For Chongqing, the situation was even worse, the property tax revenue for 2011 was only about ¥100 million (\$16.18 million) (“The real estate regulation”). Both of the pilots had very slight impact on their fiscal revenue.

#### ***iv. On the real estate market***

A half year after the tax pilot was implemented, Shanghai suffered a 14% decrease of area transactions, while Chongqing had a 10% decrease of high-end residential housing transactions. This effect may not have been the result of the pilots because at the same time many strict regulations restrained the market of residential properties. For example, Shanghai passed a new regulation for non-Shanghai households who wanted to buy new properties which required at least one year tax payment proof or social security proof. In Chongqing, the second property owned by a person required a 60% down payment. Moreover, the two pilots both targeted property owners that are holding multiple properties or for high-end properties for higher tax rates. Given these limitations, the influence of the pilots was somewhat limited. The mayor of Chongqing said that the Chongqing pilot only affected 10% of the population (“Chongqing Huang Qifan”), which suggests the influence on the real estate market needs further discussion.

Some people hoped the property tax would control the housing price that was growing rapidly in most of the Chinese cities in recent years. However, according to international experience, only a tax that is extremely high (above 10% of market value per year) would affect the real estate investment market, and the real estate investment market will also be affected by the macro economy and capital market.

In the short term or for short-term investors in Shanghai, it appears the 0.6% tax rate is low to affect the investors. For Chongqing, the tax object is mostly the wealthy and the relatively low tax rate will not affect them very much.

In the long term or for long term investors, the main theory used to explain price rises in the Chinese real estate market is the rapid rate of urbanization. As of 2010, this rate of urbanization was only 34.17% in China. According to research done by Jianlin Wang, the housing prices will not stabilize until the urbanization rate hits 75%. Yongsheng Wang predicted that in 2020, the urbanization rate in China will go up to 55%, so it is possible that during the next 10 to 15 years, the rate of housing price increases will keep in a higher level than that of a steady market. This assumption is based on the relationship between supply and demand, which in most markets is the most important element for housing prices.

Another important reason for the residential real estate prices to keep increasing is the current economic market. At this point, there are not many trustable investment goods that are seen as better than real estate. The stock market is in a bear market, which is not attractive to investors. In addition, some industries especially those doing export business are facing the effects of global slowdown and rising exchange rates. The lack of alternatives that are safe historically is one of the factors that have made residential real estate the only trustable investment channel.

**v. *On public opinion***

For the public, or the taxpayers, what people care about the most are their costs. Since they are paying a new tax, they definitely want benefits from the government's public service. They want more infrastructures for their neighborhoods; they want a reasonable allocation of resources of the real estate market, which leads to a more mature real estate market. These may not be calculable, and may be hysteretic in nature. Thus, it takes effort to educate and persuade the public to accept this policy. (Cen 52)

## **D. Criteria**

### ***i. Equity***

The equity of a property tax is usually derived from a horizontal and vertical perspective. (“Criteria for a Good Tax System”) The horizontal perspective means that the same taxpayers are taxed at the same rate. The horizontal perspective of equity will also be discussed below and examples from the U.S. system will be shown in Chapter 4, iv. For the pilots in Shanghai and Chongqing, the horizontal perspective of equity was completely ignored; both of the pilots are taking into account the local residential registration, length of residential, business and working condition as the standard of taxing. Also, the two pilots both set a time standard, which only taxes the properties that have transaction after the policy became effective.

The horizontal perspective is the premise of the vertical perspective, since a differential tax system would be fair only if the taxpayers with same conditions are taxed the same (“The fair principle of Taxation”). The vertical part means the taxpayers are taxed depending on their different circumstances. For criteria of ability to pay, the two models both tax people with more wealth, which is interpreted as people who have more than one property each. This criterion can be explained as they have adequate ability to pay for the transaction. It is commonly accepted that in the long term, a property tax is the way to narrow the gap between the wealthy and poor and is crucial to solve the problem of income polarization, said Yongsheng Wang. This criterion can be advantageous for a property tax to be progressive.

For the service received criteria, since every property is receiving public service or occupying a share of public resource, it is unequal if we do not tax those property owners with only one property, while they are still receiving benefits. Also, the incidence of the tax is not explained well in the model, which makes it difficult

for the revenue to be reasonably distributed into each jurisdiction.

***ii. Adequacy and Stability of Revenue Yield***

The revenue of the two property taxes is quite limited as we discussed in this chapter, section c), iv, because of the narrow tax base and high threshold. The property tax in Shanghai and in Chongqing or even in China will not be the main source of tax revenue until the tax base has expanded to cover more properties.

The stability and predictability are limited by the two models themselves. While imposing tax for newly transacted properties only, the volume of transactions has a significant effect on the amount of revenue. In other words, the tax base is unstable and unpredictable because of the instability and unpredictability of the real estate market.

***iii. Economic competitiveness and social benefit***

The impetus of the property tax in China is the uncontrolled housing price, so the property tax has placed a mission to control the housing price. Taking this reason into consideration, the criteria of whether the property tax is successfully stimulating the economy will be based on the degree of its impact for the real estate market to return to a rational level. Since the two pilots are still at a beginning phase, along with its limited tax base, the benefit for the economy has not been greatly seen.

***iv. Administrative Efficiency***

The private cost for a property tax is always low; taxpayers rarely pay anything other than the tax amount. The public cost for a property tax is usually high, for Shanghai and Chongqing pilot, they have not completed many aspects of the property tax system, and thus, there will be many programs to invest in. Necessary steps include the creation of a registration system of properties to define the ownership, an assessment mechanism to help implement a property

tax, and a visible system for the public to understand and be notified of the tax bill and the property tax system.

### **E. Comment**

The property tax recently launched in Shanghai and Chongqing is more symbolic than practical. First, because of the high tax threshold, properties that can be taxed are very limited. For instance, the Chongqing pilot impacts only 10% of property owners ("Chongqing individual housing"). Second, the tax base is limited, the Shanghai model is 0.4% or 0.6% for tax rate, depending on the price, with 70% of transaction price as the calculation basis; the Chongqing model is only 0.5%. Third, the impact on taxpayers is slight. For Shanghai, property owners are taxed at a relatively low rate for holding properties with low value. For Chongqing, the new policy is for individuals' new house units, villas and other high-end housing, which will not increase the burden for people holding average-level properties; the families included in the taxation pool are relatively rich, this level of tax rate has slight effect to their financial condition.

On the other hand, the pilot programs made it clear that the revenue collected will be used for the construction of affordable housing, to address the livelihood issues such as low income families, this reflects an important role in the regulation of income distribution, and the promotion of social equity. But similarly, the limited scope of the pilots makes it less effective.

## **4. The Property tax in the U.S.**

In the U.S., "Taxes on land and the buildings on it are the biggest source of revenue for local governments." ("Taxes by State") According to the U.S. census data, in 2007, the property tax covers an average of 30% of each state's total tax revenue, with the highest, New Hampshire, of almost 60 percent of tax revenue from the property tax. ("Property Taxes")

According to the U.S. Census Bureau data for 1,826 Counties, for the average of 2007 to 2009, the property tax paid as a percentage of household income ranges from the lowest of 0.25% (\$123/¥760), Vernon Parish in Louisiana, to the highest of 8.79%(\$7,345/¥45,392), Passaic County in New Jersey. The average percent in the U.S. is 2.85% (\$1,838/¥11,359). As for the property tax paid as percentage of home value, it ranges from the lowest of 0.12% (\$169/¥1,044), Tangipahoa Parish in Louisiana, to the highest of 2.99% (\$2,610/¥16,130), Orleans County in New York. The average percent in the U.S. is 0.96% (\$1,838/¥11,359).

In the US, the Property tax is the main source of local government revenue in part since it is the only type of tax that is geographically defined. Although the income tax and the sales tax are also important to the local level tax system, the property tax is more stable and easier to administer after the initial systems are put in place. To compensate for changing budget needs, in addition to changes in assessed values, the tax rate can be adjusted up or down in some cases, the maximum change in property taxes has been capped to protect taxpayers..

## **A. Legal Theory**

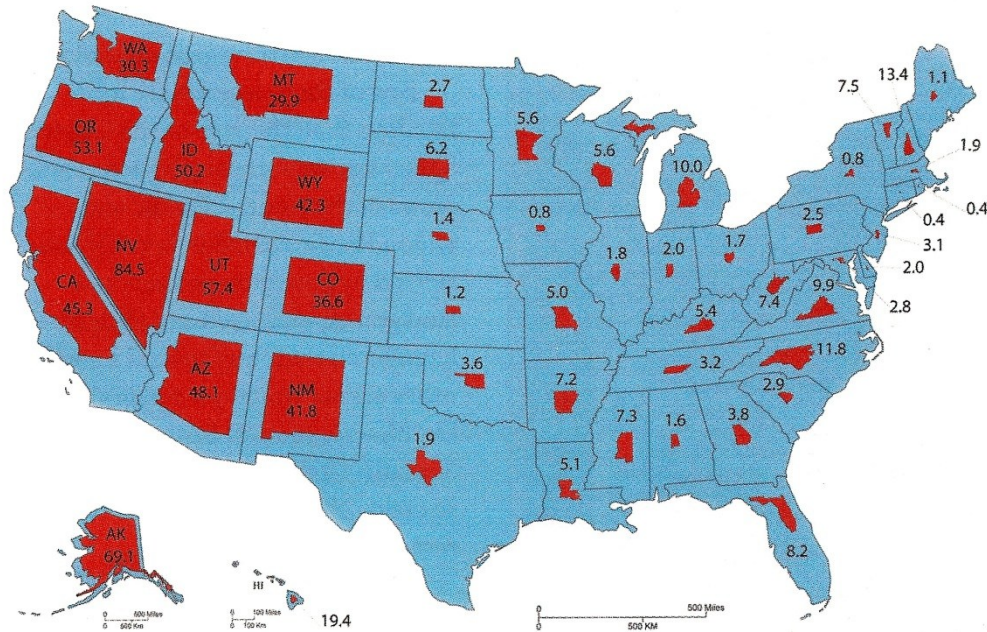
### ***i. Land Ownership System***

According to Robert J. Smith's research, the total area of the U.S. is about 9.8 million km<sup>2</sup> and the federal government owns, manages or controls about 30% of this amount of land. "These federal lands are used as military bases or testing grounds, nature parks and reserves and Indian reservations, or are leased to the private sector for commercial exploitation (e.g. forestry, mining, agriculture)" Said Frank Jacobs.

**Figure 2 Land ownership in the U.S.**

# WHO OWNS THE WEST?

## Federal Land as a Percentage of Total State Land Area

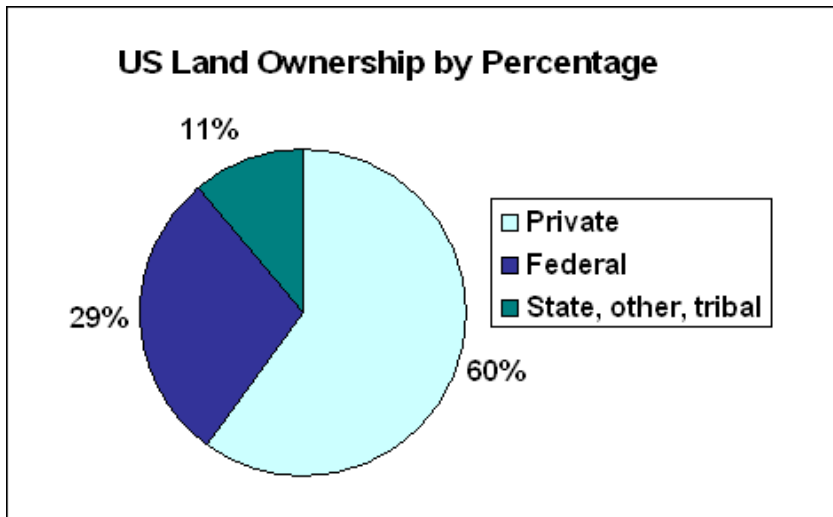


Data source: U.S. General Services Administration, *Federal Real Property Profile 2004*, excludes trust properties.

Source: U.S. General Service Administration, *Federal Real Property Profile 2004*.

Figure 2 shows the variation in the percentage of land owned by the federal government across the states. According to the U.S. Department of Agriculture, National Economic Development Manual in 2012, 60% of the land in the United States is privately owned; state and local governments own the 11% balance. This is shown in Figure 3.

Figure 3 U.S. Land Ownership by Percentage



Source: *corpsnedmanuals.us*

**ii. Constitutional**

The constitution in the U.S. has a number of clauses that protect private property rights. For example, in the federal constitution the governmental power of taxing is limited and congressional power of taxing is denied. Similarly, intellectual properties are protected by authorized copyright or patent, and so on. More specifically, the Fourth Amendment limits the government's right for the seizure of property. The Fifth Amendment prevents the eminent domain of private property without a just compensation and due process of law. While the government has limited power for acquiring and holding properties, congress has unlimited power for disposing of public properties. To supplement government budgets, public owned properties are sometimes transferred to private ownership. The Eighth Amendment bars excessive fines or other charges. Over time, some additional clauses were inserted into the constitution later to protect minorities as well as to protect landowners from unfair confiscations. In the Tenth Amendment of the constitution, the federal government delegated the rights to state government to make laws that are not prohibited or delegated by the federal constitution. Thus, each state may have its own laws, added to the federal constitutional requirements, to protect property.

**iii. Delegated Authority**

The United States property tax system is a comprehensive and complex system. At a state and local level it may have different delegates that play an important administrative role in the system. Take the state of Nevada as an example, which has The Nevada Tax Commission (Commission), the Nevada Department of Taxation (Department), County Assessors, Treasurers, and Commissioners, the State and County Boards of Equalization (State Board / County Board), the Committee on Local Government Finance (CLGF), and the Appraiser Certification Board (ACB) (“Nevada Property Tax”). The roles these delegates play in Nevada property taxation are presented in Table 4.

**Table 4 Property tax delegated authority in Nevada**

Delegated Authorities	Roles
Nevada Tax Commission	The Commission is responsible for prescribing regulations, review appeals that has been through the Department and may "confer with, advise and direct county officials with regard to the preparation of the tax roll, collection of taxes and other revenues." And also adopts the formulas used by the Department; take equalization action for inappropriate assessment ratio; certify county commissioners the combined tax rate to collect revenue.
Nevada Department of Taxation	"Exercises general supervision and control over the entire revenue system of the State." ..."collects and distributes the property tax for centrally-assessed property and net proceeds taxes"... "assist and consult with County Assessors in appraising property and developing and maintaining standard assessment procedures"... "conducts a ratio study to determine whether property values are equalized among the counties"...educate appraisers at county and state levels... "administers the provisions of the Local Government Budget and Finance Act"...establish the limit of the amount that a local government can get from property tax..."reviews and approves final budgets submitted by local governments and determines whether the proposed tax rates exceed the allowed rate."
County Assessors	"discovers, lists, and determines the taxable value of all real and personal property in his county, except property to be valued by the Department."...determines assessed, but required to use standards set by the tax commission; "produces and publishes the assessment roll and notifies each taxpayer"; produce variety of reports to the tax department; he also defense the value he assessed during the appeal process.
Nevada State Board of Equalization	"change and correct any valuation of the county assessor found to be incorrect, as well as hear all protests with regard to locally assessed properties and the value of mines appraised by the Department."
County Treasurers	"bills and collects all taxes assessed upon the real property tax roll"... "manages the collection of delinquent taxes, and the seizure and sale of property in the event taxes remain unpaid"; he also manage, calculate and apply abatment for properties; "remits a portion of the property tax to the State and apportions the taxes received among the various funds and local governments within the county"
County Commissioners	Appointing County Board of Equalization; provide certain supplies to County Assessor; "may correct clerical errors and overassessments on the tax roll"... "may correct clerical errors and overassessments on the tax roll"; convene a meeting to establish the combined tax rate.
Committee on Local Government Finance	Promulgate regulations, monitor reports regarding fiscal health of local jurisdiction; "reviews plans of corrective action to mitigate possible financial emergency submitted by local governments, provides observations and recommendations to the local governments, and periodically reviews the status of the financial operations of the local governments"
Appraiser Certification Board	Advises the Department with regard to the certification and continuing education of property tax appraisers.

*Source: Nevada Property Tax: Elements and Application*

A comparison table is shown in Table 5, which summarizes the fundamental differences between property tax system in China and the U.S.

**Table 5 Comparison of property tax system in China and the U.S.**

<b>Legal Issues</b>	<b>US</b>	<b>China</b>
Role in Gov. revenue	Biggest part of local government	Small part of revenue
Land Ownership	Private:60%; Federal:29%; State, other and tribal: 11%	Owned by collectivities or the nation
Constitutional	Original version and 3rd, 4th, 5th, 8th and 10th amendment;State constitution	Clause 10
Delegated Authority	Tax Department, assessor and special committees	Local tax department coordinated with fiscal, affordable housing department, planning, land resource and so on.

## **B. Sponsor**

### ***i. Governmental Levels***

The property tax in the U.S. is a uniform, equal-rate ad valorem (i.e., at value) tax on both structures and land. (J. and MacKinnon 389) While “the U.S. tax system is a federal republic with autonomous state and local governments” (“America’s Aversion to Taxes”), the property tax is levied sometimes at the municipal level, but most often at the county level. (“ Property Assessment”)

### ***ii. Special Districts***

One property may be taxed several times by different overlapping jurisdictions, “these include counties or parishes, cities and/or towns, school districts, utility districts, and special tax authorities, and vary by state” said Glen Fisher. For example, in 2007, a property in Renton, WA may be taxed by the following jurisdictions, as described in Table 6, followed by their rates. For each of the jurisdictions, there may be different boundaries for taxing, but they overlap each other, which creates some inconsistencies depending on which of the overlapping jurisdictions a property is located in. The total mill rate in the case of Renton was

calculated by adding all the rates from each jurisdiction together.

**Table 6 Property tax in Renton, 2007**

Jurisdictions	Rate in ‰
Port of Seattle	0.23158
King County	1.28956
School: State	2.32535
Hospital	0.55652
EMS	0.20621
Renton School District	3.44659
City General and Levy	2.884
Total	10.93981

Source: *rentonwa.gov*

## **C. Methodology**

### ***i. Terminology***

#### ***1) Equity***

In general, the notion of equity in taxation is about the rights and obligations of individual citizens and private parties in constitutional democracies. (Barker 57) This concern stems from the U.S. constitution, which has an equal protection rule. This rule extends to the privileges and immunities provisions of property tax, according to the research by JR Hellerstein, W Hellerstein and Youngman.

Consistent with federal law, state constitutions regulate local level property taxation and require that properties must be uniformly or equally assessed. This means there is only one rate within one tax jurisdiction even though there could be different rates among overlapping tax jurisdictions. This requirement is common in many state laws as noted by the quote, “the ancient principles of uniformity, equality, justness and fairness permeate the law, principles which cannot now be ignored.” (“Boyne”) This requirement dictates that the assessment method must be consistent, though it doesn’t affect the application of exemptions or tax abatements. For example, some states will permit different classes of property

may be exempt, but this exemption cannot discriminate among different taxpayers. To ensure that property taxes are equitably distributed, a “ratio study” will be conducted to demonstrate the accuracy of assessed values. Generally, two elements will be tested, the level of taxation and the uniformity of taxation.

## 2) *Ad valorem*

Ad valorem is a Latin word, which means according to value. A tax system using ad valorem means the tax will be based on the value of the subject property. Ad valorem tax is popular in different countries and is used for many taxes. An example of an ad valorem tax is the stamp duty on stock transactions in China with a rate of 1‰; the property tax system in the U.S. is also an ad valorem tax system. This value is generated on an annual basis to reflect changes in property values.

## 3) *Mill rate*

Mill rate is also called millage rate, which is an alternative way to describe the tax levy rate. A mill equals one tenth of a cent, which is 1‰ dollar. (“How Property Taxes Are Calculated”)

## 4) *Tax base*

This is the aggregate or cumulative tax base of all properties in a jurisdiction as determined by the assessment ratio and the fair market value estimates for a specific date and is revisited after properties are re-appraised.

## 5) *Market value*

Market value is also called fair value or fair market value. It is the price of value for a property would sell at in an arm’s length property transaction. In the U.S., it is commonly defined as the price agreed by typically motivated, well informed and unpressured sellers and buyers, with reasonable time for the property on the open market. There are three professional methods that are used

to estimate fair market value: Sale Comparison Approach, Cost Approach and Income Approach.

#### 6) *Assessed value*

Equalized Value, in theory, which is sometimes used in property tax systems should result in the same distribution of taxes as market value, since it is calculated by dividing the assessed value by the assessed ratio ("Assessment"). Equalized value or assessed value is different from market value since the two should be rarely correlated in most circumstances, said Bill Gassett, However, without adjustment it is not an appropriate method to estimate market value.

"The tax is computed as the determined market value times an assessment ratio times the tax rate." In general, the mill levy means the same thing as tax rate ("Louisiana Property tax Basics"). The commitment to equitable taxation is the reason for investigating assessed value and assessment ratio.

The assessment ratio is the total assessed value of a residential property to the full market value of the property ("Department of Taxation and Finance"). In some states, the assessment ratio is set by state law. For example, in Tennessee, the assessment ratio is 25% for residential and 40% for business ("Tennessee"). In some states, the assessment ratio is determined locally; some are different within a tax jurisdiction and vary by type of properties. The methods for determining the assessment ratio vary among tax jurisdictions. The method for testing the validity of assessed values used in New York State is fairly comprehensive and only selected methods can be used by cities and towns. The first way is to compare the assessed value in the database to the sales price. The second way is using computer models and the inventory of properties as well as its selling prices to estimate the market value of all the properties in the assessment roll. Another way is using an appraisal ratio study of randomly selected parcels with adjustments or to use a recently used ratio. A tax jurisdiction

can use one or more of the above methods. In some conditions, the tax jurisdiction can submit its own ratio, if it is within plus or minus five percent of this locally stated ratio, then it may be approved. (" Department of Taxation and Finance")

The Colorado model for determining equitable taxation differs from that in New York. In Colorado, the actual market value is determined on June 30<sup>th</sup> of each year, 2010 as the appraisal date. Based on that value, a Notice of Valuation is sent to property owners. The state Legislature may change the assessment ratio annually, even though it has been the same since 2002. Once the assessed values are set, the last necessary element is setting the tax rate, which is set at the last month of every year by tax authorities, also known as special jurisdictions. ("Calculating")

In California, the calculation of assessed value is based on a different mechanism. For the first assessment, properties are usually assessed as their purchased value. While this starts out as equitable, over time it can get out of balance. For example, in California prices may change very fast which will lead to market values that are much higher than previous assessment values. In California, changes in assessed value are capped to a maximum increase of 2% per year, while the market values of most of the places are growing more than 2%. In addition, in California there are 9 propositions that exempt certain properties from reassessment and 7 propositions that define the improvement that can be excluded from assessed value. ("Understanding") Thus, there are differences in tax liabilities that may not appear to be equitable but are required by state law.

#### *7) Exemption and abatement*

Most tax jurisdictions consider government owned properties and religious properties as exemptions from the property tax. General homestead exemptions are also popular in some states. For example, California residents have \$7000

exemption for each property. These types of exemptions are offered to protect qualified seniors and disabled persons from taxes they cannot afford. Other types of exemptions may vary by place. For instance, South Carolina has exemption for political subdivisions that are exclusively for public use. Most other jurisdictions have some form of exemptions including those for learning institutions that have no profit going to private use; hospitals and other institutions caring for infirmed, handicapped, elderly, children and indigent without private profits; religious places and burying grounds; public libraries; charitable trusts and foundations; “nonprofit corporations providing water supply or sewage disposal”; affordable housing for low-cost housing for elderly or handicapped (“South Carolina”). Other exemptions are also provided according to personal concerns that reflect local or state values.

The most common exemptions are classified as follows in Table 7:

**Table 7 Common exemptions**

Exemptions	Definition	Substance	Example
Homesteads	Homes that are the residents primary residential place, for the majority of the year. Some states require a specific length of time of residency before applying. In some states, the homesteads exemption is tied to other criteria like age or income. Some states need the taxpayer to apply for homestead exemption each year.	Lower the assessed value by a percentage or a specific amount of dollar	In Washington State, "the homestead exemption is limited to \$30,000 in value for real estate. The exemption does not apply against liens for improvement of the real estate, mortgages, and debts for alimony or child support. If a husband and wife own a homestead, the law usually requires that both of them sign a conveyance or mortgage regarding the real estate for it to be applicable or enforceable against both spouses. For Washington, a designation or plat of a homestead may be filed."
Seniors and the disabled	A general exemption for homeowners older than 60, 65 or 70, varies among states. There may be "age, income, and residency restrictions", "Disabled homeowners may be required to show proof".	It is usually a deduction of the taxable property assessment value.	"South Dakota, has multiple relief programs that allow both groups to seek property tax refunds and reductions in real estate assessments"
Military veterans	Served in military before can be granted a property tax relief. Frequently, it's also granted to veteran deceased's spouse or parents.	Some offer to all the veteran, some only to disabled veteran. It can be a full exemption of the total assessed value or a deduction of assessed value.	In Texas, veterans with 100 percent disability or individual unemployability will be granted a full exemption of all the appraised value.
Renovations or improvement	Some improvements in some states will be granted some exemptions.	Amount of dollar can be claimed or a specific period exemption of the property tax of this part will be granted.	In Pierce County, Wash., home improvements will be given 3 year exemption of tax.
Energy incentives	Taxpayer will get pay back for the installation of renewable energy systems	Green improvements like solar water heaters, geothermal heat pumps, photovoltaics, etc. will be excluded from the assessment.	For New Hampshire State, "solar systems (thermal and photovoltaic), wind turbines, and central wood-fired heating systems" will be offered exemption.
Other exemptions	Some for low income taxpayers, some for long-term occupant, some for widow/widower, some for volunteer firefighters, etc.		"Maine Township, Ill., offers a long-time occupant exemption for people who've owned their homes continuously for 10 years and earn less than \$75,000 annually.

*Source: (Bayer, Tad.org, Lawchek.net and Nh.gov)*

In addition to complete exemptions, partial abatement may be provided in some circumstances. For example, rebate or credit may be provided when the tax amount exceeds a specific percentage of the household income of the property owner. Likewise, in some states, policies will include deferrals or delays in collections or offsets in the form of assistant payments, etc. While some of these tax breaks come from the government, they can be requested by private taxpayers. This can occur when the property owners consider their assessed value higher than the similar properties in the area. Since this would not be equitable, they are vested the right to file tax abatement to their local assessor office before a specific deadline. In Massachusetts, the decision of the application will be made within three months. If the application for tax reduction is denied but

the property owner still deemed it as an improper decision, they can then appeal to the State Appellate Tax Board. To provide more flexibility and encourage redevelopment, “some cities offer tax abatements citywide, while others only offer them in designated areas.” This may be done to incentivize regional development, which is achieved by governments designating certain tax abated properties in less desirable neighborhoods (“Taking Advantage”).

A common term that is used when exemption and abatement are implemented is Payment in lieu of taxes (PILT). In the United States, PILT has been used by at least 117 municipalities in 18 states since 2000. Kenyon and Langley once concluded that the reason for PILT to be used is that it can be more precise and overcome some of the disadvantages of exemptions. This is especially true when exemptions are poorly targeted, for example, when there is a geographical mismatch between the costs and benefits of the properties with tax exemption.

In the US, PILT is sometimes used for governments and non-profit organizations. For federal government owned properties, which are not subject to local taxation, rather than being totally exempt from property taxes, the federal government can pay local governments fees to offset local governments’ tax reduction. This is sometimes the case for “the National Park Service, the U.S. Fish and Wildlife Service (all agencies of the Interior Department), the U.S. Forest service (part of the U.S. Department of Agriculture), and for Federal water projects and some military installations” (“Payments”). In some states, even though public or non-profit colleges and universities may not be subject to local taxation, they may pay a fee to local governments to offset the tax reduction that would occur since public colleges and universities are typically exempted. In some cases, PILT can be negotiated, “as when an arrangement is made for a corporation or institution to build a facility on public land without assuming ownership of the land.” (“Payment in lieu”) This can be done as an incentive to get private owners to

invest in areas or projects that have public benefits but don't make economic sense without a subsidy. Similarly, non-profit organizations that may be exempted from property taxes will in some cases offer to negotiate a PILT. In addition, to encourage development of facilities that create public benefits, PILT can also be negotiated to limit or defer property taxes as an incentive.

In the U.S., offering PILTs for non-profit organizations is usually not mandatory. Although, this treatment can be criticized since it forces reallocation of taxes to other properties. However, some local governments have changed regulations to support non-profits. For example, Adam Bednar, the president of the city council of Baltimore, MD once complained that his city lost \$120 million annually because of PILT. The government also argued that these institutions enjoy the same public services as the rest of the public and thus could have a better relationship with local government by paying some negotiated fee instead of avoiding property taxes through complete exemptions.

Table 8 is a summary comparison for the main elements between the U.S. system and the two pilots in China:

**Table 8 Comparison for the U.S. system and the two pilots in China**

<b>Tax Model</b>	<b>US</b>	<b>Shanghai</b>	<b>Chongqing</b>
Tax Object	All property within a jurisdiction,	Properties transacted after the publishment of the policy (Additionally, Chongqing is taxing all the single-family housing)	
Tax Base	Assessed value	70% of Transaction price	Transaction price
Tax Rate	Varies from states, for 2007-2009, it ranges from 0.12%-2.99% of home value	0.4%-0.6%	0.5%-1.2%

**ii. Methods**

**1) Mass Appraisal**

Since all properties in a jurisdiction must be assessed annually, property tax administrators have a major challenge in valuing properties. Unlike individual

property appraisals, which deal with only one property at a time, property tax assessors often use mass appraisal methods to deal with a group of properties at once. In general, mass appraisal systems utilize the same theories as techniques of individual property appraisals, but do so by applying appraisal formulas and statistical models (“What is Mass Appraisal”). The most commonly used program for mass appraisal is called CAMA (“Application of CAMA”), which stands for Computer- Assisted Mass Appraisal.

CAMA was conceptualized, developed, implemented and promoted by John Q. Ebert and was first used in 1965 in Michigan, U.S. It became popular in the 1970s along with the popularization of computer technology (“Computer-assisted”). In 1982, the first automated commercial property CAMA system was built to integrate all the three approaches for evaluation: income, market comparison, and cost approach. The CAMA programs that are being used recently in the US and other countries where property taxes are imposed, is forcing the taxation managers to adopt standard methods. In a number of countries, CAMA is the standard and combines all three methods of valuation to arrive at a fair market value. The application of other mass appraisal techniques is being used as well. For example, cloud technology allows real time data to be sent to and from the database, “all data, including sketches, photos, and video, is transmitted in real-time back to administrative devices, allowing for immediate quality control” (“Computer-assisted”) These data are then fed into models to establish assessed values for all properties in a jurisdiction.

## *2) Tax Incrementing Financing (TIF)*

Tax Incrementing Financing (TIF) legislation was passed in California, after the Second World War. It was also used in other states and markets including Chicago for which, in the 1990s, it played a significant role in the city’s redevelopment. TIF was also used was in 2012 in Edinburg, when the approach to

economic development and revitalization was introduced in the UK ("Tax Increment Financing").

The way that TIF works is that it enables a developer to finance a project by providing a credit to repay bonds that comes from the added property taxes and other revenues that are received when the original land is redeveloped. ("How Tax Increment") For example, a property was assessed at a value of \$200,000 and generated \$10,000 of tax in 2010, the property's original value is called base value, and the original revenue is paid throughout the TIF period. Next, the project will be financed by the newly generated tax revenue and excludes the original amount (\$10,000 in this case) that is continually paid to the tax entities. Then, in 2013, when the assessed value increases to \$1 million, which generates \$60,000 payable tax amount, the tax entities still receive \$10,000 and the balance goes to repay the loan that financed the improvements or infrastructure.

California's TIF legislation was passed in 1952 by a constitutional amendment approved by voters which allowed property tax revenues to be used to repay a funding source. This allowed improving the bright future of their communities by allowing them able to use TIF. This model did not become popular until the late 1970s with the passing of Proposition 13 in California which limited the tax raising power of local government. To fund public investments TIF became among many tax collecting jurisdictions that could not fund schools and other facilities due to tax collection drop or cap. In some cases TIFs were used with eminent domains, which helped make redevelopment projects more attractive to developers. However, since they raised issues of equity, the trend also caused many court cases and created other problems. Despite problems, those redevelopment agencies gained 12% of the state wide property tax instead of 4% in the 1980s. In some cases, state governors raided these redevelopment associations' bank accounts and moved the money to the state general fund, which did not help solve the balancing problem for local projects. This raiding continued until Proposition

22 was passed in 2011, which abolished the program in the state of California and ended it in February 1, 2012.

There are several lessons about TIF financing that have educative value for China. First, some researchers comment that the models in California were executed in different ways for different places. To understand the costs and benefits when summarizing the model, it is important to look at the specific ways it was practiced in specific times and specific places. Second, when TIF was used for its initial purpose, to reduce tax collection and build public infrastructure, the model was progressive, not regressive. Unfortunately, California allowed the model to become too complicated and there were too many experts with different views, among redevelopment agencies, which made it difficult to evaluate the impact on redevelopment through the use of TIF.

### ***iii. Process***

#### ***1) Establishing***

The assessed value of a property is usually calculated by multiplying the assessment ratio by the market value. Tax rates are mostly determined by each tax jurisdiction's legislative bodies. Thus, individual property taxes are calculated by multiplying the assessed value by the tax rate or mill rate. The tax rate is determined by several steps. First, the tax jurisdiction adds up the total assessed value within the jurisdiction. Second, the tax rate is calculated by dividing the tax districts' budget requests by the total assessed value. Using this approach, if the government budget changes the tax rate will also change to the same degree. In some cases, to protect owner from rapidly increasing taxes, states set a maximum tax rate (Mason County, Washington). As concluded by Moody's, tax rate varies among jurisdictions; for 2007, the average effective tax rate, as the rate of market value, of each states is between 0.4% and 2.58%. Some states will have a maximum property tax limit as a percent of market value which is set by state

constitutions. For instance, California and Washington have 1% of market value as the limit.

The determination of assessed valuation is completed for a specific date which varies among jurisdictions. Regardless of timing, since it relates to market value it is usually determined by application of the three professional real estate valuation methods: income, comparable and cost approach.

## *2) Enforcement*

In general, property owners pay taxes when they are due on an annual basis. To ensure funds are available, in most home mortgages the owner pays part of the property tax each month to avoid large bills. If taxes are not paid, the taxing jurisdiction must go through a formal collection process. The first step to begin a civil enforcement process is an issue of lien. According to the article, Property tax, an overview, from Cornell University Law School, the definition of lien in Federal Regulation is as follows: "If any person liable to pay any tax neglects or refuses to pay the same after demand, the amount (including any interest, additional amount, addition to tax, or assessable penalty, together with any costs that may accrue in addition thereto) shall be a lien in favor of the United States upon all property and rights to property, whether real or personal, belonging to such person." Rather than the federal government, the government agency that collects property taxes is the local taxing jurisdiction. If a payment is missed, several rounds of notification must be sent to the taxpayers. If payments are still not made, the notice will usually be published in local newspapers. During this process, a fee or penalty fee charge will usually be added to the taxes to cover collection costs. The government must file a notice of foreclosure to all the parties that have the recorded interest of the property, if the tax payment is still unpaid. If payment is still not made, the property will be seized and can be sold in an auction after the final deadline for the property owner to pay the tax and to redeem the property.

Take the example of Washington County in New York State. According to the Real Property Tax Collection and Enforcement regulations in Washington County, each January is the time to pay the property tax without penalty. There will be a fee of 1%, 2% or 3% if the tax was paid during the following February, March or April, respectively. After April, a fee of 5% penalty plus 1% interest per month, effective from February 1st until the date of payment, will be charged. A petition of foreclosure will be filed in 21 months from the lien date. At this point, public notice will be published in local media; personal notice will be sent to owner or owners; the mortgage and others with recorded interests will also be notified so they have the opportunity to step in and pay the tax to protect their interests by foreclosing on the property.

To protect owners who are facing hardship, the late answer provision still allows the property owner to pay off the tax, but this must occur before Summary Judgment has been filed. After this, the taxpayer still has the repurchase option but the repurchase should be at least eight days before the auction date scheduled by the tax jurisdiction to sell the property. Finally, if the non-redemption or non-payment continues the property can be sold at a public land sale auction. ("Enforcement") the total redemption period during which an owner can reclaim foreclosed property by paying past charges varies by state and ranges up to two years.

Table 9 is a table to compare the process for the Chinese and the U.S. systems:

[Table 9 Chinese and the U.S. property tax systems comparison](#)

Process	US	Shanghai	Chongqing
Property roll	Tax base system, the assessment roll is usually produced and published by assessor	Property uniformly registration system will be built by 2014	
Establishing	Usually Assessed Value*Mill rate, some exceptions	Taxable Value*Tax Rate	
Appeal	Appeal process	None	
Enforcement	Lien & Forfeit & Seizure	Late fee	Late fee & Personal credit system & Compulsory deductions from their bank accounts
Use of Tax	Allocated to each jurisdictions	Indemnification housing	Public rental housing

### 3) Appeals

After the assessed value has been sent to the property owner, the owner has a period of time to contest or appeal the valuation. Once the final assessed value is set, the payment amount, time and terms will be set although they may vary among jurisdictions.

In the state of Nevada, there are three main reasons that a taxpayer could appeal. First, when they feel their property is over assessed. Second, when they feel there is an inequity of treatment compared to other properties. Third, when the true market value becomes less than the taxable value. Once a taxpayer appeals, a public hearing will be held. The notice and agenda will be posted and sent to related parties at least three days before the hearing. "State Board is specifically required to provide reasonable notice to all parties appearing before it" ("Nevada department of taxation"). The County Board has the power to correct all the mistakes that they conclude the county assessors have made, and can also establish a more detailed assessment procedures with the approval of the State Board. "Board convenes each session on the fourth Monday in March in Carson City, Nevada, and holds as many meetings as necessary to complete the business of the State Board." ("Nevada department of taxation ") Usually, this process will take 15 to 20 days. The State Board will review the hearing from county board to

review the County board's decision. "Hearings on direct appeals are conducted to allow all relevant evidence to be admitted and witnesses may be examined and the opposing party may cross-examine such witnesses, and such witnesses may be impeached" ("Nevada department of taxation"). The Nevada Tax Commission may review the cases of taxpayers who are denied for the appealed relief and are too late to pay the initial tax to avoid additional penalties that may have been imposed. The commission also may review hears the taxpayer who is seeking the relief of penalties, as well as the abatement that has been denied. An appeal to the commission would be assigned to an officer who make the final decision and give a recommendation to the Commission.

#### **D. Use of tax**

In the U.S., most of the property tax collections stay at the local level. For example, in North Dakota, "of the \$537 million collected in property taxes and special assessments in the state in 1999, only \$1.2 million went to the state and about \$900,000 went to the Garrison Diversion Conservancy District (a 26-county agency)" ("A Study of North Dakota's Tax Structure"). Furthermore, revenue is usually distributed to different levels of local government, like counties, cities, K-12 schools, community college districts, special districts, etc. In California, more than 4,000 local governments are in the first percent rate of property taxes. For most of the taxing jurisdictions in the U.S., education shares a big portion of the revenue. In California, almost 40% of property taxes were taken by K-14 education ("Understanding California's Property Taxes"). In Washington State, 54.2% was allocated for schools in the 2010 tax year ("Homeowner's Guide to Property Tax"). In South Carolina, almost two-thirds of county-levied tax is used to support public education. ("South Carolina") To show how taxes are distributed, Table 10 presents the state wide average revenue distribution for the state of Indiana.

**Table 10 State wide average revenue distribution of the state of Indinan**

Jurisdictions	Distribution for each property tax dollar
County	\$0.1870
Township	\$0.0377
City/Town	\$0.2247
School	\$0.4364
Library	\$0.0458
Special Unit	\$0.0660
Conservancy	\$0.0024
Redevelopment	\$0.0010

Source: *in.gov*

## E. Criteria

Several criteria must be satisfied in the U.S. property tax system. These include: Equity, Adequacy and Stability of Revenue Yield, Economic Competitiveness and Administrative Efficiency.

### *i. Equity*

As discussed in Chapter 3, the equality of the property tax can be valued from the horizontal and vertical perspectives. For the horizontal perspective, the U.S. system has many restrictions to insure the equality criterion is satisfied. At the national constitution level, there is a requirement of equal taxing; at the state constitutional level, there is a requirement to have the properties uniformly or equally assessed.

The vertical perspective means the taxpayers are taxed depending on different circumstances. The first condition will be the ability to pay as reflected in the relative wealth or value of property. Taxpayers in different situations may be treated differently in some states. For example, in some states the elderly are given a homestead exemption to reduce the tax burden on those living on fixed incomes. The vertical perspective is also achieved through other regulations, i.e. abatement. For example, Allegheny County in Pennsylvania has an abatement, which indicates that “residents who are at least 60 years old, have an annual income of \$30,000 a year or less (counting just half of Social Security or Railroad

Tier One benefits) and have lived in and owned their current Allegheny County residence for at least 10 years are eligible for a 30 percent reduction in their County tax bill” (“Property Assessments”). Also, the ad valorem tax, to some extent, is itself progressive, since a person who is wealthier tends to have more expensive property holdings.

The approaches to narrow the gap between wealthy and poor through different property tax treatment are important of the modern tax system, to improve social equity. However, the taxes still cannot discriminate among taxpayers in the same situation which satisfies the equity requirement. This is somewhat similar to the progressive tax rate in China’s pilots, which charges higher taxes for people holding more properties. In the U.S., this goal is achieved by reliance on an ad valorem basis. While it is difficult to fulfill both equity and justice, method for tax legislation usually takes both into consideration in an effort to close the gap between the wealthy and the poor. “The more unequal the market income, the greater the amount of redistribution required to achieve a given degree of equality in disposable income.” (“Taxation”) The current limited system used in the U.S. may be since the gap between the wealthy and poor is not big compared to China.

Another aspect is the services received or benefits. In the U.S. system, the ad valorem tax for property, which uses value as the standard, is fairly equal. This means, assuming a same tax rate, the more public service a property receives, the higher the property tends to be valued, and thus tends to collect more tax revenue.

Incidence, as another element of equity, is the relationship between a property tax and its payer. The U.S. system usually has a clear tax bill showing different portions of property taxes imposed by different jurisdictions. Thus, taxpayers can clearly see the public service they pay for and the benefit their properties receive.

***ii. Adequacy and Stability of Revenue Yield***

A good tax system also tends to generate adequate revenue to support government services. The revenue for the U.S. property tax system is spread among taxpayers can usually be calculated by dividing the fiscal fund needed for the next year by the taxable assessment value. In some states like California, the revenue is a percentage of taxable value plus the voter permitted debt. Thus, the revenue will be adequate if the projection of the fiscal fund is accurate and values are stable.

While a tax system can affect the tax base, a good system that supports services will help to keep the tax base that generates adequate revenue. It is understandable that the increase of tax base, at the same tax rate level, will increase tax revenue. Also, the increase of tax rate, at the same taxable value, will increase revenue to cover increased government costs. Usually, if the budget is stable, an increase of tax base (the property tax can be interpreted as the increase of the total assessed value or the increase of the population or residents) can lower the tax rate or, in other words, will lessen the burden of each family. That is, in a mill rate system, rising values will mean lower less mill rates that are applied to every share of assessed value. On the contrary, increase of tax rate without offsetting benefits can reduce the tax base by pushing people moving to a more affordable place with adequate public service and a lower property tax. Take the example of Detroit, Michigan, "Nearly half of the owners of Detroit's 305,000 properties failed to pay their tax bills" in 2012, as concluded by Becket Adams. When the economic crisis caused the shrinking of the tax base, the government offered less public service and cut funds, as well as raised tax rates, which caused the tax base to shrink more severely. Detroit now has one of the highest property tax rates in major cities while the population has severely declined. The Census Bureau reported that Detroit had 1.8 million population in 1950 while there was only 0.7 million in 2010. ("47% of Detroit")

### ***iii. Economic competitiveness and social benefit***

A good tax system should also stimulate economic competitiveness. The U.S. property system usually has a clear relationship between the sources and the uses of taxes, as discussed in section d of this chapter. The improvement in services, supported by the tax revenue, can translate to support for the property values within the area. This in turn can support the economy by bringing in more people who are attracted by the improved social environment.

Property and other forms of taxes can be used as a tool to affect people's behavior which explains becomes one of the reasons for tax relief policies. For example, at the federal level, there is a policy mentioned "federal tax credits of up to \$1.80 per SF are available for green building projects that meet ASHRAE standards" ("Green Roof"). The Baltimore County in Maryland has an incentive for environmental friendly buildings, "Properties that may receive tax breaks based on Leadership in Energy and Environmental Design (LEED) compliance are divided into two groups, High Performance Commercial Buildings and High Performance Residential. The County does not mandate compliance; however LEED accreditation comes with very significant tax breaks" ("Property Tax Credit for High Performance Buildings and Homes").

Examples in the affordable housing industry exist in some states, like Florida and Texas. For example, Texas has an exemption for community land trust, "Real and personal property owned by a community land trust for the purpose of providing affordable housing for low-income and moderate-income residents, promoting resident ownership of housing, keeping housing affordable for future residents, and capturing the value of public investment for long-term community benefit is exempt." ("2013 Texas Property Tax Exemptions") Although this policy is available to all eligible organizations, some requirements should be met: the approval should be obtained before July 1 at the year of application. Charitable organization requirements must also be met. "Own the land for the purpose of

leasing it and selling or leasing housing units located on the land; and engage exclusively in the sale or lease of housing” (“2013 Texas Property Tax Exemptions”). Annual audit by private auditors are often required to ensure continued eligibility and compliance with requirements.

**iv. Administrative Efficiency**

In some jurisdictions, property taxes are usually costly to collect. “The property tax has high public costs but, for most taxpayers, low private costs.” (“Criteria”) On the public side, it is costly to have the government assess every property, keep information on record or even build and maintain an electronic database. On the private side, taxpayers may spend time paying attention to property taxes and sometimes appeal with tax bills that they think are inappropriate. Overall, the total cost falls on the government side but is necessary to implement a valid tax system.

Table 11 compares the U.S. and Chinese property taxes by using the criteria that have been discussed above:

**Table 11 The U.S. and Chinese property taxes comparison by using the criteria**

<b>Criteria</b>	<b>The U.S.</b>	<b>China</b>
Equity	Constitutional equity terms protect from horizontal perspective; vertically consider age, veteran, disabled...	Horizontally ignored; vertically included, but needs more complexity
Adequacy & Stability of revenue	Always adequate because of the method; good systems keep the tax base. Stable because of the stable tax base	Limited revenue because of narrow tax base and high threshold. Unstable since the volume of newly transacted properties are changing
Economic Competitiveness	Tax collected is to support the public environment	Haven't seen a more rational real estate market
Administrative Efficiency	Costly, but most of the cost comes from the government side	Less costly, but it will be costly to complete the system

## **5. Wenzhou condition**

### **A. General Condition**

Wenzhou is a prefecture-level city under the Zhejiang province. It has a land area of 11,786 square kilometers and a sea area of about 11,000 square kilometers. According to the 2010 census, it has a resident population of 9,122,100, including more than 4 million migrant workers. Wenzhou has three municipal districts, six counties, and two county-level cities. Wenzhou is the first place to start private business in the history of the People's Republic of China, after the economic reform.

### **B. Economic condition**

For Wenzhou, the GDP in 2011 was ¥335 billion (\$54.2 billion, currency of U.S. Dollar, as exchange rate of 6.18).

As of 2011, Wenzhou had an overall per capita disposable income of ¥31,749 (\$5137); urban residents per capita disposable income was ¥35,431 (\$5733); rural residents had ¥13,243 (\$2143) per capita net income.

As of 2011, Wenzhou's total fiscal revenue was ¥48.562 billion (\$7.86 billion); of which the local fiscal revenue was ¥27.087 billion (\$4.38 billion). (Blue book of Wenzhou)

For the year of 2011, total fiscal revenue was ¥48.46 billion (\$7.86 billion), 95% was from tax revenue. The fiscal expenditure for 2011 was ¥37.04 billion (\$5.99 billion). The downturn in the light industry and the real estate recession caused the low increase rate of tax revenue. (Yonglin Jin 20)

## **C. Current Real Estate market condition**

### ***i. Real estate market***

According to Yonglin Jin in The Blue Book of Wenzhou, among 70 large and medium-sized cities in China, in 68 cities' housing prices during 2012, Wenzhou was one of the two cities where housing prices decreased (Yonglin Jin ). Another report released by the government compared the housing prices between 2010 and 2012, and showed Wenzhou had the highest drop range of 17.7% among 70 large and medium-sized cities in China ("Unified real estate"). Despite this decline Wenzhou University Institute of real estate market monitoring data indicated the residential housing price in the urban area of Wenzhou in 2011 was 4.2 times of the number in 2006. This reflected an increase from ¥8,000/m<sup>2</sup> (\$120.31/SF) to ¥34,000/m<sup>2</sup> (\$511.30/SF).

### ***ii. Demand and supply***

As for the supply side, there was 1.5 million m<sup>2</sup> (16.14 million SF) of residential space in the Wenzhou urban area in 2013. This number includes the residue from 2012, which means the land issued by the government in 2012 but hasn't been developed. The available residential space also includes newly leased land in 2012 that will be developed and the amount that may be absorbed for next year (Langzhao 7). The affordable housing still covers a small part of the supply. For the years from 2006 to 2011, affordable housing space under construction accounted for only 4.7%, 5%, 2.65%, 3.95%, 3.8%, and 3.6% of total space under construction, respectively. In 2011, 1.33 million m<sup>2</sup> affordable housing was under construction and there were 2,539 households living in affordable rent properties. (Yonglin Jin 108)

For the demand side, the methodology used here segregates the demand in Wenzhou into two main categories. The first category is the increase of urban population, which is the objective condition. From 2005 to 2010, the urban

population in Wenzhou grew from 4.38 million to 6.03 million, an annual increase of about 300,000 that was mostly due to urbanization. While the average living space in 2010 was 30.51 m<sup>2</sup> (328.29 SF), the increasing annual demand for living space was about 9 million m<sup>2</sup> (96.84 million SF) per year. The second category is the subjective condition. For example, in Wenzhou, buying a new property at marriage is common. In 2010, the number of females from Wenzhou, who got married, was 58,836. Using the average living space per person of 30.51 m<sup>2</sup> (328.29 SF), the amount of increasing demand was 3.6 million m<sup>2</sup> (38.74 million SF). Since most young couples were buying bigger properties for marriage, and taking into account the improving living quality; there was more than 12.60 million m<sup>2</sup> (135.58 million SF) of demand in 2010. That is to say, the demand for that year was for 150,000 properties. Since the numbers are relatively stable from year to year, the annual growth in demand will be close to the demand in 2010. (Yonglin Jin 112)

As for the demand of investment, data from a brokerage company was found but only second hand transactions were included in the data. The research of the data regarding the investment demand indicates that the highest volume of investment is 1/3 to 1/2 of the highest volume of 2009. (Yonglin Jin 102)

### ***iii. Land market***

From 2007 to 2010, the amount of land that had been released from the government to the market was 1,756 acres in total, 585 acres annually. For 2011, the Wenzhou government's plan was to release land twice the amount of land released in 2010. However, at that time, the future projection for the real estate market among developers was bad and the land that was actually released was less than that in the year of 2010. 2012 was a tough year for the land market in Wenzhou. Only 20 deals of land were completed for the first half of 2012; in the second half of the year, deals of land improved and the result of the whole year

were 120 deals with 3,350 acres. 30 of the deals were in the central city area, which fulfilled only half of the government's plan.

#### *iv. Capital market*

The real estate market cooled down since the end of 2010, when the government tightened monetary policy and raised interest rates. The investment for the real estate market in Wenzhou in 2012 was ¥68.75 billion (\$11.12 billion) and only increased 1%. In the meantime, the investment in industry and infrastructure was ¥46.93 billion (\$7.59 billion) and ¥62.87 billion (\$10.17 billion); this was an increase of 42% and 48.3%, respectively. (Yonglin Jin 69)

Business people from Wenzhou are sometimes called the “Eastern Jews,” a term which indicates the natural instincts they have, and 30 years of reputational accumulation since the Chinese economic reform. The typical perception of the Wenzhou capital market has is that it has a huge amount of civil capital of ¥800 billion (\$129 billion) to ¥1,000 billion (\$162 billion). However, the reality is that most of the capital is invested out of Wenzhou, or has not been invested since the real estate market recession started. (“Way out”) This is important to note since the amount of capital can be a significant market power when the real estate market is recovering.

Wenzhou used to be a city of many manufacturing and light industry companies, However, profits from these traditional industries kept narrowing. In this environment, the profit-driven nature of capital caused Wenzhou business people who had capital to begin chase higher-return business. For many the real estate market became the most popular choice.

The public belief that the current Chinese real estate market has a severe bubble is based on the popularity of property investment. A report showed that 60% of private lending in Wenzhou was invested in the real estate market during the period of 2008 to 2010 (“Wenzhou prices”). Private lending covered a big portion

of Wenzhou's capital market. For example, in August, 2011, private lending capital was ¥120 billion (\$19.42billion), which equaled 20% lending amount of regular banks.

**v. Market projection**

Currently in Wenzhou, administrative oppression has had a heavy influence on the real estate market. From 2006 to 2012, the average annual transaction was 0.6 million m<sup>2</sup> (6.46 million SF) (Yonglin Jin 102), which included 17,000 deals. Compared to the annual demand calculated earlier in this chapter (150,000 properties for 2010), the actual number of 17,000 deals indicates that much demand has not been satisfied. One of the reasons for the gap in demand is housing prices, as the average household revenue is about ¥70,000 (\$11,327) compared to the average housing price is more than ¥30,000 (\$4,854) per m<sup>2</sup> indicates housing not affordable for most of the public. According to a personal interview with Songhu Bao, an officer from the Wenzhou Development and Reform Commission, despite high demand the vacancy rate is almost 35% in the Wenzhou urban area. This is due to the relationship between supply and demand and the fact that most of the vacancy should be the properties that are not affordable for the public. The market support to keep these vacant properties at this high price can only be the hot money that is searching for returns. That is one reason why experts project the higher-end residential to have a worse future than the lower-end residential which has a stronger demand.

**6. Recommendations for Wenzhou**

**A. Combination of ad valorem tax and specific tax**

A criticism of the Shanghai pilot program is the exemption of the first property. Instead of the exemption of a specific area per person for the threshold, the pilot program may encourage people who are first-time buyers to buy a bigger property since it is tax free. This impact could be a negative for the forming of a rational

housing market. Some suggest that setting exemptions by a specific housing area is a more reasonable approach which will be discussed with the Wenzhou situation in section f) of this chapter. The taxable part of the properties held by the owner, after deducting the general homestead exemption, will be taxed based on its value, which is the most common method used by most of the countries. This system is more complex since it requires that the tax entities have more comprehensive system to define the properties as well as ownership and the number of properties that owners are holding.

### **B. Decentralize and leave autonomy for local government**

China and the U.S. have different political institutions, so the model from the U.S. cannot be copied to China without adjustment. In China, tax policies are usually determined by the central government, but the property tax should have a differential tax rate and different tax base. This is because in different areas of China, the level of economic development shows huge differences; thus, the real estate economy is developed differently among different areas. Since the national average income is still at a relatively low level, the set-up of the property tax should not be too high and thus will have to have differences among areas. Thus, a tax system in China may have to be based on niche targeting and the resolution to have the local government define their own models while complying with the direction or limitations set by the central government.

For Wenzhou, the main character of real estate market, which is different from others, is the high rate of real estate transactions for investment, rather than transactions for living. This situation is more common for higher-end properties, which produces a high vacancy and pushes the housing prices beyond public affordability levels. Thus, for Wenzhou, the tax rate may be set as graduated tax rates, with higher rates for higher-end properties as a means of narrowing the gap between the wealthy and poor, while applying a lower tax rate to lower-end

properties to satisfy the basic living requirement of the public.

### **C. Land-transferring fees issues**

Currently in China, the government fiscal system heavily relies on the revenue from the land-transfer fees. A conservative estimate of fiscal revenue in China in 2011 is 8 trillion, of which land-transferring fees revenue for the same year was 2.7 trillion, which almost covers 34% percent of the total revenue. Since the transfer fee revenue is collected by local government, it covers more than a half of local fiscal revenue. ("Tan Ye") As for Wenzhou municipal government, the fiscal revenue was around ¥48 billion (\$7.77 billion) for 2012. Compared to the number in 2011, it has an increase of 3%, which was much lower than the average number of 9.2% in the province. The significant retardation was due in part to the tough land market as indicated by the fact that total land transferring fees revenue for 2012 in the main city area was ¥6.55 billion (\$1.06 billion) while the first half year of 2010 had a land transferring fee revenue of more than ¥10 billion (\$1.62 billion).

Since land is a non-renewable resource, it cannot be supplied unlimitedly. Thus, relying on land-transferring fees as the main source of fiscal revenue is unsustainable since transaction volume changes with market conditions. The director of the Institute of Fiscal Science in the treasury department, Kang Jia, once said that promoting the property tax to be the main taxes for local government is not only an international convention, but also an important measure to optimize the structure of land revenue. ("30 provinces") In general, a property tax system is a more stable and sustainable source to which can help local cultivate governments become a long-term server or provider with a long-term perspective. Thus, gradually promoting the property tax to replace the land-transferring fees is also consistence with the historical cyclical trend in values and market conditions.

## **D. Methods: personal properties uniform registration system and properties assessment system**

### ***i. Personal properties uniform registration system***

The passing of the Property Law was a significant event in China. This created a serious law to define property rights, and to protect national, collective and individual citizen's property. Before this, although private properties had the highest level of constitutional protection, there was lack of a single law to implement property rights until March 19, 2007, the date that the Property Law was published.

Defining property rights was the first step to impose a property tax, which is not yet completed. While the property law has a clause indicating that there should be a uniform registration system in which all the real property is registered, there have been several years without implementation. Even though some local governments have started some departments for property registration, the progress has not been significant since there hasn't been a national level unified registration system to be set as a standard. Thus, it was good news that the Chinese state council general office issued notice regarding the division of tasks on the implementation of the "State Council institutional reform and functional transformation plan". This notice indicated the plan to set up the uniform registration system for real properties would have to be completed by June, 2014. At the current time, the "Real Property Registration Ordinance" is still in development ("Unified").

For the public, some people believe that the most useful part of the registration system is the impact on anti-corruption, which benefits from having all government officers' property registered. During the last several years, it was discovered that more and more government officials had an astonishing number of properties. Consequently, people have more of an expectation that the property registration system will regulate governmental corruption. From the same

perspective, it will also help protect every individual's ownership by recording the properties on an electronic database. This will prove and record ownership, and create a more reliable than certificate of title since in the past a certificate could be forged.

Before implementing a property tax system, the most pressing element is to define the tax base since it is necessary to have all the properties on record to define housing stock in the market. Further, if the property tax system were connected and merged with a personal information system, it would be easier to define how many properties and how many square feet a person owns. This information is essential for the specific part of the property tax discussed in the a) section of this chapter. During the implementation phase, the registration system will be a good database to be opened to the public, to clearly show the basic information of each property. In addition, any information regarding the property tax can be posted online, in the system, which is how the personal properties uniform registration system will prepares for implementation of the property tax. ("Which is the difficult part")

## ***ii. Properties assessment system***

For the technical preparation, the assessment system which will need the most improvement is the most urgent problem to solve. Currently, China is facing the problem of lacking personnel and experience in property assessment and its application ("Property tax deal")

Last year, the State Taxation Administration, along with the Public Affairs School in Renmin University, started training for the assessment of properties in preparation for the assessment of the property tax base. This training event drew practitioners from thirty provinces as well as municipalities directly under the Central Government and specially designated cities in the state plan. This effort was regarded by some as a sign to expand the property tax pilot from Shanghai

and Chongqing to the whole country.

China is currently in the process of urbanization, and the economy and real estate market are developing rapidly. At the same time, the housing prices are increasing actively at a higher percentage than other more stable markets. Thus, it is more feasible and conservative to use the market value or an assessed price, which is based on the market value, as the tax base. The California model of assessment value in which the calculation sets the assessed value according to market value, and then the assessed value can grow as much as 2% may not be suitable for China at this time. Since the Chinese market is still growing because of relatively low urbanization rates, with an unpredictable and actively changing price changes, the assessed value may be out-of-date in a short period of time. However, it can be useful to have the assessed value in China tied to the market changes, and use learning from the California model, to set some standards and help determine if a property should be flagged for reassessment or not.

However, before moving forward there are many problems to solve. For newly transacted properties, the transaction value can be a good resource to define tax base. While for the properties in stock, especially those that have been out of the transaction market for a long time, along with the reason of lacking dynamic records of a property value system, the assessment process will be much harder to determine.

Another problem is China doesn't have a complete database, appraisers are working depending on inconsistent standards, which can lead to inaccuracy of total assessed value estimates, especially since appraisers may be working depending on different standards. ("Business behind property tax") Thus, a case database should be built uniformly, and this database should be open to all valuation offices.

As for the technique of assessment, the assessment should be done by

assessment departments along with the assistance from private appraisal companies. For the government appraisal department, their duty should be evaluating most of the properties in the market. In Wenzhou, since there are 6.02 million residents living in cities and towns, if divided by 2.76, ("Bulletin") the average number of people in each family, there can be as many as 2.18 million properties in need of valuation. Thus, mass appraisal, especially computer-assisted mass appraisal (CAMA) should be the most feasible method as we discussed in Chapter 4, c), ii, 1).

Even though CAMA has become a more and more mature approach to valuation, there are still some incomplete parts. For example, by using this method, it is hard to reflect the real value for special properties that deviate from the market value. Since this method depends heavily on related statistics, it will be hard to evaluate properties with less statistics. Since China just started building the statistics database, properties lacking statistics will likely occur often. Thus, single-property appraisals may also have to be utilized in combination with mass appraisal. ("Application")

#### **E. Tax taxpayers in same circumstances alike**

Equity is an important principle in tax laws. From an equity perspective, as discussed in Chapter 3, the pilots in Shanghai and Chongqing both ignored the horizontal perspective of equity, which impels to impose the same level of tax to taxpayers in the same circumstances. However, both of the pilots take into account the local residential register, length of residential, business and working conditions as the standard for taxing. This may reduce some of the investment from speculators, but it also makes the two pilots a temporary regulation with policy guidance rather than a base for a permanent set of tax laws. To some extent, it seems reasonable to monitor the short term impact on the real estate market, which is growing too fast and makes the public unable to afford most

properties. However, in the long term, the property tax law needs stability. Changing the law along with the changes in the market is not a stable method. More importantly, the long term objective will be narrowing the gap between the wealthy and poor and improving the tax system and collecting revenue for the government fiscal system. If the short term objection leads the public opinions astray, it will be harmful for the long term goal.

In addition, the two pilots both set a time standard that taxed only properties that have transactions after the policy took effect. This assumes people holding multiple properties have higher income and are buying more properties which may be reasonable to some extent and can also help adjust the gap between the wealthy and poor. However, any such impact but the time point will be only temporary, and for the convenience of tax calculation. Since the assessment system is not complete and accurate at this time, it is obviously easier to use the valid transaction price as the tax base initially. To fix this problem for equity problem, it will be necessary to complete the personal properties ownership registration system and properties assessment system, which we will discuss in the next section.

According to Hongxu Yang's research, in property taxation, equity is achieved by extending the collection for only newly transacted properties to all properties in housing stock. The first reason is because the time of transaction is not a condition to define different situations of taxpayers according to equal standards or of value or wealth they control. However, this temporary treatment can fulfill the need for adequacy of revenue for local government, which is crucial for local education budgets and public infrastructure, as a sustainable source. Thus, taxing housing in stock as well as newly absorbed and newly transacted will be the direction for the Chinese property tax to develop in the long term.

## **F. General homestead exemption and other more comprehensive abatement**

### ***i. General homestead exemption***

The general homestead exemption is appropriate to be set as a specific square footage per person. It is similar to the exempted amount in the Shanghai pilot. The reason for having this exemption is because the property tax is what the public does not have to pay before; it will be easier for the public to accept if the tax threshold is higher. Also, China is still a developing country, even though Wenzhou is a more developed city in an area with a relatively more active economy, it still has a lot of people living lives of frugality, as discussed in Chapter 5, the urban residents per capita disposable income is ¥35,431 (\$5,733). The average price on May, 2013 for second hand housing transactions ranged from ¥20,000 (\$3236) to ¥22,000 (\$3559) ("Wenzhou housing prices"), and the average housing square footage in Wenzhou, as of 2011, was 41.9 m<sup>2</sup> (451 SF) ("Shanghai Chongqing individual housing"). Thus, for a typical three-person family, the total price will be ¥2,639,700 (\$427,136); even when using the lowest tax rate from the Shanghai and Chongqing pilots, 0.4%, which is regarded as very low, the annual property tax bill would be ¥10,559 (\$1,708) almost 15% of the annual household income if we assume two of the family members are working. This will be too heavy a burden for a family. Comparatively, the average level in the U.S. is 2.85% and ranging from 0.25 to 8.79%. In China it will be tough for the public to accept such a high rate.

The reason to set the exemption based on the amount of square footage per person instead of amount of properties owned (i.e. exempt the first property owned by a family) is one that one of the functions a tax is supposed to accomplish is to regulate the public's behavior. In the case of property taxes in China, to regulate the real estate market and help it become more reasonable and need-driven. For example, a property tax might encourage people to buy what the

average amount of place to live instead of buying a bigger one based in part on property tax-free subsidy.

To provide some guidance for policymakers, it would be useful to determine how much square footage is appropriate for the general exemption. The Shanghai pilot has the average housing size of 33.4 m<sup>2</sup> (360 SF) ("Statistical bulletin") as of the end of 2011. However, they set the general homestead exemption at 60m<sup>2</sup> (646 SF) per person. In evaluating the impact of the pilot, we should take into account that the size in the pilot is relatively high. This was consistent with the whole pilot model, and was partly based on loose or missing background data. In the case of Wenzhou, a lower than the average living space per person was used. This approach reflected the value of the property tax and goal for giving this exemption to lower the burden to a reasonable degree, without materially affecting the revenue or placing too much of a burden on owners as result of the property tax.

*ii. Other exemption and abatement*

The two pilots appear to have had a slight impact on the basic living quality. This may be due to the fact that the exemption and abatement mentioned in the two policies have been brief and incomplete. In the future, if the property tax system was expanded to a broader tax base, it may be necessary to review and diversify the exemption and abatement. Examples of such policies were discussed in 4, c), I,6) which is a good example and reference from the U.S. system, especially to include senior, disability, veteran or even indemnification housing as part of our exemptions and abatement.

**G. Appeal process should be generated**

A formal appeal process is one of the elements that makes a property tax complete in most countries. In the U.S. which uses the common law system, the appeal process is clearly defined and there is a fixed period time for applicants to

file applications; late appeals will not be accepted. In some cases the appeal must be made to the same government department while in others it may be a specific governmental agency. For countries that use the continental legal system, even though the application can be filed to the same or higher level of authority, there is no time limit for appeal and. The timing of the decision on the appeal depends on when the aggrieved party has filed the appeal.

Although China relies on the socialist legal system, in practice, it draws on elements of both the continental legal system combined and the common law system. In setting a property tax appeals system in China, the Administrative Reconsideration Law of the People's Republic of China is a good source. Thus, it may be reasonable to set a 60-day period for the applicant to file the appeal. As in other countries, it might be set up so applicants can appeal to the same level of government or a higher level department in charge of tax authority. Alternatively a better way may be to set a special entity to deal with all the property tax appeals to increase efficiency. The commission mode, which has been used in China for five years, can be applied to the appeal process of the property tax. Since a property tax appeal involves different parties and professional fields, this mode will address the need for a system that offers equality and efficiency. A committee should consist of appraisers, accountants, lawyers, tax accountants and other senior professionals.

The appeal process in China might use the typical process from the Administrative Reconsideration Law of the People's Republic of China: 60 days for applicants to file appeals along with the request for compensation. Before this occurs, applicants might be given a chance to appeal informally to the assessor, to provide evidence for the assessment. Then, if the issue is not solved, the appeal will proceed to the next step. The timing might allow 5 days for the administration to decide to accept or not; 60 days for the administration to hear and make the decision; 15 days for the applicant to bring a lawsuit to court. Several decisions

might be options: affirming the original decision; obligation for the party against whom an application is filed to fulfill some requirement; revocation, modification or confirmation of the decision; and the decision provide compensation. (“Administrative” and “The processing”)

#### **H. Use of tax should be addressed**

According to the equality perspective, in a Chinese property tax system, revenue should be used for public infrastructure and service. In addition, based on the role that the property tax system might play to help adjust the gap between the wealthy and poor, some of the revenue of the property tax should be used for indemnificatory housing or providing affordable housing. As for Wenzhou, the current housing situation and the severe gap in affordability, narrowing the gap between the wealthy and poor would be addressed more in order.

For the property tax revenue to provide public service, the permitted uses of tax revenue should be regulated to ensure the use has the desired impact. Unfortunately, in the Shanghai and Chongqing pilots, the use of tax is not fully discussed; it is just mentioned in one sentence. Even though they both mentioned using the tax revenue to build affordable housing, there are other needs that are not discussed. In the U.S. property tax system, some of the models that guide the use of property taxes are worth learning. For example, the one discussed in 4, d), indicates the relationship between the uses of tax revenue and the needs of each tax jurisdiction in the state of Indiana. The takeaway is that it is important to show the public where the revenue goes, which will make the process clearer. This will help not only for the public, but also help the government schedule the expenditures of the revenue. This would indicate how a specific portion of revenue would be invested in public services, including infrastructure, national defense, education, fire service and public security. It should be shown that the expenditures that are made at the local level which will go back to boost the value

of the property. For the property tax to narrowing the gap between the wealthy and poor, the Chongqing model provides a good example of how revenues can be used. Compared to the affordable housing program in other cities, Chongqing offers enough public rental housing really influenced the market, more than most of other cities. In 2010, Chongqing started the public rental housing push, which helped provide a large number of low-income rental housing units that almost equals 20% of the total amount of properties in the market ("The real estate regulation"). This was a priority of the property tax pilot, which mentioned the intent to use the tax revenue for construction and maintenance of public rental housing. Some of the experts who opposed the publication of the property tax finally praised the Chongqing model as a compromise, "It's okay for government to impose more tax, as long as the revenue be used to develop more affordable housing for the public", said Xianping Lang.

Models like the Tax Increment Financing model that were discussed in Chapter 4 can also be set up based on the U.S. experiences which showed how such systems can allow private entities to participate in public development. Incentives such as the property tax credits can also be given to private developers who take part in the development of affordable housing. In China, such policies would offset the fact that private companies rarely do indemnificatory projects because of the relatively low rate of return.

## **7. Conclusion**

As discussed in this thesis, the merits of property tax play significant role in a various areas that turn the development of property tax into an urgent work. The recommendations in Chapter 6 draw on the matters that need attention when the property tax is being developed. These recommendations are based on the Chinese legal system and social condition. They are also based on the situation of Chinese mid-size cities, especially Wenzhou, and rely on the experience of

Shanghai and Chongqing property tax pilots. In addition, many of the recommendations have absorbed the successful experiences from other countries, especially the U.S.

However, there is still a long way ahead to the completion of the Chinese property tax system due to the incompleteness of the Chinese legal system and the social development situation in China. It would be my honor if this thesis contributes to the journey of achieving the property tax system in China.

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