Land Taxation in China: Assessment of Prospects for Politically and Economically Sustainable Reform

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The emerging land-related unrest in China poses a pressing challenge on the legitimacy of the government. Through the perspective of good governance, the paper examines the role of land in government financing and its economic and political cost, as well as the erosion of government's credibility and its negative impact on private and collective property rights. The paper emphasizes the recent upward trend in land-related unrest as a consequence of abuses by local governments on land-source revenues. Our special concern rests on the institution of collective property which is slowly emerging from the shadow of the former state property in the course of economic transition. Collective property right could be a useful legal and economic institution but must receive political support to exist alongside with private property.

 $\it Key\ Words\colon$ Land tax; Property tax; Land-related revenue; Land administration.

JEL Classification Numbers: H20, H27.

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1. INTRODUCTION

In January 2011, China launched a property tax trial in two cities, Chongqing and Shanghai, in the hope of controlling skyrocketing housing prices and stabilizing local governments' fiscal revenue. However, there is little existing public finance analysis on land-related fiscal policies to guide either the development or implementation of these types of policies. This paper examines fiscal land policy in China through the lens of theories and practices on good governance.

What constitutes good governance or government? In an Aristotelian spirit we may say that a good government is one which excels in fulfilling its proper functions. Views of government functions may vary but most of us would agree that the government has at the very least two functions: facilitation of economic life and maintenance of peace and order; to be able to fulfill these functions the government must be able to sustain itself. Land administration is implicated in the exercise of all these functions: land is one of the key factors of production along with labor and capital; failure to manage land properly has historically led to popular uprisings and erosion of legitimacy of governments; and land provides with revenue directly through land taxation or serves as the basis (via the notion of residence) for claims to other revenue sources (e.g. personal income tax).

The art of good governance consists in balancing the exercise of these functions, yet tensions and conflicts may appear as one function interferes with another. It is in this context that we consider governance over land. For the Chinese economy which has been expanding at roughly 10 percent annually over the last quarter century, growth no longer seizes the central stage of policy agenda. The focus has been shifted towards sustainability and quality of growth in the medium to long run. Therefore, government's control over land must enable socially sustainable forms of growth. In China, government — especially the sub-national tiers — plays a crucial role in ensuring socially sustainable development and provision of public services (health care, education, and social protection), infrastructure and agricultural development. However, the revenue bases of local governments are very limited, and they depend heavily on land-related revenues. Thus, inadequate land administration can be potentially economically costly; it can undermine the fiscal capacity of the state. At the same time governments fiscal policies which have promoted enclosures and land expropriations incur substantial political costs as well.

The paper proceeds as follows. Section two considers government's use of land as a source of revenue. We identify a number of aspects of the current land revenue system which carry high economic and/or political costs. Section three emphasizes the recent upward trend in land-related unrest as a result of abuses by local governments which originate — at least in part —

from certain uses of land as a source of government revenue. Land-related unrest signals erosion of legitimacy of the government. Further, we point out that government's fiscal policies related to land hinder the development of property rights by undermining government's credibility and paralyzing the political will of the people. Our special concern is with the institution of collective property which is slowly emerging from the shadow of the former state property in the course of transition. Collective property right can be a useful legal and economic institution but must receive political support to exist alongside with private property. Section four concludes.

2. LAND AS A SOURCE OF GOVERNMENT REVENUE

Since 1956, the rural land has been property of the collective, while the urban land has belonged to the state.¹ The state maintains monopoly of the primary land market in the urban areas; the state transfers use rights to a plot of land via two tracks-allocation (reserved for state-owned or non-profit) and conveyance (reserved for commercial enterprises). The land-use rights obtained through conveyance can be further transferred which has permitted the secondary land market to emerge. Needless to say, the fees on conveyance are much higher than fees on allocation.

In the rural areas, while the collectives formally have property rights and certain degree of autonomy in decisions with regard to land, the state imposes controls on certain transfer of rural land use rights, especially if they involve conversion to non-agricultural use. Weak collectives' and individual farmers' rights have made it relatively easy for the local governments to exercise discretion over the use of land, its conversion to non-agricultural use or expropriation.

Local governments' monopoly on land decision-making makes it an especially attractive revenue source for the local governments to meet their extensive expenditure assignments. The 1994 tax reform recentralized the revenue assignments, leaving expenditure assignments largely untouched, creating a substantial fiscal gap at local levels. In 2008, sub-national governments accounted for more than 78.68 percent of total public expenditure, while receiving 46.71 percent of total government revenue (China Statistical Yearbook, 2009). Spending on social services is even more decentralized all the way down to the county level, with the sub-provincial tier financing 70 percent of public investment in social services, provincial and central tiers contributing another 20 and 10 percent respectively

¹This distinction between state-owned urban and collective-owned rural is simplified. In reality, according to the 1996 land survey report, the state owned six percent of cultivated land and orchards (yuandi) and 55 percent of forest and pasture land. Pastures and forests account for 97 percent of the state-owned agricultural land.

²See appendix A for detailed discussion on rural land tenure system and its legal basis.

in 2005(Shen forthcoming; Shen and Zou forthcoming). Central government transfers are sizable; they financed 67 percent of provincial, 57 percent of prefecture and 66 percent country and lower level expenditures in 2003 (Shah and Shen 2008)³, yet inadequate to fill the vertical fiscal gap. Over-reliance on transfers carries the risk of soft budgetary constraints and creates perverse incentives to collect taxes, further deepening reliance on transfers and extra-budgetary revenue. In China, local governments do not have the right to set the tax rate except some minor local taxes. Especially, the "tax sharing reform" in 1994 was designed to base the fiscal relations between governments on the tax code, which recentralized the Chinese fiscal system because the central government takes a considerable amount of revenue (Wang, Shen and Zou, 2009, P208).

Lack of revenue seriously compromises local governments' ability to carry out infrastructure investment and weakens social service provision. Both are highly visible public services and the failure to invest in either may lead to political repercussion. Thus local governments are faced with strong incentives and in reality provided with the opportunity to exploit land as a source of revenue. The revenues from land recorded in the formal budget are small partly due to loopholes in the tax code. For instance, there is virtually no property tax in China. And most of the budgetary income from land comes in the form of one-off charges on transactions or are based on statutorily fixed, cost-based assessments which fail to take into account the current market value of the land. Thus, budget fails to provide sound value-based tax revenue as practiced in most other countries.

During the 1990s the share of land and property taxes in all sub-national taxes averaged for 40 percent for developing countries, 35 percent for developed countries and only 12 percent for transition countries (Bird and Slack, 2004). As a share of sub-national revenue, property and land taxes amount to 18 percent in developed countries and 19 percent in developing ones; in transition countries land and property taxation contributes less than 9 percent of sub-national revenue (Bahl, 2001). As figure 1 illustrates, the contribution of property taxes to sub-national revenue in China is small even by comparison with transition countries, only 4.9 percent. The land and property taxation in sub-national expenditure is about 10 percent in developed and developing countries and slightly over 5 percent in transition countries (Deininger, 2003).

Unfavorable revenue-sharing arrangements and weakness of budgetary revenue base have led local governments to expand collection of extrabudgetary revenue. Extra-budgetary revenue from land is substantially greater in magnitude; by some estimates, land transfer fees amount to at

³Shah and Shen (2008) consider central-provincial shared taxes as central transfers according to the international standards.

70
60
50
40
30
20
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FIG. 1. Reliance on Property Taxes by Local Governments (Property Tax as a Percent of Total Local Revenues)

Source: Authors, based on data from Bird and Slack (2004)

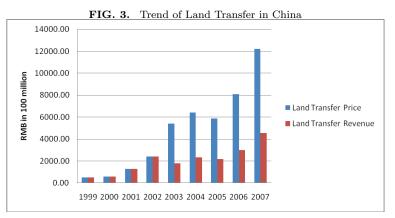
least 20 to 30 percent of total sub-national government revenue (World Bank, 2006). Unfortunately extra-budgetary funds lack stability and have uncertain legal status. Additionally, the collection and administration of extra-budgetary funds is more opaque and contributes to corruption and makes it more difficult to detect unsound fiscal practices.

Local governments generate revenue from land transfers in a variety of ways: (a) directly through land auctions⁴; (b) through the administrative transfer of land for urban use, in which case the benefits of transfer are indirect: land transfers for urban construction seek to attract industrial enterprises whose presence in turn gives local budget a boost; (c) through land banks and mortgage loans.

In 2007, land transfer revenue accounts for 15% of the total central and sub-national government revenue. The tax revenue accounted for only 56% of total Chinese government revenue, followed by the social security income (13%), extra-budgetary revenue (9%) and budgetary non-tax revenue (7%). For local governments, land transfer revenue has had an even higher share of the total revenue. Figure 3 show the trend of the land transfers revenue and land transfer price in China from 1999 and 2007. The figure depicts that land transfer has been increasing dramatically since 1999. The land transfer total sale price increased from 241.68 billion RMB in 2002 to 1221.67 billion RMB in 2007, and the land transfer local government revenue has also experienced significant raise to 454.14 billion RMB in 2007. In addition, figure 4 depicts that land related revenue take an increasing proportion of local governments' total revenue, for example, land related revenue accounted for less than 10% of central and local government revenue

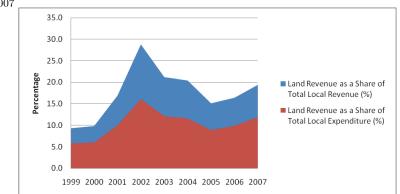
 $^{^4\}mathrm{Auctions}$ account for 20 to 30 per cent of all land transfers.

Source: China Statistical Yearbook 2008, China Labor Statistical Yearbook 2008, Yearbook of Land and Resources of China 2008, and Peking University-Lincoln Institute Center for Urban Development and Land Policy.



Source: China Statistical Yearbook of Land and Resources of China 2000-2008, and Peking University-Lincoln Institute Center for Urban Development and Land Policy.

enue before 2000, and dramatically increased to 20% of local government revenue and 12% of central and local government revenue in 2007. Additionally, table 1 break the land transfer revenue by province. Sichuan province ranked the highest in terms of the land transfer revenue as a ratio



 ${\bf FIG.~4.}~$ Land Revenue as a Share of Total Fiscal Revenue and Expenditure 1999-2007

Source: China Statistical Yearbook 1999-2008, and Peking University-Lincoln Institute Center for Urban Development and Land Policy.

of GDP (5.4%), land transfer revenue as a share of total revenue (66.66%), and land transfer revenue as a share of total expenditure (32.24%).

Land banking has evolved into a vehicle of capitalization on requisitioned land-an undertaking driven entirely by profit-making. Originally land banking was intended as a planning tool for productive development of surplus land. Today land banking facilitates land transfers which have nothing to do with planning but allocated land for suboptimal uses. Land banks hold the land for the local governments, mortgage it with loan institutions and invest recovered funds in urban infrastructure development. Land banking in China is characterized by high volume of transactions, which is virtually unprecedented in the world.

Using of requisitioned land as collateral on mortgage loans has significant implications for local government finance. On one hand, mortgage loans alleviate the deficit of funds for infrastructure investment; however the benefits from such investments are unevenly distributed. Because mortgage loans carry the risk of expropriation of the mortgaged land in case of local governments' default, local governments have to invest the funds in profit-maximizing ways, which in most cases results in investment in urban infrastructure where the returns on investment are greater. Rural areas in dire need of infrastructure investment are unlikely to benefit from such loans. The same problem confounded the subsidized loan program which failed to induce the desired poverty-reducing effect because budget-constrained local governments tended to allocate subsidized loan funds to capital-intensive industries in search for faster and higher returns.

On the other hand, access to credit softens budgetary constraints and potentially undermines fiscal discipline, especially in the environment lack

 ${\bf TABLE~1.}$ Land Revenue Statistics by Province in China in 2007

Rank	Province	Land Transfer	Province	Land Transfer	Province	Land Transfer	
		Revenue as a		Revenue as a		Revenue as a	
		ratio of GDP		Share of Total		Share of Total	
		(%)		Revenue (%)		Expenditure (%)	
1	Sichuan	5.40	Sichuan	66.66	Sichuan	32.24	
2	Chongqing	4.31	Chongqing	40.18	Tianjin	29.67	
3	Tianjin	3.96	Anhui	38.40	Fujian	28.15	
4	Hainan	3.24	Tianjin	37.02	Chongqing	23.15	
5	Liaoning	3.00	Fujian	36.65	Shandong	21.57	
6	Anhui	2.84	Hainan	36.61	Zhejiang	18.88	
7	Fujian	2.77	Liaoning	30.58	Liaoning	18.76	
8	Shandong	1.88	Shandong	29.12	Anhui	16.79	
9	Zhejiang	1.82	Hubei	26.85	Hainan	16.17	
10	Hubei	1.72	Hebei	25.29	Hebei	13.25	
11	Ningxia	1.60	Jilin	22.19	Hubei	12.41	
12	Xinjiang	1.52	Zhejiang	20.68	Jiangsu	10.81	
13	Hebei	1.46	Guangxi	19.22	Henan	8.18	
14	Guangxi	1.35	Xinjiang	18.67	Guangxi	8.16	
15	Jilin	1.35	Ningxia	17.77	Jilin	8.05	
16	Guizhou	1.32	Henan	17.75	Guangdong	7.21	
17	Jiangsu	1.07	Heilongjiang	16.63	Hunan	6.86	
18	Inner Mongolia	1.04	Hunan	15.36	Xinjiang	6.71	
19	Heilongjiang	1.04	Inner Mongolia	12.85	Heilongjiang	6.17	
20	Henan	1.02	Guizhou	12.72	Ningxia	5.88	
21	Hunan	1.01	Jiangsu	12.33	Inner Mongolia	5.84	
22	Shaanxi	1.01	Shaanxi	11.62	Shaanxi	5.24	
23	Shanghai	0.94	Shanxi	8.34	Shanghai	5.23	
24	Shanxi	0.87	Guangdong	8.17	Shanxi	4.75	
25	Guangdong	0.73	Jiangxi	7.51	Guizhou	4.56	
26	Jiangxi	0.53	Tibet	6.43	Jiangxi	3.24	
27	Yunnan	0.45	Shanghai	5.50	Yunnan	1.9	
28	Tibet	0.38	Yunnan	4.43	Gansu	1.24	
29	Gansu	0.31	Gansu	4.40	Beijing	1.1	
30	Beijing	0.19	Qinghai	2.39	Qinghai	0.48	
31	Qinghai	0.17	Beijing	1.21	Tibet	0.47	

Source: Yearbook of Land and Resources of China 2008, China Statistical Yearbook 2008 and Peking University-Lincoln Institute Center for Urban Development and Land Policy.

of supervision over mortgage loans. Mortgage loans also lack firm legal status in China and in fact contradict the prohibition on direct sub-national

borrowing, which introduces additional risk in mortgage loans. In practice, there is no evidence of risky financial behavior by the local governments (such as defaults on the loans) mainly due to government's access to considerable supply of land at relatively low price and China's phenomenal economic performance. Potential sources of risk do exist, including (i) inability of the local governments to determine the final demand for land and (ii) local governments' exposure to interest rate fluctuations which can potentially cause volatility of local government's income; (iii) shrinkage of the supply of convertible land, which means that these practices are unsustainable even in the medium term (rapid pace of conversion of arable land has threatened food security and some provinces have exhausted their quotas of convertible land⁵).

Thus current uses of land to generate revenue are inefficient from a number of perspectives. The revenues generated from land mostly do not go through the formal channel of budget. Once we count the direct and indirect revenue generated through administrative transfer, auctions, and other fees that are land-based (in a broad sense), revenue base may be substantial. However, such revenue sourcing is unstable, non-transparent, and risky. It tends to undervalue land in effort to realize a quick profit, encourages a fast rate of conversion of arable land, and rewards corrupt officials and gives them incentives to appropriate communal lands.

LAND TAX ADMNISTRATION

A comprehensive tax reform may help to address many of these challenges, through replacing non-transparent, unreliable and unsustainable fee-based revenue with a transparent and coherent tax.

Effective administration of land taxation requires a cadastre with size, value and ownership status of each parcel of land and its productive capacity, as well as information on the costs of inputs and outputs. China does not have a cadastre which leads to problems of identification and assessment of properties; these difficulties can be compounded by poor enforcement of tax payments⁶.

Land taxes can be based on area occupied, appraised value of property or self-assessed property value. The value may refer to the land alone or to land, improvements to land and buildings. Tax on land value (excluding

⁵Exhaustion of convertible land may not be a problem in principle; instead fixed supply of convertible land can be an incentive to more intensive use of available land and its further development. The danger, however, is that weak institutions and legal code and poor enforcement ability, would allow further extensive urban development and conversion of land to urban use instead of promoting intensive growth. It is important to structure incentives in ways which are conducive to intensive growth in the industrial centers. Similarly intensive agricultural production should be stimulated as well.

⁶Property tax administration is weakened by incomplete property registers in Guinea and Kenya.

improvements) would be less distortionary and approximate a benefit tax. Taxation of land value — excluding buildings and improvements — has the merit, at least in theory, of stimulating more productive use of the land. Additionally, in the case of China where the real-estate market has been growing extremely fast, value-based taxes would significantly improve revenue recovery.

Area based taxation can be distortionary since it makes no adjustment for land quality and effectively imposes higher rates on low-quality land. Land value taxation is preferable but is costly to implement and requires adequate capacity for regular appraisals. Self-assessment is a low-cost alternative to formal value assessment and may be particularly attractive to low-income countries with weak administrative capacity. However its success hinges on being able to adequately structure incentives to promote adequate reporting of land value; and perception that self-evaluations are fair is also crucial to the success of self-assessments. For these reasons self-evaluations are not commonly used.

It is widely accepted that advantages of land taxation come at high administrative cost. The cost increases tremendously if proper value-based taxation is to be implemented due to the requirement of up-to-date information about properties. However the experience of Russia's land taxation indicates that in China's circumstances a tax reform is feasible and desirable. Russia embarked on the land taxation reform in the midst of serious economic downturn, lacking a cadastre of lands and having no experience in ad valorem tax assessment (Nitikin and Zou, 2006). China is much better positioned economically to undertake the reform.

In case of China, as in Russia, a gradual approach could be used when first cadastral assessment of land is performed. The second stage involves registration and valuation of buildings. In the absence of land markets, actual market value-based assessment can be reasonably well substituted by statistical mass-assessment techniques.

Implementation of land value taxation almost immediately increased local revenues (since 2005, in Russia 100 percent of land tax is assigned to municipal budgets), despite the fact that property taxes are criticized for their lack of elasticity and inability to increase revenue from taxes on property quickly or by a substantial margin (Bird 2000). In Ontario, reformed property taxation did not bring a windfall of revenue, but has been able to increase revenue substantially to make up for the shortage of intergovernmental transfers (Nitikin and Zou, 2006).

There is a substantial degree of subjectivity in property assessments. Valuations are likely to reflect political pressures or capture of administration by private interests. In countries where taxpayers have little confidence in the impartiality of assessments, valuation will likely generate conflict around the issue of appraisals. Therefore, in addition to having the

human and organizational capacity to conduct assessments, local governments should have appropriate organizational structures to deal with appeals. Russia's tax reform has been associated with significant increase in the total number of disputes; in 2000-2005 the number of disputes quadrupled (Nitikin and Zou, 2006).

Currently China's courts are overwhelmed with appeals for redress of grievances against government officials and definitely will be unable to arbiter disputes related to appraisals. Local governments in India in fact have moved away from value-based taxation for the concern of social cohesion and the burden on local arbitration institutions. Assessments of land based on physical characteristics of the plot — on the other hand — anchor land taxation to more objective and easily observable and measurable attributes and allow to make adjustment — albeit very imperfect — for the quality of land. In Canada, improved valuation of properties has led to a drop in the number of disputed tax charges. Slack (2002) attributes it to taxpayers' confidence in the fairness of assessments.

Land value taxation may be opposed by the asset rich but income-poor or credit-constrained taxpayers since they cannot increase the productivity of their land due to credit constraints. By the same token, the rich, whom the tax most affects (in absolute terms) are also likely to object or to evade the tax. A similar tax once introduced in Cracow was quickly rebuffed by the legislators who faced serious political pressure from the elites affected by the tax and who incidentally were affected by the land value taxation themselves (Brzeski, 2005). Given the widespread frustration with local corruption among the peasants, it would be dangerous to risk further increasing the collusion of local elites and officials.

Even in more affluent settings — such as Canada — political pressures to adjust the level of property taxes down or not to initiate the reform altogether are substantial. In Ontario, preparation of the tax reform spanned several terms of administrations, before it could actually be implemented. This requires substantial political will. Once the reform has been initiated the same political pressure is likely to introduce new distortions.

Bird (2000) argues that decentralization can improve collection. This may work in China as well but enforcement of collection must be preceded by reforms of taxation in such ways that local governments have an incentive to collect taxes. Currently, in the absence either of solid local tax bases or the autonomy to set tax rates, the costs of enforcing collection are high relative to the benefits from it as a result of inadequate composition of local governments' tax bases. Land/property taxation rates should be set above the cost-recovery threshold—the same problem faced Russia's local government with respect to individual property tax collection before 1999, when individual property was taxed at the low 0.1 percent rate.

High visibility of property taxes increases the political costs of property taxation.⁷ These taxes are normally charged annually and require lump sum payments which make tax payers more aware of their property taxes. Since the tax base on property taxes is inelastic, to increase revenue from property, the governments must raise the tax rate, also a very visible parameter. Visibility of the property taxation could be used for the purpose of accountability and transparency of local governments. And precisely for this reason they encounter political resistance from elites and local officials. Additionally, since property tax is so closely connected with the incidence of benefits, taxpayers resent property taxes if they observe that the local governments fail to deliver public services (poor road maintenance or trash removal services, or poor access to health and education facilities). This gives another reason why land taxes should remain in municipal budgets.

3. FISCAL LAND POLICY IN CHINA: EROSION OF LEGITIMACY AND GOVERNANCE

3.1. Erosion of legitimacy

Financing a government may involve substantial political risks. Political calculus has special importance for China. Political turmoil is a frequent companion of transition. In China, social unrest has increased from 10,000 protests in 1994 involving 730,000 participants to 74000 protests involving 3.7 million. During the nineties, incidence of protests rose dramatically by 60 percent from 1997 to 1998 and by 30 percent from 1998 and 1999. After a slowdown, a new cycle of growth in unrest began in 2004 (see figure 5).

Secular upward trend in social unrest notwithstanding, changes in the level of unrest are precipitated by government policies. The 1997-1998 rise in protests occurred as a result of SOE downsizing⁸. The latest wave of unrests is to a great extent fueled by land-related issues: (1) land expropriations for public development projects, (2) enclosures of farmland without adequate compensation for the losses for urban development, and (3) corruption and unfair land reallocations by village administrations, (4) coercion of farmers to relocate through the use of violence. For example, in October of 2004, 90,000 peasants in Sichuan province confronted the police over the expropriation of their land without due compensation to enable the construction of a hydroelectric dam (Marquand, 2004 and Mooney 2004). Increase in land-related protests roughly coincides with a new wave of growth of capital investments and increased demand for land.⁹

 $^{^7\}mathrm{Bird}$ (2000) observes that "academics tend to be much fonder of the property tax than the politicians who have to impose it."

⁸Thirty million workers lost jobs in 1997-1999.

⁹Gross fixed capital formation expanded by 19.7 percent in 2003.

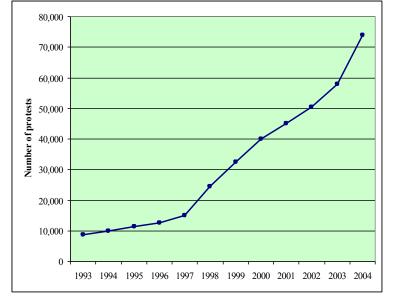


FIG. 5. Incidence of social unrest in China, 1993-2004

Source: Liaowang and China Ministry of Public Security, cited in Tanner (2004), State Department (2005), Chan 2004, Pei (2005). Note: Number of protests refers to "mass incidents".

Most of the unrests have origin in grievances against mistreatment by local officials. There is an overwhelming perception of corruption and abuse of authority by local officials among peasants. The issue of enclosures has provoked steep increase in the levels of social unrest in terms of number of events and number of participants. Peasants protest against coercive means some local official employ to induce farmers to sell their land. In 2005, 30 protesters were killed by the police in Dongzhou village in Guangdong. In Dingzhou village, Hebei province, protests ensued after the local government used hundreds of thugs to force peasants from their land to make way for a power plant; confrontation with police resulted in six deaths and many more wounded (AFP, Februrary 28, 2006).

Grievances are so numerous that the overloaded system of petitioning redress of abuse by local officials cannot process them. Only two out of 1000 petitions find some sort of resolution through intervention of the higher officials. The court system 10 is also overloaded with case of abuse of au-

¹⁰The RLCL modified the procedure for resolution of dispute related to land. The 1998 Land Management Law and Administrative Review Law required that all disputes sought resolutions through the administrative reviews, and only passed to the people's

thority by local officials; courts take no more than 90,000 such cases a year and rule against the government in 1/4 of these cases (Pei, 2005a).

Social unrest is a frequent outcome of land reforms and without prompt resolution, political tensions surrounding the land issues can spill into mass violent conflicts or civil war. Tensions around land issues preceded, for instance, the outbreak of a civil war in Rwanda and underpin ethnic confrontation in Cote d'Ivoire and Ghana.

Creation of institutions which can diffuse tensions in a timely fashion before they escalate into a violent conflict is crucial. Rolfes and Mohrman (2000) document a positive effect of legal aid centers in Vladimir and Samara oblast in Russia in resolving contentious land-related issues. In Mexico the government launched a large-scale program on provision of legal aid to farmers, which involved establishment of 42 agrarian courts (Zepeda, 2000).

Provision of written land use contracts to individual farmers in China is a step in the direction of prompt resolution of disputes related to ownership right. Introduction of elections of village leaders represents an important political safe guard against corruption in village administrations. The success if this initiative has been limited however.

But apart from corruption, the failure to resolve land disputes is also associated with poor titling, fragmentation of forest administration across several agencies, and ambiguous legal relationship between collective and state property. We see evidence of these problems in relation to forest tenure. For instance, in 1997 nearly 18 percent of state-owned forest area and 21 percent of collective forest area was unregistered nationwide. 11 Several offices participate in forest administration: the State Bureau of Forestry, the Ministry of Agriculture, the Ministry of Land Resources, and the Ministry of Civil Affairs (Ho, forthcoming).

Even when the methods are legal, the level of compensation is frequently unfair, which undermines credibility of local governments. Article 65 of the 1998 Land Management Law calls for "appropriate compensation" to the land users whose land was expropriated for the construction of public facilities or public welfare undertakings. Unfortunately "appropriate compensation" is a vague standard and the law provides no guidance for its interpretation. There is a tendency for most collective entities to interpret "appropriate compensation" as a very minimal amount (Prosterman, 1998).

court as a last resort. The RLCL gave farmers a choice of ways for pursuing dispute resolution, including consultation, deviation, arbitration and law suits in people's court.

¹¹There is sizable variation across provinces. For example, in Inner Mongolia which has the largest forest area in the country (over 12 percent of all forest area) and where the state owns 3/4 of forest, over 50 percent was unregistered.

3.2. Property rights and non-credible governance

Local governments' appetite for land has created political tensions in the countryside between local officials and the peasants who face frequent dispossessions in the name of "public good;" increase instances of social unrest indicate erosion of people's confidence in government. Popular confidence in the government is an integral component of tenure security. Even when one is granted formal property rights, one must be confident that these rights will be enforced equitably. In Russia for instance, one of the reasons for slow rental market is precisely such lack of confidence: property owners — despite having a written title to the property — are in many cases uncertain whether their property rights will be upheld.

While the collective may claim customary use right, in the formal legal sense the forest is state owned unless collective ownership can be legally proven. Such burden of proof may be too much for the collective for a number of reasons. The definition of the collective is ambiguous: is it the township, the administrative village or the natural village or villagers' group? Second, the collective's claim to ownership of the forest land is based on customary use since before the current state was established (prior to 1949); however China's legislature invalidates all land titles issued prior to the land reform of 1949. This effectively leads to the situation when in practice the ownership right of the collective is in fact a right to manage and administer the use of land, while the ultimate owner is the state. 12 The weak legal status of collectives' claim to ownership of land relative to the state's similar claims makes it difficult for the village to resist reclamations and enclosures: once the county or township government decides to convert the land to non-agricultural use, the collective has no legal recourse (Ho, forthcoming). From the juridical point of view, reclamation constitutes the transfer of the collective's use right to the state, thus aligning the use right with the property ownership right.

Another instance when the weakness of the current collective ownership rights becomes obvious is conversion of arable land to non-agricultural use. If collective property right existed as an institution independent from the state, would not one expect that that collective ownership of rural land would interfere with arable land conversion? Yet it does not, which points to the weakness of collective ownership right. It would be more accurate to say that in practice the collective land rights consist of a bundle of rights to use and administer the land resources on behalf of the real owner, the state. The problem of conversion then is not caused by the failure of the

 $^{^{12}}$ The state then "may in accordance with the law, expropriate land which is under collective ownership, if it is in the public interest" (Land Administration Law (1988, 1999), Article 2).

collective ownership as such but rather by the invasiveness of the state which undermines the autonomy of the collective.

If invasiveness of the state ownership is the problem, dismantling of collective ownership and institution of private ownership in its place misses the point. The state can invade and subvert private property rights as well (in Turkmenistan private property is recognized by the Constitution¹³ and all the formal attributes of private property right to land are present, e.g. well documented land titles).

When it comes to collective property rights, the importance of confidence in the government is even greater. China is at an important juncture when it has to decide whether collective property ownership should exist. In our opinion it should, but in a modified form. Yet collective property is a delicate form of property since it involves cooperation of many parties. As such it requires protection from the government. Unfortunately, current land policy contributes to the destruction of the popular support for collective property, thus undermining a powerful source of socially sustainable growth.

International evidence suggests that collective land ownership and equitable access to land it provides is conducive to growth. Equitable access to land is associated with higher growth and as well as higher returns accumulation of human capital (Deininger and Olinto, 2000). Indeed we see that distribution of land in China is among most equitable in the world. Research points to the importance of initial equality for growth and China's experience is consistent with this generalization. Elimination of collective property is likely to increase inequality in land distribution and can be potentially damaging to long-term growth. We have seen that income/consumption inequality in China has been increasing and has slowed down the pace of poverty reduction. Privatization of land in the absence of collective property will further exacerbate this trend.

Additionally Pei (2005b) argues that in China during the 1990s, collective ownership of land combined with HRS created an institutional framework which allowed more uniform labor-intensive industrialization of the countryside through TVEs, absorbed surplus labor¹⁴ and raised local welfare levels minimizing the threat of social turmoil fundamental restructuring of factor markets could bring. During the late 1990s and 2000s, the role of TVEs in growth has declined and the private sector has assumed the leadership role in development, however the contribution of collective property

 $^{^{13}}$ Article 9 of Turkmenistan's Constitution states: "Turkmenistan establishes the rights of private ownership over the means of production, land, and other material and intellectual goods."

¹⁴Approximately 110 million rural surplus workers moved from farming to rural industries in 1978-1996 (Pei, 2005b).

ownership with improved incentives structures and greater tenure security should not be discounted.

The reason why collective ownership promoted equitable land distribution is a system of frequent land readjustments — one of the unique features of China's land administration, by comparison with other countries. Approximately 3/4 of all changes in land holdings are related to village-wide reallocations¹⁵ (Rozelle et al., 2005). Reallocation consists in redistribution of responsibility land from one household to another; for instance, land can be shifted towards a household which had a newborn son, and away from a household who married their daughter. Reallocation takes place without compensation to the previous tenants for any investments they have made.

It has been argued that the possibility of reallocation and other restrictions on land use create disincentives to invest in the land. However, Kung and Liu (1997) and Carter et al. (1995) report that villagers favor land reallocation. If so, and if reallocation implies lack of tenure security, then either villagers oppose tenure security, or in fact reallocation and tenure security are not mutually exclusive notions from the point of view of the farmers.

Deininger and Jin (2002) argue precisely that: they show that increased transferability — even without transfer of ownership right — of land will significantly improve the alignment of land resources with households' farming ability. Transferability of the land would also increase the land supply by allowing households with low aptitude for farming to move to nonfarming activities, in turn reducing rental prices and thus facilitating the access to land by able but poor farmers.

Yet at the same time Deininger and Jin (2002) find that current administrative reallocation practices do promote productivity as well, even though there is scope for improvement through better matching of land supply to households' demand. It is likely that reallocation and transfer contribute to productivity via different mechanisms: the former by preventing excessive concentration of land and the latter by inducing more efficient land allocation.

A wise strategy would consist in trying to pursue the advantages of private property rights as well the advantages of the collective property rights, especially since peasant seem to appreciate the equalizing effect of land reallocations. ¹⁶ Such a route would entail: (a) continued separation of property rights and land use rights for some of the land; this land; (b) preservation and strengthening of collective ownership and/or land use rights; (c) strengthening of tenure security and transferability of tenure

 $^{^{15}}$ Rozelle's data describe the period prior to the 2002 Rural Land Contracting Law. 16 Ho (forthcoming) argues for a dual tenure system — private and communal — for the forest land.

either through private property rights or surrogates¹⁷; (d) further lifting restrictions on the kinds of productive agricultural land use, (e) devolution of decision-making power regarding land readjustment to the collective, along the line of the 2002 RLCL which calls for approval of land reallocation decisions by the supermajority introduced in the village assembly.

The principle of periodical adjustments of land distribution is the essence of collective ownership. While the practice of land readjustment should be continued it must be reformed. It must involve fair compensation which takes into account the improvements made to the land by the tenant as well as the inconvenience of changes due to land assignment. The compensation mechanism will improve tenure security and stimulate investment in the responsibility land. Land reassignments must also become more targeted and less sweeping in magnitude, applying to a smaller share of agricultural land to create room for a land rental market.

Unfortunately, the current of governance practices, especially those of local governments undermine collective property ownership. Lack of accountability of township officials and village leadership undermine peasants' trust in fairness of reallocation decisions. Current practices of unfair compensation have a similar effect.

At the same time legislation is indispensable, which would establish the collective ownership right, one that is independent of state ownership.

4. CONCLUSION

Our discussion has focused on the role of land in government financing and its economic and political cost, as well as the erosion of government's credibility and its negative impact on private and collective property rights. There are obvious deficiencies in the administration and design of the land taxation. First, budgetary revenue from the land is small, reflecting the fact that property taxation is virtually non-existent in China. Second, tax autonomy of local governments is limited and local revenue bases cannot support the assigned level of expenditures which has led to the proliferation of EBFs; the latter provide large contributions to sub-national coffers, but lack stability. Third, state monopoly on the primary market in urban land and control over rural land has made it easy for local governments to raise revenue through conversion of agricultural land to industrial to finance the vertical fiscal gap.

A number of modifications to the land taxation have been considered. Land value taxation has definite advantages on theoretical grounds since it approximates benefits tax and can induce development. However international experience indicates that land value taxation is costly in terms of

 $^{^{17}\}mathrm{See}$ appendix B.

organizational capacity (to make property valuation possible and to support processing of disputes related to assessment); furthermore, it would more likely increase political tensions in the countryside. Bird (2000: 14) explicitly states that "experience around the world shows that the political costs of reliance on the property taxes are so high that no government [motivated by purely cost-benefit considerations] with access to cheaper' sources of finance will willingly do so."

However, judging from Russia's experience, implementation of land taxation in China is feasible and can be expected to pass even more smoothly than in Russia, where the reform was conducted in adverse economic circumstances. If a gradual approach is taken, the cost of creation of property registry, assessment, etc. will be manageable.

A comprehensive land tax reform has the potential to address many of the distortions produced by the current forms of land revenue-generating. Current forms are unstable, non-transparent, and risky; they tends to undervalue the land in an effort to realize a quick profit, encourage a fast rate of conversion of arable land, and reward corrupt officials and give them incentives to appropriate communal lands.

Furthermore, land conversions and unjust expropriations undermine the institutions of private and—even more so—collective rights by causing erosion of popular trust in the government. The latter are still emerging as a separate form of ownership independent of state ownership and rely heavily on credibility of governments. Collective rights are particularly vulnerable to erosion of credibility. Meanwhile, collective land ownership promotes more equitable asset distribution and thus contributes to faster and more socially sustainable growth.

Thus, in the long run improved land taxation in properly implemented can foster credibility and promote the institutions of private and public property. Nevertheless, in the short run, land taxation reform itself carries the risk of wakening the credibility of government. Land value reform is known to arouse political tensions, even in more affluent economies. A margin of credibility has proved important even in course of Ontario's modernization of its land taxation system. Moreover, in China there is strong evidence that haphazard land management practices have eroded public trust as seen in the increase of grievances and protests.

Considering political and social tensions surrounding land in China, it is recommended that first, implementation of the land value taxation should be gradual, introducing land value taxation first and then moving to valuating buildings; second, that it runs parallel to a profound reform of local governance to boost government credibility; and third, that additional more flexible revenue bases (e.g. PIT or EIT) are desirable for local financing.¹⁸

 $^{^{18}\}mathrm{See}$ Bird (2000) and World Bank (2002) for a review of alternatives.

APPENDIX A

The rural land tenure system

Five modalities of tenure of agricultural land can be identified: responsibility land, ration land, private plots, contract land, and reclaimed land. Responsibility land tenure is — the most common type reported by 90 percent of villages and covering 80 percent of all farmland — is allocated to households by the village in exchange for a mandatory quota of agricultural output at below-market prices. Responsibility land is allocated based on the household size and the number of working age household members. It is subject to reallocation to other households by the village administration. Ration land is allocated to households on the basis of their size to ensure households' self-sufficient grain production; tenure of ration land is not subject to any fees or other obligations. Private plots are mainly parcels of land in farmers' backyards; households' tenure of these plots is practically secure in the long and short term and in some localities the private plots can be bequeathed to children; however farmers cannot transfer title to these plots to other households. Private plots are the second most common type of land tenure practiced in 54 percent of villages. Contract land is rented out to farmers by the villages for a monetary fee and may or may not be subject to a production quota. Reclaimed land is previously uncultivated land to which farmers can acquire use rights without incurring delivery quotas or fees (Rozelle et al., 2005).

In addition to land readjustments, crop selection and land use are strictly regimented — quotas are demanded to be paid in grain and cannot be substituted with cash and farmers are not allowed to grow cash crops despite the fact that they are more lucrative. All these measures serve to promote food security and self-sufficiency in agricultural production.

Decisions about land reallocation are made in most cases by the village heads, but 14.4 percent report that reallocation is decided at the township level. Reallocation decisions are made in a decentralized way by villages and townships, and despite a single nationwide policy about land allocation (30 year term on land tenure prior to reallocation), there is substantial variation across provinces, townships and villages. Slightly over 10 percent of villages reallocate land and reallocations involve approximately 1/2 of the village's land, affecting 2/3 of village households (Rozelle et al., 2005).

Legal Basis for the rural land tenure system

Collectivization¹ in the mid 1950s and de-collectivization since the late 1970s and 1980s which precipitated the introduction of the Household Re-

¹Despite initial institution of egalitarian individual ownership after the expropriation of land from the landlords and rich peasants in 1949, during the 1950s, China collectivized its agriculture following the example of the USSR.

sponsibility System (HRS) are central events which shaped China's current land tenure system. The 1982 Constitution established State ownership over the urban land, while the rural land was recognized as the property of the rural collective; thus dual system of land ownership was instituted.

The trend toward gradual de-collectivization continued during the eighties and nineties. The 1988 constitutional amendments asserted transferability of the land use rights and the 1998 amendments to the Land Administration Law extended the length of contracts for farmers to 30 years and provided for written registration of the land use contracts, thus giving farmers and important instruments of land dispute resolution.

The Rural Land Contracting Law (RLCL) adopted in August of 2002 further deepened the rights of individual farmers, stating that land rights include "rights to use, profit from, and transfer land contracting and operation rights, and the right of autonomy over production operations and disposition of products and the right to receive the corresponding compensation" for the land readjustments and expropriations. Specifically RLCL permits the following transactions: transfer to other village households, lease to non-village households, exchange, assignment and other transactions involving land which do not contradict the law. The RLCL does not provide guidance with regard to the right of inheritance of arable land, while it explicitly permits inheritance of forest land. Omission of the right to inherit arable land seeks to avoid disrupting the property structure of household land holdings (Gu, 2002)

The RLCL secured the right of farmers to 30-year contracts and prohibited land readjustments during this term and most importantly limited the right of the collective to reallocate the land to the instances when natural disasters severely damage the contracted land and some other special circumstances. The authority to define the range of "special circumstances" rests with the local governments; however, RLCL specifies that such decisions should win approval of the super-majority (two-thirds) of the village assembly or village representatives and receive clearance from the township government and the county agricultural administration. The Law also stipulates that farmers must be party to any transaction involving contracted land and explicitly prohibits attempts to "intercept or reduce" the proceeds from land transaction by local officials. Furthermore, RLCL validates contracts which contain prohibition of readjustment, except in those cases when readjustment is mandated by the law.

The RLCL modified the procedure for resolution of dispute related to land. The 1998 Land Management Law and Administrative Review Law

²Article 16.

³Article 27.

 $^{^4}$ Articles 34 and 35.

 $^{^5}$ Articles 27 and 55.

required that all disputes sought resolutions through the administrative reviews, and only passed to the people's court as a last resort. The RLCL gave farmers a choice of ways for pursuing dispute resolution, including consultation, deviation, arbitration and law suits in people's court⁶.

APPENDIX B

Land use rights, their marketability and contribution to tenure security

International experience suggests that private property rights to land are not necessary to create a market in land. Land use and land lease rights are divorced from ownership rights in Botswana, yet land leases are readily used in the real estate market and as collateral by financial institutions¹. The leasehold rights are fully marketable and their value has appreciated over time, making them increasingly attractive to the banks.

Collective ownership of land by land boards does not significantly interfere with transactions in land. Land boards certify leasehold rights of the loan applicants but their permission is not required to take out a mortgage. To be sure, land use rights in Botswana have evolved since 1968 — when the land boards were established — the functionality of the leasehold rights has been subjects to upgrades which allow land leases for residential lands and extended the leasehold right to individuals outside of the community.

In Vietnam, similarly, land ownership rights are not coextensive with land use rights; nevertheless, long-term land use rights provide adequate security of tenure. There is a moderately active market in land use rights with just over 15 percent of land leased out. Land sale and rental transfers tend to be informal to avoid official land administration fees. Vietnam's experience with land transfers also supports the claim that market renal transfer tend to lead to more efficient allocation of land: overall land-leasing households tend to be more efficient at farming.²

Three Central Asian countries — Uzbekistan, Turkmenistan, and Kyrgyzstan — also provide valuable insight into the relation between land use and land ownership rights. Bromley (2005) draws on the experience of these ex-social countries to argue that private property rights are not necessary for successful economic development or for operation of land markets. In Uzbekistan — by far the most successful in terms of per capita growth among the three — agriculture is dominated by collective farms which are able to pursue economies of scale in cotton production (mainly in irrigation) and remain effective agricultural producers. Private ownership of

 $^{^6}$ Articles 51 and 52.

¹Information on land policy in Botswana comes from Department of Lands of the Ministry of Lands, Housing and Environment (2002).

²Information on land tenure in Vietnam comes from EASRD (2004).

land is in fact prohibited to avoid speculation and concentration, but individual land use rights are recognized. In Turkmenistan, on the contrary, property rights well defined and land titles well documented, but land use and transfer are restricted. Kyrgyzstan also directly prohibits private land ownership, yet land market is developing, albeit slowly.

The bottom line is that it is possible to develop effective use rights without committing to private land ownership. Appropriately defined land use rights can promote tenure security and support market transactions such as rental transfer and land mortgage. Privatization of land in an ex-social country can prove too ambitious an undertaking involving substantial social costs which can threaten social cohesion if there is not enough political will in the government or among the popular masses as it has turned out to be the case in Russia.

APPENDIX C

Canada's and Russia's Experiences with Land Taxation Reform: Lessons for China

C.1. INTRODUCTION

Bearing in mind China's ongoing reform of land taxation, we look to the experience of Canada and the Russian Federation in reforming their systems of taxation. The two cases capture the wide range of challenges a reformer would face. Clearly, in the grand scheme of things, Canada's property taxation functions effectively in that it supports national and regional economic development, a reasonable level of equity and social cohesion. Examination of Ontario's transition to the uniform system of current value taxation in 1998 and its outcomes gives us a sense of the modern standards in property taxation, their advantages and disadvantages when their functioning is unencumbered by the institutional upheaval so typical of economies in transition. Here we look to Canada's experience with land taxation to identify "best practices." Russia's experience with (still ongoing) land taxation reform then highlights some of the pitfalls of implementing a modern system of taxation in the context of economic transition.

Notably, in the two cases (1) tax reform was associated with a recentralization of fiscal autonomy at the provincial level in Ontario and at the national level in Russia; (2) was introduced in an opportune political moment and has required a great deal of political will. While in Canada, the political costs of tax reform figure prominently, in Russia reforms are compounded by the economic and organizational cost of creating cadastres and developing the institution of cadastral assessment from scratch. Ontario's reform took place against the background of good overall budgetary perfor-

mance and good fiscal discipline among the municipalities, while Russia's tax reform have had to be mindful of the local governments' ability to collect taxes and to finance assessments.

C.2. REFORM OF PROPERTY TAXATION IN ONTARIO, **CANADA**

Land taxes¹ in Canada are levied by primarily by municipal governments, but some provincial governments levy property taxes as well. In municipalities, property taxes generate revenue for municipal services and for primary and secondary schooling (when levied by provincial governments). For instance, in 2006, 19 percent of the property tax revenue collected by the city of Kensington in Ontario was spent on education; correspondingly, 81 percent were expended on municipal needs. The main expenditure items in the municipal budget are police (16.9 %), social services (15.3%), fire and rescue (11.8%), road maintenance and construction (8.8%) and capital infrastructure investment (8.3%) (Kensington City Government, 2006).

Provincial governments regulate tax bases and rates in municipalities within their jurisdiction. Thus sub-national regulatory fiscal autonomy is exercised primarily at the provincial level. Municipal governments have the authority to vary tax burdens across different types of properties.

Property-related revenue accounts for a significant share of municipal budgets, around 53 percent across all provinces in 2000. Property taxation is central to the ability of the municipal governments to meet their expenditure responsibilities. In fact, the 5 percentage-point reduction in the share of intergovernmental grants between 1998 and 2000² was largely compensated by an almost equivalent increase in property taxes (Slack, 2002).

The tax base is defined as "real property," including land and improvements to it. In some instances machinery and equipment are considered improvements. Special treatment is extended to land with mineral deposits, oil and gas wells, as well as public utilities servicing several jurisdictions, pipelines and railways.

 $^{^{1}\}mathrm{I}$ discuss throughout this section Ontario's land (plus improvements) value taxation and do not mention land transfer taxes. Similarly to sales tax, land transfer taxes in Canada are collected at the time of purchase of a property. In Ontario and British Columbia the sales taxes are progressive, but use different formulas for calculating the tax. In British Columbia, land transfers for a sum below \$200,000 are taxed at 1 percent, while land sales in excess of \$200,000 are taxed at 2 percent. In Ontario, a 1.5 percent tax is imposed on land transfers under \$55,000, a 1 percent tax is charged on transfers between \$55,000 and \$250,000, while a 1.5 and 2 percent tax rates are applied, respectively, to land transfers \$250,000-\$400,000 and in excess of \$400,000 in

²Grants declined from 23 to 18 percent of total municipal revenue, while property tax revenue rose from 48.6 to 53.3 percent.

Land and properties are assessed at the market value; the value of farmland and managed forests is established for current land use. An effort is being made to link to the assessed value of the property to the actual conditions of the property market, while avoiding excessive fluctuations. In Ontario, for instance, in 2001 the assessed "current" value was estimated with a two-year-lag; in 2005 the lag was reduced to 1 year³; in 2006, however, the current assessed value is calculated as a rolling average for the previous three years.

Public hospitals and educational institutions, churches, charities, cemeteries and Indian land are exempted from taxes. Lands and properties occupied by government institutions (federal and provincial) are not subject to taxation, but pay fees at a discounted rate.

Different rates apply to residential and non-residential properties. Within non-residential properties several types are further distinguished, based on use.⁴ The province of Ontario, for instance, establishes separate rates for five types of non-residential properties: commercial, industrial, pipelines, farms, and managed forests.

To meet differential expenditure responsibilities, municipalities can vary tax rates by manipulating transition ratios. ⁵ However the autonomy of the municipal governments is limited — a municipality is free to increase transition ratios up or down for only within a given range, "the range of fairness." Yet when transition ratios exceed the upper bound of the range of fairness, municipal governments cannot further increase the transition ratio, but can only keep it at the existing level or decrease it, converging toward the range of fairness. ⁶ For instance, Ontario's 2006 transition ratio for industrial properties is 2.5, which is well beyond the range of fairness (0.6-1.1); consequently municipalities in Ontario can either maintain this ratio (2.5) in 2007 or decrease it (See Table 1).

In Ontario, the range of fairness for multi-residential properties is between 1.0 and 1.1, while for most non-residential property classes⁷, transition ratios were allowed to vary from 0.6 to 1.1 (Slack, 2002).

A favorable rate applies to farmland at 25 percent of the residential rate (transition ratio 0.25).

In Ontario, reduced rates apply to vacant commercial properties (35 percent below the rate of developed commercial properties), while vacant

³I.e. the market value as of June 30, 2004.

⁴Multi-residential properties are further distinguished.

⁵Transition ratios anchor the tax rate for each property class to the tax rate on residential properties (transition ratio is equal to 1 if it is equivalent to the residential property tax rate).

⁶Existing municipal rates for some property classes may exceed the range of fairness for historical reasons.

⁷The notable exceptions are professional sports facilities and pipelines, for which the ranges of transition ratio were, correspondingly, 0.001 to 1.1 and 0.6 to 0.7 (Slack, 2002).

 ${\bf TABLE~1.}$ Transition Ratios, Revenue-neutral by Class.

			2005	Revenue		2006
	Matched		General	Neutral	Revenue	Starting
	Year-end		Tax	2006	Neutral	Tax
Property Class	2005 CVA	2006 CVA	Rates	Rates	Ratios	Ratios
1. Residential	\$1,000,000	\$1,100,000	0.80%	0.73%	1	1
2. Multi-residential	\$500,000	\$550,000	1.00%	0.91%	1.247357	1.25
3. New multi-residential	\$0	\$0	0.00%	0.00%	0	0
4. Commercial (vacancy-adjusted total)	\$835,000	\$835,000	1.60%	1.60%	2.195349	2
5. Industrial (vacancy-adjusted total)	\$501,300	\$451,170	2.00%	2.22%	3.049096	2.5
6. Pipeline	\$10,000	\$10,200	0.60%	0.59%	0.807114	0.75
7. Farm	\$200,000	\$210,000	0.20%	0.18%	0.25	0.25
8. Managed Forest	\$100,000	\$110,000	0.20%	0.18%	0.25	0.25
Total	\$3,162,000	\$3,282,000				

Source: Government of Ontario (2006)

industrial land receives a 30 percent reduction. Agricultural land pending development is taxed at a reduced rate. The tax increases on such land are introduced in stages: when the land is registered for subdivision and when a building permit has been issued.

Tax relief takes a number of forms. Tax deferral schemes are available to the seniors, widowed or disabled, in which case a portion of the land tax is converted into a lien on the property payable when the title is transferred. Property tax credits are available to homeowners and renters. The amount property tax refund is calculated as a difference between the amount of property taxes and some fraction of the taxpayer's income, to the effect that higher income taxpayers receive smaller refunds. Grants to residential taxpayers are extended in Alberta, New Brunswick, Manitoba and British Columbia. The grants and/or subsidies are paid directly to the taxpayer to reduce the payable property taxes. Tax deferrals as well as grants/subsidies are administered by either provincial or municipal governments and are funded from the corresponding budgets; while property tax refunds are administered by provincial governments.

Billing and collection of property taxes are administered by municipal governments. Municipalities collect and remit to the learning board budgets education taxes of a quarterly basis.

Property assessment is coordinated at the provincial level. Provincial governments established independent assessment bodies, such as BC Assessment in British Columbia or the Municipal Property Assessment Corporation (MPAC) in Ontario. MPAC is a non-profit organization, its governing body, the Board of Directors, comprises taxpayers as well as mu-

nicipal and provincial representatives. Every municipality in Ontario holds membership in MPAC. The list of MPAC's responsibilities includes: assessment of value of properties, classification of properties, identification of tax-exempt properties, compilation of the annual assessment roll to be submitted to municipal governments, and processing of assessment appeals.

Consideration of assessment-related disputes by MPAC creates an alternative channel of dispute resolution. MPAC facilitates resolution of disputes related to assessments by providing property owners with a opportunity: (a) to review the assessment roll available at municipal offices; (b) to review the details for their own property and basic assessment roll information for as many as twelve properties using MPAC's Internet-based service; (c) to access a MPAC's Property Profile Report showing the assessment details for their property; and (d) to access comparable Property Reports from MPAC for six comparable properties selected by the owner and six comparables selected by MPAC. If consideration of the contested assessments by MPAC fails to lead to a resolution, the tax payer can take the case to the Assessment Review Board, a quasi-judicial body, or appeal the assessment through the court. One indication of the effectiveness of the arbitration process in Canadian provinces is the relatively low rate of arrears which was equivalent to 7 percent of total property taxes in 1999 in Ontario (Slack, 2002).

Eight years ago Ontario's property tax system underwent a reform which thought to correct a number of problems: (a) lack of uniform assessment methods across municipalities, since market value taxation was introduced on a voluntary basis, not all municipalities adopted it; (b) outdated assessment system —for instance properties in Toronto had last been assessed in 1953 based on 1940 values; (b) inequitable rates and property value assessment between and within municipalities, and between classes of properties; (c) high rate of appeals of inequitable assessments. In Toronto these distortions were politically motivated and designed to shift the tax burden away from the residential taxpayers at the expense of businesses; as a result Toronto's businesses received a substantial incentive to set up operations elsewhere.

In response to these challenges tax policy reform in Ontario undertook a number of steps. (1) A uniform system of assessment across municipalities was introduced. (2) The provincial government required municipalities to move to the single variable rate system which has been discussed above. Prior to the reform, provincial legislature mandated higher rate of taxation for non-residential properties.⁸ Prior to the reform, on average, non-residential property rate was nearly 18 percent above the residential

 $^{^8\}mathrm{On}$ average, non-residential property rate was nearly 18 percent above the residential rate.

rate; under the new system the difference could not exceed 10 percent. (3) The provincial government provided for tax deferral and gave provinces up to 8 years to phase in the new regulations. (4) The legislature prohibited subsidizing of tax increases for one class of property at the expense of other classes (most importantly, of course, subsidization of the residential class from the commercial or industrial classes).

Reforms led to the shifting of the tax burdens. Within the commercial property class, the relative burdens on small commercial properties increased by comparison with large office properties. To dampen the effect of this shift, the new tax legislature moved to introduce (1) optional property classes to allow for differential rates for subclasses of commercial properties; (2) optional caps on tax rate increases; (3) provisions that increases in total expenditure be financed from property taxes.

What are the consequences of this reform? Has the goal of equitable distribution of tax burdens been achieved? And more broadly, what lessons can we draw from Ontario's experience in land taxation?

- Within the international context, despite all the inadequacies discussed here and which prompted the reform, Ontario's land taxation has performed well in that it generated adequate revenue for the government to finance maintenance of local infrastructure and to support provincial spending on education.
- Also, despite the fact that land revenue is considered a rather static tax base which cannot support sudden increases in expenditure, Ontario's land taxes made up for the reduction of government transfers to the provincial budget fairly effectively.
- The results of the reforms have been mixed. Indeed, the reform promoted greater uniformity across provinces in assessment and the structure of property taxes. However, these reforms ran up against substantial political constraints primarily significant increases in the tax rates for certain property types and increased burden on residential tax payers due to reassessment of residential properties and limits on the increases of non-residential property classes. Political repercussions motivated introduction of caps which effectively led to new distortions in the distribution of tax burdens across property classes.
- Having said this, the practice of tying the tax rate on business property to the residential taxes in a given proportion seems like a politically savvy practice with a lot of potential to limit the tendency of the local government to over-tax businesses.
- Concerns with increasing assessed value of properties have led to freezing of the assessed value of non-residential properties at pre-reform (1997) level. Current value taxation is thus implemented fully only in the residential property class.

- The reform recentralized in the name of fairness to the provincial level the power to regulate taxes by limiting the ability of municipalities to manipulate the distribution of tax burdens between classes of properties.
- Current value assessment also introduced a greater degree of complexity in tax administration.
- Clearly the new system of assessment is largely trusted and has reduced the number of disputed assessments.
- What insights does Ontario's experience offer for other reformer? Slack (2006) seems to believe that the longer one waits to reform taxes, the greater the cost of the reform will be had Ontario introduced current value assessment in 1978 as did British Columbia, the cost of the reform would have likely been lower.
- This also implies that the initial period of reform is most costly politically, financially, and possibly socially.
- Confidence in the fairness of assessments is crucial to market value taxation and investments in "getting assessment right" will pay off.
- The political will of citizens is central to the success of the reform, especially in view of high political cost and when reforms concern such highly visible tax.

C.3. REFORM OF LAND TAXATION IN RUSSIA

Russia is undergoing a reform of its property taxation system. There has been a notable progress toward simplification and modernization of property taxation. Many changes have been introduced only recently and their effect is hard to judge, yet certain attributes of Russia's reform of the property taxation provide relevant insights for China's ongoing reform of land taxation.

Russia and China: Differences and similarities in government finance

The very fact that Russia is attempting to create a modern land and property taxation system in the midst of transition from command economy makes its experience relevant to China.

In Russia, expenditure assignments leave local governments responsible for social protection schemes, which should be financed by the federal governments to ensure proper redistribution (Martinez-Vasquez and Boex, 2001). Similarly, in China local governments are assigned a substantial role in provision of social protection. In both countries local governments face significant expenditure responsibilities and weak local revenue bases

and land taxation in both cases is seen as the way to boost local revenue capacity. 9

Central authority in Russia and China has experienced significant erosion since the beginning of market reforms. In Russia, asymmetric federalism of the early to mid 1990s was symptomatic of the weakness of the central government. On the one hand, asymmetric arrangements served to appease secessionist movements in the regions, but on the other hand, they weakened the federal government's fiscal capacity and contributed to the federal government's default on internal debt in the wake of the 1998 crisis (Martinez-Vasquez, 2002). In China local secessionist movements did not gain the same kind of momentum they did in Russia, but the inability of the central government to control local officials is symptomatic of the weakness of the central government. Notably, China and Russia both moved to recentralize their systems of government finance after the central and consolidated government revenues also declined substantially as a result of fiscal decentralization of the 1980s and early 1990s in China¹⁰ and in the early to mid nineties in Russia. In Russia, as in China, reform of land taxation is seen as a way of improving the effectiveness of the government apparatus.

The two countries face a related problem of the lack of accountability of local governments. And in Russia, as well as China, there is an expectation that the land and property tax reform must increase transparency of local governments' financing and their accountability (e.g. by eliminating the excessive reliance on extra-budgetary funds).

At a more operational level, like China, Russia has had to build its land taxation system from ground up — there was neither a cadastre of properties nor a capacity to perform cadastral assessment.

Unlike China's, Russia's reform of land and property taxation was initiated in unfavorable economic circumstances, including poor growth and economic instability, but with a renewed sense of urgency — after the default of 1998 — of transforming fiscal relations.

Land taxation prior to 2005

Prior to January 1, 2005¹¹, the Federal Law on Payment for Land provided the legal basis for land taxation. Land tax applied to land in ownership or use of legal entities and physical persons. Lessees of the state-owned land (federal, regional, or municipal) were subject to land lease fees.

⁹Excessive "earmarking" of central government transfers in Russia and federal limits on local revenues compounds the problem of insufficient revenue sources at the local level (Bird 2002).

¹⁰Tax Sharing System reform of 1994.

 $^{^{11}\}mathrm{That}$ is prior to the adoption of Federal Law N141-FZ from November 29, 2004.

Legislatures at the corresponding levels set the rates of land lease fees for different categories of lessees/owners and types of use. However, the federal government established the minimum and maximum caps on the tax rate, thus setting boundaries to local tax autonomy.

Different fee schedules were applied to agricultural and non-agricultural lands. The tax rate doubled if the land remained unused or if it was used for unintended purposes.

Tax rates on agricultural land vary according to the composition ¹² of land, its quality, area, and location. The Federal Law on Payment for Land set the average tax rates for each region, while the regional legislature established the minimum rate for agricultural land. A different rate applied to non-agricultural use of land by individuals in rural locations. It was a fixed rate calculated on the basis of the area of the plot. Local governments had the discretion to increase the fee by up to 100 percent for plots under non-agricultural use in certain locations.

Taxation rates for urban land were established by the federal Law on Payment for Land. The rates varied by economic zone — there are eleven of them in Russia — and ten categories of urban settlement size. These rates represent the average tax rates mandated by the federal government for a town of a certain size within a given economic zone; the local governments in turn had the discretion to apply differential rates for various subdivisions as long as they could meet the revenue quotas corresponding to the average rate. In calculating specific rates, local governments factored in location, distance from the center of the city or town, the level of economic development, environmental and geological characteristics. The tax autonomy of local governments consisted in the ability to distribute the tax level differently across subdivisions within their jurisdictions, while the overall tax rate for each jurisdiction was set by the central government.

Although land tax was classified as a local tax, its revenues were nevertheless shared between the three levels of government. Tax revenues from rural land in non-agricultural use went to local budgets. Fifty percent of revenues from urban land went to the local budgets, 20 to regional, and 30 to central. The federal share in revenue from agricultural land was set annually by the laws regarding the federal budget. The decision regarding the share of federal government was informed — at least in principle — by the administrative expenses of the federal government (management of land use, operation of the tax-collecting service, monitoring and protection). The regional governments' share in agricultural land revenue was determined by the regional legislature but could not exceed 10 percent.

 $^{^{12} \}mathrm{Different}$ rates are set for different soil types of ploughed land, plantations, pastures, etc.

Land taxation system established in the Federal Law on Payment for Land has a number of problems. (1) The tax rate structure was very complex, with rates varying on the basis of economic zones, types of ownership or lease, types of land use, settlement size, etc. (2) The revenue sharing arrangements were also too complex and allowed the federal government a substantial degree of discretion of the federal governments to determine its share in the revenue on a yearly basis, which introduced uncertainty into the budgetary process and gave the central government to expand at the expense of the lower tiers. (3) The federal government appropriated a sizable fraction of the land revenue, for instance, 30 percent or revenue from the urban land tax went to the central budget. (4) The level of taxes was tied to the land's physical attributes and did not correspond to its market value, leading to significant undervaluation of the land. (5) Although the Law granted a degree of tax autonomy to local governments, their discretion was narrowly circumscribed — they could not determine the overall level of taxes they levied in their jurisdictions, but could distributed the tax burden differently across subdivisions.

Reforms after 2005

Adoption of the Federal Law on the Payment for Land in 1992 marked the beginning of land privatization in Russia. In the absence of land markets, to enable transactions in and taxation of land, the law introduced normative land values which varied across regions. Between 1992 and 1998 approximately 129 million hectares of land had been privatized.

The land taxation based on nominal values was confounded by hyperinflation which characterized Russia's transition. Hyperinflation required radical and rapid adjustments of the tax values to maintain adequate levels of real revenue. In some cases — mostly in urban areas — adjustments were made on the basis of market values of land, although these markets were very rudimentary. Non-uniform value adjustments to land value led to sizable inequities in the distribution of taxation burden with similar properties assessed wildly differently in different jurisdictions. These inequities undermined the fiscal bases of many local governments and exacerbated substantial regional inequalities of sub-national revenues. The need for a land taxation reform became obvious, but politically challenging.

After the default of 1998, the Russian government has been gradually reforming the revenue system, including the land taxation laws. Chapter 31 of the Tax Code of Russian Federation¹⁴ replaced the Federal Law on Payment for Land.

¹³The same holds for the regional government, but to a lesser extent, since the federal government sets a ceiling on the regional government's discretion to determine its share of revenue.

 $^{^{14}\}mathrm{Federal}$ Law N141-FZ from November 29, 2004

The new Tax Code defines the land tax as a local tax in the sense that its revenues go to the municipal budgets. Local governments are also permitted to adjust the tax rate.

Between 1999 and 2006, the Russia's Land Cadastre Service, Rosned-vizhimost, prepared a cadastre of nearly all land using mass valuation methods and since January 1, 2006 cadastral value of land provides the basis for land taxation. 15

Mass valuation methods were based on sale comparison, income and cost approaches. The mass valuation of land has been difficult to implement in a uniform fashion (geographically and across types of land) due to lack of reliable land market data. On the one hand, only housing markets in urban centers are adequately active enough to generate adequate market value data; and even then sales represent a minority (approximately 6 percent) of property-related transactions. On the other hand, land registration data could not be used for assessment because the prices recorded during registration are underreported by the contracting parties to reduce transfer fees.

As an alternative to market value assessment, geo-referenced statistical models linked to cadastral maps are used to predict the value of urban land. Predictors of market land value include such factors as access to public utilities and services, transport infrastructure, as well as environmental factors. Fourteen types of urban land use — each associated with a certain value per square meter — are distinguished for each cadastral unit and the tax base could be calculated to reflect its current or best use.

Rural land is assessed on the basis of its income-generating capacity, since the agricultural land market is even less established than the urban market.¹⁷ A large number of plots occupied by infrastructure installations, roads, industrial sites, etc. are assessed on individual basis due to the lack of market reference points for their valuation. This introduces a substantial degree of subjectivity and opacity into their assessment.

According to articles 10 and 11 of the Law on the National Cadastre of Lands, provincial governments (subjects of the federation) carry the primary responsibility for conducting cadastral assessment of lands, while collection of additional information regarding the land remains the responsibility of local governments.

 $^{^{15}{\}rm The}$ current estimated value of land is assessed at RUR 23600 billion, approximately USD 790 billion (Mishustin, 2006).

¹⁶According to Mr. Overchuk, for areas where reasonably reliable market data are available, the correlation coefficients between predicted and actual market values are on the order of .6-.7 (Overchuk, 2004).

¹⁷While private ownership of land was allowed in 1992, the sale and purchase of land were permitted since 2002 only.

The Tax Code significantly simplifies the tax rate schedule. It sets the maximum rate of 0.3 percent of the cadastral value of land for agricultural land, residential land (including land under residential construction), and land under personal use as garden plots. For all other land, the maximum tax rate is 1.5 percent. However, regional governments can set their own rates within the federal limits. For instance, the city of Moscow set the rate on the residential land at 0.1 percent. The Tax Code (article 394) provides for the possibility of introduction of differentiated rates for different categories of land and land use¹⁸. In Kazan, for examples, the municipal government imposed taxes in the range between 0.1 and 0.4 percent of the cadastral value of land, depending on the category of land.¹⁹ Notably the Tax Code applies uniform rates to different categories of taxpayers. The tax rate is no longer doubled for unused land.

For land in joint shared ownership, the amount of tax is calculated based on the size of each share in terms of the land area. The tax on land in collective ownership is divided equally between the members of the collective.

It is expected that the new cadastral value-based land tax will increase the level of taxes for densely populated urban areas where the value of land is high, while the level of taxes in smaller settlements (less than 50 thousand) will decrease.

Other property taxes

In addition to the land tax, there two more taxes on property: individual property tax and enterprise property tax. Inheritance and gift tax was recently abolished beginning in January of 2005.²⁰ Its abolition received wide popular support and was passed in the Parliament by a vast majority of votes. The dissenting minority — mostly Communists — opposed the law because elites stood to gain the most from it (RIA Novosti, 2005). The wide-spread popular support for the abolition of the inheritance and gift tax, however, was founded on two key considerations: on the one hand, the assets of the elites were hidden in the off-shore accounts anyway and they had easy access to means to avoid the inheritance and gift tax. On the other hand, the burden of the IGT fell disproportionately on the low-income individuals who possessed assets as a result of privatization but

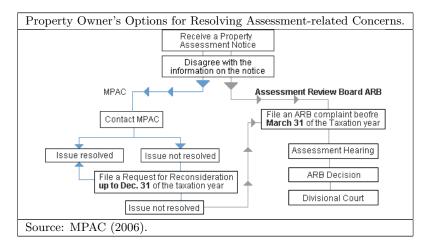
¹⁸The Land Code identifies several categories of land: (a) agricultural land, (b) land under settlements, (c) lands occupied by industrial, energy, telecommunications, defense, and security installations, (d) lands under special protection, (e) forest lands, (f) bodies of water, and (g) the land reserve (Article 7 of the Land Code).

¹⁹Municipal government set the rate for residential land under apartment buildings at 0.1 percent and 0.2 percent rate for residential land under individual housing or garden plots. The land occupied by commercial and industrial objects is taxed at 0.4 percent. The land under public facilities is taxed at 0.123 percent; the land tax for city electric transportation facilities is set at 0.1 percent (Interfax-Povolzh'e, 2005)

²⁰Only gifts between spouses and close relatives were exempted from tax.

who could not bequest or transfer their assets as gifts to their relatives because of high taxes and who could not afford to avoid the tax. Moreover, if the goal of IGT was to tap into transfer of assets by those who disproportionately profited from privatization, this tax base was incorrectly assigned to the municipal level of government. As a local tax, IGT could be more easily avoided by the local elites who were closely connected to the local officialdom than by the poor.

Although classified as regional, fifty percent of the revenue from the enterprise property tax is allocated to the local budgets at the point of collection.



Individual property tax and the enterprise property tax

Individually owned buildings and structures are subject to a tax rate of 0.1 to 2 percent of the inventory, the structure of the tax rates is progressive, with property under RUR 300,000 taxed at 0.1%, that in 300,000-500,000 range taxed at 0.3%, and property valued over 500,000 taxed at 0.3% to 2%. The tax rate on the property of legal entities (organizations) set by provincial governments, but not to exceed 2.2%. Individual property tax revenue goes to the local budgets and the enterprise property tax is allocated to provincial budgets (Federal Tax Service, 2005).

As with land taxes prior to the reform, there were substantial regional disparities in the levels of taxation explained by the fact that different municipalities applied their own indexes to categories of individual property to correct for inflation. Inflation adjustments have led to overvaluation of cer-

 $[\]overline{}^{21}$ The value of the inventory established either by the Bureau of Technical Inventory (BTI) or at the mandatory insurance value. For certain vehicles (excluding automobiles) engine power is use as the basis for taxation.

tain classes of property, raising their taxable value above the market price. These adjustments particularly affected valuation of housing. Collection of individual property taxes on housing which has not been registered during privatization has been problematic. Much valuable new real estate escapes taxation by remaining "unfinished" and thereby unregistered by BTI. In 1999, by Tax Ministry's estimates there were over 5 million uncompleted houses and apartments on which no taxes were assessed or paid. (Interfax Russian News 1999, August 17).

All taxes are collected by the local branches of the tax inspectorate, the federal tax service. The tax inspectorate then allocates exclusively local tax revenue to the local budgets, while federal and shared tax revenue is transferred to the local office of the federal treasury. The latter separates the shares of different levels of government and transfers the funds accordingly

The way forward

The reform of land taxation has proceeded in a gradual fashion through a series of steps on two fronts: technical and legislative. The sequencing of the reform is informative.

On the technical front, the property taxation reform required creation of a cadastre of properties, which in turn meant development of a new sphere of expertise in land assessment and evaluation. In 1999-2006, Rosnedvizhimost created the land cadastre from scratch. Over this period, over 3500 land assessors were trained and the market for land assessment services was legalized and the licensing of land assessors was introduced.

On the legislative front, as the land cadastre was being developed, the government (a) moved to rationalize assignment of the land tax, making it an exclusively local tax, thus making local revenue flow more predictable; (b) simplified the land tax rate structure; (c) applied uniform rate to all taxpayers; (d) reduced the number of property taxes by eliminating the inheritance and gift tax.

Further reforms on the technical side will involve continued investment into the training of the land assessors is required to support periodic re-assessment of properties; it is expected that reassessments will be conducted every 3 to 5 years. The Leningrad oblast government has recently requested a reevaluation of the land value since the market value of the land has increased threefold since the last cadastral assessment in 2000 (Kommersant, 2006). Clearly soaring real estate prices and construction boom in the capitals put additional pressure on the assessment agencies.

Creation of the land cadastre was conceived as the first stage in creating the technical foundation for the land reform. The next step - on the technical side - is creation of the cadastre of all buildings in addition to land.

Once the cadastre of land and buildings is created, it will be possible to further simplify property taxation by introducing a unified real estate tax, which will succeed the land tax, the individual property tax, and enterprise property tax. The intent to establish real estate taxation and the provisional nature of the current land tax is affirmed in Article 65 of the Land Code. At the moment, the implementation of the single real estate tax has been postponed until 2008-09 due to lack of adequate cadastres in some regions.²² The real estate tax will be classified as a regional tax but will be shared with local governments.

The real estate tax has been piloted in two cities — Tver and Novgorod. In Novgorod, a cadastre of all properties has been developed to enable their appraisal. The real estate tax was introduced gradually; at the first stage it covered only legal entities which own the land on which they are located, but at later stages the real estate tax will cover all the legal entities — those which own the land and those which lease.

The experience of many countries with land value taxation indicates that a parallel development of effective methods of dispute resolution is necessary because of a degree of subjectivity in value assessment. Currently land disputes are handled by the courts or arbitration courts. Aleksei Overchuk, the deputy chief of the Federal Real Estate Cadastre Agency, emphasized the need (a) to create organizational infrastructure to enable effective handling of appeals of cadastral assessments (the total number of tax-related disputes filed in courts grew 400 percent and in 2000-2005²³, and the trend in contested land taxes is likely to be similar), and (b) to educate the public about cadastral assessment.

Lessons for reformers

- The sequence of reforms was reasonable: first land cadastre was created and land value assessment carried out, followed by the creation of real estate cadastre. It is intended that a single real estate tax will replace the three property taxes currently collected.
- It took the Russian cadastral agency six years to implement cadastral assessment "from scratch." This gives Chinese reformers a reference point, although it is not clear how quickly cadastral assessment of land in China will take. Obviously its territory is smaller, but the number of landholdings is much larger. On the other hand, China's good economic performance is likely to generate resources human and financial for carrying out assessment.
- Implementation of land value taxation increased the revenue base of the local governments and boosted local revenue.

²²The lagging regions are Nizhny Novgorod, Sakhalin, Vologodsk, and Tula oblasti, as well as in the Republic of North Osetia-Alania and the Aginsky Buryat AO.

 $^{^{23}} Federal\ Tax\ Service,\ http://www.nalog.ru/document.php?id=22664\&topic=nal_statistik.$

- As in Ontario, inflation has significantly affected property values and resulted in "unreasonably" high tax amounts.
 - The rate schedule has been considerably substantially simplified.
- Because of the small size of land markets, it was impossible to base land value assessment on observed market rates. Mass valuation techniques have proved a viable substitute.
- Russia is facing a number of challenges: (a) complete real estate assessment, (b) continue building human capacity for assessment; (c) educate the public regarding ad valorem taxation, (d) improve dispute-resolution in relation to land taxation.

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