

Draft

**Potential Impacts of Real Property Tax Reform on
Industries in China: An Input-Output Analysis**

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Potential Impacts of Real Property Tax Reform on Industries in China: An Input-Output Analysis

Restructuring real property taxation has become a common strategy for reforming local public finance in many transition economies (Bird and Slack 2004; Malme and Youngman 2003). China is no exception. In 2003, the Standing Committee of the National People's Congress of China issued a general directive for creating a uniform property tax to consolidate numerous taxes and fees on real estate. Following the announcement, the central government proposed to combine the Building Tax¹, Urban Real Estate Tax (URET) and Urban and Township Land Use Tax (LUT) into a single levy (see Appendix A for the definition of these taxes).² Immediately, this suggestion has generated many public inquires.³ This paper deals with an important, yet currently overlooked, issue: How would the new property tax system affect the production and tax burden of industries in China?

There are three reasons for choosing this topic. First, many policymakers have suggested that the proposed real property tax should, in its initial stage of implementation, be applied only to income-generating real estate, including factories, commercial offices and rental residential buildings. If the central government accepts this recommendation,

¹ The Building Tax is also referred to as House Tax in the literature.

² This information was obtained from interviews with senior tax officials from the State Administration of Taxation of China. There are other proposals as well. For instance, one unofficial suggestion is to include the land leasing fees in the property tax payment, which lessees would pay annually instead of a lump sum. Yet, government officials have been arguing against this idea.

³ Some of the most common questions include:

1. How would the proposed property tax system affect local public finance in general, and fiscal relations between different levels of local government in particular?
2. Which existing property related taxes and fees should be consolidated into the new unified tax?
3. How would the new tax on land and buildings be integrated with the existing public leasehold system (Hong 2005)?
4. Would the new property tax reduce real estate prices? If so, would real estate developers or homebuyers be major beneficiaries of price changes, thereby influencing the pace of property development and homeownership?

industries would be affected first by the property tax reform. Hence, it would be useful to assess how different policy designs would alter industrial production and tax burden allocation among sectors, both of which are the determining factors for the success of the tax reform. Second, although industries are first to be affected by the new property tax, there has not been enough attention given to this aspect of the reform. Most concerns raised in the mass media have been related to property price changes and their impacts on the affordability of housing and real estate investment. Third, unlike other issues, data are available, albeit imperfect, for assessing impacts of the property tax reform on production changes and tax burden shifts. In our study, we measured the direct and indirect impacts of the new property tax on outputs of 40 different sectors, using information contained in the 1997 Input-Output Table of China. Unfortunately, a more recent table is unavailable. Other else, we could have produced more accurate assessments of the property tax reform. This data issue notwithstanding, the method used in this study could be applied to conduct new assessments when updated information is available.

The discussion of this paper proceeds as follows. The first section presents the background upon which the proposed property tax reform is contemplated. The second section explains the reasons for using the input-output (I/O) technique, describing in detail the varied assumptions and data modifications made to facilitate the use of the 1997 Input-Output Table of China for our simulation study. The third section discusses the pros and cons of the property tax reform proposed by the Chinese government and the additional option we suggested here, that is, to eliminate the City Maintenance and Construction Tax (CMCT). As will be argued later, the CMCT, we believe, is a property

related tax because its revenue is for financing public infrastructure investment and maintenance. Due to this characteristic, this tax should be considered for reform, so as to avoid imposing excessive property tax burden on enterprises. In the fourth section, we recommend two transitional options for implementing the new property tax system, including (1) to increase the tax rates for the existing LUT and (2) to establish a land rent system in which leasehold charges would be collected in the form of an annual land rent. These alternatives are for areas where preconditions for a complete changeover to a uniform property tax system are absent, allowing local governments to adopt the new system gradually. The fifth section summarizes our assessments.

Background

For the past twenty years, public finance reforms in China have been primarily about reshaping central-provincial fiscal relations (Bahl 1999; Bahl and Wallich 1992; Brean 1998; UNDP 2001; Wong 1991, 1997, 1998; Wong, Christopher and Woo 1995; World Bank 1990, 2002). The watershed of these endeavors was the establishment of the 1994 Tax Sharing System (TSS) in which many taxes were delineated explicitly as either central or local levies [see Bahl (1999) for reasons of establishing this system]. Besides, separate central and local tax agencies were established to collect and administrate their own tax revenues. For example, all real property related taxes were classified as local taxes, collected and administered by local tax bureaus. Local governments retain 100 percent of all property tax revenues. Some shared taxes remain, however, including the Value Added Tax, Natural Resource Tax, Security and Exchange Tax, Industrial and Commercial Income Tax and Personal Income Tax (Bahl 1999; World Bank 2002; DRC

2004). Revenues collected from these taxes would be divided between the central and provincial governments according to some predetermined ratios.

Under the TSS, the central government has been able to expand its share of the total tax revenue. It increased from around 30 percent before the reform to over 50 percent after the implementation of the TSS (World Bank 2002). Yet, this favorable outcome for the center has been achieved largely at the expense of local levels of government, including provincial, prefecture (or special municipal), city, county, and township governments. These local governments are major providers of public services to the population (*ibid*). With the declining share of the total tax revenue but unchanged financial responsibilities for the provision of public goods, many local governments have been experiencing fiscal crunches. As a result, they use extra-budgetary and off-budget financing to raise funds for covering public spending (Wong 1998). Because these two approaches are hard to monitor, their roles in financing local governments have never been regulated by central authorities. From the central government's standpoint, if the two informal schemes become major sources of local funds, it could lose its ability to use fiscal or monetary policy to regulate the macro economy. More important, since local governments' capability of using extra-budgetary and off-budget financing varies across locales, the reliance on these fiscal schemes may create vastly different quality as well as quantity of public goods received by populations in asserted regions (*ibid*).

In view of these potential consequences, the central government wants to regain its control over local public finance. In another paper, we explore options of revising other local taxes, or relying continuously on formal and informal user fees to finance local spending (Hong 2003). Among varied possibilities, we concluded that restructuring

the property tax system would be the most logical step toward achieving the goal of formalizing the local fiscal system. Not only would the consolidation of several property related taxes and fees into a uniform tax be able to simplify the current tax system, but it could also move many off-budget items into the formal budget, thereby subjecting them to the scrutiny of the central government. As stated before, the government's proposal is to combine the Building Tax, URET and LUT into a uniform property tax. Policymakers have yet to decide which property related fees would be replaced by the new tax. Nor have they set the rate for the new property tax. It appears that in the initial stage of the reform, the new property tax would only be imposed on existing taxpayers—foreign and domestic enterprises, businesses and rental property owners—and would not affect residential property owners whom use their dwellings for domestic use.

Methodology

The I/O technique is the primary method employed to calculate the tax reform impacts on industrial outputs. An input-output table, as Leontief (1936, 1966) designed initially, provides a detailed account of the flow of goods and services among the producing and purchasing sectors of an economy. Not only does the table show all intermediate transactions between producers and purchasers of a given time, but it also reveals the total final demand—gross national product (GNP)—and the corresponding income—gross national income (GNI)—received by all factors of production. Since data are assembled within a consistent accounting framework, the total value of output sold to all intermediate and final users must be equal to the total value of the payment made to all factors of production and intermediate producers. This characteristic of the I/O table

becomes a key principle for consistency checks to ensure that all transactions are recorded accurately. Because empirical data are hard to come by in China, a reasonably updated I/O table could provide researchers with useful information for use in modeling and forecasting economic impacts of any policy changes.⁴

Three points regarding the application of I/O technique are worth stressing at the outset. First, the latest I/O table published by the National Bureau of Statistics of China is the 1997 Input-Output Table. Information obtained from this table could be out-dated because production technology in China has been changing rapidly since the beginning of the 1990s. Yet, as imperfect as it may appear, the value of using the 1997 Input-Output Table is to estimate possible trends for production changes and tax burden shifts that different reform scenarios may bring forth. The goal here is not to make accurate predictions.

Second, data supplied by the 1997 Input-Output Table are national figures and therefore do not reflect the diversity of the Chinese regional economies. For a country as large as China, it is reasonable to suspect that impacts of the proposed tax reform on the coastal cities would be different from those found in the western interior. The economic impact assessments reported here are for the nation as a whole. In our next research stage, we will attempt to locate provincial I/O tables for regional level simulation studies.

Third, we did not conduct our assessments based solely on the I/O table. As will be described next, we calibrated figures in the 1997 Input-Output Table before performing economic impact assessments. Our adjustments were made based on assumptions and subjective judgments, both of which were founded on knowledge gained

⁴ See Polenske and Chen (1991) for an account of the application of I/O technique to policy analysis in China.

from personal interviews. The anecdotal evidence, though hard to validate systematically, provided us with the necessary contextual information to modify the I/O table for the simulation study.

For the purpose here, it would be unnecessary to present a full discussion of the I/O technique. Readers who are interested in knowing the I/O technique can refer to Miller and Blair (1985) and Polenske and Fournier (1993). Yet, an explanation of the assumptions behind the method would help readers understand the meanings and limitations of our assessments.

Assumptions

The application of the I/O technique is based on four assumptions. We first state these assumptions and then elaborate on them individually. First, production in all sectors is operating at a level of constant return to scale, that is, any increase (or decrease) in one additional unit of input—with all other factors being held constant—will not lead to a disproportional increase (or decrease) in production. Second, there is no joint production. Each industry produces only one commodity, and each product is manufactured by one sector. Third, production technology remains unchanged during the study period. Fourth, in dealing with the new property tax and land rent, enterprises will adjust their production levels and product prices, so as to shift the burden to final users and intermediate purchasers. Put differently, increases in cost of production triggered by the land rent and/or new tax will not reduce wages and fringe benefits for workers or retained earnings for enterprises.

Analysts whom want to predict industrial output beyond the year of the I/O table make the first three assumptions, which are standard for the application of the I/O technique. All these assumptions imply an optimal and stable production technology within the period of analysis. As mentioned before, these assumptions may not hold in China where production technology has been changing rapidly since the beginning of the 1990s. Thus, the direct and indirect input coefficients calculated based on the 1997 data may not be as accurate as we would prefer for predicting economic impacts into the future. Hence, all our statements are pertaining to what would have happened in 1997 had the Chinese government implemented the proposed property tax in that year.

As for the final assumption, Bahl and Jun (1989) have argued that any increases in taxation on land and buildings at the time of their research would probably lead to lower retained earnings for enterprises and/or reduced remunerations to workers. It was certainly true in mid-1980s when the state still controlled prices and production. If it were true in 1997, impact assessments would have to be conducted based on how curtailments in retained earnings and wages affected final demand. Then the direct and indirect input coefficient matrix will be multiplied by the new final demand column to obtain the new output figures for individual sectors.

Yet, based on our interviews with policymakers and scholars in China, it is unclear if enterprises would be willing and able to absorb the new property tax liability by reducing profits. If the government were to increase the new property tax and land rent substantially in 1997, it would have been hard for some state-owned enterprises whose businesses had been unprofitable since the beginning of the economic reform to handle the tax increases. Hence, they might have had to pass part of the burden on to

their consumers and intermediate producers. One possible option for enterprises would have been to negotiate with their suppliers for lower prices and/or smaller quantity of production inputs. Another option would have been to increase the price of their product. These two options, if exercised, would have affected input prices and quantities, both of which would have altered the direct and indirect input requirements for production. In reality, in coping with a tax hike, enterprises may use a mix of the above strategies. Due to the data limitation, we assume that firms would react to the new property tax and land rent by cutting back on production and raising the price of their product.

Input-Output Table Modifications

We also made four modifications to the original 1997 Input-output Table of China. First, investment in construction is particularly sensitive to taxation on land and buildings. Yet, data provided in the I/O table represent only the *flow* of goods and services among industries for a specific year. Hence, figures contained in the construction row include only the management services that the construction sector supplied to other industries in 1997. They do not include the completed fixed capital investments, which are considered as final demand of construction (additions to the *stock*) in the I/O table.

To avoid underestimating the potential impacts of property tax reform on the construction industry, fixed capital investment undertaken by each sector in 1997 was added to the corresponding cell in the construction row. To balance the table, the total amount of fixed capital investment for all sectors was taken out from the final demand for construction. The amount was then broken down according to the investment in fixed

assets undertaken by different sectors in 1997. Capital investment of each sector was then reallocated back to the corresponding cell in the final demand column.

Second, the 1997 I/O table of China does not show separately the varied taxes on production. To assess impacts of changes in selected property related taxes, five tax types—the Adjustment Tax, CMCT, Building Tax, LUT and Land Value Increment Tax—were disaggregated from the total amount of net tax on production for each sector and identified separately in the modified I/O table (see Appendix B). The amount for each of these taxes was estimated based on their percentage of the total tax payment made by each sector in 2002 (China Taxation Yearbook Editorial Committee 2003:606-607).

Third, land rent was also not identified in the 1997 I/O table of China. To estimate impacts of the land rent system, an additional row for land rent was added to the I/O table. The amount of land rent paid by each sector was calculated based on a presumptive percentage of land assets in total fixed capital investment. The percentages for individual sectors were calculated based on information gathered from the *Report on Fixed Asset Investment in China: 2001* (Director General of State Development Planning, et. al. 2002) and *China Statistics Yearbook: 2003-2004* (China Real Estate Index System 2003).

With the above assumptions and modifications, we simulated the economic impacts of different reform scenarios. For example, to estimate how the consolidation of the Building Tax, URET and LUT into a single levy may affect industrial output and tax burden shift, we changed the numbers in the URET and LUT rows into zero. We then increased the figures in the Building Tax row according to different scenarios, assuming

that the new property tax will have features similar to that of the Building Tax. In adjusting these numbers in the I/O table, the direct input requirement coefficients changed. So did the direct and indirect input requirement coefficients. With the modified Leontief's inverse, we estimated the new output level and total tax liability for each industry—the impacts assessments of reform approaches to which we now turn.

Assessments of Reform Scenarios

According to an official statement issued by the State Council in 2004, the general directives for reforming property taxation in China are as follows:

1. Amid the intensification of the financial market reform in China, policymakers must also devise a proper tax reform. The basic principles for the tax reform are to: (a) simplify the current tax system, (b) broaden the tax base, (c) lower the tax rate, (d) tighten collection effort and (e) implement the reform gradually as local conditions permit.
2. Selected taxes and fees for urban and township infrastructure investment should be reformed. When the time is ripe, a standardized property tax should be imposed on land, land improvements and buildings. At the same time, selected fees and charges related to the possession of, and investment in, real property should be eliminated.
3. In the process of standardizing property taxation, local governments should be given appropriate taxing powers.

To carry out these mandates, central authorities have proposed to consolidate the Building Tax, LUT and URET into one standardized levy and transfer some real property

related user charges to the new property tax net.⁵ We will provide an extensive analysis for the first two reform items here. The reform on user fees is an importance issues for restructuring local public finance (Wong 1997, 1998), which must be dealt with in a separate paper.

Eliminate City Maintenance and Construction Tax

Another property tax like levy, which is not determined based on the value of either land or buildings, is the CMCT. As mentioned before, the CMCT is a surcharge on the tax liability of enterprises for Business Tax, Consumption Tax and/or Value Added Tax (VAT). The CMCT rates depend on location of the taxpayers, that is, generally 7 percent in the urban area, 5 percent in county and township and 1 percent in the other area. In Shanghai, for instance, the CMCT is collected along with other fees, such as the education surcharge (3 percent of the tax liability for the above three taxes), embankment fee (1 percent) and benefits for the voluntary military personnel (0.3 percent). All these surcharges can amount to 11.3 percent of the total liability for the three taxes.

There have been debates among policymakers and analysts alike about the classification of the CMCT. Some believe that the CMCT is not a property tax because its tax base is neither the size nor the value of the property. As the argument goes, this tax should not be included in the agenda for the upcoming property tax reform. Others argue that the purpose of the levy—to raise funds for maintaining and building public infrastructure—is similar to that of other property related taxes. Under the proposed

⁵ This information was gathered from interviewing tax officials from the State Administration of Taxation of China in December 2003.

system, this function should be performed by the new property tax; thus, the CMCT should be abolished for the sake of simplifying the property taxation system.

The distinction is important because one justification for taxing real property is that public infrastructure investment can affect property value.⁶ To recover the costs of public development, property owners whom enjoy capital appreciation of their assets but do not contribute to the rise should return a portion of the increased land value to the public by paying property tax. The linkages between public investment and property value and between land value capture and property taxation, if established, can be an effective way of legitimizing the collection of property tax. In the case for the CMCT, these linkages cannot be established because its tax base has no direct relationship with the value of real property.

More important, keeping the CMCT may create public resistance against paying the new property tax. When the government combines the Building Tax, LUT and URET into a single levy, firms may refuse to pay the new tax, arguing that they are already paying the CMCT whose collections will be used for similar purposes of the new property tax. When taxpayers are unwilling to cooperate, they will find ways to evade the tax, thereby hindering the implementation of the new policy.

Based on these considerations, the eradication of the CMCT has two advantages. First, it can simplify the property tax system in China. Firms will not have to pay both the CMCT and the new property tax for public services. Second, the abolition of the

⁶ This statement may not be relevant for China before 1978 when the location of state-owned enterprises was dictated by the state. Yet, with the intensification of the economic reform and the increased number of private firms in the economy, decision regarding business location has been gradually reverted to enterprises. The demand for property in strategic location where better public infrastructure and social services are available has risen; hence the rise in property prices.

CMCT would make the overall structure of property taxation in China more in line with systems found in other countries. In many places, costs of infrastructure investment and maintenance will be recovered, though not always successful, through property taxation. From the viewpoint of attracting foreign investment, it may help overseas investors better understand their obligation of paying property tax if they are thinking of investing in China.

Despite the two advantages, the government must consider one question before terminating the CMCT: Can local governments find alternative funding sources to compensate for the loss of the CMCT revenue? One special feature of the CMCT is that local governments have been relying heavily on this tax to raise public revenue (Hong 2003). As depicted in Table 1, the total revenue collected from the CMCT in 2002 amounted to 47.1 billion yuan (US\$5.7 billion), which was equal to 2.8 percent of all tax revenue in that year. For individual provinces and special municipalities, percentages of the CMCT collections in total tax revenue ranged from 1.7 to 4.4 percent.⁷ If the central government were to abolish the CMCT in 2002, the Hunan government would have lost 4.4 percent of its local tax revenue, totaling 1.4 billion yuan (US\$169 million). The heavy reliance of some local governments on the CMCT revenue could make any proposal to do away with this levy difficult.

Simulated impacts presented in Table 2 are consistent with the above observation. Had the government terminated the CMCT in 1997 total tax collections would have decreased by 2.7 percent, representing a total tax revenue shortfall of 28 billion yuan

⁷ We did not consider Shenzhen because it appeared to be an outlier. Its CMCT collections accounted for only 0.34 percent of the total tax revenue in 2002.

Table 1. 2002 City Maintenance and Construction Tax: By Provinces and Special Municipalities

	(In 1,000 yuan)		
	Total Tax Revenue	CMCT	
		Amount	Percentage of Tax Revenue
North China			
Beijing	134,351,650	2,862,320	2.13%
Tianjin	45,352,060	873,040	1.93%
Hebei	52,023,890	1,650,910	3.17%
Shanxi	26,286,590	1,009,550	3.84%
Inner Mongolia	21,405,560	566,420	2.65%
Northeast China			
Liaoning	62,981,220	1,778,680	2.82%
Dalian	20,284,250	445,710	2.20%
Jilin	26,611,410	800,490	3.01%
Heilongjiang	44,739,400	1,868,400	4.18%
East China			
Shanghai	174,915,470	3,013,480	1.72%
Jiangsu	138,091,470	3,673,300	2.66%
Zhejiang	95,274,730	2,808,920	2.95%
Lingbao	35,679,470	823,510	2.31%
Anhui	34,987,920	1,182,090	3.38%
Fujian	36,887,570	874,610	2.37%
Xeiman	14,276,990	338,950	2.37%
Jiangxi	17,481,200	699,310	4.00%
Shandong	76,706,340	2,991,640	3.90%
Central-South China			
Qingdao	23,129,760	748,170	3.23%
Henan	44,062,930	1,724,030	3.91%
Hubei	45,829,080	1,504,070	3.28%
Hunan	33,200,070	1,453,720	4.38%
Guangdong	171,308,330	4,007,800	2.34%
Shenzhen	61,099,250	208,620	0.34%
Guangxi	23,810,110	912,060	3.83%
Southwest China			
Hainan	5,673,180	196,920	3.47%
Sichuan	45,868,430	1,751,990	3.82%
Chongqing	18,901,490	739,030	3.91%
Guizhou	16,699,890	703,770	4.21%
Yunnan	51,984,800	2,151,430	4.14%
Tibet	980,110	27,630	2.82%
Northwest China			
Shaanxi	28,688,560	1,047,250	3.65%
Gansu	15,972,950	594,100	3.72%
Qinghai	4,220,600	132,180	3.13%
Ningxia	3,889,390	151,320	3.89%
Xinjiang	19,842,040	776,680	3.91%
Total	1,673,498,160	47,092,100	2.81%

Source: China Taxation Yearbook (2003: 589-590).

Table 2. Simulated Impacts on Total Tax Revenue and Industrial Output Due To The Abolition of The City Maintenance and Construction Tax
(In 1,000 yuan)

Change in Total Tax Revenue		Change in Industrial Output	
Amount	Percentage	Amount	Percentage
(28,013,645)	-2.73%	52,959,327	0.251%

Source: Computed by the author using the modified 1997 input-output table of China.

(US\$3.4 billion). Industrial output would have expanded by 52.9 billion yuan (US\$6.4 billion)—an increase of 0.25 percent.

Table 3 shows the estimated economic impacts by sector. Although there would have been no change in the total tax payment made by farmers because they are exempt from the CMCT, agricultural output would have increased by 0.18 percent. This would have been due largely to the indirect effects of production expansion in other sectors.

Table 3. Simulated Burden Shift and Output Changes Caused by The Abolition of The City Maintenance and Construction Tax: By Sector

Sector	(In 1,000 yuan)			
	Total Tax Payment		Output	
	Amount	Percent	Amount	Percent
Agriculture	-	0.00%	455,590.4	0.18%
Mining	(1,097,676.3)	-3.02%	378,849.1	0.52%
Manufacturing	(17,618,767.7)	-2.80%	3,163,291.2	0.28%
Construction	(1,472,719.1)	-3.62%	412,417.6	0.23%
Transportation, warehousing and telecommunication	(600,191.5)	-2.59%	189,219.9	0.24%
Commerce, food services and passenger transport	(4,043,110.2)	-2.65%	362,498.9	0.21%
Banking and insurance	(2,490,245.7)	-3.00%	128,770.9	0.34%
Services	(893,882.0)	-2.39%	205,294.8	0.10%
Public administration	-	0.00%	-	0.00%

Source: Computed by the author using the modified 1997 input-output table of China.

With the abolition of the CMCT, all sectors (except agriculture and public administration) would have experienced a substantial decrease in tax burden. Enterprises in the construction sector seemed to be the major beneficiaries, with their total tax payment cut by 3.6 percent. Other sectors that would have received over 3 percent reduction in tax payment included mining and banking and insurance. The increase in output for individual sectors varied. Yet, none of the increases would have exceeded 1 percent.

All these projections pointed to one important factor about reforming the CMCT: Any changes made to the CMCT would have significant financial impacts on local governments as well as industries. From the perspective of local public finance, if central authorities decide to abolish the CMCT, it must provide local governments with alternative revenue sources to make up for the loss of the CMCT collections. Otherwise, local officials may not support the policy change. The significance of the CMCT revenue in local tax revenue might have been the reason for government reluctance to consider modifying this tax. Again, many tax officials with whom we interviewed have insisted on not classifying the CMCT as a tax on land and buildings. Hence, to them, including this tax in the upcoming property tax reform is unneeded.

From the taxpayers' viewpoint, however, revenue generated from the CMCT is for defraying the costs of constructing and maintaining urban infrastructure. It will be unconvincing if taxpayers are asked to pay, on the top of the CMCT, a new property tax for government services. Since both taxes in principle serve the same function, it would simplify the tax system if the two levies become one. The obvious choice will be to replace the CMCT with the new property tax.

The replacement of the CMCT can only be achieved if the new property tax is buoyant enough to become a major funding source for local governments. In the next section, we estimate what the tax rate for the new property tax should be. Assessments of how the reform may affect government revenue, industrial output and burden shift will also be discussed.

Establish A Single Property Tax

As mentioned earlier, the Chinese government has decided to consolidate the LUT, URET and Building Tax into one standardized levy on both land and buildings. The proposed new tax will be applied to local- and foreign-owned property located not only in cities and towns but in rural areas as well. Combining three very different property taxes into a single levy can be challenging. While the LUT is a tax on land, the other two are levies on both land and buildings. Besides, the LUT is an area-based tax, that is, its tax liability is determined based on the size of the land in possession. The Building Tax and URET are both ad valorem taxes, whose tax bases can either be the (original or assessed) capital value or gross rental value of the property (see Appendix A). As far as we know, policymakers in China prefer the new property tax to be an ad valorem tax. Central authorities will most likely design the new property tax structure based on selected features of the existing Building Tax.

Advantages

Having a standardized property tax has at least four merits. First, the single property tax system can simplify tax administration. Instead of administering the

collection of five different property related levies, local tax bureaus will be able to concentrate their effort on just one tax. Cumbersome regulations concerning the determination of the tax base, liability and exemptions can be curtailed.

Second, under the existing property tax structure, local- and foreign-owned real estates are taxed differently, with the Building Tax applied to the former type of property and the URET to the latter. The new tax system would end this discrepancy. As China has become a member of the World Trade Organization, the standardization of property taxation would help the Chinese government live up to its obligation to end any differential tax treatments on foreign investment and goods.

Third, as stated, the new tax will be an ad valorem tax, which may allow the government to capture future increases in property value if property reappraisal can be done regularly. The State Administration of Taxation (SAT) of China is upgrading the property assessment system in China. Officials of the Local Tax Department of the SAT have collaborated with international agencies, such as the UNDP, OECD and Lincoln Institute of Land Policy, on training and research on issues related to property valuation for tax purposes. Only with a well-established property appraisal system can the benefits of a value-based tax system be realized.

Fourth, one key purpose for creating the new property tax is to transfer some real estate development fees into tax. As argued by Bahl (1999), Hong (2003), Wong (1998) and the World Bank (2002), the idea of utilizing user's fees to recoup the costs of public infrastructure investment might have been abused by some local governments. In some cases, real estate developers paid more than 30 levies to different levels of government (or numerous public agencies) just to commence their projects (Hong 2003). These fees,

most of which are paid in a lump sum, might have increased development costs. If local governments, under the new property tax system, can recover public infrastructure costs by taxing land and buildings, selected user's charges can be eliminated. This way, the transaction costs of doing business in China can perhaps diminish.

Disadvantages

These advantages notwithstanding, challenges abound. First, the implementation of the single property tax system may require local tax officials to adopt new property appraisal procedures. Again, the benefit of having tax revenue increase in accordance with the rise in real estate prices can only be materialized if property reassessment is done periodically. In addition, as the coverage of the new property tax expanded, older buildings whose original or rental value is unknown must require qualified public and private assessors to estimate their taxable value. Property appraisal requires extensive investment in technology and personnel. Many local officials are concerned if the central government will provide them with technical and financial assistances for making the necessary organizational changes. Relying on self-raised funds to finance these changes would not be viable, for many local governments are facing budget deficits.

Second, there are also concerns as to how the would-be taxpayers, especially farmers and rural enterprises, will be affected by the new system. Some policymakers speculate that certain individuals and firms may not be able to pay the new property tax. The government therefore must design a set of standardized rules and procedures for determining to whom tax exemptions should be granted. Alternatively, there should be

phase-in mechanisms for allowing local officials to implement the new property tax gradually to avoid imposing undue financial burden on taxpayers.

Third, the new property tax will apply a uniform rate for taxing land and buildings. While many scholars in the West have proposed to tax land more heavily than buildings (Netzer 1998) and suggested a split-rate property tax system (England 2002, 2003), the Chinese officials with whom we interviewed seemingly want to tax land and buildings equally. In fact, some see land and buildings as essentially inseparable for tax purposes. A split-rate property tax system would, in their view, go against the initial intent of the property tax reform, that is, to simplify the system. Although these are reasonable justifications for not taxing land and buildings at different rates, the benefits of a uniform property tax may have to be achieved at the expense of using the property tax as an instrument to encourage efficient land development.

As will be discussed, we are suggesting a land rent system to facilitate the implementation of the new property tax. Establishing a land rent system along with the collection of the new property tax would resemble a split-rate property tax system. The advantages and disadvantages of this approach will be discussed in detail later.

Last, but not least, local public agencies that rely on user's fees to finance their services may resist the reform. Indeed, under the proposed scheme, many government agencies will lose their autonomy to raise funds for their operations, because they can no longer demand the public to pay them directly for their services. Instead they must turn to their superior government units for funding.

Potential difficulties in establishing new fiscal relations among different levels of local government are not trivial. For instance, if revenue collected from the new property

tax will be shared equally between the provincial and city governments and if municipalities will be responsible for collecting the tax, what will be the financial incentive for city officials to mobilize their collection effort? For every yuan of tax collections, 0.5 yuan will go to the coffer of the central government. Under such an arrangement, municipalities will be better off by negotiating with property owners for other kinds of payment, such as in-kind or monetary contributions to public development, for government services. The central government has been trying to reduce the size of the extra-budgetary funds and to discourage the practice of off-budget finance in order to exert tighter control over local spending (Wong 1998; Hong 2003). By doing so, central authorities are hoping to regain its ability to use macroeconomic policy tools to regulate the national economy. The attempt of the central government has not been successful because revenue sharing remains as a major characteristic of China's central-local and intra-provincial fiscal relations.

One way to minimize the problem is to allow the government unit that collects the tax to retain 100 percent of the revenue. If revenue sharing is inevitable, the central government should establish a system in which a guarantee will be given to local governments and public agencies that their budgets will not be adversely affected under the new property tax regime. The reimbursement scheme that central authorities designed to compensate provincial governments for fiscal deficits caused by the 1994 Tax Sharing System can be a model for the new property tax system.⁸

⁸ See Bahl (1999) for a detailed discussion of the reimbursement scheme established under the Tax Sharing System.

Tax Rate Setting

Because maintaining fiscal stability for local governments is a top priority, one question concerning the property tax reform needs special attention: To what extent can the government set the new property tax rate to the level that its collections can compensate for all revenue losses instigated by the tax reform? To answer to this question, we estimated a revenue-neutral rate for the new property tax based on two assumptions.

First, we assumed that in the initial stage of the reform, the government would not extend the tax base to include owner-occupied property. As said before, policymakers and scholars are concerned with homeowners' ability to pay the new tax if they impose the new property tax on domestic dwellings. Under the current system, owner-occupied residential buildings possessed by Chinese nationals are exempt from the Building Tax. Given the cautionary approach that the Chinese government has been employing in all reforms, it would be reasonable to assume that the initial reform would be limited to property types that are already included in the current tax net. As the reform progresses, the coverage of the new tax base may be widened to comprise owner-occupied houses.

Second, because we used the 1997 revenue data for the Building Tax to conduct our simulation study, we assumed that the total assessed value of the tax base was close to the total market value of all taxable properties in that year. Again, there are two ways to set the base for the Building Tax—the discount original value of the buildings and its gross rental income. Because the government is planning to tax property based on their current market value, buildings that use the original cost as the tax base must have their taxable value adjusted upward. Detailed information about the percentage of taxpayers

whom employed the original value as the tax base in 1997 is unavailable. To simplify the simulation, we assumed that all taxpayers used rental income—a figure that would resemble better the market value of the property—as the tax base. All in all, these two assumptions imply that any changes in new property tax collections would come from tax rate adjustments. The coverage and total assessed value of the tax base would remain constant.

We simulated the economic impacts of a revenue-neutral shift from the current multi-levy scheme to a single property tax system. We estimated that the government would have had to set the new property tax rate at 11.5 percent of gross rental value of property if all losses resulted from abolishing all other property related taxes were to be fully recovered (see Table 4). In comparison with the Building Tax rate, the new property tax rate would have represented a 188 percent increase—4 percent vs. 11.5 percent for individuals, and 12 percent vs. 34.6 percent for enterprises.⁹ On the production side, there would have been an increase of only 0.046 percent in total industrial output.

⁹ Some local governments, like the municipality of Beijing, impose different building tax rates on individual and corporate property owners. For individual owners, if they rent their properties at market rates, they will pay a Building Tax at 4 percent of their rental income. For corporations, they would have to pay the same tax at 12 percent of the discount original value or estimated rental value of the property. Under the proposed new system, if the government decides to tax property based on rental income, corporations that lease their real estates at market rates should not pay higher tax than do individuals. All taxpayers, individuals and corporations, should pay their property tax to the government based on one standardized rate—11.5 percent of gross rental income. Keeping the two separate rates would only complicate tax administration and create inequity.

Table 4. Simulated Impacts of The New Property Tax on Total Tax Revenue and Industrial Output

The New Property Tax System	(In 1,000 yuan)			
	Change in total tax revenue		Change in Output	
	Amount	Percentage*	Amount	Percentage
Abolish the adjustment tax, CMCT and LUT. Tax Rates: 11.5% or 34.6% of gross rental income	-87	0.000%	9,675,390	0.046%

* The percentage is not zero. It appears as zero because of rounding.

Source: Computed by the author using the modified 1997 input-output table of China.

This result indicated that if policymakers want to avoid any adverse effects on local revenue, the new property tax must be set at a high rate. A heavy property tax may impose financial hardship on taxpayers. It will be especially difficult for individual property owners whom rent out their apartments to another entity. For example, an owner is letting her two-bedroom, 140-square-meter apartment in downtown Beijing for 6,225 yuan (US\$750) a month.¹⁰ Her annual property tax liability under the new property tax system will increase from 2,988 yuan to 8,665 yuan (US\$360 - \$1,043)—almost three times. Unlike corporations, this taxpayer does not pay the CMCT and Adjustment Tax. She therefore will not be entitled to any tax reduction due to the termination of these two taxes. Even for corporate property owners whom will receive a tax relief, the new property tax rate, which is 35 percent of gross rental income, seems equally alarming. It is hard to imagine that the government could make such a huge tax increase overnight without facing any public resistance. The new tax rate may have to be phased in gradually. Yet, establishing the new property tax system in stages may mean less tax revenue for local governments at the beginning of the reform.

¹⁰ These monetary terms are in 2004 value.

There are three ways that local governments can minimize the potential revenue shortfalls. All of them are related to tax administration. First, local tax bureaus can improve their tax collection. By increasing their effort to lower the delinquency rate, local governments may be able to recover part of the revenue losses without relying solely on a huge increase in the tax rate. Second, simply bringing the assessed rental value of the property closer to the market value can enlarge the tax base. When the total assessed taxable value of the tax base increases, tax collections will rise even if the tax rate remains constant. Third, the government can widen the tax net by cutting back on tax exemptions. All these improvements in tax administration may help local governments lower their tax revenue deficits.

Burden Shift and Output Change

While the new property tax may reduce the tax burden on most secondary industries, it would increase the tax liability of services sectors. As shown in Table 5, had the new property tax been implemented in 1997 the mining, manufacturing and construction sectors would have experienced a cut in total tax payments to the government, with reductions ranging from 1.3 percent to 2.2 percent. On the contrary, other industries would have had to pay higher taxes, including for example agriculture (14.9 percent), transportation, warehousing and telecommunication (1.4 percent), banking and insurance (3.5 percent), and services (2.9 percent).

The huge increase for the agricultural sector is because farmers and rural enterprises do not pay the CMCT and LUT; thus, the abolition of the two taxes under the

new property tax system would not lead to any lowering of tax liability that can offset the increase in financial burden.

Table 5. Simulated Burden Shift and Output Changes Under The New Property Tax System: By Sector

(In 1,000 yuan)

Sector	Total Tax Payment		Output	
	Amount	Percent	Amount	Percent
Agriculture	6,447,356.47	14.89%	917,586.2	0.037%
Mining	(786,173.42)	-2.12%	1,051,006.1	0.151%
Manufacturing	(9,335,892.54)	-1.26%	6,693,815.3	0.055%
Construction	(905,412.12)	-2.22%	440,378.3	0.025%
Transportation, warehousing and telecommunication	341,634.08	1.38%	358,444.0	0.041%
Commerce, food services and passenger transport	290,795.98	0.20%	532,044.1	0.003%
Banking and insurance	2,877,372.81	3.46%	(88,859.4)	-0.024%
Services	1,075,682.69	2.98%	(237,548.4)	-0.016%
Public administration	-	0.00%	-	0.000%

Source: Computed by the author using the modified 1997 input-output table of China.

Although the impacts on production would have been small (see Table 5), taxing property owned by industries differently can in the long run accumulate large enough effects that set the whole economy into a different development course. If the central government wants to promote the growth of secondary industries, the new property tax may provide the right incentive for enterprises to invest in these economic activities. However, if the government prefers to increase farmers' income or to expand the financial and services sectors, the new property tax may generate an inducement that counters the government's objective.

In addition, dissimilar property tax treatments toward industries may amplify regional disparity. Regions whose industrial base is in the secondary sectors may find their industries grow faster due to the reduction in their total tax burden. On the contrary, areas that concentrate on services and finance may experience a slower growth. For local

public finance, revenue shortfalls will most likely occur in regions where industries are predominantly in the mining, manufacturing and construction sectors. Local economies that focus on agriculture or services will benefit from a handsome increase in tax collections. Certainly, in the long run, the increase in the new property tax revenue may eventually be offset by the decrease in personal and enterprise income taxes as key industries in the region begin to contract. All these differential impacts of property taxation, if added together, could in the future alter the pattern of regional development. To understand fully how the new property tax may affect differently the growth of local economies in China, detailed impact assessments at the regional or provincial levels are deemed necessary.

Although the government's reform proposal seems tenable, challenges abound. Two major obstacles are: taxpayers' inability to pay the new levy and lack of local administrative capacity to implement and administer the new tax system.¹¹ In the remainder of this paper, we discuss two options that may ease these problems.

Transition Mechanisms

One mandate issued by the State Council regarding the property tax reform is that the implementation of the new tax would depend on the presence of favorable preconditions. Although the State Council does not specify what these favorable preconditions are, we speculate that there are at least three. First, there exist reasonably developed real estate markets so that data for property assessment for tax purposes are available. Second, there should be adequate tax administrative capacity in local

¹¹ By focusing on the two problems, we are by no means downplaying the importance of other issues, such as the effects of the new property tax system on land development and intergovernmental fiscal relations. These are complex issues that should be explored thoroughly in separate papers.

government to administer the new tax. Third, sufficient financial ability of would-be taxpayers to pay for the new levy should be evident.

Not all regions in China possess these preconditions. As our interviewees pointed out, the reform would be carried out in selected coastal cities first. Then it would be extended to other areas. One potential problem associated with this approach is that the old and new property tax systems will coexist, thereby creating a situation in which enterprises of the same kind but in different locations will be subjected to dissimilar tax treatments.

Having a dual system—a common reform phenomenon in China—for property taxation can have significant implications on regional economic development and income distribution. For instance, construction firms in the reform areas will have a lower total tax liability than do their counterparts in the non-reform areas. For the banking and insurance industries, the situation will be reversed, that is, banks and insurance companies in the reform areas will pay more taxes than do the same type of firms in regions where the reform is delayed. This discrepancy may influence the flow of capital investment and the specialization of regional economies, which has nothing to do with the comparative advantages of different locales. To avoid any distortions to regional economic development, the Chinese government may consider two transition mechanisms: restructuring the LUT and establishing a land rent system.

Revise Urban and Township Land Use Tax

Although the LUT will most likely be abolished in the future, its potential to assist the implementation of the property tax reform is still worth considering. As argued

before, conditions in some local areas may not be suitable for a complete overhaul of the existing property tax arrangements. One interim option is to alter the LUT structure by increasing the tax rates for different taxing zones. There are pros and cons of this approach.

The advantage of reforming the LUT is that it will impose the least demand on local governments to change tax administration. This way, local governments may have more time to acquire the necessary data and skill to conduct property assessments for tax purposes and to upgrade their tax administrative capacity before shifting over to the new property tax system. Central authorities can simply increase the tax rates for the LUT. For example, the government can raise the tax rate for land located in large cities from 10 yuan to 75 yuan per square meter, and for land located in mid-sized cities, from 8 yuan to 60 yuan per square meter. No new collection system and detailed property assessment will be needed. Local governments will be able to increase the LUT collections and use the funds to compensate for any revenue deficits due to the abolition of other property related taxes. This method, we believe, is most realistic for regions where their real estate markets are still in the initial stage of development.

The major disadvantage of the approach is that a substantial increase in the tax rates is required to ensure a revenue-neutral shift. It is because the LUT rates were set too low initially. To make matters worse, they have not been revised since the tax was first established in 1988. We estimated what the renewed LUT rates should be if the government wants the adjustment to generate enough funds to cover all revenue shortfalls.

New LUT Rates

As illustrated in Table 6, had central authorities done away with the Adjustment Tax, CMCT and URET in 1997 they would have had to increase the LUT rates by as much as 699 percent to make up for all revenue losses. Even with such a huge increase in tax rates, the net change in tax collections would have increased merely by 18,000 yuan (US\$2,169), which is negligible in both monetary and percentage terms. Nor would the change have had any material impacts on production. Total industrial output would have dropped by 0.009 percent, representing a decrease of 1.9 billion yuan (US\$229 million) in total output.

Table 6. Simulated Impacts on Total Tax Revenue and Industrial Output Due To Increase in The Urban and Township Land Use Tax

	(In 1,000 yuan)			
	Change in total tax revenue		Change in Output	
	Amount	Percentage*	Amount	Percentage
Abolished the Adjustment Tax and CMCT but increase LUT by 699%.	(18)	0.000%	(1,922,736)	-0.009%

* The percentage is not zero. It appears as zero because of rounding.

Source: Computed by the author using the modified 1997 input-output table of China.

Without any survey data, it is hard to tell how taxpayers would have reacted to such a huge increase in tax rates for the LUT. Yet, there seems to be a consensus among Chinese policymakers and analysts alike that the LUT rates are too low. Table 7 shows the comparison of the tax rates before and after the proposed modification. For instance, if a landholder in a large city is paying 10 yuan (US\$1.20) per square meter as the LUT to the government for a piece of Grade 1 land, the new rate will increase to 74.8 yuan

(US\$9) per square meter after the adjustment. The array of tax rates for the LUT will change from 0.5 – 10 yuan (US\$0.06 - \$1.20) per square meter to 3.7 - 74.8 yuan (US\$0.45 - \$9) per square meter.

Table 7. Tax Rates for The Urban and Township Land Use Tax before and After The Reform

Location of Land Site	(yuan per sq. m.)	
	Before	After
Large city (over 1 million people)	0.5 - 10	3.74 - 74.80
Medium city (1 million - 1/2 million)	0.4 - 8	2.99 - 59.84
Small city (499,000 to 200,000)	0.3 - 6	2.24 - 44.88
Counties, towns & industrial zones (less than 200,000)	0.2 - 4	1.50 - 29.92

Source: Estimated by the author.

When comparing the proposed LUT rates with the land use fees in Shenzhen, the revised rates do not seem to be excessively high. Certainly, Shenzhen—a special economic zone—is unique, and observations derived from this comparison should not be generalized. Yet, at least for this case, the new tax rates are in line with the land use fees. In 2001, fees for occupying the best available land in Shenzhen ranged from 3 to 120 yuan (US\$0.36 – US\$14.46) per square meter. Although the high end of this range is about 45 yuan more than the proposed highest rate for the LUT, the general land use fee structure is in accord with the configuration of the LUT rates (see Table 7 and 8).

Bringing the LUT rates closer to the fee levels can reduce the discrepancy in charging landholders for using public land. As we have discussed elsewhere, some cities impose the LUT on land users, whereas others collect land use fees (Hong 2003). In most cases, enterprises that pay a fee are subjected to a heavier leasehold charge than are

those that pay tax. Hence, raising the LUT rates may narrow the discrepancy in the payment for using public land.

As reasonable as it may seem, it is inconceivable that taxpayers would not resist if the government were to raise the LUT rates by almost 700 percent. One temporary solution is to increase the tax rates gradually but with lower tax revenue for local governments. When the time is ripe for implementing the new property tax, local governments can then shift to the new system.

Table 8. Land Use Fess in Shenzhen

Classification	Fees (In yuan per sq. m.)
Grade 1	3 - 120
Grade 2	2 - 70
Grade 3	1.2 - 45
Grade 4	1 - 30
Grade 5	0.6 - 24

Source: Shenzhen Real Estate Yearbook (2002: 85)

Burden Shift and Industrial Development

Two outcomes regarding the tax burden shift are noteworthy. First, the two reform scenarios—restructuring the LUT vis-à-vis adopting the new property tax—may create opposite distributive effects on different industries. Specifically, the new property tax system seems to favor secondary industries, as discussed earlier. Reforming the LUT however may benefit the agricultural and services sectors the most. Again, had the government increased the LUT by 699 percent instead of adopting the new property tax,

rural enterprises would have seen their total tax payment cut by 3.5 percent, as opposite to an increase of 14.9 percent had the new property tax been adopted (see table 9).

This can be explained by the fact that farmers do not pay any LUT; thus they would not be affected adversely by the increase in the tax rate. On the contrary, the new property tax would be applied to all enterprises, rural and urban. Rural enterprises therefore would have to pay tax on their land holdings under the new property tax system.

Since the current priority of the Chinese government is to protect farmers' interests, restructuring the LUT appears to be most suitable for areas where there is a high concentration of agricultural production. Nevertheless, the approach will be inconsistent with one key objective of the property tax reform, that is, to reduce the discrepancy in property taxation between the rural and urban areas. Balancing these policy tradeoffs will be a challenging task for the government in the upcoming property tax reform.

Table 9. Burden Shift Comparison Between The New Property Tax and The Urban and Township Land Use: By Sector

Sector	(Percentage Change in Total Tax Payment)	
	The New Property Tax System	Increase the LUT Rates by 699 %
Agriculture	14.89%	-3.50%
Mining	-2.12%	-0.50%
Manufacturing	-1.26%	-0.04%
Construction	-2.22%	-0.59%
Transportation, warehousing and telecommunication	1.38%	-0.49%
Commerce, food services and passenger transport	0.20%	-0.07%
Banking and insurance	3.46%	-1.09%
Services	2.98%	-0.16%
Public administration	0.00%	0.00%

Source: Computed by the author using the modified 1997 input-output table of China.

Similarly, the tax burden for firms in the transportation, warehousing and telecommunication sector would have decreased by 0.5 percent had the government

relied on restructuring the LUT to reform the existing property tax arrangements. If the new property tax were used instead, the tax burden on these industries would have increased by 1.4 percent. Likewise, the increase in LUT rates would have reduced the tax liability of sectors including commerce, food services and passenger transport (0.07 percent) and banking and insurance (1.1 percent). The effects on tax burden for these two sectors would have been reversed under the new property tax system.

Second, even if the effects on tax liability for sectors are of the same direction, the magnitude of change created by modifying the LUT seems to be smaller than that of adopting the new property tax. For example, while the adjustment of LUT would have led to a 0.5 percent decrease in total tax liability for the mining sector, the reduction created by the new property tax for this sector would have been as much as 2.1 percent. Similarly, the construction sector would have paid 2.2 percent less taxes under the new system; but the reduction according to the revised LUT rates would have been only 0.6 percent (see Table 9).

In sum, regarding the distributive impacts of the two reform scenarios, one observation is clear: Restructuring the LUT may produce less drastic effects on burden shift than the new property tax system may create. It is important to understand how the financial position of varied industries will be altered by different reform approaches. This way, central authorities may be able to devise policy to lessen the unequal distribution of tax burden. They may also make better decisions in choosing the right reform method for different local economies. In general, for areas where production activities are related mainly to agriculture and services, the restructuring of the LUT as a means to reform property taxation appears to be an attracting alternative. As for regions

where secondary industries are dominating, the new property tax seems to provide a good fit for their economic structure.

Establish A Land Rent System

Another mechanism that may help local governments implement the new property tax reform is: a land rent system. In a land rent system, leasehold charges will be paid in the form of annual land rent. The land rent may then be converted into tax as the new property tax reform progresses to more advanced levels. The conversion can be done by increasing the new property tax rate systematically and at the same time reducing the rent level accordingly. This way, the transition to the new property tax system will be less likely to create fiscal deficits and engender taxpayers' revolt.

The option is viable in China because land, according to the Chinese Constitution, is publicly owned. The government assigns land use rights to developers and users through a public leasehold system (Deng 2003; Ho and Lin 2003). Like any other systems in China, the land leasing system is extremely intricate, with a complex web of closely intertwined formal and informal rules that forms the land allocation system. Describing these land tenure arrangements fully is beyond the scope of this paper. Readers whom are interested in the subject can referred to Deng (2003) and Ho and Lin (2003). Here, we focus on land leasing issues related to the property tax reform.

At present, if a land site is leased by public auction or tender, the winning bidder must pay a lump sum leasing fee immediately to obtain the land use rights. If land rights are allocated to private individuals through negotiation, all too often, some local officials may not impose proper charges on lessees. For land assigned administratively to

public agencies and state-owned enterprises, land use fees are not required. One problem of requesting lessees to pay all leasehold charges up front is that this payment method may encourage local officials, whom are desperate to raise funds to cover public expenditures, to assign land use rights to private entities rapidly. According to Wong (1997:108), revenue generated from leasing public land has been a major source of funds for local governments, accounting for as much as 20 to 80 percent of total revenue in some coastal cities.

The central government is concerned with the reliance of local governments on this funding source because of two reasons. First, a fiscal system that depends on the collection of all leasehold charges up front is unsustainable (Hong 1998, 2003b). Eventually, local governments may run out of public land if they continue to lease land hastily to private developers. Once the leasing fee is collected in full at the beginning of the lease, public officials may lose other opportunities to recoup future increases in land value (Hong 2003c). Certainly, the government can tax property in order to capture the land value increments. Yet, the idea of using property taxation to accomplish this objective is not without controversies, either.¹²

Second, the rapid assignment of land use rights for private development would have significant implications on rural development, farmland conservation and urban planning. Indeed, the loss of farmland has been at such an alarming pace that the central government has put a ban on the use of negotiation to lease public land (Ministry of Land and Natural Resources 2002). The measure is intended to better monitor public land disposition by making it more transparent and to crack down on corruption. According to

¹² See Oates (2001) and Netzer (1998) for a full range of discussions on the possibilities and limitations of land value taxation.

Deng (2003), many private entities had in the past obtained land use rights through their personal connections with public officials. In some cases, money paid for obtaining leasehold rights went into the pockets of bureaucrats but not the local treasury.

The design of the new property tax must take the unique land leasing system into consideration. When the rights and obligations of possessing land use rights have not been clearly delineated, adopting a property tax system in which land and buildings are not treated separately may impede the government's future initiative to reform land tenure. In some legal systems, once the state accepts a property tax payment from a landholder, the transaction would symbolize the government's implicit recognition of the taxpayer as the de facto property owner. As far as we know, the Chinese government has no immediate plan to transfer public land to private individuals as freehold. Thus, if local governments continue to collect all leasehold charges up front and then impose the new property tax on land and buildings jointly, this arrangement would be tantamount to freehold systems (Hong 2003c). If landholders confuse leasehold with freehold, they may acquire the wrong impression that they own their land. Problems associated with the false expectation of lessees on their property claims found in the public leasehold systems of Canberra, Australia (Neutze 2003) and Israel (Alterman 2003) are illustrative. In both cases, not only has lessees' false expectation hindered government ability to collect leasehold charges and property tax, but it has also led to conflicts in land resource allocation. Delineating possession of different rights in land as clearly as possible is a critical task that Chinese policymakers should not overlook before moving forward with the property tax reform.

We understand that land tenure reform is controversial and may take years to be fully implemented. It is unreasonable to suggest that the proposed property tax reform must be postponed until land reform is completed. What the Chinese government needs is a transition system in which the property tax reform can proceed as planned without interfering with its other endeavors to restructure land ownership. Establishing a land rent system appears to be an option because of three reasons.

Advantages

First, asking lessees to pay an annual land rent may lower the incentive for some local governments to lease land rapidly. As leasehold charges will be paid in annual installments, local officials will no longer be able to generate a large amount of cash instantly to cover short-term fiscal shortfalls. They can continue to lease land by public auction and tender but will assign the land contract to the bidder whom is willing to pay the highest annual rent, not a one-time leasing fee, for the land use rights.

To allow local governments to capture future increases in land value, well-designed provisions should be incorporated into the land lease to facilitate rent renegotiation between the contracting parties when new circumstances arise. These conditions include, for instance, a periodical review of the rent level to keep rental payment in line with increases in land value and inflation. Other rent renegotiation opportunities comprise lease modification for acquiring additional land rights for land redevelopment and contract renewal for extending the possession of land use rights.

Second, a land rent system can remind the government and lessees their landowner-tenant relationships. In Hong Kong where leasehold charges are paid in full at the beginning of the lease, the government still collects an annual land rent from lessees as a symbolic payment to characterize the landowner-renter relationships. For China, such a reminder is important because its land tenure system is in constant flux. When property relations are ill defined, conflicts between the government and land users may emerge. For example, retaking land from holders for public uses or urban development is increasingly difficult for the government. Legally, because land is publicly owned, the government should have the right to resume land for public development when the lease expires. In practice, however, public officials have failed to delineate explicitly their property relations with land users. This oversight may in turn prohibit the government from taking the full advantage of owning land. It is not to say that asking lessees to pay an annual land rent could solve the problem. Yet, a constant reminder—a yearly payment of a land rent—would have a bearing on the bargaining position of the government when negotiating with lessees for land transfer.

Last, but not least, collecting land rent can assist local governments to balance budget deficits. As suggested by our study, if the central government decides to implement the new property tax system, it may have to set the new tax rate at a high level to avoid any revenue shortfalls. In any circumstances, it would be hard to convince taxpayers to accept the new rules if the new tax rate is high. If central authorities must phase in the new tax, some local governments will suffer from reductions in total tax revenue. The land rent system, if used, can generate income to compensate for the decline in revenues when the new property tax system is in transition.

Based on our estimate, land rent can be a significant revenue source. As illustrated in Table 10, if the central government had asked all land users to pay an annual land rent in 1997, rental income would have added 29.8 billion yuan (US\$3.6 billion)—a 2.9 percent increase in total tax revenue—to the government treasury. This showed that rental income would have been more than enough to cover other tax revenue losses. Had the government decided to keep the total revenue the same, it could have set the new property tax rate at 4 percent—the same rate for the Building Tax—and discounted the land rent by as much as 47 percent. With a reasonable tax rate and a concession on rental payment of close to 50 percent, taxpayers may be less resistant to the changes.

Table 10 also shows several possible combinations of rent level and property tax rate to produce a revenue-neutral shift. For example, the government could have lowered the rent level by as much as 60 percent and increased the new property tax rate from 4 to 5.9 percent had the revenue-neutral approach were employed in 1997. The same outcomes could have been achieved by other combinations, as depicted by Option 4 to 7 in Table 10. If central authorities were to grant fee simple to all landholders, it could order local governments to terminate the land rent system and raise the new property tax rate to 11.5 percent.

Generally speaking, under our proposed scheme, whenever the government increases the new property tax rate to deepen the local tax reform, it can lower the land rent level to avoid antagonizing taxpayers. The extent to which a local government should depend on the new property tax or land rent to generate public funds would need to be decided on a case-by-case basis. The suggested approach may give local

Table 10. Simulated Impacts of Different Combinations of Rent Level and New Property Tax Rates on Total Tax Revenue and Output

Option	Land Rent	New Property Tax		Change in Revenue		Change in Output	
		Tax rate	Percentage Increase	Amount (In 1,000 yuan)	Percentage	Amount (In 1,000 yuan)	Percentage
1	100%	4.00%	0.00%	29,765,241	2.905%	(47,324,819)	-0.224%
2	-47%	4.00%	0.00%	(363)	0.000% *	3,952,693	0.019%
3	-60%	5.89%	47.31%	31	0.000% *	5,360,120	0.025%
4	-70%	7.30%	82.50%	2	0.000% *	6,421,306	0.030%
5	-80%	8.71%	117.69%	(28)	0.000% *	7,494,276	0.035%
6	-90%	10.12%	152.88%	(57)	0.000% *	8,578,986	0.041%
7	-100%	11.52%	188.07%	(86)	0.000% *	9,675,106	0.046%

* These percentages are not zero. They appear as zero because of rounding.

Source: Computed by the author using the modified 1997 input-output table of China.

governments the flexibility to adopt the new property tax system at a speed that best suits their economy.

Disadvantages

Like any other reform strategies, there are problems associated with the land rent system. The first is its administration. The central government must decide which agency—the local tax bureau or local land bureau—should be responsible for the land rent collection. In China, land related matters, such as leasing, are currently handled by the Ministry of Land and Natural Resources (MLR) and its local bureaus. Hence, the MLR and its local offices should administer and collect the land rent. As for the new property tax, which will be classified as a local tax, local tax bureaus should be in charge for its administration.

If two independent agencies will administer the collection of new property tax and land rent separately, these two branches of local government must coordinate their efforts to ensure a good integration of the two closely related levy systems. Yet, all too often, public agencies within a bureaucracy may have difficulty cooperating with each other because of the strict assignment of responsibilities. As mentioned earlier, one key objective of collecting land rent is to utilize the system as a transition device. This potential notwithstanding, if changes of the rent level and new property tax rate cannot be synchronized due to institutional barriers, the government may not be able to reap the desired benefit of the land rent system. In fact, a dysfunctional transition system may even obstruct the property tax reform. It is important to consider in advance how to

establish an interdepartmental agency to make certain that the operations of the new property tax and land rent systems are in unison with each other.

Second, policymakers should decide if the revenue collected from land rent will be shared between the central and local governments. At present, funds gathered from leasing existing urban land belong to local governments. For newly developed land—land converted from farmland to urban site, local governments would retain 70 percent of the leasing fees. The remaining 30 percent will go into the coffer of the central government (Ministry of Land and Resources 1998).

Before establishing a land rent system, central authorities must consider how the rental income will be shared among different levels of government. In principle, as argued for the new property tax system, it is desirable to allow the government unit that collects the rent land to retain 100 percent of the revenue. This way, the responsible unit will have the financial incentive to mobilize its collection effort.

In China, however, revenue sharing—especially among different levels of subnational government—is the norm, not an exception.¹³ Although the fiscal relations between the center and provinces have been somewhat clarified under the Tax Sharing System, the fiscal relations among different levels of subnational government are yet to be standardized and simplified. Eventually central authorities would have to decide which levels of local government should be responsible for administering the collection of land rent. More important, new legislations are needed to guide the allocation of rental income.

¹³ For instance, revenue collected from the VAT is shared between the central and provincial governments, with the center keeping 75 percent of the revenue and the province, 25 percent.

Third, the land rent system may generate a cash flow problem for local governments. When leasing fees are deferred and paid by lessees in annual installments, there will be less money available immediately for local governments to cover current public spending. Nonetheless, the lowering of current income for local governments should not be viewed as a revenue loss. In principle, the sum of the present value of all annual rental payments made by a lessee through the lease term should equal the lump sum leasing fee, if a proper discount rate is used in the calculation. Owing to the potential cash flow problem, local governments must find ways to secure adequate funds to pay for public expenditures. This can be done by issuing government bonds—an option that is not yet available for local governments in China—or borrowing money from the central government or other financial intermediaries, using perhaps the future land rent collections as collateral. Loans can then be repaid in installments by funds collected from yearly rental payments made by lessees.

Fourth, comparing with the property tax system, the land rent system may create a more uneven distribution of financial burden among industries. Skewed distribution of fiscal impacts on taxpayers is undesirable because equity is a crucial factor for ensuring the success of any tax reform (Bird and Casanegra de Jantscher 1992). As indicated by Option 1 in Table 11, had the land rent system been fully implemented in 1997 farmers and rural enterprises would have paid as much as 29.2 percent more to the government as payments for land rent and other taxes. This was largely because agricultural production could be land intensive; thus, charging the full land rent to cultivators and rural enterprises would have increased their payments for using public land. Similar rationale

Table 11. Simulated Impacts of Different Combinations of Land Rent and The New Property Tax Rate on Burden Shift: By Sector

Sector	Option						
	1	2	3	4	5	6	7
Agriculture	29.16%	14.19%	14.20%	14.36%	14.54%	14.71%	14.89%
Mining	19.79%	6.19%	6.04%	4.12%	2.04%	-0.04%	-2.12%
Manufacturing	4.59%	0.39%	0.36%	-0.02%	-0.43%	-0.84%	-1.26%
Construction	-0.41%	-2.16%	-2.16%	-2.18%	-2.19%	-2.21%	-2.22%
Transportation, warehousing and telecommunication	12.57%	4.36%	4.31%	3.62%	2.87%	2.12%	1.38%
Commerce, food services and passenger transport	-0.05%	-1.05%	-1.02%	-0.73%	-0.42%	-0.11%	0.20%
Banking and insurance	-2.83%	-1.42%	-1.32%	-0.20%	1.02%	2.24%	3.46%
Services	18.77%	7.28%	7.20%	6.20%	5.13%	4.06%	2.98%
Public administration	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Standard deviation	11.41%	5.41%	5.38%	5.12%	5.00%	5.05%	5.27%

Source: Computed by the author using the modified 1997 input-output table of China.

can be applied to explain the increase in the financial burden for the mining sector (19.8 percent).

Likewise, the services sector would have paid 18.7 percent more to the government. The upsurge would have come mainly from the real estate industry whose burden was estimated to increase by 38.2 percent after the reform.¹⁴ The transportation, warehousing and telecommunication sector would have also experienced a substantial increase in payment to the government (12.6 percent). All these industries require a fair amount of land input in their production. The Major beneficiary of the land rent system would have been the banking and insurance sector (-2.8 percent).

In assessing the distribution of burden increase, we calculated the standard deviation of percentage changes in payment to the government for each option. The standard deviation for Option 1 was 11.4 percent. It then dropped to 5 percent when moving from Option 1 to 5. Going beyond Option 5, the standard deviation started to rise from 5 to 5.27 percent. These estimates implied that Option 5 might have been the optimal level of distribution, alluding to the possibility that a combination of a new property tax rate of 8.25 percent and a 70 percent discount land rent would have produced

¹⁴ According to the 2002 figures, real estate companies paid a higher percentage (2.3 percent) of their taxes in Land Value Increment Tax than did other sectors (from 0.01 to 0.25 percent) (China Taxation Yearbook Editorial Committee 2003: 607). The Land Value Increment Tax (LVIT), which is similar to the capital gains tax in the United States, is an instrument for the government to capture land value. There have been discussions in China among policymakers and analysts alike about abolishing the LVIT (Hong 2003). Opponents of the LVIT argue that the tax has deterred real estate investment and in turn hampered the development of private housing markets. At present, transaction involved “non-luxurious” residential property is exempt from the LVIT. Because our simulation study did not consider the possibility of terminating the LVIT, our estimate might have overestimated the burden on the real estate industry. If the central government abolishes the LVIT in the future, the real estate sector will benefit the most from this policy change. Even with the LVIT, the annual land rent, if “capitalized” into land prices, will eventually lower property value, thereby reducing the amount of tax that firms may have to pay for capital gains in real estate transaction.

a better distributive outcome than the new property tax or land rent system alone could have generated.

Comparing the new property tax system with the land rent system for all revenue-neutral options (Option 2 and 7), it appeared that the majority of the sectors would have experienced a reduction in burden had the new property tax replaced land rent as a more important revenue source. Most noticeably, the burden shift for the mining sector would have reversed from an increase of 6.2 percent to a decrease of 2.1 percent. A similar trend could be identified for the manufacturing sector—from 0.39 percent to -1.26 percent. Only three sectors would have paid more taxes to the government had the reform developed toward the uniform property tax system. These sectors were the agriculture (14.2 – 14.9 percent), commerce, food services and passenger transport (-1.05 - 0.2 percent), and banking and insurance (-2.8 - 3.5 percent).

All these results indicated that the two systems would have very dissimilar effects on China's long-term economic development. If all factors remain constant, moving from the land rent system toward the new property tax system may discourage industries, such as commerce, banking and insurance, from expanding. The opposite approach would be to promote the development of commerce, banking and insurance but slow down the growth of all other industries, such as mining, transportation, telecommunication and manufacturing (see Table 12).

These estimates raised two questions regarding taxing land and buildings separately in China. First, will taxing land more heavily than buildings lead to an uneven distribution of tax burden? Second, will imposing a heavier levy on land than buildings create the right tax incentives to facilitate the government's economic development

Table 12. Simulated Impacts of Different Combinations of Rent Level and The New Property Tax Rate on Production: By Sector

Sector	Option					
	2	3	4	5	6	7
Agriculture	0.06%	0.05%	0.05%	0.05%	0.04%	0.04%
Mining	-0.02%	0.03%	0.06%	0.09%	0.12%	0.15%
Manufacturing	0.02%	0.03%	0.04%	0.04%	0.05%	0.05%
Construction	-0.08%	-0.05%	-0.03%	-0.01%	0.00%	0.02%
Transportation, warehousing and telecommunication	0.02%	0.02%	0.03%	0.03%	0.04%	0.04%
Commerce, food services and passenger transport	0.03%	0.02%	0.02%	0.01%	0.01%	0.00%
Banking and insurance	0.08%	0.05%	0.03%	0.02%	0.00%	-0.02%
Services	0.01%	0.00%	0.00%	-0.01%	-0.01%	-0.02%
Public administration	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: Computed by the author using the modified 1997 input-output table of China.

strategy? Both issues deserve thorough examinations in the next research phase. These two questions, until fully answered, will cast doubt on any recommendation that a split-rate property tax system should be considered for China. Despite these unresolved matters, one thing is clear: the land rent system can act as a transition mechanism through which local governments can adopt the new property tax scheme gradually without facing any potential fiscal crunch or public opposition.

A Road Map for Property Tax Reform

It was not unusual that at the end of our interviews, the roles of the interviewees and our research team shifted. The Chinese officials with whom we interviewed became the interviewers; and we were put on the receiving end, facing challenging questions propounded by our Chinese counterparts. The most common question was, “What would you recommend as a road map for our property tax reform?” Surely, there was no easy answer to such a pointed, yet legitimate, inquiry. We also did not want to give any recommendations without first analyzing our research data carefully. At times, we were so intimidated by this question that team members would stare at each other, hoping someone in the group could come up with a reasonably smart answer that could get ourselves out from these potentially embarrassing situations.

This concluding section is about developing such a road map for China’s property tax reform. Of course, our suggestion is neither the best nor the only direction that the Chinese government can pursue. It is a possible course of action that we established based on the economic impact assessments of varied reform scenarios presented here. Details of our proposal are as follows.

The first step is to terminate the Adjustment Tax. We agree with the Chinese government that the Adjustment Tax should be totally phased out. Getting rid of this tax altogether would simplify the structure of property taxation in China. Perhaps it may even enhance the efficiency of fixed capital investment. As predicted by our simulation study, potential impacts on total tax revenue and industrial output would be minimal.

The second step is to decide if the CMCT should be terminated. We have argued here that the prime function of the CMCT—to raise public funds for public infrastructure investment and maintenance—is similar to that of the proposed new property tax. Again, it would simplify the property tax structure and reduce the workload for tax administrators if the same function can be performed by just one tax—the new property tax.

Despite the apparent benefits of abolishing the CMCT, the major challenge is its prominent role in financing local government expenditures. As we estimated, terminating the CMCT could have a significant bearing on the financial position of local governments. Some locales may lose as much as 2 to 4 percent of their annual tax revenue due to this tax policy change. Thus, in undertaking this step, central authorities must provide local governments with alternative revenue sources, so as to ensure that any revenue losses would be compensated for. One option is to establish a new property tax that is buoyant enough to take the place of the CMCT in local public finance—Step Three.

The third step is to determine where and how to conduct the property tax reform. The criteria for selecting the reform areas may include the presence of (1) reasonably

developed real estate markets, (2) adequate tax administrative capacity to implement the reform, and (3) a certain level of public acceptance to property taxation. If these preconditions are available, the government should consolidate the LUT, URET and Building tax into a single levy. The tax base for the new property tax will be the assessed market value or gross (preferably net) rental value of both land and buildings. The tax rate would have to be set rather high to ensure no adverse impact on local government budget. We estimated that had the Chinese government implemented the reform in 1997 it would have had to set the rate for the new property tax at 11.5 percent in order to orchestrate a revenue-neutral shift. This tax rate would have been about 188 percent higher than the current Building Tax rate.

Challenges for implementing the new property tax are: (1) to convince taxpayers that the high tax rate is reasonable and (2) to upgrade local tax administration to implement and administer new tax collection. During the process of executing the changes, some local governments may find themselves facing the following situations:

1. Would-be taxpayers are unwilling or unable to pay the new property tax.
2. Local tax bureaus may need more time to train their staff and carry out the necessary organizational changes to accommodate the new property tax system.
3. The new property tax that favors mostly secondary industries may not create the right incentives to foster the kind of industrial development that best suits their economy.

In dealing with these obstacles, public officials can take either one of the two following steps—Step Four or Five.

The fourth step is to modify the LUT structure instead of installing the new property tax system. This approach will only serve as an interim method to allow taxpayers and local governments more time to prepare for the new property tax reform. We propose to raise the tax rates for the LUT, so as to generate funds to compensate for the revenue losses caused by the termination of the Adjustment Tax and CMCT.

Although restructuring the LUT is the simplest—in terms of requirements on tax administrative changes—among all reform scenarios, its potential to cover any tax revenue shortfalls is limited. As estimated, it would have required the central government to raise the tax rates by almost 700 percent had it decided to instigate the proposed change with no tax revenue loss. One advantage of using this approach is that the distributive impacts created by the LUT adjustments seem to be less drastic than those generated by the new property tax. If modifying the LUT rates is not viable, local governments can take Step Five.

The fifth step is to adopt a land rent system. The land rent system, as explained earlier, can be treated as a transition system in which leasehold charges are collected in the form of annual land rent. The annual land rent may then be converted into tax systemically when the new property tax reform progresses to more advanced stages. The advantages of the land rent system are: (1) lower the incentive for local governments to lease public land rapidly, (2) better characterize the landowner-renter relationships between the government and lessees, and (3) generate substantial income for covering tax revenue shortfalls when the new property tax system is in transition.

One major drawback of this approach is that coordinating the administration of the land rent and new property tax systems can be complicated. Besides, issues related to

the sharing of rental income between the center and provinces and among different levels of local government must be settled. Local governments may also have to borrow funds from the central government and other financial institutions to secure an adequate cash flow for covering immediate local expenditures. Last, but not least, there are open questions regarding how collecting both land rent and new property tax—a split-rate like tax system in which land is taxed more heavily than buildings—may affect tax burden shift and regional economic development.

The Chinese government has a clear vision for the destination of its upcoming property tax reform: the establishment of a uniform ad valorem property tax whose base will cover local- and foreign-owned real assets in the urban as well as rural areas. In addition to business and rental properties, the coverage will eventually be extended to include all owner-occupied dwellings. No one would dispute this aspiration. What we have done here is to chart one possible course through which central authorities can move the reform forward without causing major distresses to local government budgets and would-be taxpayers. Our proposed steps, which are only a few out of innumerable possibilities, are only the first several strides of a long journal toward completing the property tax reform in China.

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Appendix A. Property Related Taxes in China

Tax Item	National Guidelines	Shanghai	Beijing	Shenzhen
Urban Land Use Tax	<p>1. Large city: 0.5-10 yuan/m²/yr; 2. Middle city: 0.4-8 yuan/m²/yr; 3. Small city: 0.3-6yuan/m²/yr; 4. County, town, or industrial zone: 0.2-4 yuan/m²/yr.</p>	<p>1. Urban districts within the municipal area: 2-7.5 yuan/m²/yr; 2. County town, established towns, industrial and mining zones: 1 yuan/m²/yr; 3. Chongming County: 0.5yuan/m²/yr.</p>	<p>Level 1: 10 yuan Level 2: 8 yuan Level 3: 6 yuan Level 4: 4 yuan Level 5: 1 yuan Level 6: 0.5 yuan</p>	Collect the land use fee instead.
Exemptions	Exemptions are applied to land occupied by government agencies, rural collectives, the military, community groups and bureaus of the Ministry of Finance, and used for public infrastructure development.	Same as the national guidelines.	Same as the national guidelines.	
Building Tax	<p>1. Acquisition-value method: 70-90% of original or assessed value of the property x 1.2%. 2. Rental-income method: 12% of rental income.</p>	<p>1. Acquisition-value method: 80% of original or assessed value of the property x 1.2%. 2. Rental-income method: 12% of rental income (or 4% for individual owners) 3. For individual rental property owners, they may pay a composite rate of 5%, which include the individual income tax, business tax and building tax, of gross annual rental income to the municipality.</p>	<p>1. Acquisition-value method: 70% of original or assessed value of the property x 1.2%. 2. Rental-income method: 12% of rental income. 3. For individual rental property owners whose properties are rented at market rate, the tax rate is 4% of gross annual rental income.</p>	<p>1. Acquisition value method: 70% of original or assessed value of the property x 1.2%. 2. Rental-income method: 12% of rental income.</p>
Exemptions	Non-business properties owned by local citizens are exempted.	Same as the national guidelines.	Same as the national guidelines.	Same as the national guidelines.
Urban Real Estate Tax	<p>1. 1% of the assessed value of buildings; 2. 1.5% of the assessed value of land; 3. 1.5% of the assessed property value if land and building values are not available separately; 4. 15% of assessed rental value if property value is unavailable.</p>	Same as the national guidelines.	Same as the national guidelines.	Same as the national guidelines.
Exemptions	<p>1. Government, public and military facilities are exempt; 2. New buildings are exempt for 3 years; 3. Renovated buildings with expenses exceeding 50% of the original building value are exempt for 2 years; 4. Provincial units or above also have the powers to grant exemptions to other properties.</p>			

Appendix A. Property Related Taxes in China (continue)

Tax Item	National Guidelines	Shanghai	Beijing	Shenzhen
Land Value Incremental Tax	Four progressive tax rates: 1. Net gains < 50%: tax rate = 30%; 2. Net gains = 50-100%: tax rate = 40%; 3. Net gains = 101-200%: tax rate = 50%; 4. Net gains > 200%, tax rate = 60%.	Same as the national guidelines.	Four progressive tax rates: 1. Net gains < 50%: tax rate = 30%; 2. Net gains = 50-100%: tax rate = 40% and a tax credit of 5% of allowable deductions applied to tax liability; 3. Net gains = 101-200%: tax rate = 50% and a tax credit of 15% of allowable deductions applied to tax liability; 4. Net gains > 200%, tax rate = 60% and a tax credit of 35% of allowable deductions applied to tax liability.	The tax is 20% of net gains.
Exemptions	Sales of non-luxurious, residential properties by individuals are exempt.	Same as the national guidelines.	Same as the national guidelines.	Same as the national guidelines.
Deed Tax	The tax rates range from 3-5%. The tax base is the transaction value.	The tax is 3% of the transaction value.	The tax is 4% of the transaction value.	The tax is 1% of the transaction value.
Exemptions	For corporate buyers: 1. Exemption is available for sales on or before December 31, 2002 of residential and commercial properties developed before June 1998. 2. Exemption is available for sales of self-constructed or owner-occupied non-luxurious, residential properties. For individual buyers: 1. 50% reduction is available for sales of self-constructed or owner-occupied, non-luxurious, residential properties. 2. Exemption is available for sales on or before December 31, 2002 of residential and commercial properties developed before June 1998.	Individuals buying non-luxurious, residential housing shall pay deed tax of 1.5 % and will be entitled to a 50% subsidy.		Any amount over 10 million yuan will be charged at a rate of 0.5%.

Appendix A. Property Related Taxes in China (continue)

Tax Item	National Guidelines	Shanghai	Beijing	<u>Shenzhen</u>
Business tax Exemptions	The tax is 5% of sales revenue for transferring tangible assets or real property. For individual rental properties rented at market rate, the business tax is 3% of rental revenues. 1. Exemption is available for sales on or before December 31, 2002 of residential and commercial properties developed before June 1998. 2. Exemption is available for sales of self-constructed or non-luxurious, residential properties that have been occupied by owners for over a year.	Same as the national guidelines.	Same as the national guidelines.	Same as the national guidelines.
City maintenance & construction tax (CMCT)	For city: 7% of business tax liability; For districts and town: 5% of business tax liability; Other: 1% of business tax liability.	Additional taxes amount to 11.3% of business tax liability (CMCT at 7%; educational surtax at 3%; embanking fee at 1%; and benefits for voluntary military personnel at 0.3%).	Same as the national guidelines.	CMCT is 3% of business tax liability, and another 3% for education fee.
Fixed Assets Investment Adjustment Tax (Adjustment Tax) Exemption	Tax rates range from 5 –30% A. Infrastructure 1. State urgent projects—no tax 2. Project encouraged by the State—5% 3. Office buildings, hotels and guest houses—30% 4. Residential buildings—no tax, 5% 5. Other—15% B. Renewal projects 1. State urgent projects—no tax 2. Others—10% The Adjustment Tax has been suspended since 2000.			

Sources: Beijing Local Tax Bureau (2002); Beijing Real Estate Yearbook (2000); SATC (1999; 2003); Shenzhen Real Estate Yearbook (2001); SMHLRAB (2001); and Zhang (2001).