

Make It Simple and Light: Some Thoughts on Real Estate Related Taxation in China

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This article discusses the advantages and disadvantages of real estate-related taxes that might be imposed in mainland China, in light of the government's needs for tax revenue and the economy's need for incentives to develop land. Some policy recommendations are presented, based on an analysis of real estate taxation in general and of China's specific needs. As one recent article has noted, understanding how behavior adjusts in response to taxation is one of the most important issues in public finance.¹

Keywords

China, Public Finance, Real Estate Taxation.

Introduction: Why China Presents an Interesting Case

Industrial growth and the beginnings of private property rights have brought China into the realm of modern economies; China has posted impressive growth in the course of its movement to a more market-oriented system.

¹ Triest, p. 761.

While fixed investment, foreign direct investment, and real gross domestic product have actually fallen in recent years in Russia, they have greatly increased in China. One reason may be the reported efforts of Chinese local governments in promoting commerce and providing supportive public services.² In this environment, the country has had to deal increasingly with the question of a private tax base to support these public services. Economists have long studied the impact of real estate taxes on development and other economic activity. Tax on real estate, which we define as land and improvements permanently attached to the land, has not been an issue in recent decades in mainland China, where the government has been the legal owner of all land since 1949. The state also owned most urban housing from the early 1950s until the early 1980s, and continues to own a substantial portion of the stock of residential and commercial buildings.

Advantages the government realizes through its ownership of land include the capture of all land value appreciation, the ease of determining land uses, and the ability to control (or perhaps to ignore) perceptions of land price changes during periods of economic turmoil. Disadvantages include the inefficient use of land (empirical studies in western countries have shown that land use decisions are less efficient when made by government than when determined in a free market), possible corruption of officials who control land use, and the potential for the state to receive less financial benefit than the tax revenues that private ownership would produce. Perhaps more importantly, state ownership of all land, and of a major share of the country's housing, leads to diminished housing development and to financial burdens on the government (in the form of maintenance costs, in addition to the foregone tax revenues).

Although improved property is becoming increasingly privatized as part of China's economic reform process, land transactions remain highly regulated by the government. For example, what a land buyer purchases is the right to use land for up to 100 years, so while individuals are encouraged to own their homes, they have no true ownership rights in the land beneath.³ China currently raises money for government use primarily by taxing things other than real estate, through value-added taxes and income taxes (which are levied on both privately and government owned enterprises), with administration directed at the national level but much discretion on the part of local government officials.⁴ Since 1994, China has moved toward greater

² Berkowitz and Li, p. 370.

³ Discussions and observations in China indicate that a buyer basically obtains a long-term lease; the dwelling occupant "buys" the right to *use* the land for 75 to 100 years, but the government remains the land's nominal owner.

⁴ Berkowitz and Li, p. 373, 376.

decentralization in administering these taxes, with the national government providing guidelines for local governments to follow but with little sharing of tax bases across jurisdictions (whereas Russia's movement toward market economics has been plagued by greater tax authority at the national level and taxation of the same tax bases by multiple jurisdictions).⁵ Real estate has served as a tax base in China mainly through a value-added tax on land (rental values), a property transaction tax, and a tax on rental revenue.

China's economic reform initiatives provide an interesting opportunity to institute the type of ad valorem real estate taxation seen in developed countries. The desire for a strong economy opens the door to a timely, productive debate on policies that will best serve the long-term interests of the country's citizens. Now may be an especially productive time for a debate on tax policy; even the more developed economies' systems of generating taxes in support of local government functions were not designed for today's world of mobile capital, global trade, and electronic commerce.⁶ In China's case, the change from a controlled to a market economy provides a "blank slate" on which to craft tax policies. Unlike areas with long traditions of taxation on privately owned real estate, Chinese regions would not face the administrative or resource allocation costs that would accompany a change in long-standing tax procedures.

In fact, because of the country's vast size (in terms of both population and geography), China presents a potential laboratory for experimenting with differing tax regimes, in order to evaluate plans for China in particular and for government revenue generation in general. This type of experimentation may be particularly well-suited to China, which has a history of creativity in invention, the arts, trade, and even collecting taxes. For example, the medieval Ming dynasty implemented the li-chia system, organized around groups of 110 households (li), each of which was broken into 10-household subgroups (chia). The largest and wealthiest ten households in a li each spent a year administering the system and providing public services, until a new census was taken after ten years.⁷

Ideologies of Real Estate Ownership and Taxation in China

Early in the 20th century, Dr. Sun Zhongshan (Yisian) [known to Westerners as Sun Yat-sen] tried to promote his idea, derived from 19th century New York

⁵ Berkowitz and Li, p. 371, 373.

⁶ Brunori, p. 542.

⁷ Ueng and Yang, p. 150.

political reformer and self-taught economist Henry George, of taxing land but not the value of improvements. George felt that taxing land alone would provide incentives for owners to put land to its most productive use, and would eliminate inefficiencies in land markets.⁸ This “single tax” could, in Dr. Sun’s view, open the door for China to become the richest nation in the world.⁹ An interesting feature of Dr. Sun’s approach was that the land owner should provide the initial assessment of the land’s value, with all subsequent appreciation belonging to the state. The advantages, according to Dr. Sun, would include taxing the rich more heavily than the poor, providing ample financial resources for the state, enhancing housing affordability, and avoiding the dramatic land price increases he had observed in such places as New York and Paris. He was troubled by unfairness in the system of land taxation that existed in China a century ago, in which taxes were based on acreage rather than value, often leaving poor farmers in remote areas more heavily taxed than wealthy urbanites. Dr. Sun’s approach to real estate taxation was part of a wider plan to achieve a fairer distribution of land ownership in the country.¹⁰

During the long period of government real estate ownership, all land use decisions and all development activity were under government control; as a result, there was no explicit price paid in a transaction. Under these conditions, all property value appreciation belonged to the government, and all property taxes were implicit (the government did not levy taxes on itself). Since the mid 1980s, as noted earlier, an authorized private user has been able to rent land for up to 100 years. But following the housing privatization initiatives of the early 1980s, the government started levying an income tax on housing’s rental revenue; by the mid 1990s, property owners in the nascent rental housing industry were paying 37% to 60% of their rental income to the government.¹¹ The value-added tax on land’s rental value was first instituted in 1994. Of course, China’s government needs stable revenue sources, but many observers feel that its taxes and fees are too many in number and too great in value. On rental housing in Beijing, for example, taxes and fees account for about 30.7% of rental income for individual owners and about 45.2% for rental companies. These levies include 12% property tax; 5.5% operating tax; and 33% in land usage tax, individual or company income tax, and various other fees. Income tax related to real estate ownership is particularly burdensome, in that it is assessed against gross revenue, with no

⁸ Ladd, p. 1.

⁹ Guo Fu Quan Ji (Complete Collection of Father of the Nation), Volume II, 215 – 216. Party History Committee, Central Committee of Guo Min Dang of China, August 1982.

¹⁰ Dr. Sun, 1912.

¹¹ For a discussion of housing reform in China, see Gu and Colwell (1997) and Gu and Yang (2000).

deduction for depreciation and maintenance.

Some Economic Aspects of Property Taxation

Across the globe, taxes on real estate have come to provide significant financial resources to the governmental entities that collect them. In market economies, the taxes are determined through legislation, and are levied explicitly. The situation is quite different in economies that are centrally controlled; because the governments under such regimes own the land, the taxes must be levied implicitly. Yet even though the taxes are not levied directly, they nonetheless have well-recognized negative effects on land development and property transactions. These effects include distorted resource allocations, less development than would be optimal, and the potential for corruption. Conflicts arise because economists' prescriptions for minimizing these negative effects can interfere with governments' desires to maximize tax revenues.

In fact, because real estate taxes can interfere with economic incentives, some communities have implemented preferential tax treatment for favored land uses. For example, farm land (especially land suitable for commercial development) in the United States is often taxed under procedures that provide financial benefits to the land owners. Other favorable tax treatment is given for development expected to create economic benefits or improve blighted "enterprise zone" areas.¹² Because of the controversies, it should come as no surprise that ad valorem real estate taxation receives both praise and criticism. A desirable aspect of real estate taxation is that it pays for public services at the local level, which is generally seen as being more responsive to citizens than is a higher level of government. Perhaps more importantly, ad valorem taxation can signal a community when inappropriate land uses have been permitted (as when a noxious use reduces values – and taxes – on nearby properties, and thus pushes more of the aggregate tax burden onto others in the jurisdiction).

An undesirable aspect of real estate taxation is that local jurisdictions often overlap, so that, for example, a desired cost/benefit package from the city might not be accompanied by a desired cost/benefit package from the school district that serves the city's residents.¹³ One possible alternative to levying taxes on a selected tax base is to charge fees for the receipt of specific government services. However, while such fees can be effective when used

¹² These beneficial tax treatments are discussed in Ladd.

¹³ These relationships have been noted by economist William Fischel, whose comments appear in Ladd, p. 41, 46.

to pay for water or for trash removal, they work poorly in paying for the maintenance of public facilities or for police protection,¹⁴ as a result of potential “free rider” problems.

It is not clear whether a tax on real estate is regressive or progressive in nature. Some view real estate taxes as regressive; a reason is that the value of a particular real estate asset may bear little relationship to the owner’s overall wealth or income. While one argument holds that property tax is generally regressive, in that even low-income individuals must have some minimal level of housing, another holds that property tax is a levy that can not be avoided, and that reduces the rate of return on capital, and thus is proportional (or even progressive) to the extent that wealthier individuals own more capital.¹⁵

A feature to be encouraged in any tax regime is the minimization of the cost and inconvenience of tax administration. One recent article demonstrated that Pareto improvements could be realized if traditional taxation (in an income tax context) were administered through a two-round regime coupling voluntary compliance with compulsory collections (when the latter are needed). This system would work if the administrator were empowered to impose sufficiently severe fines on individuals who evaded taxes. Specifically, each taxpayer would voluntarily submit payment for his or her appropriate share of the targeted public budget. The government could refund all the voluntary payments if the targeted goal (based on the aggregate tax base and a specified rate) were not met. After this refunding, a second round of taxation would occur under traditional administrative procedures; each taxpayer would have to pay his or her appropriate share of the targeted public budget, plus a share of the high administrative costs, plus a heavy fine for underpayment. In fact, the amount that knowledgeable taxpayers would willingly pay, collectively, would exceed the total expected revenue that a traditional tax system would generate.¹⁶ While the situation modeled did not involve real estate taxation, the outcome offers support for the intuition that a tax system that is costly to administer is not well designed.

At least some form of real estate based tax is likely to become a major provider of revenues for at least some levels of government in China as the country increasingly adopts features of a modern market economy. All 50 of the United States make use of some type of property tax; this form of taxation historically has been the largest provider of revenues for local government activities, especially schools. Although the property tax has at times

¹⁴ These examples are offered in Brunori, p. 546.

¹⁵ Ladd, p. 35.

¹⁶ Ueng and Yang, p. 146, 151.

included levies on individuals' personal property items, in modern times taxes based on property values in the US tend to have been applied primarily to real estate and certain business assets.¹⁷

Is the Land Tax a Viable Choice?

Locally-administered ad valorem real estate taxation in the United States typically has, as its tax base, the total value of the property: land plus buildings. In most instances, the value of the land is taxed at the same rate as is the value of improvements (and there are no current US applications of a land-only tax). However, an exception to this general rule is the graded tax, with the value of land taxed more heavily than is the value of constructed improvements. The graded tax is used by some jurisdictions in the state of Pennsylvania,¹⁸ although the only major city to tax land and structures differently is Pittsburgh.¹⁹ Pittsburgh implemented a plan in 1978 that has led to the lowering of the tax rate applied to improvements and the increasing of the tax rate applied to land;²⁰ the rate applied to structures ultimately came to be more than five times the rate on land.²¹ Although Pittsburgh realized tremendous growth in development activity after the implementation of the system of taxing land more heavily, factors other than the tax (including a major urban renewal program) may have played important roles.²² Indeed, it is interesting that Pennsylvania, the state that makes heaviest use of (graded) land taxation, is also the state in which local governments make the heaviest use of income taxes.²³

A neutral tax is one that does not affect resource allocations in terms of total

¹⁷ Ladd, p. 4.

¹⁸ Sixteen cities in Pennsylvania employ graded systems; see Brunori, p. 549. In addition to Pittsburgh, these include Allentown, Harrisburg, and Washington; see *Incentive Taxation*, March 1998, p. 3. The state of Idaho also has a \$50,000 residential improvements exclusion that has the effect of a graded system; see *Incentive Taxation*, March 1998, p. 4.

¹⁹ A form of the land tax is used in Jamaica, Slovenia, and Estonia, and land tax has been discussed in the Czech Republic and Latvia. Other instances of graded systems that tax land more heavily than structures can be seen in Australia (especially the state of Victoria), Canada, and South Africa as well. See Brueckner, p. 49; Oates and Schwab, p. 19; and *Incentive Taxation*, November 1998 p. 2 and July 1999 p. 1.

²⁰ Bourassa, p. 45.

²¹ Oates and Schwab, p. 1.

²² Oates and Schwab, p. 2.

²³ Brunori, p. 545.

quantities, although there can be distributional effects.²⁴ One type of tax that is often said to be “incentive-neutral” is the tax truly levied on land value alone. Indeed, those who follow the teachings of Henry George view the land tax as one that not only is incentive-neutral (in that it does not provide incentives to over- or under-invest in improvements, although we might question whether it would affect the sizes of parcels selected for particular uses), but that also should generate sufficient revenues to provide for the payment of all government expenses – hence George’s view of the land tax as the “single tax.”²⁵ Supporters of land taxes (who might recommend taxing land alone, or might instead prefer a graded system with land taxed at a rate higher than improvements) also see them as more fair than improvements-based taxes, because land is fixed in supply, such that its value derives from natural occurrences, and from population and public investment activities to which the land owner did not contribute.²⁶ Under typical market conditions the land owner can not avoid paying the tax even by selling the land, because the expectation of future tax payments is capitalized into a lower transaction price.²⁷ We might also note that a land tax can be less intrusive than is a tax based in any part on improvements value, in that the latter typically requires assessment personnel to physically enter the improvements at selected times to verify the existence or condition of various property features.

While the idea of taxing land is often called the “Georgist” approach, land taxation’s roots can be found in the works of earlier economists, including Adam Smith, David Ricardo, and John Stuart Mill.²⁸ Land tax proponents, in general, believe that the supply of land is perfectly elastic, such that allowing the government to capture land’s full value through a tax will have no impact on land owners’ development decisions. The so-called Georgist view (that the owner is required to pay tax because others are prevented from using the land) is contrasted with the “Tiebout” view (that an owner is required to pay tax in return for public benefits received, and as a result selects land in an area where the tax/benefit mix is attractive).

²⁴ Mills, p. 125.

²⁵ *Encyclopedia of the Social Sciences*, Vol. 9, p. 153. George actually called for a 100% tax on land *rents*, which would be fundamentally equivalent to government ownership of land. For this tax to be efficient, there would have to be economies of scale in providing public services; see Ladd, p. 30.

²⁶ Some economists argue that a tax on periodic land *rents* is incentive-neutral, whereas a tax on land *values* may cause distortions by motivating a land owner to develop sooner than would otherwise be appropriate unless the value were assessed at the land’s highest and best use; see Ladd, p. 26, 27.

²⁷ Ladd, p. 25, 26.

²⁸ Bentick, p. 860.

Some who encourage land taxation see benefits that can be classified into two categories: liquidity and incentive effects. The liquidity issue is that if land is taxed without regard to the nature or intensity of its use, the owner of land left vacant or underdeveloped will lack the liquidity to pay the tax. The incentive issue relates to a reduction in the cost of holding improvements, and therefore a lowering of the supply curve for buildings (whereas the supply of land, if we view it as fixed, is not affected by production or holding costs, including taxes).²⁹ Another way of addressing this issue is to expect the derived demand for land to increase substantially as untaxed improvements' values rise, leaving land values high enough to generate substantial tax revenues.³⁰ Land taxation is said to be efficient, in that societal resources are not wasted through owners' failure to maintain buildings out of fear of having their assessed values (and taxes) increased. One study has found that a revenue-neutral land tax results in greater investment in improvements than does an equal amount of tax raised on both land and structures.³¹ Land tax supporters feel that if buildings are not taxed, a developer will strive to achieve a capital-to-land ratio that equates the marginal product of capital to the cost of capital. In the presence of a tax on buildings, however, the capital-to-land ratio will be lower, such that the marginal product of capital is equated to the cost of capital plus the tax rate. Therefore, if taxing land allows for reducing or eliminating the tax on improvements, taxing land alone (or at least more heavily) is said to bring about more intensive development.³²

Taxing land alone is also defended as a fairer approach than typical ad valorem taxation, in that an increase in land's value results largely from actions of the public or of other investors, and thus the added tax results from what has been largely a windfall for the fortunate owner.³³ Supporters of the land tax feel that the revenue-generating and fairness benefits are further enhanced by the ease of administering a tax system in which the tax base can not be hidden, and payment can not be evaded.³⁴ Some even see land taxation as providing revenue stabilization across economic cycles.³⁵

²⁹ Bourassa, p. 46.

³⁰ A view offered by economist Thomas Nechyba, noted in Netzer, p. 2.

³¹ Brueckner, p. 56.

³² Oates and Schwab (1998), p. 135; Oates and Schwab (1997), p. 3. A similar observation is offered in Brueckner, p. 51.

³³ Ladd, p. 25.

³⁴ Netzer, p. 2. One observer has noted that Cook County, Illinois (Chicago) employs only 18 appraisers to assess land values but needs 133 appraisers to assess building values. See *The Illinois Geogist*, Summer 1998, p. 3.

³⁵ An approach taken by economist Andrew Reschovsky, cited in Netzer, p. 2.

Yet there can be serious problems with a land tax regime. Indeed, the “single tax” based on self-assessment presents some disadvantages that Dr. Sun did not mention. These disadvantages include the potential for black markets to develop, or for collusion to occur in land transactions; the possibility that the state would not receive the benefit of the appreciation and the accompanying additional tax revenue; the chance that the government would have to spend more resources monitoring land transactions; and the possibility that buyers’ need to make secret side payments to land owners would reduce the number of people who could afford to buy homes or other private real estate. Indeed, a number of recent studies have raised questions on whether the land tax offers the benefits, in terms of efficiency and other desired outcomes, that its proponents claim. Foremost among concerns cited in recent works is that taxing land without regard to its use can cause an owner to hastily develop to a use that is not the most efficient.³⁶ Stated differently, arguments that favor land taxation are less convincing when seen in an intertemporal context. Because land’s market value reflects economic benefits that may not be expected for years to come, a tax on land’s value can result in taxation prior to the receipt of revenues. Efficiency can be impeded as a result, with land inefficiently directed away from uses (forestry, construction) with long development times.³⁷ Even treating the supply of land as perfectly elastic is questionable, in that the supply suitable for specific uses depends on other development that has taken place (although the analysis typically focuses on a small municipal area, where the supply of land is more appropriately seen as being truly fixed).

Other issues involve the difficulty of administering a land taxation scheme. For example, how is the land to be assessed for taxing purposes? If the tax is to be neutral with respect to revenue generation, the tax base must be the current rent that could be charged for using the land, rather than the current market value. If the tax is to be neutral with respect to the timing of development decisions, however, the land must be assessed based on its highest and best use, rather than its actual current use.³⁸ The choice of a benchmark can have both economic and political impacts; if an owner can change the tax by selecting a particular land use, then the tax regime is not neutral.³⁹ At the same time, taxing vacant land at a zero rate would be politically controversial, since the result might appear to favor speculation.⁴⁰ Another issue is the small amount of revenue that would result from taxing

³⁶ Oates and Schwab, p. 3.

³⁷ Bentick, p. 860.

³⁸ These issues are discussed in Ladd.

³⁹ Tideman, p. 110.

⁴⁰ This example is cited in Bentick, p. 867.

only the value of land, even if the rate were to be relatively high.⁴¹ Yet another problem with the Georgist view is that the supposed benefits of financing public services with the land tax alone may not materialize when the public goods are subject to congestion and do not exhibit appropriate economies of scale, or when residents have little ability to move among jurisdictions.⁴² A final point of concern is that if the government effectively owns all land and therefore gains the full financial benefit of increases – or suffers the full detriment of decreases – in land value through taxation, owners of homes and other private property have less incentive to work together toward solving problems, such as crime, that require collective effort within a local area.

Other Issues Affecting Property Tax Policy

In devising a policy recommendation, we must consider several aspects of the economics of property taxation. In doing so, we can place only limited reliance on past studies. Research on real estate taxation has tended to focus on perceived benefits of switching from a land-plus-improvements tax to a land tax, not on the creation of a tax system where no closely similar system has existed before. Earlier studies also are based on various restrictive underlying assumptions,⁴³ and usually are based on metropolitan areas, not entire countries. Therefore, logic and common sense may be more helpful to us in recommending a course of action than is empirical evidence.

One issue to address is that of tax incidence; suppliers and demanders of real estate services share any tax burden based on their relative price elasticities. Taxes, in general, make prices higher for users and costs higher for suppliers, thereby reducing the equilibrium quantity (of whatever is taxed) in the market. An unreasonably high tax will depress development of the tax base, and eventually reduce the tax revenue collected by the government over the long term. Another issue is the incentives created by a tax regime; as noted, some types of taxation are not incentive-neutral, in that they do affect economic activity.⁴⁴ For example, a higher tax on measured income causes people to work less, hide income from tax authorities, or direct their efforts to legally untaxed endeavors; a higher tax on motor fuels provides an incentive for drivers to travel fewer miles or drive more fuel-efficient vehicles. Of course,

⁴¹ This concern has been raised by economist Edwin Mills, as cited in Netzer, p. 2.

⁴² Ladd, p. 29, 30.

⁴³ See, for example, Wildasin, p. 105.

⁴⁴ More technically they create a deadweight loss; see William Fischel's commentary in Ladd, p.45.

we must consider the entire package of tax costs and benefits across jurisdictions when measuring the incentive effects of various tax regimes. For example, while many observers feel that a tax on improved real estate causes developers to develop less intensively than the level that would be most efficient for society, the federal income tax benefits accruing to both residential and income real estate in the United States mitigate the disincentives of a local improvements tax. Another issue is the balancing of fairness with efficiency. One fairness element of real estate taxes is that real estate can not be shielded from the tax authorities in the manner that valuable personal property is often hidden, so it is unlikely that anyone could illegally evade a real estate tax (though some observers believe that those with political power use their influence to hold their assessments in check).

Another issue is the competition among jurisdictions. Tax planning in the United States is complicated by the fact that there are more than 80,000 individual taxing jurisdictions,⁴⁵ and their individual taxing activities may lead to confusing outcomes for citizens and analysts alike. For example, citizens in the city of Pittsburgh also pay ad valorem taxes to jurisdictions such as the county and the school district, which do not use the graded system that the city employs.⁴⁶ If multiple independent jurisdictions are levying taxes on the same tax base, a “tragedy of the commons” can occur, in which the tax base is so over-taxed that it is ultimately destroyed, as reinvestment is insufficient to replace what is lost through depreciation. A result is likely to be an ultimate reduction in tax collections that leaves the taxing jurisdictions poorly equipped to provide public services.⁴⁷

In fact, the existence of differing policies in different jurisdictions raises the more fundamental question of the efficacy of real estate taxation. In recent years, taxing bodies across the US have come to rely less and less on the property tax; between 1970 and 1994 twenty-one states decreased their reliance on property taxes by more than 10%,⁴⁸ with severe legal restrictions on property taxation having been placed in four states (California, Colorado, Montana, and Oregon) and legislated caps on tax rates or other revenue measures common in many others.⁴⁹ In fact, throughout the 20th century the importance of property tax has fallen in the US, with property taxation’s proportion of local government funding having peaked in the 1930s and fallen since then.⁵⁰

⁴⁵ Brunori, p. 547.

⁴⁶ Bourassa, p. 45.

⁴⁷ Berkowitz and Li, p. 371.

⁴⁸ Brunori, p. 544.

⁴⁹ Sokolow, p. 89, 92.

⁵⁰ Sokolow, p. 86, 87, 89.

States, counties, cities, and school districts are not the only types of jurisdictions that use tax policies to compete for economic activity. An issue that has come to concern policy analysts in recent years is tax competition among countries. Both the Organization for Economic Cooperation and Development (OECD) and the European Union have issued guidelines to prevent what they see as unfair competition in the tax arena, such as offering preferential tax treatment to selected activities or constituents as a means of attracting desired economic outcomes.⁵¹ While these guidelines do not have the power of international law, they do signal concerns that China would be wise to heed, especially if its political leaders anticipate seeking economic assistance from international bodies.

After considering the government's need for revenue, the country's traditions (and its economic and political situation), and what is known theoretically and empirically about different taxing schemes, we have come to see several disadvantages in China's existing system of imposing fees and taxes relating to real estate:

- it charges fees before an operation has begun generating revenues, hence making it difficult for people to start businesses;
- it levies taxes based on gross rental revenues without allowing deductions for depreciation and maintenance costs, hence discouraging existing businesses;
- it discourages entrepreneurs from taking the risks of providing housing services;
- it increases prices and rents to consumers, thereby depressing demand for owned and rental housing; and
- it is accompanied by very high administrative costs, because every different government agency must keep records of the same property (and its owner) and do the bookkeeping in connection with collecting taxes or fees.

A Policy Recommendation

We recommend that China work to develop a system of real estate taxation based on total property income (which must be an imputed income in the case of owner-occupied housing or business property), after allowance for depreciation and maintenance costs. The continued existence of active rental markets should facilitate the estimation of the imputed rental value of owner-

⁵¹ See Weiner and Ault for a discussion of the OECD and EU reports.

provided real estate services. The tax should be administered by a single jurisdiction, presumably at a high level of government. (A recent study based on information from China and Russia indicates that both tax collections and economic activity benefit from a lower number of taxing jurisdictions; indeed, too many taxing entities can result in economic stagnation as low net tax revenues, after allowing for collection costs, impede public services and much commercial activity is driven “underground.”⁵²) This type of administration is consistent with recent trends in the administration of China’s income and value-added taxes.

We do not suggest a land tax, or even a graded system, because of the administrative difficulties and other problems of land taxation, as discussed earlier. In addition, we do not recommend taxing housing at a lower rate than other capital improvements (aside from the possible need for a practically-driven exemption for lower valued residences). While taxing housing at a lower rate than other structures benefits housing, it might also lead to the construction of larger housing units, thereby crowding out other capital spending, such as that needed in building the country’s commercial base (although taxes on homes owned by the non-affluent might have to be phased in as the economy strengthens). This single income-based taxation of real estate would encourage more entrepreneurs to enter the housing market, because

- it would make starting rental businesses easier, in that the initiators of such enterprises would not have to register with, and pay fees to, various levels of administration before beginning their operations;
- it would allow marginal entrepreneurs to operate housing businesses, thereby making the industry larger than under the current fee/tax system (since they would pay tax only when they made profits);
- it would eliminate transfer fees that might prevent transactions, and thereby might prevent properties from moving from lower-valued to higher-valued uses; and
- it would reduce administrative costs, since the government would eliminate all the “in-between” fee collectors.

Relative to the current system, this type of tax would be efficiency-enhancing in a Kaldor sense, with gains to winners exceeding losses to losers (though not necessarily in a Pareto sense, since we have no way to know how the distribution of those who pay taxes or fees under the current system correlates with the distribution of those who would be taxed under a system of real estate taxation, although if the two lists were identical the change

⁵² Berkowitz and Li, p. 372.

might be Pareto-efficient as well). The value to the taxing authority of the change from a system of various taxes and fees to one of real estate taxation can be represented with the following simple equation:

$$(Base_{RE} \times Rate_{RE} - Adm_{RE}) - (Base_{CUR} \times Rate_{CUR} - Adm_{CUR}), \quad (1)$$

where $Base_{RE}$ is the tax base for a real estate tax, $Rate_{RE}$ is the tax rate applied to net operating income on real estate, Adm_{RE} is the cost of administering a system of real estate taxation, $Base_{CUR}$ is the weighted average value of items (revenues or activities) taxed or otherwise charged for under the current system, $Rate_{CUR}$ is the weighted average of the tax or fee rates levied under the current system, and Adm_{CUR} is the cost of administering the current fee/tax system. The change is desirable if the equation's value exceeds zero.

Because we assume that $Adm_{CUR} > Adm_{RE}$, we find that the change should be valuable to the public even if the aggregate value of real estate net operating income (actual and imputed) is equal to the value of items currently taxed, and/or if the tax rate applied to real estate income is equal to the average rate of tax/charge under the current system. However, we also assume that the rate applied to real estate net operating income will be much less than the average rate applied to taxed activities under the current system; otherwise, some of the benefits discussed above might not be realized. It is not clear whether $Base_{RE} > Base_{CUR}$; it is possible that, at least initially, $Base_{CUR}$ will exceed $Base_{RE}$, perhaps by a sizable margin, because the current system is based on so many diverse values and activities. (One source of uncertainty is the degree to which lower-valued residences would be exempted from the real estate tax.) However, over time, we would expect $Base_{RE}$ to grow considerably (even if not to a level exceeding $Base_{CUR}$) as property values rise, through strong market activity and the movement of properties to higher-valued uses. It is clear that if $Base_{CUR} > Base_{RE}$, and especially if this relationship persists over the long run, then the administrative savings ($Adm_{CUR} - Adm_{RE}$) must be considerable for the change to result in greater net tax revenue in the presence of a lower tax rate. Of course, a greatly simplified system should result in significant administrative savings and, as noted, the value of the tax base should rise as a better tax system and other market improvements take hold.

A more creative alternative with the same general structure would be to base the tax on a property's total market value rather than its net operating income. This approach would allow for self-assessment of value, as once recommended by Dr. Sun. As have more recent writers on the topic,⁵³ Dr. Sun

⁵³ See, for example, Colwell.

recognized that self-assessment would have to be accompanied by some form of eminent domain system based on the self-assessed value. Otherwise, each property owner would have incentives to state a lower value in order to pay lower taxes, with no accompanying penalty. In other words, under such a system, the owner's assessed value would also serve as a basis for the price at which the owner would be obligated to sell the property to the government (or even to an interested private party). Creating a system in which the owner can state a true reservation price would be all but impossible in a place with an established tax system (such as the US), but it might be achieved in China, where private ownership is not yet widespread, and where established and politically powerful tax bureaucracies would not have to be dismantled and replaced. Indeed, the size and diversity of China might easily accommodate trials with both systems in different regions, even though such experimentation would bring added administrative costs. Because of the important implications that such a system could have for land use, government administration, and property rights, China might offer itself as a dynamic laboratory for a limited number of real estate tax systems, with financial assistance provided by other countries, or even by private organizations, that could benefit from the knowledge thereby generated.

Our suggested policy, if adopted, would offer benefits to the evolving Chinese private real estate markets and the broader economy. It could serve to minimize depressing effects on real estate development, in order to provide a growing base, and growing sources, for taxation (consider that a fairly low percentage tax on rental property owners' net operating incomes, instead of their gross rental revenues, would encourage housing development and, in the long run, increase tax revenue to the government). This result would buttress the government's demonstrated desire to provide good public services in support of a growing economy; indeed, the wish to provide supportive services gives the Chinese government incentives to adopt a tax system that is designed and administered for efficiency. Of course, while providing proper services is essential in a Tiebout sense (studies suggest that property taxes absent good roads and other public services stifle not only real estate activity, but economic growth more generally), simply adding a real estate levy on top of the current tax system would serve only to decrease the rate of return on a real estate investment, thus reducing activity in the private market.⁵⁴ Replacing the current cumbersome system, and keeping the burden on households (and commercial enterprises, as well) at a reasonable level, while recognizing private property rights and providing adequate public services, should promote the kind of economic activity that would maximize what the government could collect in taxes over the long run, and should minimize questions over shifting or other tax incidence concerns.

⁵⁴ See, for example, Annala (1999) and Helms (1985).

Finally, a broad-based tax that is not too dissimilar to those levied in other countries would be unlikely to raise concerns among international political organizations over inappropriate competition.

Conclusions and Implications

The ability to raise tax revenue is a great motivator in the formulation of government policies. Real estate related taxes can be particularly effective generators of government revenues. In the United States, for example, property taxes accounted for more than 79% of local tax revenues in the 1965 – 1991 period (although their share of total tax revenues has fallen). In 1991, the per-capita property tax in each of five states (New Hampshire, New Jersey, Alaska, Connecticut, and New York) was well above \$1,000. In addition to the ad valorem tax, a governmental unit can levy taxes on capital appreciation and rental income. When we consider that China's urban population is 300 million and growing, we can see the tremendous potential for healthy growth in real estate values and, in turn, for impressive growth in real estate related tax revenues. Both the national government and lower governmental units can be expected to look toward real estate-related taxes to fund public expenditures as China's private markets develop.

Yet at the same time, tax payments are a considerable burden to property owners, especially if they face severe levies on other tax bases (income, transactions) as well. In the US, property taxes account for more than 4% of per capita income, on average. In China, where the general lack of housing affordability remains a major obstacle to housing privatization, it might be impractical to levy a property tax on owners of lower-tier dwelling units any time in the near future (a tax on "luxury" houses and apartments could be implemented as an initial step). But the burdensome system of taxes and fees that currently applies to rental income in Chinese cities has severely impeded the development of a private rental housing industry, and has slowed the housing privatization process. Lower income people can not afford the high rents, while the owners of rental housing can not make profits. At the same time, the Chinese government is facing the problem of a huge and increasing number of vacant new residential buildings. There were 70,380,000 square meters of vacant residential buildings awaiting sale in 1997, and the vacancy rate has remained high (at 25% in 1997, 27.3% in 1998, and 20.2% in 1999). Obviously, the government can not receive much tax revenue from a weak industry struggling to gain a foothold. While any policy adopted must walk the fine line between raising current revenue and harming long-term incentives, applying a relatively low rate to a reasonably comprehensive base offers a chance to succeed where the current policy has created barriers.

An obvious limitation of the foregoing discussion is that we can offer no empirical tests, or even any specific examples of applications of these ideas in jurisdictions within China; private land ownership and the defense of private property rights remain fairly new ideas in the world's most populous country. We look forward to a day when we, or others, can build on this admittedly descriptive analysis in a more systematic way, based on the qualitative and quantitative information that is sure to emerge as China's real estate and other private markets continue to develop. In conclusion, our suggested policy – replacing the current complicated system of taxes and fees with centrally-administered taxation at a low rate on rental (actual or imputed) or asset values – would increase operating efficiency, reduce prices and rents to consumers, and, as a result, stimulate the growth of the housing industry and the broader economy. Taxing too heavily would encumber the growth of the industry and reduce the government's ability to collect tax revenues in the long run. But a faster growing housing market and housing industry would provide a solid, verifiable tax base and greater tax revenues to the government.

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