



Rural tax reform and the extractive capacity of local state in China [☆]

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ABSTRACT

China's fiscal arrangement in the 1980s has preserved local governments' incentive but the 1994 fiscal reform recentralized revenues. Since then, farmers' tax burdens have risen steeply and become a major challenge to the state legitimacy. How to account for the huge regional variation? Why were some localities able to tax more heavily than others? Based on a national survey of village governance in China, we examine farmers' burdens empirically and identify political and social factors that explain the local governments' ability to tax farmers. This paper suggests that developments since the 1990s have shown that it overstates local discretionary power and does not pay enough attention to societal forces in understanding local public finance.

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1. Introduction

Tax is the lifeblood of a modern state. Without sufficient revenues, the state cannot finance its basic functions and win popular support. Excessive taxation, however, dissipates regime legitimacy quickly and results in state failure (Cheibub, 1998; Levi, 1988). Oppressive taxation and peasants' uprisings have been common under the Chinese dynastic rule and many empires crumbled as a result of popular rebellions (Bernhardt, 1997). In the 1990s, excessive taxation reemerged in China's countryside. In addition to formal taxes, local governments charged exorbitant levies and fees on rural households. In some cases, farmers' financial burdens reached as high as 20–30% of their already low incomes (Chen, 2003). Many agricultural regions have developed a vicious cycle: to secure tax collection, local governments recruited more staff members; an enlarged local bureaucracy in turn required more revenues and collections (Chen, 2003; Yep, 2004). Excessive taxation and farmers' burdens have become a major source of grievance in China's vast rural areas. Farmers brought their complaints against their local governments to higher levels of the administration, including the central government, the court, and also the public media. In many incidences, frustration with these formal and bureaucratic channels pushed desperate farmers into direct confrontation with local authorities (Bernstein & Lu, 2000; O'Brien & Li, 2005). The central government, fearful of the damage to its legitimacy, responded with a series of tax reform policies starting in 2000. The first step, known

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as the “tax-for-fee” reform, converted some legitimate local fees into one unified agricultural tax. The new tax rate was raised but local governments were prohibited from levying new fees. In 2004, the central government took a bolder move and started to phase out the century-old agricultural tax on farmers. In the long sweep of Chinese history, this was a rare, if not unprecedented, instance of rescinding any obligation of the farmers to the state. Ultimately, the central leadership aimed to restore its political legitimacy and to reign in local state’s excessive extraction of farmers.

Like many policy changes in China, implementation can be a major challenge. Have farmers’ burdens fallen as a result? Did tax reforms achieve their intended targets? To answer these questions, we examine local state’s extractive capacity. Why is there a regional variation in extraction rate and how can some local governments extract more resources than others? In 2005, we conducted a national survey of rural governance with particular attention to the financial aspect of it. As a result, we have collected systemic data about farmers’ monetary burdens. The empirical test confirms some key hypotheses we have developed. Rural tax reforms initiated by the central government have indeed alleviated farmers’ overall financial burdens — on average, the burdens were cut by more than half — but the pattern becomes more complicated and also more fascinating when we break them down into two components. In accordance with the central directives, local state did scale down agricultural taxes (i.e. the first component) very significantly. The other component includes various informal extractions, such as irregular fundraisings and fines, which local governments were able to maintain as a source of revenue, despite efforts made by the central government to minimize them. Local governments’ extractive capacity in this area, however, was checked by two factors: the ability of farmers to resist and the development of informal organizations in villages.

This paper contributes to the literature on fiscal federalism. Some political economists argue that China’s rapid economic development can be explained by local governments’ pro-growth policies. China is a unitary state but it adopted a quite unique fiscal system in the 1980s. The central government signed contracts with local governments and specified a fixed amount or a fixed ratio of revenue submissions. Beyond that, local governments could keep the surplus and had full discretion in spending. This financial incentive encouraged local officials to promote economic growth in their jurisdictions and maximize their budgetary incomes. These scholars believe that China has become a *de facto* fiscal federalism (Blanchard & Shleifer, 2000; Oi, 1992; Montinola, Qian, & Weingast, 1995; Jin, Qian, & Weingast, 2005). Instead of sorting and matching emphasized in the traditional fiscal federalism theory, this new analysis brings economic growth to the front and expands the scope of the theory.

Our discussion of farmers’ burdens shows that local governments have acquired some autonomy and a delicate bargaining characterizes the central–local relations. But the fiscal federalism argument may have overstated local discretion in China. In the 1980s, the central government respected local discretion most of the time but things started to change in the 1990s. As a result of fiscal contracting, the central share in government revenues dropped. This resulted in the fiscal recentralization in 1994 which gave the central government a larger share in total revenues, including 75% of VAT. Enterprise income tax and personal income tax were initially assigned to local governments. When they grew unexpectedly fast in the following years, the central government forced local governments to give up half of them in 2002. In the meantime, the central government unloaded a lot of spending responsibilities onto local governments. To finance these unfunded mandates, local governments had to exact levies from farmers in the countryside. The rise of farmers’ burdens demonstrates the lack of discretionary power (both revenues and expenditures) on the part of local governments. As will be elaborated toward the end of the paper, our research does not support the other extreme of an omnipotent center either. To ensure efficient provision of local public goods, the central government has left certain bargaining room in a highly centralized state.

The fiscal federalism argument has also understudied a major source of constraint local governments must face in revenue collections. Rules regulating central–local fiscal relations undoubtedly affect local governments’ ability of revenue maximization. After the reform, the Chinese society has regained some vitality and started to constrain the hands of the state. In studying rural taxation, we found that local governments’ extractive capacity depended on the extent to which local society collaborated with local authorities. In localities where the mass and cadres have developed high tensions, local officials had trouble mobilizing revenues. On the other hand, in places where self-governing organizations have developed a capacity for public service provision, local governments were relieved of certain financial burdens. These findings provide a more nuanced picture of state–society relationship in China and enrich the single-dimensioned (i.e. intergovernmental) focus in fiscal federalism (Hansen, 2008; Tsai, 2007).

The rest of the paper proceeds as follows. The next section analyzes the governance structure in rural taxation and explains the rise of farmers’ burdens, especially after the fiscal recentralization in 1994. Section 3 develops three institutional hypotheses to explain local governments’ extractive capacity. The data from our national survey and empirically tests are discussed next. The conclusion addresses some implications of this study for rural financial challenges and the overall rural governance.

2. Fiscal recentralization and the rise of farmers’ burdens

Rural taxation has played a crucial role in the construction of the new China (Lin, 1992). The state relied on three taxation tools to extract resources from farmers. The agricultural tax was a tax in kind and the rate was about 10% of grain output in China’s first five-year-plan period (1953–1957) but dropped to 5% in the 1960s and 1970s (Yan et al., 1988). The second taxation tool of “price scissors” was implicit but quite powerful. Farmers were mandated to sell their grain products to the state at below-the-market prices. According to one estimate, this implicit taxation amounted to as high as 280 billion Yuan between 1953 and 1978, i.e. about 17% of the total agricultural outputs. This figure was in fact much higher than the extraction from formal agricultural tax (89.8 billion Yuan) (Cui, 2002). These two sources of taxation were mostly controlled by the central state. Communes and production brigades relied largely on the final tool and levied a collective accumulation fund, a welfare fund, and a cadres’ compensation fund. Heavy taxation in the rural areas was made feasible through the coercive grain procurement system. All rural collectives must sell their grains to the state at low prices. As a tax in kind, the agricultural tax was automatically deducted before the collectives could receive their payments, and

then communes and production brigades withheld the accumulation, welfare, and compensation funds. Only afterward could farmers receive their share of grain and cash based on their work-points (Lin, 1992). The mandatory procurement system and collectivization lowered the administrative costs of taxation and minimized social resistance.

The central leaders adjusted the taxation system to facilitate the larger goal of economic development in the early 1980s. A quota and revenue sharing system was introduced in inter-governmental fiscal relations (Oi, 1992; Montinola et al., 1995). Quotas were negotiated beforehand by respective governments and revenues beyond these quotas were subjected to sharing. This allowed local governments to acquire their own revenues in the extra-budgetary accounts, over which local governments enjoyed more autonomy. The central state might have rationally turned a blind eye to these incomes to give local governments extra incentive for economic growth. Township governments were authorized to collect five pooling funds (Wu Tong) for local services such as education, militia training, road construction and maintenance, welfare for veterans, and birth control. Villages were authorized to collect three deductions (San Ti) for collective capital accumulation, welfare funds, and cadres' salaries. These extractions were classified as extra-budgetary.

Despite this fiscal incentive, rampant fees did not get out of control until the mid-1990s. The mandatory grain procurement system was terminated in the early 1990s. As local cadres lost a convenient revenue collection tool, they had to collect taxes and fees directly from individual households, which usually required more personnel and resources. Direct taxation revealed the true coercive nature and contributed to the public perception of over-taxation of peasants. The 1980s was also a golden era for Township and Village Enterprises (TVEs). Submitted profits from TVEs had become a major source of township governments' extra-budgetary revenues and provided some cushion for farmers. When the Chinese market became internationalized in the early 1990s, many TVEs went bankrupt or were simply privatized (Naughton, 2007).

Finally and most important, the central government recentralized fiscal revenues in 1994 (Wong, 1997; Wong & Bird, 2008). The bargaining regime in the 1980s involved too many negotiations and renegotiations and there was no legal guarantee for these bargaining results either. Anticipating central change of heart, local governments diverted revenues from budgetary to extra-budgetary. As a result, centrally controlled government revenues dropped in the 1980s and local revenues rose steadily. In 1994, the central government introduced a separate-tax reform to grab a larger share of the fiscal pie at the expense of the local governments. For example, the central share of government budgetary revenues dropped from about 40% in the mid-1980s to only 22% in 1993. The separate-tax reform raised that share to 55.7% the next year and to about 50% since then (World Bank, 2002). The central government did use the centralized resources to reward or punish local governments through fiscal transfers. Up until early 2000s, however, central transfers were relatively small and favored relatively well-off areas. Poor agricultural areas in the central and western regions faced harsh financial conditions (Zhou, 2006). Intensified cadre evaluation in the 1990s further exacerbated local public finance. The central leadership set up specific policy goals, such as school enrollment rate, telephone coverage, running water, road connection, etc. Local officials must fulfill their targets; otherwise the leading cadres would be punished or removed. Local governments must tap into their own revenues to finance many such tasks (Yep, 2004).

Local governments in general felt the financial pressure but agricultural regions were particularly hard hit. To make their ends meet, local governments fabricated all sorts of excuses to raise extra funds from farmers, such as fees and levies for school renovations, environmental protection, cooperative health service, irrigation, etc. In some areas, rural households had to pay for more than a hundred such fees! Being extra-budgetary, these revenues were not subject to sharing with higher level governments. Financial rules regarding these collections were generally weak and local officials enjoyed a lot of discretion. Local officials used the money to finance some centrally mandated tasks, but it was also a hotbed for corruption because neither the central government nor the farmers could hold local officials accountable. Many farmers did fight back and in some cases the resistance escalated into violent clashes involving police, local cadres, and the masses, seriously undermining social stability and the Party's legitimacy in the countryside (Chen, 2003; Thornton, 2004).

3. Explaining local taxation on farmers: three hypotheses

Local governments faced a challenging environment in the second half of the 1990s. The center became more fiscally and administratively demanding. Local governments must perform and meet central expectations. More aggressive taxation, however, was met with a rural society that was less inclined to be controlled. The next three sections develop some specific hypotheses to explain regional variations in taxation.

3.1. Central mandates and tax reforms

In the late 1990s, the central leaders realized the explosive condition in the countryside and decided to restore stability by enacting a series of policies, known as the rural tax reform. In March 2000, the Party issued the "Circular on Implementing Pilot Project of Rural Taxation Reform." Like many previous major breakthroughs in rural policy changes, Anhui was chosen as the pilot province and a few counties and cities in other provinces were also included. The next year, Jiangsu became the second province to experiment with this reform. In 2002, twenty provinces joined and selected some localities for experimentation.

At this stage, the policy objectives were not ambitious. As Table 1 shows, the central state tried to regularize farmers' tax burdens and control the excess. Five pooling funds (Wu Tong), three levies (San Ti), and compulsory labor had existed for decades and become a crucial component of local public finance. The real problem lay in the rules regulating these funds. Classifying these collections as extra-budgetary allowed local officials to operate under the radar screen. The tax-for-fee reform incorporated them into the formal budget and made their management more transparency. Local governments were asked to stop collecting these three types of funds. To make up for the shortfalls, the agricultural tax rate was raised from 5% to 7%, plus a 20% surcharge. These tax revenues

Table 1
Rural tax reform in China, 2000.

Tax burdens by farmers before the reform	Tax burdens by farmers since the reform	
	Phase I: 2000–2004 Tax-for-fee	Phase II: 2004 AT termination
Agricultural tax (AT) (5%)	7%	0
Five pooling funds	Termination	0
Three levies	Supplement (20% of AT)	0
Compulsory labor	Termination	0
Fees and fundraisings	Termination	0
Administrative fees	No “unreasonable” fees	No “unreasonable” fees

Note: 1. These are policy objectives not reality.

2. Yishi Yiyi funds are not included in this table.

must follow general budgetary rules (State Council, 2000, 2002, 2003). All other fees and levies were labeled as “unauthorized” or “illicit” and were to be eradicated. As a service charge, administrative fees (vehicle fee, marriage license fee, etc.) have legitimate reasons to exist. Governments at all levels have authorized these charges therefore, strictly speaking, they are all legal. For instance, the Ministry of Finance authorizes local governments to charge trading companies an import/export permit fee of 20 Yuan and a loading permit fee of 10 Yuan. Jiangsu provincial government requires each employee to pay 2 Yuan for each employment contract signed with his/her employer. The Provincial Finance Department also charges users of the city water supply system an evaluation fee of 100–600 Yuan per project. Zhenjiang city in Jiangsu province mandates a garbage disposal fee of 3 Yuan/employee/month on local companies.¹ These hundreds of administrative fees and charges enable local governments to hire people and provide services.

In reality, local officials have utilized the legitimacy for revenue collection. For example, instead of 5 Yuan, local civil affairs bureaus might charge married couples a license fee of 15 Yuan. Farmers did not really have enough information about the stipulated fees. In recent years, the center required all agencies to publicize the charge schedules. This “sunshine project” could potentially improve the accountability and prevent local add-ons. Some agencies found excuses not to publicize relevant information or post them in places not readily accessible. Therefore, local officials still had plenty of room to ratchet up extractions. As a result, administrative fees have evolved into a convenient collection vehicle for local cadres. The central government did not terminate these fees immediately but warned against any “unreasonable” charges. The difficulty of defining a “reasonable” charge, however, blurred the line between illegal fees and reasonable administrative fees.

In 2004, the center decided to completely terminate agricultural tax on farmers. Peasant discontent and riots had alarmed the central leaders. More importantly, because of the rapid economic growth, the central budgets had expanded at a fast pace so that the center was confident of affording subsidies to most local governments that had budgetary shortfalls. Like the tax-for-fee reform before, a gradualist approach was adopted. Two northeastern provinces of Heilongjiang and Jilin were asked to exempt agricultural tax in 2004. The same year, eleven other provinces where agriculture was still a large part of their economies had to cut their agricultural tax rate by three percentage points and the rest of the country by one percentage point. The goal was to terminate this tax in five years (State Council, 2004; Sun, 2004).

Because of the center’s strong commitment to alleviating farmers’ burdens, these rural tax reforms should curb local governments’ ability to tax farmers. We expect farmers’ overall burdens to drop after the introduction of tax reforms, especially after 2004 and the reduction is regionally uneven as different provinces implemented different tax reform policies. Chinese political economists have debated the ability of the center to control its local governments (Chang, 2001; Goodman, 1995; Huang, 1996; Naughton & Yang, 2004). Our hypothesis presumes a still capable central government. As discussed earlier, onerous financial burdens on farmers and the rural budgetary crisis were largely a result of the center’s effort to recentralize revenues and unload unfunded mandates. We believe that decentralization has also altered the power balance in intergovernmental relations and the center must negotiate with local governments for policy implementation. In fact, the central government had only regularized parts of local taxation (bold items in Table 1). With clear reduction goals, local governments should react to this part more promptly.

The center also targeted irregular fundraisings and unreasonable fees, but its effectiveness might be compromised because of the inability of the central government to verify information. In the case of administrative fees, the central government did not even order a total termination and still left room for local manipulation. This soft approach might reflect the central government’s strategy to “buy” local officials’ consent to carry out the agricultural tax reform. At a deeper level, it revealed a fundamental dilemma on the part of the central government. For local governments, these administrative fees helped pay for public services in their jurisdictions, such as education, health, product safety, vehicle regulation, etc. Eliminating them would seriously impair the governments’ ability to perform these basic functions. Even if the central government can, in theory, centralize all revenues and provide services directly to all people in the country, tremendous regional heterogeneity renders it extremely inefficient. The center simply does not know what kind of services and how much each locality needs. To elicit local information and expertise, the central leaders allow for certain discretion so local officials can manage their own budgets. As discussed above, the ambiguity about the reasonableness of various fees undermined the central effort to rein in rampant irregular fees.

¹ A full list is available: <http://wj.zhenjiang.gov.cn/zjwj/jiafeichaxun/xingzhengshoufei.asp>.

Hypotheses A.

A1. Farmers' burdens should drop after the introduction of rural tax reforms.

A2. The more regularized part of farmers' burdens should experience faster decline than irregular fees and extractions.

3.2. Mass-cadre tension in local societies

In addition to central orders, local governments must also deal with challenges from the society. One of these challenges was a more assertive peasantry. As the liberalization continued in the 1990s, grain market started to replace the state procurement system. For many decades, the latter system had enabled local officials to withhold taxes and fees from peasants with relative ease. In a market economy, farmers regained control over grain productions and sales. Instead of selling their grains to the state granary bureaucracies, farmers had the option to bring their products to the market directly. Cadres had to collect taxes and fees from individual farming families, usually in cash payments. In Chinese villages, this state–society relationship can be examined through the mass-cadre tension.

Mass-cadre tension varied quite a lot in rural governance. In places where village cadres have cultivated a cordial relationship with villagers, the latter would cooperate and help the cadres to fulfill their tasks. On the other hand, mass-cadre tension brewed noncooperation and compromised the cadres' ability to extract resources. Noncooperation could take a more confrontational form, such as violent clashes with tax collectors, suing local officials in courts, and petitioning higher level governments (Bernstein & Lü, 2003; O'Brien & Li, 2006). While it was a relatively common scene in the second half of 1990s, various government policies in the early 2000s contained some most egregious forms of over-taxation, especially fees without clear central or local authorizations.

Violent confrontations over rural taxation still existed in the early 2000s but, throughout our fieldwork, a more passive form of tax resistance prevailed. In many places we visited, peasants simply walked away or locked their doors when tax collectors and village cadres came. Farmers were not only resisting unreasonable taxations and levies (therefore rightfully) but also boycotting perfectly legal taxes and administrative fees with legitimate authorizations. Since most taxes and fees were legal therefore their collections were mandatory for local cadres, failure to fulfill the targets would be a major embarrassment for them. Under a highly authoritarian system, farmers used this noncooperation strategically to voice their disagreement with leaders without basic accountability to them.

Our fieldwork reveals two major factors that have affected mass-cadre tension in village politics. First, formal politics tends to be embedded in dense informal personal networks (Levitsky & Helmke, 2004; Shih, 2004). In Chinese rural politics, villages are supposed to be self-governing organizations and not part of the formal state. In reality, village cadres have been assimilated into local state apparatuses and have a high chance of being promoted to township governments. Despite the extension of village committee elections nationwide in the late 1990s, township governments still largely determine the fate of village cadres, especially village party secretaries. Cadres with more personal ties above have more political capital in formal politics. Politically secure cadres can afford violating rules and ignoring local demands, i.e. not being accountable to villagers. In such villages, the mass-cadre tension tends to be high and tax resistance widespread.

In 2007, we visited Beifu village in Jiangsu Province and it offers a good example for illustration. Beifu was only one out of 62 villages in Diaoyu Town but boasted four village natives in the Diaoyu town leadership group (19 members in total) between 2000 and 2004, including two deputy party secretaries. There were three more natives heading town public security, family planning, and economic management offices. We were informed that this village had in fact dominated local politics for many years. Through dense networks, many village natives were promoted to the town government and beyond. This political protection brewed a tense relationship between cadres and villagers in Beifu village. By 2004, close to 90% of farming households did not pay their agricultural taxes and the total uncollected tax amounted to 280,000 yuan.² On the other hand, Chunjing village in the same town had no natives in the town government. Its mass and cadres had maintained a cooperative spirit and no tax arrears were accrued during the same period.

The second factor has to do with the presence of veterans. These veterans include people who have fought in the three major wars under CCP, including the anti-Japanese war, the liberation war, and the Korean War. These veterans can moderate mass-cadre tension through their influence in village lives (Chan, Madsen, & Unger, 1984; Friedman, Pickowicz, & Selden, 2007; Thaxton, 2008). These people have more loyalty toward the government, and through their prestigious positions, their political views can steer villagers toward closer identification with the regime, thereby providing local state with more legitimacy. As part of their rewards, these veterans also enjoy certain material benefits, such as food subsidies, monthly allowance, and health care, which provide villagers with evidence of state responsibility. On the other hand, veterans generally have informal ties with high ranking officials, usually through their military careers and civil affairs departments. This ability to bypass grassroots organizations acts as deterrence to abusive village cadres.

In short, mass-cadre tension offers an important angle to analyze local state's ability to extract resources from farmers. Highly contentious relations induce widespread tax resistance, mostly in the form of non-cooperative avoidance. Farmers' perception of

² Since taxes and fees were mandatory tasks for village cadres, the latter had to borrow money to submit revenues to higher level government. Without sufficient revenues, village cadres had to borrow more money to meet the matching fund requirement for subsidies from above. In the end, the total debt in Beifu was about 800,000 yuan.

legitimacy should also play a role. Extractions with central permissions followed more rules and were generally regarded as more legitimate. Fees beyond the central permission, on the other hand, usually carried less legitimacy. In order to collect taxes from each household, local governments had hired extra hands, which were financed by illicit fees, which further undermined the legitimacy of their collections.

Hypotheses B.

B1. Higher mass-cadre tension induces farmers' resistance and inhibits local state's ability to extract revenues from the villagers.

B2. Compared to more regularized portion of the burdens, farmers' resistance to irregular fees should be stronger and more effective.

3.3. Villagers' self-governing organizations

Villagers' organizations constitute the other major component of the rural society. After the state retreated in the 1980s, the rural society gradually regained its vitality. Many villagers' organizations started to populate the social space (Shue, 1994). There is a growing literature on rural organizations and scholars disagree on the impact of villagers' organizations on local governance. Some analysts follow the western tradition and believe that non-government organizations are anti-state by nature. These NGOs strengthen the society's ability to monitor or challenge the state by providing organizational resources and overcoming collective action problems (Putnam, 1994; Roy, 2008; Tandon & Mohanty, 2003). In the words of Perry (2002), Chinese villagers have been "challenging the Mandate of Heaven". A number of studies examine why and how Chinese villagers have resorted to 'mobilized,' rather than 'institutionalized,' modes of political participation, to protect themselves from a 'predatory' local state (Bernstein & Lü, 2003; Cai, 2008; Guo, 2001; O'Brien & Li, 2006). The other camp believes that local state has coopted villagers' organizations in the countryside and coerced them to facilitate the goals set by local officials (Hansen, 2008; Oi, 1999; White, Jude, & Shang, 1996). Instead of the dichotomy of direct confrontation or total submission, the third group claims that villagers' organizations have actually negotiated a healthy space for influencing rural politics. On the one hand, they collaborate with local officials so that government targets are fulfilled. On the other, because of their capacity in mobilizing resources as well as high respect among the villagers, these organizations maintain certain degree of independence and can shape local governments' agenda (Pesqué-Cela, Tao, Liu, & Sun, 2009; Tostensen, Tvedten, & Vaa, 2001).

Some informal organizations, such as family planning training groups and dispute arbitration associations, were largely incorporated into local state apparatuses, performing various functions for the state. Some more autonomous ones were based on voluntarism and have managed to establish their presence, including lineage groups, religious groups, the Village Elders Associations, and Wedding and Funeral Councils. We define these groups as villagers' organizations and analyze their impacts.³ We identified 552 village social organizations altogether in our sample and 8.2% were Wedding and Funeral Associations, 16.7% Village Elders Associations, 18.1% religious organizations. Overall, about 43% of all village organizations can be regarded as more or less self-governing and autonomous.

These self-governing organizations can influence rural public finance, farmers' burdens in particular, mainly because of their ability to mobilize resources and complement the party-state at the village level. Their relative autonomy, transparency, and extensive network beyond village boundaries earn them respect among rural residents. Village cadres actively seek these organizations' support and collaboration in managing village affairs, especially in issues related to public goods, such as roads, water, etc.

Take Liyuan village of Fujian province in our sample as an example. The village has 328 households and its Village Elders Association (VEA) was established in 1985 by a villager working in Fuzhou as a construction worker, Chen Wangti. Its original purpose was to help arrange funerals for all villagers who were 50 years or older, i.e. a mutual aid group. Starting in 1996, however, VEA got more actively involved in managing village affairs, such as building theatre, temple, road, and connecting sewage and drinking water. In 2004, VEA initiated the project of building a cement road and mobilized its members for funding. Before long, it collected more than 500,000 Yuan in contribution, an amount larger than the actual cost of the project. VEA's effective resource mobilization derived from the prestige it enjoyed among the villagers. In terms of organizational building, the VEA governing body consisted of seven members. Each of the seven families (Lin and Huang being the two largest families) in the village recommended one elder from their families and ran the daily operations of VEA. These highly respected elders have won VEA the trust among village residents. Their credibility was further enhanced by its handling of financial matters. Because of the implicit checks and balances in its governance, VEA handled all financial matters in relatively open fashions. Villagers knew how their money was spent therefore were willing to contribute to the cause. Finally, through relatives living in the village, VEA reached fellow family members thousands of miles away in cities or abroad and solicited their financial contributions. Interestingly, VEA, being non-governmental, had actually broader mobilization network than village committees and party organizations. Seeing VEA's ability to mobilize resources without damaging social support, village

³ We use the following criteria to select village organizations that are regarded as more autonomous. 1. They are not initiated by the local party-state; 2. local party or government officials do not participate in their decision-making processes; 3. their leading members do not concurrently hold posts in the local party and state apparatus. During our fieldwork we found that a large number of self-governing social organizations did seek nominal initiation by government agents for political security reasons ('wearing red hat'), and we regarded these as self-governing social organizations if the above conditions (2) and (3) are met. In most regions, Wedding and Funeral Council, Village Elders Association, and religious organizations are commonly among this list.

cadres collaborated with VEA more frequently in other public services and respected VEA as another authority in co-governing village affairs. At the time of our visit, they were planning to revive an old tradition of communal dining during the winter festival.

In short, self-governing organizations relieved local officials of the financial need to raise revenues from farmers directly. As discussed earlier, there is another possible causal mechanism linking self-governing organizations and farmers' burdens. Civil associations are generally believed to enhance a community's social capital and increase its ability of generating collective actions. Self-governing organizations have indeed provided such agency in China's countryside. For example, in Liyuan village, the VEA has helped organize a few petitions over garbage pollution (2000), noise from stone mining (2000), and blockage of its water supply (2006). But it did not take any lead in rural taxation issues. We observed similar patterns in other parts of the country. As discussed earlier, organized tax resistance still existed but the dominant form was passive noncooperation in the 2000s. Even if these organizations may have helped coordinating non-cooperative form of resistance, our tax resistance variable should have controlled for that effect. Our self-governing organization variable affects farmers' burdens mostly through the substitution mechanism. We expect that local cadres in areas with dense and active village self-governing organizations need not to tax too much on their own. This type of substitution effect should be more prominent in irregular fees than in the formal state agricultural taxes.⁴

Hypotheses C.

C1. Denser self-governing village organizations reduce local state's need to raise revenues from villages directly.

C2. The substitution effect should be more prominent in the collection of irregular fees.

4. Empirical evidence and discussions

We conducted a large national survey in 2005 to test these hypotheses. We first divided the country into six large regions and randomly picked one province in each: Shaanxi (Northwest), Sichuan (Southwest), Hebei (North), Jilin (Northeast), Jiangsu (East), and Fujian (Southeast). All counties in each province were ranked and categorized into five quintiles in order of their per capita gross value of industrial output. In each quintile one county was randomly selected. Two townships in each county and two villages in each township were chosen respectively on a random basis. We surveyed 20 rural households in each village. Due to natural disasters and miscommunications, our survey teams could not reach some target villages. As a result, our data covered 1928 villagers in 116 villages, from 29 counties. We had detailed information about farmers' tax burdens and village level economic and social indicators. The above information was collected for both 2000 and 2004. Since the center introduced the tax reform policy between these two years, our data allow us to evaluate the policy impacts in the countryside.

As Table 1 shows, farmers' tax burdens can be broken down to two groups. The first group consists of agricultural tax, five pooling funds, three levies, and compulsory labor, and has been incorporated into the budgetary control and targeted for reduction and gradual termination. By doing so, the central government also provided a seal of approval. The second group of extractions, including various fees, fundraisings, and inflated administrative fees, were deemed as irregular and illegal. To simplify presentation and analysis, we label them "taxation with central permission" and "taxation beyond central permission" respectively in this paper.

4.1. Farmers' burdens at a glance

Table 2 reports farmers' tax burdens in 2000 and 2004. The value of compulsory labor is calculated by multiplying a farmer's required working days by the daily compensation for such labor defined by the state. The product is the cash value a farmer needs to pay if he or she chooses not to contribute his or her labor. In most areas it was set at 6 Yuan per labor and day in 2000 and 10 Yuan per labor and day in 2004. In practice, many farmers in rich areas chose to pay cash instead of compulsory labor since their opportunity costs are higher. After the rural tax reform, local governments should, in principle, not levy illegal fees on farmers. The only exception was made to public projects which won direct approval from farmers in communal discussion (or "yishi yiyi" in Chinese). However, local governments in some regions still charged farmers by way of various fund-raisings and administrative fees (Xiang, 2003).⁵ For example, in some locations farmers needed to pay an extra soil and sand use fee (for housing construction), a water conservancy and use fee, land administrative fees in order to obtain permits for building residential houses. In Table 2, these illegitimate charges and fees are put together under taxation beyond central permission. Table 2 also presents these taxes and fees as a share of farmers' incomes (i.e. tax rate). Due to the difficulties in collecting information of individual household income, our income data are the village average income. Given that our sampling of households in a village is random, the tax rate here can be interpreted as the average tax burden per capita divided by corresponding average income per capita.

⁴ It may be argued that fund-raising by non-independent farmers' organizations constitutes another form of state extraction from villagers. Our independent variable is participation rates in self-governing farmers' organizations, thus this should not affect our analysis. Moreover, our fieldwork in the sample provinces indicates that fundraising by these self-governing organizations is invariably on a voluntary basis.

⁵ Before the tax reform, in many agriculture-based regions taxation under central legislation was the major revenue basis for the local state such as the village community organizations, township and county level governments. However, the rural tax reform significantly reduced local state revenue while at the same time there was a lack of upper level transfers to compensate such revenue shortfall. Some even claim that there would be "the death of townships" in many agricultural regions due to lack of local revenue after the rural tax reform. Apparently, township heads have an interest in maintaining a system that allows them to offer employment and associated benefits to people who have supported the party-state in the past. Under such a circumstance, local governments have incentives to levy "taxation beyond central legislation" to compensate the revenue shortfalls from the rural tax reform.

Table 2

Per capita tax burdens before and after the rural tax reform.

Data source: authors' 2005 survey.

	Per capita tax			Tax structure			Tax rate		
	2000	2004	Changes	2000	2004	change	2000	2004	Change
	Yuan		%	%		%	%		%
Total tax burdens	145	67	−54	100	100		6.9	2.5	−64
Taxation with central permission	103	27	−73	71	41	−30	4.9	1.0	−79
Agricultural tax and supplement	63	17	−73	61	63	2			
Township and village levies	32	4	−86	31	16	−15			
Compulsory labor	8	6	−30	8	21	13			
Taxation beyond central permission	42	39	−7	29	59	30	2.0	1.5	−27
Various fundraising	15	15	−2	36	38	2			
Administrative fees	27	24	−9	64	62	−2			

Note: 1. Tax rates are calculated by dividing the farmers' tax burdens per capita by farmers' incomes per capita.

2. Provincial CPIs from 2000 to 2004 are used to control for price changes.

Farmers' tax burdens fell significantly from 2000 to 2004 after the introduction of the rural tax reform. For all the farmers surveyed, total tax burdens per capita dropped by more than half from 145 Yuan in 2000 to 67 Yuan in 2004. The reduction was almost fully attributable to changes in taxation with central permission, which dropped by over 73% from 103 Yuan per capita in 2000 to 27 Yuan in 2004. For taxation beyond central permission, the per capita levy was reduced only by 3 Yuan (from 42 Yuan to 39 Yuan) between 2000 and 2004. Under taxation with central permission, the township pooling funds and village deductions were reduced by 86% while the agriculture tax (and the agricultural tax supplement) also dropped by 73%.

Table 2 also shows that the rural tax reform has significantly changed the structure of farmers' tax burdens. Before the tax reform, taxation with central permission comprised around 71% of total tax burdens, but by 2004 the figure came close to 41%. In terms of tax rates, farmers' tax burdens as a share of their net incomes dropped from 6.9% to 2.5% between 2000 and 2004, a reduction of 64%. Only around 60% of such rate reduction (2.5%) came from the decrease in tax burden level and the other 40% (1.8%) came from growth of farmers' income during the same period. In the villages we surveyed, farmers' per capita income grew from 2093 Yuan to 2675 Yuan during this period.

Table 3 shows significant regional variations in farmers' tax burdens both before and after the rural tax reform. In 2000, Jilin province had a per capita tax burden of 214 Yuan, while in Fujian and Shaanxi the burdens were both less than 80 Yuan. By 2004, Jiangsu had the highest per capita tax burden of 136 Yuan while Shaanxi had the lowest burden of 22 Yuan. Though all provinces witnessed a reduction of rural tax burdens, the changes were highly uneven. For example, there was a drop of around 80% of tax burdens for Jilin province but less than a 30% decrease for Jiangsu province.

Significant regional heterogeneity also exists in the reduction of taxation with central permission and disapproval. In 2000, the per capita taxation with central permission was around 150 Yuan in both Jiangsu and Jilin, while Fujian had the lowest tax in this category (32 Yuan). In 2004, this dropped to less than 10 Yuan for Fujian, Jilin and Shaanxi, while Jiangsu maintained a high rate of 82 Yuan.

Table 3

Farmers' tax burdens by province: 2000 and 2004.

Data source: authors' 2005 survey.

	Tax per capita					
	Total tax burdens		Taxation with central permission		Taxation beyond central permission	
	Level	Share of income	Level	Share of income	Level	Share of income
	Yuan	%	Yuan	%	Yuan	%
2000						
Jiangsu	191	6.4	147	4.9	44	1.5
Sichuan	138	7.3	96	5.1	42	2.2
Shannxi	74	8.7	56	6.5	18	2.1
Jilin	214	12.1	157	8.8	57	3.2
Hebei	161	9.8	121	7.4	40	2.5
Fujian	78	2.4	32	1.0	45	1.4
2004						
Jiangsu	136	3.3	82	2.0	54	1.3
Sichuan	59	2.7	29	1.3	30	1.4
Shannxi	22	2.3	9	0.9	13	1.4
Jilin	44	1.7	1	0.1	43	1.6
Hebei	88	4.1	43	2.0	45	2.1
Fujian	47	1.5	1	0.0	46	1.5

Note: provincial CPIs from 2000 to 2004 are used to control for price changes.

While many factors affect taxation levels, such as the level of industrialization, Township and Village enterprises, and agricultural productivity, specific provincial tax reform policies are also responsible. For example, Jilin was among the first provinces to exempt farmers from the agricultural tax in 2004. The relatively developed province of Fujian had a comparatively low tax even back in 2000, and in 2004 it took a step further by exempting farmers from almost all taxation with central permission. On the other hand, the regional pattern of taxation beyond central permission could not be accounted for by specific provincial rural tax reform policies. Both Jiangsu and Hebei introduced modest reforms and their taxation with central permission had dropped. Somewhat surprisingly, farmers' tax burdens beyond central permission actually increased! The level of economic development does not seem to play a major role either. For example, in the relatively developed province of Jiangsu (with a per capita farmers' income of 2984 Yuan and 4455 Yuan in 2000 and 2004, respectively), its per capita taxation beyond central permission grew from 44 Yuan to 59 Yuan between 2000 and 2004. However, the agricultural province of Jilin (with a per capita farmers' income at 1769 Yuan and 2764 Yuan in 2000 and 2004, respectively), the per capita taxation beyond central permission dropped from 57 Yuan to 46 Yuan between 2000 and 2004. To account for this regional variation, we bring political and social institutions as well as some common economic variables into the analysis next.

4.2. Regression analysis and discussions

We employ an empirical framework with the following specification:

$$Taxburden_{ijt} = \beta_0 + \beta_1 T + \beta_2 Taxresist_{ij} + \beta_3 Inforg_{ij} + \beta_4 X_{ijt} + u_j + \varepsilon_{ijt} \quad (1)$$

In Eq. (1), $Taxburden_{ijt}$ is a set of dependent variables that represent per capita farmers' tax burdens in the i th village of the j th province in year t . These include the per capita total tax burden, the per capita taxation with central permission and the per capita taxation beyond central permission. We asked each household to report figures in these categories. For each category, we summed up a village total and divided it by the total number of individuals in these surveyed households. Since all village members paid roughly the same types of taxes and fees, this average should be representative.⁶ There are three key independent variables on the right hand side of the equation. The first is $Taxreform_t$, a dummy variable which takes 0 for year 2000 and 1 for year 2004. This variable can be considered as exogenous since rural tax reforms were initiated by the central government and by 2004 all local governments had to implement some sort of tax reduction in their jurisdictions. There were indeed heterogeneities in reform policies and the rates of tax reduction across provinces, which are captured by provincial dummies in our regressions. Therefore, the coefficient for the time dummy can be interpreted as the average tax reduction for the 6 provinces as a whole and the coefficients for provincial dummies can be interpreted as the (per capita) tax burden in these provinces relative to that of the benchmark province of Jiangsu.

The second key independent variable, $Taxresist$ is a proxy for mass-cadre tension in a village. We use the share of households that had not fulfilled their tax obligations in the village by year 2000 to measure farmer's tax resistance and thus the tension between the mass and the cadre. The third key independent variable, $Inforg$ is a variable that represents the participation rate in rural self-governing organizations. This variable is constructed by dividing the total population of village self-governing organizations by the village population. This variable measures the village's informal organization participation rate at the time of our survey (2005). We were not able to obtain the data for earlier years. Both $Taxresist$ and $Inforg$ are time invariant but they can capture the cross regional impact of these institutions on local taxation. Still, there is the possibility of endogeneity for both $Taxresist$ and $Inforg$ variables. For example, instead of local resistance and informal organizations affecting farmers' tax burdens, farmers' burdens may in fact trigger rural protests and spur organizational building. We use instrumental variable approach to detect and correct for this endogeneity problem.

X_{ijt} is a set of control variables at the village level, including village per capita arable land, village labor force (the number of laborers divided by village population), village population size, village per capita income, village flat arable land as a share of total village arable land, village's distance to the township government seat, per capita collective enterprise profits, and per capita GDP of the county. Village per capita arable land, labor force, and flat land share are controlled because rural taxes and fees are either levied according to the amount of arable land or the number of laborers. Villages with more flat (and fertile) land are usually taxed more heavily than those with more hilly land. Village total population is controlled to identify possible economy (or diseconomy) of scale in rural taxation. Per capita collective enterprise profits are also controlled since villages sometimes use these profits to pay for farmers' tax burdens (Oi & Rozelle, 2000). Village's distance to their township government is included to control for village's geographical location. More remote villages may require more administrative resources to extract revenues and therefore end up with higher taxation. Alternatively, as the distance grows, supervision by higher level governments becomes weaker and village cadres tend to abuse their power and overtax rural population.⁷ We further control the county level per capita GDP because higher GDP usually implies higher degree of industrialization. The county as well as the township government may

⁶ One alternative approach is to ask village cadres for village taxes and fees and divide them by village population. There are at least two problems with this approach. First, village cadres may hide certain revenues, especially if they know that these fees are not legitimate. Second and more importantly, some fees are not collected by the village but by other local government agencies. So village cadres do not keep record of these fees. Individual households, on the other hand, pay all these fees regardless which level of government collects them. Individuals may have memory loss and report inaccurate figures. We used two methods to check for this kind of problem. First, instead of asking for an aggregate number, we asked interviewees to report specific items and the dollar amount of each item. Second, all interviewees met and cross-checked all answers from the same village every evening. If there was inconsistency, the interviewers immediately phoned back the villagers to verify information.

⁷ We thank one anonymous reviewer for pointing out this alternative causal mechanism. Since this is not the main interest of this paper, we will try to disentangle these two mechanisms in later projects.

rely more heavily on industrial taxes rather than farming households for revenues. u_{jt} s are the province dummies and ε_{it} is the error term.

Table 4 presents the descriptive statistics of all our dependent and independent variables for 2000 and 2004. Significant regional variations exist. In 2000, per capita tax burdens had a maximum of 413.3 Yuan and a minimum of 11.3 Yuan. In 2004 the absolute difference became less striking, with the maximum and the minimum being 261 Yuan and 0.4 Yuan, respectively. The *Taxresist* variable also varied greatly across villages with the maximum and the minimum of 69.3% and 0%, respectively. The *Inforg* variable also varied from 0% to 81.1%.

Finding valid instruments for *Taxresist* and *Inforg*, however, can be difficult (Wooldridge, 2011). If the instrumental variables are valid and endogeneity exists, two-stage regressions offer consistent estimates. We employ three instruments, i.e. the number of ancestral temples in a village, the number of village natives working at township and county level government agencies, and the number of village veterans who participated in the Anti-Japanese War, the Liberation War, and the Korean War. Presumably, the existence of ancestral temples in a village helps to enhance farmers' mutual trust and promote the development of rural self-governing organizations. Given the fact that several self-governing organizations in our sample are clan-based, this connection is reasonable. As discussed in Section 3.2, higher number of native cadres in the township and county governments worsens mass-cadre tension in a village, which induces widespread tax resistance. Politically secure cadres can also afford suppressing more autonomous organizations. In rural China, the veterans of CCP wars are usually highly prestigious and influential in shaping public opinions. Their existence may help to enhance the local state's legitimacy and reduce tax resistance among villagers.

Tables 5 and 6 summarize all major empirical results. The first stage IV regression results are presented in Table 6. The joint F tests indicate that the three IVs in our first stage regressions have significant impacts on the instrumented variables and the signs are also as expected. We also run two further tests in Table 5, i.e., the endogeneity tests (DWH χ^2 Test) and the overidentification for our second stage regressions. The results are presented in Table 5. For the overall taxation and the taxation beyond central permission, *Taxresist* and *Inforg* are endogenous statistically while over-identification tests indicate that our instruments are exogenous. We focus on the IV estimates for these two dependent variables (the overall taxation and the taxation beyond central permission). For taxation with central permission, the DWH χ^2 Test of endogeneity indicates that endogeneity issue is not serious, thus the OLS estimates are more efficient. Therefore, we will discuss the OLS estimation results when the dependent variable is taxation with central permission. Despite the technical differences, both OLS and IV estimates show good consistency for all variables in the regressions.

Table 5 summarizes our major findings. First of all, the policy variable, i.e. tax reform dummy, shows strong effect on the overall taxation level. As a result of the center's rural tax reform policy, farmers' burdens were reduced by 76 Yuan between 2000 and 2004. More important, taxations with and without central permission have exhibited quite different patterns. For taxation with central permission, central policy has cut farmers' burdens by 71 Yuan. The estimate for taxation beyond central permission has the right sign but is very small. Statistically speaking, even this small effect does not exist. These findings largely corroborate our earlier stories from Table 2 and strongly support the first set of hypotheses (A1 and A2). Local governments' capacity to

Table 4
Descriptive statistics of all dependent and independent variables.

Variable	Units	Mean	Std. dev.	Min	Max
2000					
Per capita overall taxation	Yuan	145.4	85.0	11.3	413.3
Tax with central permission	Yuan	103.2	74.8	0	342.2
Tax beyond central permission	Yuan	42.2	35.9	0	153.3
Taxresistance2000	%	10.9	12.7	0	69.3
inforg2004	%	4.1	12.2	0	81.1
Per cap arable land	ha	0.1	0.1	0	0.5
Village size	Person	1553.0	960.9	157	5047.0
Village labor share	%	50.2	12.1	20	79.2
Share of level land	%	57.9	37.0	0	100.0
Distance to township	km	5.1	4.0	0	20.0
Village percap income	Yuan	2092.8	1165.1	260	5750.0
Village enterprise profit percap	Yuan	14.2	68.8	0	656.5
County GDP per cap	Yuan	6897.0	4017.0	1479.6	17615.3
2004					
Per capita overall taxation	Yuan	66.7	54.6	0.4	261.0
Tax with central permission	Yuan	27.4	39.6	0.0	220.4
Tax beyond central permission	%	39.3	32.3	0.0	147.9
Taxresistance2000	%	10.9	12.7	0.0	69.3
inforg2004	%	4.1	12.2	0.0	81.1
Per cap arable land	ha	0.1	0.1	0.0	0.5
Village size	Person	1583.4	978.8	161.0	4975.0
Village labor share	%	51.3	11.7	19.5	81.0
Share of level land	%	59.1	37.2	0.0	100.0
Distance to township	km	5.1	4.1	0.0	19.0
Village percap income	Yuan	2674.9	1473.1	272.7	6107.4
Village enterprise profit percap	Yuan	14.1	61.4	-15.5	465.4
County GDP per cap	Yuan	8438.1	5271.7	308.0	22421.9

Table 5
Determinants of per capita taxation.

Variables	Per capita overall taxation		Tax with central permission		Tax beyond central permission	
	OLS	IV	OLS	IV	OLS	IV
Key indep variables						
Tax reform dummy 1 = after, 0 = before	-79.96*** (7.870)	-76.04*** (13.82)	-73.38*** (6.440)	-71.24*** (8.511)	-6.577 (4.217)	-4.795 (7.469)
Taxresistance	-0.385 (0.254)	-6.520* (3.447)	0.181 (0.221)	-2.718 (2.122)	-0.566*** (0.163)	-3.802** (1.862)
Inforg	-0.322 (0.220)	-3.371 (2.102)	-0.0431 (0.180)	-1.267 (1.294)	-0.279** (0.123)	-2.104* (1.136)
Control variables						
Per cap arable land (ha)	97.59 (75.30)	131.9 (99.41)	141.7** (58.54)	155.2** (61.21)	-44.13 (34.48)	-23.34 (53.71)
Village size (Person)	0.00201 (0.00519)	0.0167 (0.0124)	0.00620 (0.00418)	0.0124 (0.00764)	-0.00420 (0.00287)	0.00427 (0.00670)
Village labor share (%)	0.385 (0.375)	-0.843 (0.905)	0.529 (0.325)	-0.0511 (0.557)	-0.144 (0.196)	-0.792 (0.489)
Share of level land (%)	0.326** (0.141)	0.580** (0.272)	0.257** (0.108)	0.372** (0.167)	0.0692 (0.0703)	0.207 (0.147)
Distance to township (km)	3.226*** (1.061)	0.775 (2.157)	2.112*** (0.797)	0.998 (1.328)	1.115* (0.632)	-0.221 (1.166)
Village percap income (Yuan)	0.00127 (0.00483)	-0.000579 (0.00849)	-0.00342 (0.00411)	-0.00450 (0.00523)	0.00468* (0.00241)	0.00393 (0.00459)
collentprofitpc (Yuan)	-0.127* (0.0679)	-0.118 (0.112)	-0.138*** (0.0435)	-0.133* (0.0688)	0.0114 (0.0484)	0.0154 (0.0604)
Countygdpperc (Yuan)	0.000242 (0.00137)	-0.00103 (0.00241)	-0.000356 (0.00112)	-0.00106 (0.00148)	0.000598 (0.000653)	2.60e-05 (0.00130)
Provincial dummies						
Sichuan	-38.68** (19.45)	79.69 (70.82)	-47.43*** (14.99)	7.259 (43.60)	8.777 (10.46)	72.45* (38.26)
Shanxi	-95.09*** (19.75)	-33.13 (48.54)	-78.50*** (14.99)	-52.15* (29.89)	-16.56* (9.242)	19.04 (26.23)
Jilin	-31.17* (18.28)	7.924 (33.93)	-50.27*** (15.58)	-32.71 (20.89)	19.13* (10.03)	40.66** (18.33)
Hebei	-45.79*** (16.08)	-12.36 (31.28)	-49.47*** (13.68)	-34.64* (19.26)	3.689 (7.840)	22.28 (16.90)
Fujian	-73.02*** (17.77)	20.42 (57.80)	-81.25*** (13.63)	-40.00 (35.59)	8.250 (9.014)	60.43* (31.23)
Constant	125.2*** (36.86)	191.6*** (71.49)	85.43*** (29.48)	120.0*** (44.02)	39.74** (16.15)	71.62* (38.63)
Observations	232	232	232	232	232	232
R-squared	0.528		0.579	0.345	0.216	
Endogeneity test (DWH)		(7.55)***		1.94		(12.61)***
Overidentification test		2.34		3.57		2.23

Note: Standard errors in parentheses.

*** p<0.01.

** p<0.05.

* p<0.1.

extract resources was indeed constrained by the central government. In the 1980s and 1990s, the central leaders tolerated local discretion to incentivize local officials for faster growth. When local taxation became excessive in the late 1990s, the center tightened control and tried to rein them in. The power of the central government, however, was limited and local governments still managed to levy fees in spite of the illegality.

The other two set of hypotheses also receive empirical support. Estimates from the overall taxation regression suggest that farmers' resistance reduced their taxation burdens while villagers' self-governing organizations were not as effective (B1). The aggregation has covered up more interesting patterns. When we separate taxation with central permission and disapproval, the predicted patterns become much clearer. For taxation with central permission (column 3), neither farmers' resistance nor villagers' self-governing organizations play any visible role in alleviating farmers' burdens. This part of local taxation was viewed as more legitimate and the societal forces were less prominent. For taxation beyond central permission (column 6), both have statistically significant impacts. A 1% increase in *Taxresist* reduced the per capita illegitimate fees by 3.8 Yuan. Villagers with more active resistance constrained the local state's extractive capacity (B2). Every 1% increase in *Inforg* likewise decreased illegitimate tax burdens by 2.1 Yuan.⁸ In another specification,

⁸ To facilitate interpretation, we also standardized the coefficients. Every one standard deviation increase in tax resistance would reduce farmers' taxation beyond central permission by 1.8 standard deviations. Similarly, one standard deviation increase in participation in self-governing organizations in a village reduced taxation beyond central permission by 0.8 standard deviation.

Table 6

First stage IV estimation.

Variables	(1)	(2)
	taxresistance	inforng
No. of village political network (Person)	0.255** (0.107)	−0.268*** (0.0955)
No of ancestral temple	−0.416 (0.473)	2.210*** (0.421)
No of veterans (Person)	−0.143* (0.0823)	−0.0495 (0.0733)
Tax reform dummy 1 = after 0 = before	0.739 (1.552)	−0.416 (1.382)
Per cap arable land (mu)	−1.262 (11.23)	5.184 (9.997)
Village size (Person)	0.000412 (0.00104)	0.00345*** (0.000922)
Village labor share	−0.199*** (0.0673)	0.00206 (0.0599)
Share of level land	0.0318 (0.0270)	0.0253 (0.0240)
Distance to township (km)	−0.236 (0.197)	−0.231 (0.175)
Village percap inc (Yuan)	−0.000614 (0.000950)	0.000810 (0.000846)
collentprofitpc (Yuan)	0.000124 (0.0129)	−0.00332 (0.0115)
Countygdpperc (Yuan)	−0.000470* (0.000250)	0.000245 (0.000223)
Sichuan	16.02*** (3.549)	2.096 (3.160)
Shanxi	1.852 (3.853)	10.75*** (3.431)
Jilin	5.288* (3.078)	2.256 (2.741)
Hebei	2.281 (2.998)	2.744 (2.670)
Fujian	8.581** (3.705)	4.475 (3.300)
Constant	18.26*** (6.008)	−9.150* (5.350)
Observations	232	232
R-squared	0.291	0.393

Note: Standard errors in parentheses.

*** p<0.01.

** p<0.05.

* p<0.1.

we included all village organizations, both autonomous and controlled. Only self-governing organizations mattered. Since we have controlled for tax resistance in our regressions, it is reasonable to conclude that the causal mechanism for community organizations is the substitution effect (C1 and C2). These organizations mobilized their members to raise funds locally and it was these activities that relieved local governments of onerous taxation on farmers. Therefore, as predicted earlier, the societal dimension starts to kick in when the legitimacy of local resource extraction is being questioned. These social factors, i.e. farmers' resistance and community organizations, affected mostly taxation beyond central permission.

In addition to these key variables, the control variables reveal some notable patterns about local taxation in China. Taxation beyond central permission (column 6) did not respond to any economic variables. This may make sense since these extractions were regarded as illegitimate and local governments were not expected to follow economic rules in levying them. Fees and levies, in particular, were quite arbitrary. On the other hand, taxation with central permission did respond to many economic variables (column 3). First, these taxes were mostly based on the size and productivity of land. Villages with more land (per capita arable land) and more productive land (share of level land) had higher per capita taxation. Geography also played a positive role. Villages farther away from township government seats paid more, partly to offset higher administrative costs. Finally, village enterprises did provide an extra cushion for farmers. Local governments used enterprise profits to make up for the revenue shortfalls, mitigating the need for taxing farmers. These taxes were only weakly associated with labor. Some villages in our samples did use labor as a basis for taxation. On the national level, this was not the general pattern. Similarly, taxation did not correspond to the level of economic development or industrialization.

We also controlled provincial dummies for Sichuan, Shanxi, Jilin, Hebei, and Fujian. Hence the coefficients for the dummies indicate the per capita tax burden in these provinces relative to that of the benchmark province of Jiangsu. In terms of total tax

burdens per capita, farmers in all other provinces seemed to pay less than people in Jiangsu, the most developed province in our sample.

5. Conclusion

Farmers' burdens in the early 2000s have become a serious challenge threatening local public finance in China. Based on a national survey, we show that the rural tax reform has indeed reduced tax burdens in rural China. However, almost all of the tax reduction can be attributed to the lessening of taxation with central permission. There was very little reduction in the amount of taxation beyond central permission. In some regions local governments even carried out more local fundraising activities and charged farmers high administrative fees to compensate for the revenue shortfalls. In addition to the central–local dimension, local governments' taxation power was checked by its relationship with the society. Farmers' resistance has undermined local governments' capacity to extract funds illegally. And rural self-governing organizations helped to reduce farmers' burdens by becoming a substitute for certain functions of the local government, like providing public goods.

According to some scholars, China's local governments have acquired a lot of discretion in local public finance. Our study suggests that the central state is still capable of directing local governments to serve its own interest. The rise of excessive taxation can be seen as a consequence of fiscal recentralization and imposition of unfunded mandates in the 1990s. The reduction of farmers' burdens further indicates the authority of the center. After all, China is a unitary state and the central government still holds a lot of power in deciding fiscal matters of the country. However, the continuing existence of illegitimate fundraising activities also reveals the limit of the seemingly powerful state. The toleration of administrative fees may be the center's strategy to get local governments onboard the agricultural tax reform. It also showcases the central leadership's fundamental dilemma in managing local public finance. A fully centralized fiscal system does not work well in a country with tremendous regional heterogeneity. Efficiency requires the central government to accept local discretion in revenue extraction and public service provision. Our study of rural taxation captures the complexity of the central–local dynamics in China and warns against any simplistic portrayal of an omnipotent central state or totally runaway local states. For non-China scholars, China provides an excellent opportunity for comparative case studies. Despite the myth about absolute power, dictators must exercise their authority through agents, many of which have different interests and have the discretion to modify the policy from below. This perspective of power can shed light on the discussion about power as well as explanation of institutional changes in other authoritarian regimes.

This paper also emphasizes the importance of adjusting local state–society relations in China's rural governance. Self-governing organizations in the rural areas have played a substituting role for local public goods provision in some localities. Encouraging community organizational development should be an important component of further rural governance reform in China. But, as Tsai (2007) has argued, the role of community organizations in providing within-village public goods was usually limited. By substituting formal state apparatus, these organizations may actually lead to an undersupply of local public goods in the village. This effect became more pronounced in the aftermath of the rural tax reform. Many villages have reported cutting back teachers' salaries and consolidating primary schools in rural areas. This will likely offset the political gains from abolishing rural taxation (Qu, 2005). For the time being, the central government has been channeling financial resources from the central budgets to compensate for the revenue shortfalls. However, merely increasing the transfer of funds may not be sufficient to create the incentive for local government to provide the needed public services. In another word, the fundamental problem with local taxation is not that local governments extract resources, but how it is done. In the long run, a better functioning local governance in China necessitates much wider and more meaningful participation by both expanding the local democracy and by promoting the developments of grassroots informal organizations. From this perspective, strengthening democratic institutions at grassroots level – that is, village and township elections – may have the greatest potential of bringing accountability to local public finance. With electoral pressure, local leaders should also have incentive to listen to rural residents and provide adequate public goods in their jurisdictions.

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