

Paper to be presented at the annual meeting of the American Agricultural Economics Association, Chicago, August 5-8, 2001.

Local Governance and Public Goods Provision

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ABSTRACT

Since the early nineties, tens of thousands of villages have held elections of their leaders in rural China. Using a recent village survey, this paper empirically examines the impact of election on public goods provision to the rural community. We found that elected officials tend to tax less on constituents and provide them more with public services.

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I. Introduction

It is a strong belief that in developed countries self-governance such as election of community representatives and leaders provides accountability and transparency of the decision-making process, therefore offering better services to local communities. However, self-governance in local communities in developing countries is far less common than in the developed world. Some have argued that democracies or self-governance may not be so efficient in improving social welfare until an economy reaching a certain development level. Recent nationwide village leader (and village committee) elections in China provide a good ground for testing the impact of self-governance on public goods provision in developing countries. Although O'Brien and Li (2000), Oi and Rozelle (2000), Paster and Tan (2000), and Xiang (2000) described the evolution and performance of village elections in great detail, neither of them has examined the impact of governance on local public goods provision in particular.

More than seventy percent of population in China lives in rural areas, where local communities provide most social and public services such as roads, water supply, schools, and health clinics. Governance at the village level plays a crucial role in determining the effectiveness of public goods provision to the vast rural population. Before the eighties, the higher-level governments generally appointed community or village leaders. Since the late eighties and early nineties, tens of thousands of villages have begun to hold elections of village committees and leaders once every three years.

Given such an institutional shift, it was expected that significant impacts on community resource management, public goods and services provision would have occurred.

However, past studies on the local elections lack this kind of information. Questions remain to be answered including: have the elected village leaders been more responsive to the needs of their communities due to the increased accountability? Have public welfares been improved as a result of the elections? Under what modes of governance are elected cadres more efficient in providing public provisions?

Answering these questions requires a comprehensive data collection ranging from village economic situation, community management decisions to village election practices and etc. For this purpose, we conducted a unique and comprehensive village survey in Jiangsu Province in 2000. The data set includes detailed information on the characteristics of village leaders, agricultural production, township and village enterprise (TVE) production, and public finance. Using this data set, we are able to examine the compositions of village revenues and expenditures as well as the impact of governance on public finance. In the analysis, in order to isolate the effect of self-governance (or more specifically election) on public goods provision, we control for the characteristics of villages such as location, village size, and the development of TVEs. There is little information available in the public domain on rural public goods finance and provision at the community level. To our knowledge, this is the first attempt to study the effect of self-governance on the rural local welfare in China.

The paper is arranged as follows. In the next section, we describe the development of rural governance structure. Section three explains data sources. Section four presents the model and empirical estimations. Section five ends with conclusions.

II. The Development of Rural Governance

Before the rural reforms in the late 1970s, the upper-level governments (People's Commune or the county government) generally appointed leaders of rural communities. Each village (called Production Brigade then) had a communist party branch and an administrative office. The secretary of the party branch had a much larger power control than the head of the administrative office. The party secretary and village head represented the state to execute government policies such as grain procurement. Since the 1980s, a dramatic change has occurred in the way of rural community governance.¹

Right after the rural reforms started, farmers in Guangxi Province voluntarily established a new form of governance, village committee, in response to the sudden abolition of People's Commune and the shift of production mode from collective farming to the new agricultural household responsibility system. The committee serves as an administrative office in villages. The committee chairman is nominally the village head. In December 1982, the Constitution legalized the governance mode of village committees. By 1985, nearly one million village committees were established but most of the committee chairmen were not contested.

During the period of 1986-1990, more laws were enacted. In particular, in November of 1987, the National People's Congress (NPC) approved the influential Organic Law of Village Committee (Draft). The law laid out comprehensive provisions

¹ This section is summarized based on Chapter One in GRLGRT (2000).

on the organization, function, and election of village committees and assemblies.² By the end of 1989, village elections were experimented in fourteen provinces, six of which drafted province-specific implementing rules of the Organic Law.

Based on the experience generated from the experimentation, the central government called for a widespread implementation of village election in 1990. In 1998, NPC officially revised and passed the Organic Law. By the end of 1998, 832,900 village introduced elections in large thanks to the overwhelming participation of farmers (Xiang, 2000). The way of election has been rather heterogeneous across regions. For example, some areas first elect members of the village committees, which in turn elect the village committee chairman among the committee members, while some other areas elect the village committee chairman and village committee members simultaneously.

In specific to Jiangsu Province, it did not start widespread village elections until the end of 1992 when the provincial People's Congress passed the Implementing Rules of the Organic Law. By 1994, more than thirty thousand village committees were established through contested elections and there were more than one million assembly representatives, or an average of 33 representatives in each village (GRLSRT, 2000).

In principle, elections provide constituents with a political opportunity to voice their concerns in public decisions, therefore improving accountability in the way public funds are spent. The purpose of the election of village committees and the establishment of representative system is to provide checks and balances of local leaders and improve the effectiveness of public goods provision. However, the election process and the power structure of governance are much more complex in reality and vary to a large degree

² In principle, a village assembly or village representative assembly is the supreme decision-making body because it elects village committees. But village committees are in charge of daily

across regions as described in more detail in Oi and Rozelle (2000)'s study. Therefore, it is in large an empirical question to testify the positive effect of the new self-governance on the provision of public goods as originally envisioned.

III. Data and Descriptive Statistics

The data set used in this paper comes from a survey jointly conducted by International Food Policy Research Institute (IFPRI) and Center for Chinese Agricultural Policy (CCAP) in 2000. The survey covers 60 villages in six counties in Jiangsu provinces. The six counties are evenly distributed across the province. Zhangjiagang and Yixing represent the most developed areas (Southern Jiangsu) where TVEs are well developed and majority of family's income comes from non-farm activities. Shuyang and Gangyu represent the least developed areas (Northern Jiangsu) where most families still rely on agriculture as the major means of living. Dongtai and Xinhua lie between the above two categories in terms of both economic and social development.

In each county, we randomly selected 10 villages. At each village, we interviewed village leaders and accountants. By checking historical accounting records, we obtained village information in 1985, 1990, and 1995-1999. The survey provides detailed information about village characteristics (e.g., distance to markets and county seat), economic activities (e.g., agricultural production, township and village enterprises, and public finance and spending), as well as the major characteristics of village leaders (e.g., whether elected or appointed and previous working experience).

Among the 60 surveyed villages, two villages lacked historical records and therefore were dropped from our analysis. Table 1 provides a descriptive statistics on

management.

public finance at the village level. Tax and fees collected directly from households accounted for more than one third of village revenues. Another major source is fees collected from TVEs. Although the higher levels of governments have increased financial contributions to villages (most as a compensation to land procurement), the share has averaged at only four percent. Therefore, local public goods provision relies primarily on financing from local communities, conforming the findings by Oi and Rozelle (2000).

The average per capita expenditure measured in 1985 constant prices was 58 yuan, among which 40% has been used on public goods provision and more than 20% has been allocated for administration such as salaries of village leaders and public relations. Financial transfers to the disabled and poor accounted for only about two percent. Irrigation was the major form of public investment, comprising of about eight percent on average. Spending on road, education, and power and communication ranked the second, third, and fourth, respectively.

Unlike Fujian and other southern provinces, Jiangsu did not start village elections until the end of 1992 (GRLSRT, 2000). Table 2 reports the mode of governance in 1999. Among the 58 villages surveyed, 49 have held village elections. The way of local governance was rather diversified. Only in one village, the village committee chairman was the major decision maker on public investment. In 17 villages, the party secretaries had the final say on village affairs, indicating that the party is still the major player in rural communities. In nine villages, both party secretaries and village heads jointly made decisions.³ Village committees played a key role in the decision-making process as

³ In two villages, party secretary and village head are the same person.

reported in the 14 villages. The diversified governance structure reflects a dramatic change in leadership styles from direct command to more instructive consultation.

To further evaluate the effect of local self-governance, we compare the characteristics of leaders, economic and social welfare, and public finance between the two types of villages with appointed and elected leaders in Table 3. In general, elected village heads were younger and more educated. They had a large likelihood of being a member of the communist party and were more likely to have working experience in TVEs prior to taking the current job. Among the 58 village leaders, only two of them identified their previous major job as farming, while others reported having non-farm jobs prior to taking office.

The average income in villages with elected leaders was more than 500 yuan higher than those with appointed leaders. The numbers of telephones, refrigerators, and new houses built in the past five years per hundred households, the three major indicators of rural living standard, were also higher in the villages with elected leaders. The modes of public finance differed as well between the two types of villages. The tax and fee levied directly from households in villages governed by appointed cadres averaged 98 yuan, compared to 73 yuan in villages with election, which charged a significant amount directly from TVEs. As a result, the burden of rural households, measured as the ratio of taxes and fees to income, was lower and per capita public expenditure was higher in villages with elections than otherwise. In order to quantify the impact of governance on public finance, a more formal analysis controlling for other factors is needed.

IV. Empirical Analysis

In the econometric analysis, we examine the effect of elections and the modes of governance on per capita tax burden, effective tax rate, and public spending per capita. In addition to elections and the modes of governance, we also consider income, TVE revenues, distance to county, and village size in our analysis.⁴

As income grows, the demand for public goods provision will likely be increasing as experienced in many developed countries. Therefore, in our analysis the level of income is considered as an explanatory variable. TVEs have been widely used as a major instrument of public financing in rural China because the collectives control most property rights, this is especially true in Jiangsu Province where collective TVEs were initiated. In addition, it involves a lower transaction cost to tax TVEs than to tax individuals, which often creates tensions between villagers and cadres. It is expected that the level of TVE development affect the villagers' tax burden and the capacity of local public goods provision.

The more remote a village is, the more likely the village leader receives less monitoring and checking from upper governments and therefore has higher degree of power to determine taxation and spending. It is widely observed that the tax burden in remote areas is higher than that in other areas. In this study, we use distance to county seat as a proxy for location to examine this issue.

Because of the scale effects inherent in many public goods, it is highly possible that the unit cost of public goods provision might decrease as the village size increases. Therefore, we expect the village size be negatively related to the level of tax burden per

⁴ Public finance and income variables have been deflated by provincial price indexes using 1985 as a basis.

capita. We use a dummy variable to capture the effect of village elections. Prior to 1993, there were almost no local elections in Jiangsu Province and therefore we set the dummy to zero for all the observations in this period. From 1995 to 1999, we set the dummy to zero for the nine villages without elections and one for other forty-nine villages.

Table 4 reports the regression results on the effects of election on three aspects of public finance --- per capita tax burden, effective tax rate, and per capita public expenditure. Several features are apparent from the table. First, the modes of governance have played a more important role in affecting public financing than spending. The statistically significant and negative coefficients for the election dummy in the second and third columns indicate that elected leaders tend to collect less tax and fees directly from residents than appointed cadres. The coefficient in the third regression on per capita public expenditure is statistically insignificant, implying that the impact of election on the level of public spending is less differential.

Second, revenues from TVEs are important source of local public finance. The coefficients for the TVE variables in all the three regressions are statistically significant. In terms of public financing, the more developed TVEs are, the less burden residents have to bear. Taxation from TVEs reduces the likelihood for local leaders to collect revenues directly from individuals, therefore reducing tensions between local leaders and their constituents. Villages with highly developed TVEs also tend to spend more on public expenditures.

Third, the tax burden on individuals is heavier but the level of public spending is lower in remote regions. This can be seen from the positive coefficients for the location variable in the first two regressions and the negative coefficient in the last column in

Table 4. Fourth, income and village size matter to the public expenditure per capita. The coefficient for income is statistically significant in all the regressions. In absolute terms, the tax burden incurred to individuals increases as income grows, while it declines in relative terms. Also, higher income levels demand more public service as shown by the positive coefficient in the last column. The coefficient for village size is statistically significant and negative in the regressions on the tax burden and effective tax rate. This finding supports our hypothesis that the unit cost of public goods provision in larger villages is lower than in small villages due to the scale effect.

Table 5 further examines the role of decision-making on public finance in the period from 1995 to 1999 when we know the mode of governance. We replace the election dummy in Table 4 with four governance dummies. Interestingly, the coefficient for the village committee is smaller and insignificant in the regressions on public financing but is statistically significant and much larger than other modes of governance in the last regression on public expenditure. It seems that villages governed by the more democratic committees are more efficient in delivering local public services because decisions are based on a group of people rather than on individuals, therefore policies are more transparent and accountable. It is highly likely that under this kind of power sharing arrangement profligate spending by village leaders be reduced. The p-value of F-test for the null hypothesis that the four dummies have the same effect are less than 0.05 in the three regressions, suggesting that the mode of governance does make a difference to the provision of public goods.

V. Conclusions

Grass-root village elections have been shaping both political and economic landscapes in rural China. This paper examines the effect of village self-governance on the provision of public goods using a newly conducted village survey. The study finds that elected local leaders tend to tax less on individuals and spend more on local public goods, probably due to the increasing transparency of budget. Village elections have provided the villagers with checks and balances against excesses of leaders and improved the transparent accountability of the decision making process. As our results shows, the way of governance does affect the efficiency of public goods provisions.

TVEs have been a major means of local public finance, especially in villages governed by elected cadres. Large villages are more cost-effective in providing public services than small villages due to the scale and externality effect inherent in many forms of local public goods. Geographically remote villages are less efficient in delivering public services. Because the history of village election is rather short, in this study we are not able to evaluate its long-term effect on social and economic welfare. Further follow-up studies are necessary to gain an in-depth understanding. It will also be interesting to study the interactive relations between village committees and other governing organizations at the community level.

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Table 1 Village Public Finance

	1985	1990	1995	1996	1997	1998	1999	Average
Per Capita Revenues (Yuan)	60.4	57.7	49.8	54.1	59.7	63.3	66.5	58.8
Household (%)	45.0	39.6	41.9	40.0	36.8	37.5	35.8	39.5
TVEs (%)	24.5	33.7	31.6	33.9	28.4	27.8	26.8	29.5
Upper governments (%)	0.3	3.0	2.0	3.0	5.3	6.1	6.9	3.8
Others (%)	30.3	23.8	24.5	23.1	29.5	28.6	30.4	27.2
Per Capita Expenditure (Yuan)	60.3	50.5	51.1	54.2	57.9	63.7	65.8	57.7
Public goods provision (%)	34.7	35.9	38.9	39.2	42.8	40.2	38.3	38.6
Irrigation (%)	3.5	10.6	8.6	7.2	7.3	8.6	10.6	8.1
Education (%)	3.3	3.1	2.6	2.3	4.2	2.7	1.9	2.9
Road (%)	3.0	2.0	5.1	5.2	9.8	7.2	7.2	5.6
Power and communication (%)	1.0	1.8	2.0	2.0	1.7	1.0	2.2	1.6
Transfer to the poor (%)	2.4	2.2	2.0	2.3	2.3	2.1	1.9	2.2
Administration expenses (%)	22.2	22.0	23.1	24.1	22.9	22.0	25.6	23.1
Others (%)	43.2	42.1	38.0	36.7	34.4	37.8	36.1	38.3

Note: The revenues and expenditures are expressed in 1985 constant prices.

Table 2 The Mode of Local Governance in 1999

Variable	Observations
Whether village leader is elected	
Yes	49
No	9
Who is making decisions in the village?	
Party secretary	17
Village head	1
Both of the above	9
Village committee	14
Others	17

Table 3 Major indicators in 1999: A Comparison of Villages

	Appointed	Elected
Village leader characteristics		
Age	43	42
Years of schooling	8.6	8.9
Party membership (%)	77.8	87.5
Year of working experience in TVE	0.9	1.7
Income and development indicators		
Income per capita (yuan)	3196.1	3752.6
# of telephones per 100 household	22.0	36.6
# of refrigerator per 100 household	16.7	21.6
# of new house built per 100 household	14.5	21.8
Public Finance		
Tax and fee per capita (yuan)	97.7	72.6
Tax levied on TVE per capita (yuan)	5.6	67.5
Effective tax rate (%)	3.2	2.2
Public spending per capita (yuan)	59.6	98.26

Table 4 The Effect of Self-Governance on Local Public Finance

Variables	Per capita tax burden	Effective tax rate (%)	Per capita public expenditure
Intercept	74.49 (52.82)	35.85** (10.35)	-82.75 (54.79)
Per capita income	14.23** (4.88)	-1.45* (0.81)	24.16** (8.06)
Distance to county seat	40.88* (19.73)	7.04** (2.71)	-134.77** (38.81)
TVE revenue per capita (/1000)	-42.67** (13.51)	-6.00** (2.20)	240.36** (74.25)
Village size	-18.36** (4.79)	-3.00** (0.88)	-4.45 (4.58)
Regime dummy	-4.81** (2.28)	-0.65* (0.32)	-0.90 (2.64)
R ²	0.26	0.26	0.27

Note: The sample covers 1985, 1990, 1995-1999. Income, distance to the country seat, and village size are total population in logarithmic forms. Regime dummy is set to zero for observations prior to 1993 or without having any village elections up to 1999 and the rest observations are set to 1. Figures in parentheses are robust standard errors. * and ** indicate statistical significance at the 10% and 5% levels, respectively. The results for the five county dummies are not reported and they are all statistically significant at the 5% level.

Table 5 The Mode of Decision Making and Local Public Finance

Variables	Per capita tax burden	Effective tax rate (%)	Per capita public expenditure
Per capita income	14.72** (7.41)	-1.55 (1.02)	47.69** (19.70)
Distance to county seat	18.70 (24.91)	-2.29 (2.87)	-91.41** (33.76)
TVE revenue per capita (/1000)	-28.63* (15.63)	-2.48 (2.82)	135.07 (100.64)
Village size	-15.91** (3.99)	-1.90** (0.46)	-0.79 (6.01)
Mode of decision making			
Party secretary	10.98* (5.96)	1.11 (0.68)	17.30** (6.61)
Village leader	13.21** (6.57)	1.37 (0.88)	24.67** (9.07)
Party secretary & village leader	25.55** (7.23)	3.15** (1.01)	28.54** (8.94)
Village committee	2.27 (3.54)	0.09 (0.44)	41.55** (11.58)
F-test p-value	0.01	0.04	0.00
R ²	0.35	0.37	0.37

Note: Income, distance to county seat, and village size are in logarithmic forms. The data sample is from 1995 to 1999. Figures in parentheses are robust standard errors. * and ** indicate statistical significance at the 10% and 5% levels, respectively.