

Land Taking and Electoral Rule Setting: Evidence from Chinese Rural Democracy¹

Abstract:

In the study of Chinese village democracy, researchers have established the empirical connection between village election and public goods provision. What is missing is a good understanding of the electoral rules governing village elections. In this paper, we argue that as China urbanizes fast and cities expands, officials in the localities where more intensive land development was taking place faced more pressure to ensure “right” cadres elected, and therefore had stronger motivation to adopt rules that gave them more control over the election. A panel data set from two large national surveys of 120 villages in 2004 and 2008 covering two rounds of elections is utilized to establish the causal relationship from land requisition to electoral rule setting. We find that villages with more intensive land taking have lower scores in the election quality index. Our findings are robust to various refinements in measurement and model specification.

Keywords: local developmentalism, land requisition, village electoral quality, China

¹ We acknowledge financial supports from Ford Foundation, British SPF Funding, the Fundamental Research Funds for the Central Universities and the Research Funds of Renmin University of China, Lincoln Institute of Land Policy, Suzanne Schrier Heimerdinger Fund through Vassar College. They are crucial for our national survey but should not be held responsible for the views of this paper. We benefited from insightful comments from Pierre Landry.

Land Taking and Electoral Rule Setting: Evidence from Chinese Rural Democracy

I. Introduction

Electoral rules determine how individual preferences in a society are aggregated to form a collective decision. By specifying who can participate in voting, how candidates are nominated, whether voting is compulsory, what formula (e.g. plurality or proportional representation) is used to select winners, how districts are divided, whether run-off elections are necessary, these procedures set the rules of the game. Studies of electoral politics have examined the impact of electoral rules on various aspects of democratic politics, such as the party system, the intra-party structure, proportionality, taxation, government spending, and the monetary policy (Cox, Rosenbluth, and Thies, 2000; Lijphart, 1990; Rae, 1971; Austen-Smith, 2000; Persson and Tabellini, 2005). Studying voter turnout, researchers have also found strong evidence that compulsory voting, automatic registration, more permissive eligibility rules for absentee ballots, and more convenient voting hours increase participation (Fornos, Power, and Garland, 2004; Oliver, 1996; Rosenstone and Wolfinger, 1980). While these studies are insightful, Aghion, Alesina, and Trebbi (2004) reminded us of the possibility of reverse causation. These policy consequences may be the exact reason for the adoption or rejection of these rules in the first place. In their analysis of election laws in American cities, for example, these scholars discovered that the majority of the population strategically switched from single-member districting to multiple-member districting when the population share of the minority groups started to increase, with the ultimate goal of minimizing minority representation in the city governments (Aghion, Alesina, and Trebbi, 2007).

This insight calls for a more nuanced analysis of electoral rules. In addition to assessing the impacts of these institutions, scholars should put equal emphasis on the underlying politics of setting rules in the real world. In the study of Chinese village democracy, researchers have established the empirical connection between village election and public goods provision, income equality, and villagers' political attitudes (Zhang et al., 2004; Manion, 2006; Li, 2003). What is missing is a good understanding of

the electoral rules governing village elections. Based on information from case studies and fieldworks, we know that there are no uniform rules and villages across the country have relied on different formulas to elect their leaders. While some rules are more transparent and democratic, others leave a lot of room for manipulation. How variant are these local practices? More important, why do villages follow different rules? This paper seeks to fill in this gap by first mapping out regional variations and then offering an explanation that is based on the political incentive of the rule setters.

Even though the Villagers' Committees (VCs) are by law autonomous organizations, township officials are put in direct charge of setting the rules for electing village leaders. Under China's cadre management system, the career advancement of these grassroots officials depend on their ability to accomplish key tasks assigned from their superiors. Since the late 1990s, one major task has been land requisition. In their effort to make up fiscal revenue shortfalls, local governments raced against each other to attract manufacturing industries and engineered urban development, including infrastructure improvement and the expansion of business and residential housing. Both strategies assumed secure and easy access to large amount of cheap land from the countryside. This heavy burden fell on the shoulder of township officials. Naturally, they preferred more compliant village cadres who prioritized the government interest instead of that of village collectives during the land requisition process. Officials in the localities where more intensive land development was taking place faced more pressure to ensure "right" cadres elected, and therefore had stronger motivation to adopt rules that gave them more control over the election. To empirically test this hypothesized relationship between land taking and electoral rule setting, we analyze data from two large national surveys of 120 villages in 2004 and 2008 in this paper. Since our data cover the same villages in two rounds of elections, we are able to take advantage of this unique panel data to establish the causal relationship. We find that villages with more intensive land taking have lower scores in the election quality index, suggesting that local officials' economic and political incentives have indeed pushed them to control VC elections. Our findings are robust to various refinements in measurement and model specification.

Our research potentially makes a number of theoretical contributions. In addition to bending electoral rules in American cities discussed by Aghion, Alesina, and Trebbi

(2004), other scholars have documented similar political dynamics in Germany and France (Alexander, 2005; Kreuzer, 2005). Politicians or the ruling parties are found to manipulate electoral formulas to secure their power and dominance. The Chinese case extends the scope of this insight beyond mature democracies. Because the Chinese village democracy is orchestrated by a one-party state, however, there are also meaningful differences. In mature democracies, politicians or parties may opt for one electoral rule over the other. These rules may have distributional consequences for different parties and groups in the society, but they will not fundamentally change the democratic nature of the state. For instance, both plurality and proportional representation voting rules lead to a government by the people and for the people even though the likelihood of small parties and minority groups being represented in the government varies greatly. The Chinese state is still cautiously experimenting with village democracy under a one-party rule. In their effort to assert state control, particularly in the process of land requisition for development zones and industrial parks, local officials are willing to introduce rules that subvert the true meaning of village democracy. This type of rule-bending in China certainly sounds egregious, but it follows very much the same logic found in mature democracies. In extending the political incentive-based explanation of electoral rules to less consolidated and transitional democracies, researchers are likely to identify more cases close to the Chinese scenario.

Our findings about the impact of land on democratic politics also resonate with cases from other parts of the world. Moore (1966) has analyzed how the landed upper class suppressed the bourgeoisie in Germany while their ultimate destruction and assimilation into the new capitalist class in England and France paved the road to parliamentary democracies. Likewise, before the introduction of secret balloting in 1958, Chilean local elections were dominated by the interest of large land owners. Landlords used land rents and contracts as leverages and coerced peasants to vote for land owners' preferred policies (Baland and Robinson, 2008). In more general terms, Acemoglu and Robinson (2006) theorized the role of land in democratic transition and consolidation. Compared with capital, land is less conducive to democracy mainly for two reasons: inelastic supply and less vulnerability to revolutionary disruptions. Land in rural China has played a similar role of delaying and distorting democracy but the underlying

mechanism is somewhat different. In other countries, land was directly controlled by private property owners. Seeing democracy as a redistributive mechanism by the people without properties, landlords fought hard to preserve their privileges and assets, thus manipulating elections or simply shunning democratic institutions all together (Boix, 2003). In China, rural land is owned by village collectives. So the contention has developed between the state and the villages, not along the more conventional line of social classes within rural communities. Local governments were afraid that true democracy would empower rural residents to reclaim their rightful interest in the process of industrialization and urbanization.

Tying the previous two discussions together, our paper can shed some light on the large debate about economic development and democratization. Since the 1960s, the modernization theory has become the dominant view on such topics. It is believed that industrialization and urbanization increase the size of the middle class and raise the educational level of the citizenry, which lay down the foundation for democratic politics (Lipset, 1959). This thesis has gained so much popularity that may be truly regarded as one of the handful conventional wisdoms in social sciences. Recent scholarship, however, started to cast serious doubt on the empirical support for this argument. Przeworski and Limongi (1997) expanded the original data set and discovered that rising income stopped increasing the likelihood of democratic transition once a certain threshold of GDP per capita was reached. Wealth in fact stabilized authoritarian regimes. Acemoglu, Johnson, Robinson, and Yared (2008) relied on more sophisticated econometric models and found that the empirical correlation between high income and democracy was really driven by some omitted variables. When instrumental variables were used, the causal relationship disappeared.

Our analysis of rural democracy in China lends more credibility to these large-N statistical studies. The introduction of village democracy in the mid-1980s was itself a result of top-down push engineered by a few reform-minded leaders and energetic bureaucrats in the Ministry of Civil Affairs (Shi, 1999). It was never a grassroots movement as envisioned by the modernization theory because the countryside happened to be the least developed part of China. In their quest for economic growth, local governments realized that village democracy inhibited their ability of taking land from

farmers. Without cheap land, China's development model built on massive manufacturing exports and rapid urbanization would be jeopardized. From the state's perspective, economic development required village democracy to be "tamed". This democratic regression may be a consequence of China's unique historical conditions and its development strategy. But China's experience also follows general logics. Weakening rural democracy and robbing farmers of their land alienated the rural residents, but promoting industrialization and urbanization won the ruling elites support from urban and well-to-do classes in the society. Therefore it made good political sense for the Chinese leaders to embrace this type of development.

The rest of the paper is organized as follows. We first introduce the political and economic incentive of township officials and explain how it is related to China's rush to urbanization and land developmentalism since the 1990s. Then the institutional setting surrounding Villagers' Committee elections are discussed to illustrate how officials have manipulated electoral rules. After a brief introduction of the survey method and variable definitions, we discuss our identification strategies and model specifications. Statistical results and robustness tests are reported and analyzed in the sections V and VI. We conclude the paper with some general policy implications of our findings.

II. Official Incentive, Land Requisition, and Village Elections

Village democracy embraced by the Chinese Communist Party seems to be puzzling. Why would a one-party state allow for grassroots democracy? It undermines the party's control in the countryside, but popular elections offer the central party with a convenient tool to monitor local cadres and pacify the inflammable countryside (O'Brien and Li, 2006; Shi, 1999). These elections determine the makeup of the Villagers' Committee, including the head, the deputy head, and several other committee members. The Organization Law of Villagers' Committee adopted by the People's Congress in 1998 puts the township government in charge of "the process of setting up, changing, and abolishing Villagers' Committees." The Law states that all village elections should respect villagers' wishes in the formation of the election committee and the nomination of the candidates, and guarantees voting secrecy. But it also allows local governments to

draft their own rules according to local conditions. This leaves a lot of room for township officials to manipulate voting rules under their jurisdictions. To understand why these officials have incentive to do so, we need to analyze the rise of land developmentalism and examine its impact on local government officials' economic incentives.

2.1 The Rise of Land Developmentalism since the mid-1990s

Two major developments in the early 1990s have exacerbated the fiscal strain of local governments. Firstly, centralization under the 1994 separate-tax reform lowered the local share in total government revenues (World Bank, 2002; Wong, 1997; Wong and Bird, 2005). Secondly, the majority of TVEs and SOEs went through gradual privatization or bankruptcy and local governments lost revenues from profit submissions (Qian, 2000). As a result, local resources could not keep up with the increasing fiscal obligations, including supporting retirees and laid-off workers from former SOEs and fulfilling various unfunded mandates from the center (Tsui and Wang, 2004).² To make up for the revenue shortfalls, local governments gradually discovered the value of land (Lin, 2007; Zhu and Prosterman, 2007). As the owners of urban land, local governments could sell land use rights to industrial investors for 50 years, businesses for 30 years, and residential housing for 70 years. During the 2000s, land lease fees have grown very rapidly and constituted a big part of local fiscal revenues. What is more, when urban land was used up, local officials had the legal authority to convert farmland. Therefore, local revenues would grow with urbanization. Since then, requisitioning farmland, leasing land, and managing urban expansion have become the main business of China's local governments. The availability of cheap land also enabled local officials to construct industrial parks and build up manufacturing capacities. For example, by the end of 2003, the total number of industrial zones in the country had reached 3,837. Three years later, the figure jumped further to 6,015, averaging two industrial parks per county (Zhai and Xiang, 2007)!

² In the late 1990s and early 2000s, sub-national governments accounted for more than seventy percent of total public expenditure, while collecting less than fifty percent of total government revenues. Social service spending was decentralized further down to the county level with the sub-provincial tiers financing seventy percent of social services, provincial and central governments making up the other twenty and ten percents, respectively (World Bank, 2002).

The past decade also witnessed a gradual spatial expansion of land developmentalism. Initially, large scale industrial park and urban construction unfolded in coastal areas in the late 1990s. Since the early and mid-2000s, inland areas started to catch up in this industrialization and urbanization drive (Lin, 2007). As their infrastructures began to improve, inland regions were finally ready to compete for investments. Another equally important factor was the rural tax reform introduced between 2002 and 2006, which caused severe revenue shortfalls among inland governments. The rural tax reform deprived local governments in agriculture-based inland regions of the right to collect revenues from agriculture through formal taxes and informal charges. Unable to continue revenue collection on agriculture, local governments in inland China emulated their coastal counterparts and competed for manufacturing investments. According to a government report in 2006, roughly equal number of development zones and industrial parks were approved by coastal and inland provinces, indicating a truly national phenomenon.

2.2 Local Revenue Imperatives and Electoral Rules Setting

Fiscal imperative and land dependence gradually made their way into the political realm. A capable and good local leader was no longer someone who showed absolute loyalty to the party and to his superiors, but someone who could contribute to economic growth and revenue generation. Securing cheap land for local governments to attract businesses became increasingly important after the mid-1990s. However, to make industrial land cheaper for manufacturing investors, local governments had to grab land at low prices from the farmers. Therefore, local officials had strong incentives to depress land compensations to the farmers. Fiscal imperatives at the local level pressured local officials into direct confrontation with farmers whose land was the target of forceful requisition.

While this pressure applied to all municipal and county level officials, the stress on township cadres were particularly acute. Sitting at the bottom of the local state hierarchy, they were responsible for almost all matters related to the rural society. The municipal or county governments might set land development plans and propose terms for land

requisition. It was township officials who would carry out difficult negotiations with village collectives or were in charge of coercing defiant farmers to accept government-set terms. Having village cadres who shared their interests would not only lower the requisition costs but may also determine whether or not the transaction could be accomplished at all. If the deal failed, the superiors would discount their leadership credential, thus jeopardizing their future promotion. Therefore, township officials in localities which experienced higher intensity of land requisition had stronger incentive to manipulate the rules to make sure that more cooperative cadres were elected.

One township party secretary put it eloquently, “if election rules are followed strictly, (we) will lose control of the rural society. ... Village cadres will be afraid of villagers, not the township government. They can put off assignments from the township government and compromise the tasks during implementation. The township government has trouble controlling Villagers’ Committees” (Hu, 2001). During our own fieldwork in Fujian and Tianjin, we interviewed several democratically elected Villagers’ Committee heads who organized fellow village members to challenge local order of land requisition. In one case, land was successfully taken away from the village collective. But the former VC head continued to draw large number of followers to petition higher level governments for fair compensation and legal investigation of corruptions. In the aftermath, the township government used its power over the nomination procedure and excluded the former VC head and his supporters from the candidate list. In another, the local government even postponed the scheduled village election indefinitely.

Empirically, it is a difficult task to identify such abuses of power. However, the literature on China’s village election has helped to identify the following seven electoral procedures that are particularly vulnerable to manipulation (Kelliher, 1997; O’Brien and Li, 2000; Hu, 2001).³

³ A more extreme case is to just postpone the election, which did not happen in our sample. In 2008, we conducted interviews in one North China City of Tianjin and the story from a former village party secretary, Mr. Jia, illuminated this logic very well. To implement the local development policy, local governments at district and township levels were instructed to requisitioning land since 2002. According to Mr. Jia, the district and township governments, because of his objection, prevented him from being nominated as a candidate for the 2004 VC election and adopted every means possible to ensure its preferred candidates on the ballot. Once elected, these VC cadres ignored local residents’ interest, lowered compensations, and

1. *Formation of election committees.* Having a fair and neutral election committee is a crucial element in any democracy. In some villages, residents select their committee members directly while, in others, members are appointed by local authorities, i.e. township governments or party organizations. Without question, the first method is more transparent and gives people more confidence in the whole process.

2. *Nomination of candidates.* This procedure determines who may run as a candidate for the office. Some local government officials hold onto this power and use it to pick their own favored individuals. In many villages, however, villagers are free to nominate their candidates. This open approach deprives the cadres of the discretion and empowers the regular villagers.

3. *Voting secrecy.* To express their views truthfully, voters should have certain privacy. Some villages provide separate rooms for marking ballots, but many villages do not guarantee such voting secrecy and voters have to fill in their ballots under the close watch of local officials.

4. *Campaign speech.* Open and organized campaigns are generally prohibited but some villages do allow candidates to speak in front of the public before voting, introducing themselves and making promises to voters directly.

5. *Public counting of ballots.* After votes are cast, some villages open the ballot boxes immediately and count each ballot in public. In other villages, on the other hand, VC election committee members count votes in private quarters and release results only afterwards.

6. *Proxy voting.* In principle, voters should cast the votes by themselves. But for people who happen to be out of the town or are unable to vote in person for other reasons, some villages allow them to designate other members of the family to cast votes for them. A small number of villages do not accept this procedure.

7. *Roving ballot box.* In addition to fixed ballot boxes in the village center, some

enforced evictions ruthlessly. Moreover, with support from above, these cadres utilized collective land for development projects to enrich themselves. At that time, Mr. Jia was leading a petition against these corrupt VC leaders. But he acknowledged that it would be an uphill battle because the district government suppressed his petition and already postponed the 2007 election in his village.

villages dispatch a number of roving ballot boxes to villagers' homes so voters can cast their ballots at their convenience. This, in theory, lowers the voting cost for villagers, but is banned in other areas.

As we have discussed in the preceding section, fiscal imperative since the mid-1990s has created a higher level of land dependency among Chinese local governments, making successful land requisition increasingly important in meeting local revenue needs. This financial incentive encourages township officials to manipulate electoral rules in village elections. We test the following hypothesis below:

Ceteris paribus, villages that have experienced more intensive land requisition tend to have less open and less transparent electoral rules before and during the time of land requisition.

III. Data and Variable Definitions

3.1 Data and Sampling

The basic units of analysis for this research are administrative villages. The data are drawn from a survey project we carried out in the past seven years. We studied various aspects of rural governance, including agricultural production, taxes and fees, public goods provision, migration, land and housing, villagers' attitudes, cadre management, and village elections. In addition to its comprehensive coverage in terms of issues, our survey is also unique in its geographic and time span. The villages were drawn from a national sample and we conducted two rounds of survey in 2005 and 2008. This research design allows us to apply some statistical tools to make more reliable and generalizable conclusions.

A stratified sampling method was used to select target villages. We first divided the country into six large regions and randomly selected one province in each of them. Jilin, Hebei, Shaanxi, Sichuan, Jiangsu, and Fujian were finally included. We then arranged all counties in each province into five strata according to their per capita industrial outputs and randomly picked one county in each stratum. For each of these 30 counties, two townships were included in the study by stratifying them according to peasants' net

income per capita. Applying the same method, we selected 2 villages in each township, making the total number of villages 120. In each village, our survey teams interviewed key cadres, including party secretaries, VC heads, accountants, and former election committee members. Our survey teams also contacted the county governments directly administering these villages and collected documents regulating the conduct of VC elections in their jurisdictions. For various reasons beyond our control, such as threat from underground forces and flooding after the Sichuan earthquake in 2008, our survey teams could not reach all target villages. The final samples included 114 villages in 58 townships in the 2005 survey and 118 villages in 59 townships in 2008. The empirical analysis in this paper draws data from 113 villages whose information for both periods is available. These sample villages were not selected proportional to population, but they represent a broad spectrum of Chinese villages in terms of both geography and level of economic development. Our survey teams consisted of graduate students, mostly coming from agricultural colleges in the respective regions. They received intensive training on interview techniques by senior researchers.

3.2 The Dependent Variable

Eqindex7 is an election quality index that simply aggregates the seven electoral procedures. To ensure the quality of the electoral procedures, we took extra care in the survey and formed a focus group in every village. The focus group always included the following people: at least one elected village cadre, at least one candidate who lost the election, and at least one village elite, e.g. one village elderly who either participated in the election committee or were familiar with the whole electoral process. If disagreement emerged, we consulted more people in the village, including other electoral committee members, other candidates, and members of the current and previous VC members. A choice was made based on these inputs and the final consensus.

For the formation of election committee, the villages in our sample reported nine different methods in the survey. The first five methods (question 1 in Table 1) essentially put local government and party cadres in charge and pushed regular villagers out of the process. The rest, to different extent, allowed regular residents to influence the committee

composition. They are coded as 0 and 1, respectively.

In our pilot surveys, we discovered that more than 15 different methods were used for candidate nomination and some villages even utilized multiple methods simultaneously. We decided to focus on one crucial aspect in candidate nomination. Many researchers argued that totally open nomination (*Haixuan*) were closest to the spirit of the Organization Law of Villagers' Committee and could serve as a litmus test of the democratic intent of local governments. We asked if all villagers could nominate anyone for the position and coded "yes" as 1 and "no" as 0.

< Table 1 about here >

Coding voting secrecy, campaign speech, and public ballot counting was relatively straightforward. Villages that allowed for these practices were coded 1 and 0 otherwise. Proxy voting and roving ballot boxes need some explanation. In the context of Chinese village elections, banning proxy voting and roving ballot boxes revealed local officials' determination to forgo the option of changing ballots behind closed doors. Therefore, unlike in other democratic elections, a "no" answer to the proxy voting question was coded 1 and the choice of "fixed ballot box only" for the roving ballot box question was coded 1. These variables are summarized in Table 2.

Table 3 provides summary statistics of the seven electoral procedures. Because local governments were largely in charge of implementation, electoral procedures did exhibit huge regional variations. This was especially prominent for candidate nomination, voting secrecy, and roving ballot box, where between a third and half of villages adopted more democratic and transparent rules. Comparing election qualities from 2004 to 2007, while most procedures remain relatively stable, a significantly higher percentage of villages allowed candidates to deliver speeches and counted votes in public.

This trend is also visible in the overall quality index as shown in Table 4. During the second round of VC elections in our sample, more villages received higher scores (3.20 versus 2.11 in mean scores), indicating a general improvement in election quality. But the magnitude of improvement was uneven across villages and 15 villages in fact experienced a decline in their recent elections.

< Table 2, 3 and 4 about here >

3.3 Independent Variables

As detailed in the next section, land requisition in China is a top-down and time-consuming process. Actual land requisition takes place only after lengthy government planning and negotiations. Therefore studying actual land requisitions prior to VC elections fail to capture the political logic developed in this paper. We focus on requisitions on the election year as well as two years after the election in this paper. Village Committees generally serve three year terms and local officials should consider future land taking plans in the determination of VC leadership. We use a dummy variable, 1 indicating the occurrence of land requisition activities for the period under investigation (2004-2006 and 2007-2009). Villages were asked to report if they experienced land taking for each year in the past and the results are presented in Table 5. Since we conducted our second round of survey in 2008, we did not have data for 2009. We have collected telephone numbers of all interviewees and our research teams contacted the key village officials afterwards and gathered land requisition information for 2009. In agreement with the national trend of fast development in the past decade, our sample villages have experienced more intensive land taking activities in recent years.

< Table 5 about here >

The set of explanatory variables, X_{it} , controls for a number of village social and economic characteristics that are generally believed to affect political development and rural elections. The level of education is measured by the share of high school or above graduates in the village labor force. The logged net income per capita serves as a proxy for the level of economic development. According to modernization theorists, both factors should improve the quality of democracy and local governance. China scholars have also discovered that collective enterprises and private enterprises have complicated village elections (Oi and Rozelle, 2000). Two variables, *collective_ent* and *private_ent*, indicate the number of collective enterprises or private enterprises in the village. Moreover, China's rapid urbanization has drawn many rural migrants to cities for off-farm employment. The share of migrants in village labor force is added to control for the potential effect of this demographic change on village politics.

The explanatory variables are summarized in the following Table 6. One has to admit the possibility of the endogeneity for our control variables here. For example, the income per capita could be related both to land requisition (richer areas are more difficult to requisition the land) and to electoral quality (richer people may be more likely to protest what they think as “bad” election quality). Similarly this could happen with migration variable – if the land is of poor quality, more people would migrate, and at the same time the price of land would be cheaper and thus it would be less controversial to have the land requisition and finally less local government incentive to intervene the election. However, as we will explain in the next section, even though the compensation for land requisition may be affected by variables such as migration and local income, China’s elaborate and long-term land use planning meant that the action of land requisition itself, once decided in a much earlier time, is to be carried out by township and village cadres as planned and is highly unlikely to be affected by factors such as migration and local income.

< Table 6 about here >

IV. Identification Strategy

One potential challenge to valid inference is the issue of endogeneity. Specifically, three traditional identification issues could contaminate the OLS estimates.

First, if planning of land requisitions is influenced by resistance from villages, the election quality may reversely affect land requisitions. In reality, the current land regulatory regime in China has rendered the reverse causation less problematic for our analysis. Despite the general trend toward liberalization and decentralization, land management has become more centralized and coercive since the early 1980s. In the 1950s, the government actually embraced a fairly liberal system and emphasized negotiation in land takings. Villagers must be consulted and their consent was required to proceed (State Council on Land Requisition Methods for National Construction, 1953; Land Requisition Methods for National Construction, 1958). After the Cultural Revolution hiatus, the central government revamped the system and established a new agency in charge of land management. China’s first Land Management Law in 1987 (as well as the revised law in 1999) clearly excluded phrases like “mutually beneficial” and

“consultation”. Negotiations with villagers were no longer required before land requisition plans were made. Implementation of requisition plans, it was stressed, should not be affected by compensations and relocations of farmers (PRC Land Management Law, 1987; PRC Land Management Law (revised), 1999). The coercion was further strengthened by the adoption of a top-down land quota system in 1998. The Ministry of Land and Resources was put in charge of drafting ten-year land use master plans and assigning annual land requisition quotas to each locality in the country (Wang et al, 2009). This elaborate and long-term planning meant that village governance was unlikely to be factored in top-level decision-making processes. Local cadres, on the other hand, must fulfill the quotas assigned from above.

Therefore, we argue that land requisition is determined by upper level governments rather than through negotiations with villagers. To further demonstrate the top-down nature of land taking, we show a piece of suggestive empirical evidence. If the strength of land requisition policy indeed responds to villagers' opposition, we expect to see significant changes in land requisition after the village election performance is revealed to township officials. We regress land requisitions in 2007-2009 on election quality in 2004. As shown in Table 7, the coefficient for election quality is not statistically significant, an indication of no reverse causation.

< Table 7 about here >

The second concern is the joint determination of land requisition and village election. Put differently, if the land requisition plans were made based on some factors that also determine the village election performance, such as economic performance, location, local traditions, strength of family ties, etc., failure in conditioning out these variables may result in inconsistency of the OLS estimates. We address this problem in two ways. First, we regress the land requisitions on observed village characteristics including village log income per capita, share of out-village migrants in total labor force, village education level, the number of collective enterprises and private enterprises, to test whether land requisitions depends on these observables. The result in Table 7 shows that none of these observed village characteristics affect land requisition plans. Second,

we specify panel data models (first differencing and difference-in difference model) in the regression analysis to drop out time-invariant variables. After conditioning out the fixed effect, we compare the characteristics of villages which experienced land requisitions with those which did not experience land requisitions in a given period in Table 8. The t-statistics are all insignificant, suggesting that the village characteristics are balanced and land requisition plans generally do not select on village characteristics. One has to admit that there are still time-varying unobservables that may create endogeneity. However, arguably the t-statistics shown above and the fact that land requisition in China is largely a top-down process indicate the endogeneity issue caused by unobservables should not be very serious.

< Table 8 about here >

The third concern of endogeneity may arise from measurement errors. In our analysis, the main concerns of measurement errors are on election quality and land requisitions. As introduced earlier, we use simple aggregation of seven electoral procedures to measure the election quality in our main regressions. In later analysis, we also disaggregate the index and use these procedures to measure the quality. In dealing with the measurement error of land requisition, we examine land requisitions in more details by measuring the frequency and purpose of land requisition in the robustness check section.

V. Model Specifications and FD Results

Before discussing specific models, we provide a direct glance of the effect of land taking on election quality. Table 9 tabulates election quality scores by two periods of land requisition. One can see the election quality improved by 1.15 points (1.97 to 3.12) for villages that did not have land requisition in both periods and increased by 1.18 (1.64 to 2.82) for villages that experience land taking in 04-06 but not in 07-09. The election quality even decreased on average for those villages that did not have land requisition in 04-06 but experienced land requisition in 07-09. These crude averages seem to confirm the negative impact of land taking on election.

< Table 9 about here >

Figure 1 further compares the election quality of villages which experienced land taking with that of villages which did not experience land taking in each period. Overall speaking, the election quality improved over time. But the villages with land requisition in 07-09 scored less.

< Figure 1 about here >

These findings are intuitive but, to establish direct causal relationship between land taking and VC election, we need to address the methodological issues discussed earlier. In this paper, we use the first-difference model as our main estimation strategy with some robustness checks. We also estimate the difference in difference model, which would build on some additional assumptions. Both models give similar supporting evidence for our hypothesis.

5.1 First Difference Regressions

In the panel data model, the village characteristics are separated into two parts, i.e. a vector of observed time varying characteristics X_{it} and unobserved village fixed effect c_i . The model can be expressed as following:

$$eqindex7_{it} = \alpha_{it} + \beta landreq_{it} + \gamma X_{it} + c_i + \varepsilon_{it}$$

In the equations, $eqindex7_{it}$ is an index of election quality in village i at time t . $landreq_{it}$ represents the intensity of land requisition in village i at time t .

To correct for potential biases, we take advantage of our panel data survey and apply the first differencing method. By subtracting 2004 model from 2007 model, the unobserved village fixed effect is removed. The first differencing model is therefore expressed below.

$$\Delta eqindex7_{it} = \Delta \alpha_{it} + \beta \Delta landreq_{it} + \gamma \Delta X_{it} + \Delta \varepsilon_{it}$$

< Table 10 about here >

Column (1) and (2) in Table 10 summarizes the estimates under the first differencing model specification using the overall electoral quality index $eqindex7_{it}$. Consistent with random effect estimates, the coefficients for land requisition are negative and statistically significant at the 1% level. The magnitude actually becomes much larger. The incidence of land requisition in a village decreases the election quality index by about 1.1 points or 37%. In Column (3), (4) and (5) of Table 10, we further estimated a first-difference model with the first three principal components (components with eigenvalues > 1) of the seven electoral procedures as a robustness check. There we also find Land requisition impacts all the three principal components negatively and the impacts are significant for principal components 1 and 3. This empirical finding lends strong support to the argument developed in this paper. In order to fulfill land requisition tasks, local government officials had strong incentive to manipulate VC elections and ensure the success of more compliant cadres, which lowered the quality of rural democracy.

In our model, some control variables have interesting findings as well. Income has a positive and statistically significant impact on election quality in the first differencing model. As villagers become more affluent, they have the will and the capacity to keep local governments at bay and protect their rights. Larger percentage of migrant population is positively associated with higher quality VC elections in the first differencing model. In addition to the income effect that is already controlled, working in cities may allow migrants to take home stronger cognitive and interpersonal skills, making them more effective in village politics. The presence of collective enterprises increases the transparency of VC electoral rules. Collective assets may have elevated the stake of VC elections and motivated more villagers as well as power contenders to examine the rules more closely. Finally, education does not play a positive role in China's rural democracy. This seems contradictory to general patterns from other mature democracies but is in fact consistent with studies of Chinese village elections, because Chinese rural democracy was not spontaneous but rather imposed from the central government (Shi, 1999; Zhong and Chen, 2000).

5.2 Disaggregating the Election Measure

As an aggregate measure, the election quality index captures the overall development of VC elections well. From a policy point of view, we are also interested in understanding the dynamics in more disaggregated terms. Separating the index to its original seven electoral procedures should reveal the mechanisms at work in the Chinese countryside. Table 11 treats each procedure as the dependent variable and runs the same regressions as in Table 10 separately. The strong and statistically significant results in Table 10 are not duplicated across the board but various factors affect the overall quality of VC election through different voting procedures.

As far as land requisition is concerned, it has a negative and statistically significant impact on three electoral procedures: the formation of election committee, proxy voting, and roving ballot box. It is not very surprising that the pressure for land requisition weakened the democratic nature of election committees. Since local governments are officially in charge of supervising VC elections, the power to lay down the rules for election committee formation has been one of the most effective tools to manipulate VC elections.

In our interviews in the villages that experienced government land requisition, we learned a few “tricks” the election committee had commonly applied to influence elections. Like gerrymandering in the US, some election committees strategically redrew the boundaries of small villagers’ groups (an organizational unit below administrative villages), lowering noncompliant individuals’ chances of being nominated as official candidates. Election committees in some villages simply disqualified potential “trouble-makers” by abusing their power of verifying candidates’ qualifications. Still in other villages, the election committees manipulated the timing of election so potential opponents were inconvenienced into non-participation. In short, because of its powerful role, local officials pressured by land taking tasks could not let villagers control this important institution.

In addition, sanctioning proxy voting and roving ballot box was equally vulnerable to manipulation by local cadres under the weight of land requisition. A common complaint we heard in our field work was officials’ abuse of power to stuff ballot boxes with votes marked by themselves or change the ballots cast by their opponents. Proxy votes and roving ballot boxes offered the necessary secrecy to facilitate

cheating. Other China scholars of VC elections have reported similar abuses in a wide array of cases throughout the country. On a micro level, these results provide more nuanced evidence to support the logic developed in this paper.

< Table 11 about here >

VI. Robustness Tests

In order to verify the robustness of these results, we conduct further tests, adding more controls and using different measures of the key independent variable. Moreover, we use difference-in-difference models as an alternative strategy to the first differencing method but to save space, the results are presented in Appendix.

6.1 Land Requisition Measured by Frequency and Purpose

This section deals with possible measurement errors in the key independent variable. Measurement errors could be another source of the endogeneity problem and complicates the causal inference (Woodridge, 2011). In previous analyses, we used land taking on and after the VC elections to measure the intensity of land requisition. It may still be argued that dummy variables do not capture land requisition intensity well. In our surveys, we asked villages not just about the incidence of land taking in each year but also the number of requisition as well as use purposes for the land under requisition. This information allows us to measure land requisition from somewhat different angles.

We use land taking frequency to replace the dummies in the regression. Presumably, more frequent land requisition in a village intensifies local governments' pressure to intervene in VC elections. As shown in column (1) of Table 12, all results remain stable. The coefficients for land requisition actually get smaller compared to those in Table 11, which reflects the difference in variable definition. While the previous measures gauge the impact of land requisition versus none, frequency measures assess the marginal impact of each additional incidence of land requisition. For the purpose of this paper, the empirical results are robust to perturbation in measurement.

< Table 12 about here >

We continue to explore alternative ways of measuring land requisition. As indicated above, our surveys covered more detailed information about these land requisition. According to the purpose of land requisition, we further break down land taking into two categories. In many cases, local governments took farmland and developed land for real estates (both residential and commercial), local industrial parks, and roads and bridges connecting to these projects. In other scenarios, land was requisitioned for local residents' public facilities, such as local schools, clinics, and water pipes. In our interviews, farmers were especially antagonistic about the first type of land taking and viewed local officials as profiteers. The governments and sometimes the cadres pocketed huge profits while being stingy on compensations to farmers. *Landreq_forprofit* and *Landreq_pub* are two dummies indicating whether the ultimate land use purposes in the village is for profit and for public purpose respectively. In column (2) of Table 12, while other variables remain largely unchanged, only the coefficients for for-profit land taking are negative and statistically significant. This confirms the story developed in this paper and highlights again that it was the financial motives of local governments that drove rural residents to active resistance, hence the need for intervention in VC elections.

6.2 Township Tasks

In this section, we use a broader definition of government tasks to measure the pressure on the shoulders of local cadres. Students of Chinese political economy have long noted the emergence of a high-pressured political system, where local officials are being constantly measured by numerous tasks assigned from higher level governments, such as the annual GDP growth rate, tax collection, foreign investments, birth rate, socially destabilizing petitions, school enrollment, etc. (Rong et al, 1998, 2001; Edin, 2003). Fulfilling some, but not all, tasks requires active cooperation of village cadres, therefore should incentivize local governments to control VC election, i.e. the same logic for land requisition. Because local governments set different priority tasks, their urge to intervene in village elections varies across regions.

< Table 13 about here >

In our survey, top township officials (usually township heads and party secretaries) were asked to name five most important policy tasks that county governments used to evaluate their performance.⁴ They were then asked if they needed the cooperation of village cadres in the completion of each task. *Townshiptask* is defined as a percentage of these five most important tasks that require village cooperation. In other words, *townshiptask* measures the intensity of township's dependence on village cadres. Table 13 summarizes key information for both periods. The degree of dependence did exhibit big regional variation but the temporal trend was probably more interesting. In an overwhelming majority of villages (76%) in 2004, cooperation of village cadres was essential for accomplishing all of their top five tasks (column with an intensity score of 1). In 2007, that ratio dropped to about 27% and the distribution became more even. In close to 20% of the villages, the majority of township tasks did not require village cadres' active support (intensity scores equal to or less than 0.4). This trend reflects a significant shift in the coercive nature of the Chinese state vis-à-vis peasants. A more careful look into the data indicates why much less cooperation of village cadres was needed in the completion of township tasks. By 2007, the tax collection work was largely gone since the central government started to eliminate agricultural taxes in 2004 and lifted a major burden on township and village cadres. Another policy, i.e., the birth control, that used to call for close collaboration from village cadre was now also much easier to enforce than before as rural population now had lower fertility preferences as a result of better access to higher level of education and more off-farm employment opportunities. Table 14 reports final results with both land requisition and township tasks included in the regressions. In the random effect model (column 1), *Townshiptask* has a strong and statistically significant impact on election quality. For the same reason discussed earlier, we focus on the first

⁴ Based on government documents and our pilot interviews, the primary tasks of township governments usually include meeting various targets in GDP growth rate, tax revenue from township and village enterprises, new firms, large-scale enterprises, service industries, overall investment, land acquisition, tax collection and profit submission from collective property, balanced budget, debt reduction, peasant income, farmland reclamation, agricultural output growth, agricultural diversification and mechanization, the acreage and yield of grain, cotton, and other agricultural commodities, growth of rural collective economy, ideological propaganda, grassroots party organization, government transparency, petition reduction, birth control, social order, funerals, workplace safety, emergency response system, rural infrastructure construction, educational achievements, environmental protection, urban construction, rural labor export, cooperative healthcare, social insurance programs for the elderly, and many more.

differencing model in the discussion. In column 2, the coefficient for *townshiptask* becomes smaller but remains statistically significant at the 1% level. As expected, more dependent township governments have stronger incentive to meddle with electoral rules, reducing the quality of VC elections. But most important of all, land requisition stays statistically significant at the 1% level, even though the magnitude decreases slightly. This gives us more confidence in earlier empirical findings.

< *Table 14 about here* >

VII. Conclusion

On September 21, 2011, about three thousand people from Wukan village in Guangdong province stormed the Lufeng Municipal government compound. Since then, Wukan village had organized its own provisional council and sustained a three-month-long violent confrontation with local governments and police, an incident known as the “Wukan Revolution” in the Western media (Wines, 2012; Rahul and Ping, 2012). The root cause of villagers’ grievance was injustice associated with land taking in the past decades. Guangdong was a pioneer in China’s manufacturing export-oriented industrialization and local governments in the province were eager takers of cheap farmland as early as in the late 1980s. Because of government control, VC elections in Wukan could not serve as a formal channel to address villagers’ grievance over cadres’ abuse and corruption. It was finally under the direct intervention of the Guangdong provincial government that villagers’ demand for a fair election was met.

While the Wukan incident depicts the impact of land taking on VC elections in the most dramatic fashion, this is unfortunately being repeated to varying degrees across China’s countryside. Our paper draws on two national surveys and offers strong empirical support for this connection. As shown in the analysis, there are no uniform rules in VC elections and villages have relied on different formulas to elect their leaders. Some rules are more transparent and democratic, but others leave a lot of gray areas that are open for manipulation. In villages with more intensive land requisition, electoral rules are more likely to be manipulated by their upper level governments.

In addition to shedding some light on general theories of electoral rule setting discussed in the introduction, our findings project a less sanguine picture of grassroots democracy in China. Many observers believe, and hope, that rapid industrialization and urbanization in China help to lay down a good foundation for participatory politics. VC elections, in particular, have been embraced by many scholars and policy analysts as a lightning rod and would eventually spill upward to sweep the authoritarian state. This optimism, however, underestimates the resilience of the Chinese Party-state. Instead of a natural progress, Chinese industrialization and urbanization in the past two decades were essentially driven by revenue-thirst local governments. As a result, the mutually reinforcing processes of economic development and political democratization broke down. In order to facilitate economic growth, local governments became increasingly assertive and sabotaged the grassroots democracy. This irony reminds us of the precarious nature of grassroots democratization in an autocratic state as well as a less desirable association between politics and economy. To enhance the likelihood of democratic consolidation in the rural areas, policy makers need to address one root cause of local manipulation: revenue incentives. A streamlining of tax revenues and spending responsibilities between the central and local governments is essential in toning down local officials' aggressive push for growth. Moreover, current land regulatory regime also needs to be liberalized so local governments do not have monopolistic control over land taking.

References

- Acemoglu, D. Johnson, S. Robinson, J. Yared, P. (2008). "Income and Democracy." *American Economic Review* 98 (3): 808-842.
- Aghion, P. Alesina, A. Trebbi, F. (2004) "Endogenous Political Institutions." *Quarterly Journal of Economics*, 119, May, 565- 612.
- Aghion P, Alesina A and Trebbi F (2007) "Choosing Electoral Rules: Theory and Evidence from US Cities." *Quarterly Journal of Economics*.
- Alexander, G. (2005) "France: Reform-mongering between Majority Runoff and Proportionality", in *Handbook of Electoral System Choice*, by Josep M. Colomer (ed.)(Palgrave MacMillan, New York, N.Y.)
- Austen-Smith, D. (2000) "Redistributing Income under Proportional Representation." *Journal of Political Economy*, 108, 1235-1269.
- Kreuzer, M. (2005) "Germany: Partisan Engineering of Personalized Proportional Representation", in *Handbook of Electoral System Choice*, by Josep M. Colomer (ed.) (Palgrave MacMillan, New York, N.Y.)
- Baland, J. Robinson, J. (2008) "Land and Power: Theory and Evidence from Chile." *American Economic Review*

- Boix, C. (2003) *Democracy and Redistribution*. Cambridge University Press.
- Cox, G. Rosenbluth, F. Thies, M. (2000) "Electoral Rules, Career Ambitions, and Party Structure: Comparing Factions in Japan's Upper and Lower Houses", *American Journal of Political Science*, 44, 115-122.
- Fornos, C. Power, T. Garand, J. (2004) "Explaining Voter Turnout in Latin America, 1980-2000", *Comparative Political Studies*, 37, 909-940.
- Han Li and Kung James, "'Urbanizing' China: The Changing Fiscal Incentives of Local Governments" Working paper HKUST
- Li, L. (2003) "The Empowering Effect of Village Elections in China", *Asian Survey* 43, 648-662.
- Lijphart, A. (1990) "The Political Consequences of Electoral Laws, 1945-85", *American Political Science Review*, 84, 481-496.
- Lin, G. 2007. "Reproducing Spaces of Chinese Urbanization: New City-Based and Land-Centered Urban Transformation", *Urban Studies* 44 (9): 1827-1856.
- Manion, M. (2006) "Democracy, Community, Trust", *Comparative Political Studies*, 39, 301-324.
- Moore, B. (1966) *Social Origins of Dictatorship and Democracy*. Beacon.
- O'Brien, K. Li, L. (2000) "Accommodating Democracy in a One-Party State: Introducing Village Elections in China", *China Quarterly*, 162, 465-489.
- Oliver, E. (1996) "The Effects of Eligibility Restrictions and Party Activity on Absentee Voting and Overall Turnout", *American Journal of Political Science*, 40, 498-513.
- Persson, T. Tabellini, G. (2005) *The Economic Effects of Constitutions* (MIT Press).
- Przeworski, Adam and Fernando Limongi. 1997. "Modernization: Theory and Facts." *World Politics*, 49(2): 155-83.
- Rae, D. (1971) *The Political Consequences of Electoral Law* (Yale University Press).
- Rahul, J. Ping, Z. "Wukan Officials Punished over Land Sales" *Financial Times*, April 22, 2012.
- Rong Jinben, et al, 1998 *From a Pressure Imposing System to a Democratic Cooperation System: the Political Reform at County and Township level* (in Chinese) The Chinese Press of Translating and Editing.
- Shi, T. (1999). "Village Committee Elections in China: Institutional Tactics for Democracy." *World Politics* 51 (3): 385-412.
- Tsui, K. Wang, Y. (2004) "Between Separate Stoves and a Single Menu: Fiscal Decentralization in China." *China Quarterly* 177: 71-90.
- Wines, M. "Protest's Success May Not Change China." *New York Times*, March 3, 2012.
- Wolfinger, R. Rosenstone, S. (1980) *Who Votes?* New Haven and London: Yale University Press.
- World Bank. (2002) *China National Development and Sub-national Finance: A Review of Provincial Expenditures*. Washington, DC.
- World Bank (2005) *China: land policy reform for sustainable economic and social development*. World Bank, Washington, DC.
- Wong, C.P.W., (ed.), 1997. *Financing Local Government in the People's Republic of China*. Hong Kong; New York: Oxford University Press.
- Wong, C.P.W. and Bird, R.M., 2005. "China's Fiscal System: A Work in Progress," Working Papers, No.0515, International Tax Program, Institute for International Business, Joseph L. Rotman School of Management, University of Toronto.
- Zhai, N. Xiang, G. (2007) "An Analysis of China's Current Land Acquisition System and Policy Implications", *China Administration* (in Chinese) 3.
- Zhang, X. Fan, S. Zhang, L. Huang, J. (2004) "Local governance and public goods provision in rural China", *Journal of Public Economics*, 88 (12), 2857-2871.
- Zhu, K. and Prosterman, R. (2007) Securing land rights for Chinese farmers: a leap forward for stability and growth, *Cato Development Policy Analysis Series*, No. 3.

APPENDIX *Difference-in-Difference Regression Results*

An alternative way of testing the impact of land requisition on election quality is to treat land requisition as a treatment and estimate the treatment effect. In Section IV, we have logically and statistically shown that the land requisition plans are not reversely affected by election quality because of the coercive nature of land requisition in China as well as the top-down and centralized land management system. Nor do they depend on village characteristics such as log per capita income, education, migrant share, collective enterprise, and private enterprise, et al. Therefore, we can also use the difference-in-difference model as a robustness check. The difference-in-difference approach by construction use only part of the data, therefore, the results may be different from the first difference model and thus can serve as a robustness check. The DID model can be written as:

$$eqindex7_i = \alpha + \beta treated_i + \gamma After_i + \delta treated_i * After_i + \theta X_i + u_i$$

where $treated_i$ represents land requisition in village i and $After_i$ is a dummy for the second period (after treatment). X_i is a vector of village characteristics. The coefficient of the interaction term is the treatment effect.

As a first step, we utilize a visual method to get an intuitive grasp of the hypothesized effect. The treatment here is designed as land requisition in village i in 2007-2009 and the treatment group consists of villages that had no land requisition during 2004-2006 (1st period) and experienced land taking during 2007-2009 (2nd period). The control group consists of villages that did not experience land requisition in both periods. Figure 2 compares the election quality indices of the control group and the treatment group before and after the treatment.

<Figure 2 about here>

As Figure 2 shows, before treatment, the villages in the treatment group had higher election quality than villages in the control group. After the treatment, the election quality of the treated villages became worse than that of the villages in the control group. In fact, while the election quality in the control group increased over time, the election quality in treated villages even decreased.

To take full advantage of our data, we also specify an alternative treatment. The treatment in this case is defined as land requisition in 2004-2006 and therefore the new

treatment group contains villages that did not experience land requisition during 2007-2009 (*before*) and experienced land requisition during 2004-2006 (*after*). We plot the election quality indices of the alternative treatment group and control group in Figure 3. The result is consistent with the previous graph that the election quality of treated group decreased more than the control group (note that the *before* and *after* dummy is reversed here).

<Figure 3 about here>

To statistically estimate the effect of land requisition, we apply the difference-in-difference method introduced earlier and report the estimation results in Table 15. The error terms are clustered in all regressions. The first two columns are the results of the first treatment (land requisition in 2007-2009). The parameter of main interest in our analysis is the coefficient on the interaction term $treat01 * dummy07-09$, i.e. the treatment effect of land requisition on election quality. In Column (1), the treatment effect is negatively significant at the 1% level. The land requisition reduces village election quality by 1.4 points or 36%. Even when adding village characteristics into the regression in column (2), the impact is still quite large and statistically significant. We also use the alternative treatment to estimate the effect of land requisition and the results are in column (3) and (4). The treatment effect is estimated to be a decrease in the election quality by about 0.8 point and statistically significant at the 5% level. These effects are consistent with the results in column (1) and (2).

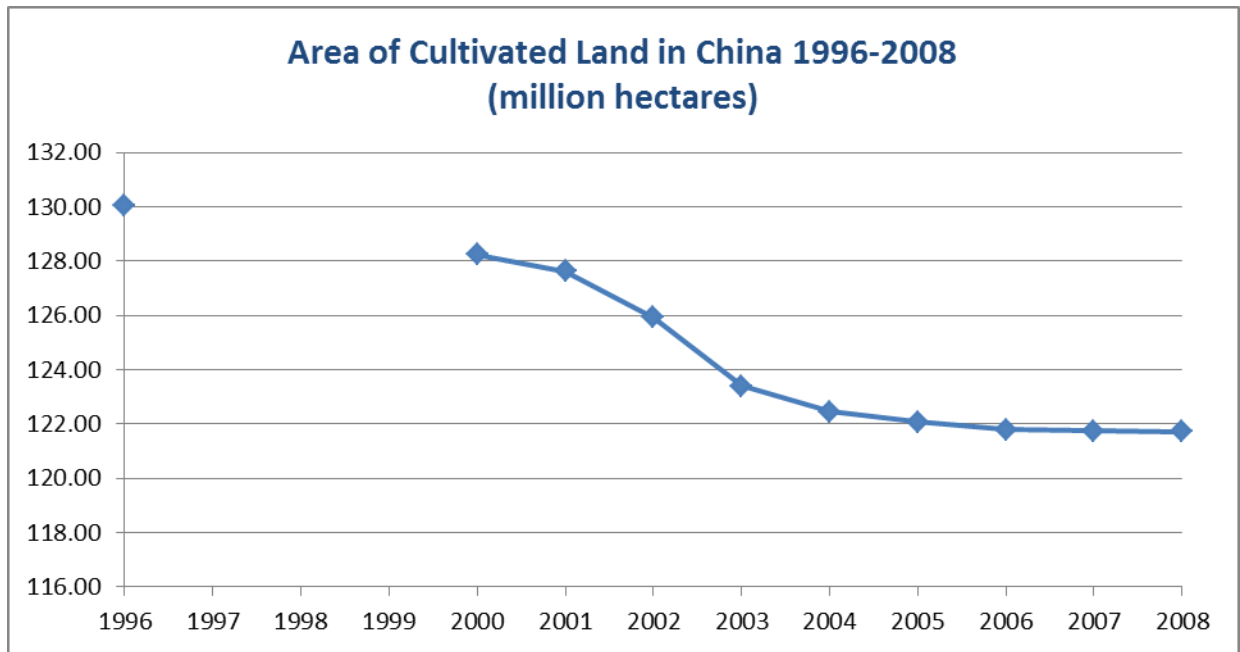
Besides the treatment effect, we have also discovered a number of interesting results. First, the average election quality scores of both treatment groups are higher than their respective control groups. It could be the case that villages that have land requisitions are generally speaking more democratic for some reasons. It is not likely harmful to the consistency of our estimation results since it actually rejects the reverse causality logic by which more democratic village should have less land requisition. It could also be argued that one may not need to worry too much about the initial value of the election qualities of treated and control groups as long as they are moving in the same trajectory: the election quality for both types of villages improves over time. Moreover, the coefficients on all included village characteristics are insignificant except for p_entprs in column (2).

Similar to the panel data analysis, we disaggregate the election quality index to its original seven electoral procedures and apply the difference in difference method separately. The results are presented in Table 16. Consistent with the findings from the first differencing model, the coefficients of the interaction term are negative for all procedures but only the formation of election committee and roving ballot box reach conventional levels of statistical significance. The effect of proxy voting is no longer statistically different from zero. Overall, the results support the hypothesized causal relationship between land requisition and less democratic and transparent electoral procedures in VC election.⁵

<Table A1 about here>

<Table A2 about here>

Figure 1. Area of Cultivated Land in China, 1996-2008



⁵ This table uses land requisition in 07-09 as the treatment. We have run regressions using land requisition in 04-06 as the treatment. The estimates for land requisition are similar. The coefficient for the formation of election committee, in particular, becomes statistically significant at the 1% level. To save space, we report only one treatment in the paper.

Source: Notice of the State Council on Issuing the Outline of the National Overall Planning on Land Use⁶; China Environment Statistics Yearbook 2010⁷

⁶ General Office of the State Council of the People's Republic of China, 'Guowuyuan Bangongting Guanyu Yinfa Quanguo Tudi Liyong Zongti Guihua Gangyao de Tongzhi [Notice of the State Council on Issuing the Outline of the National Overall Planning on Land Use]', accessed April 2, 1999, http://www.gov.cn/xgk/pub/govpublic/mrlm/201011/t20101115_62801.html

⁷ National Bureau of Statistics of China and Ministry of Environmental Protection of the People's Republic of China, *2010 Zhongguo Huanjing Tongji Nianjian [China Statistical Yearbook on Environment 2011]* (Beijing: China Statistics Press, 2011)

Figure 2: Study Sites for 12-City Suburban Survey

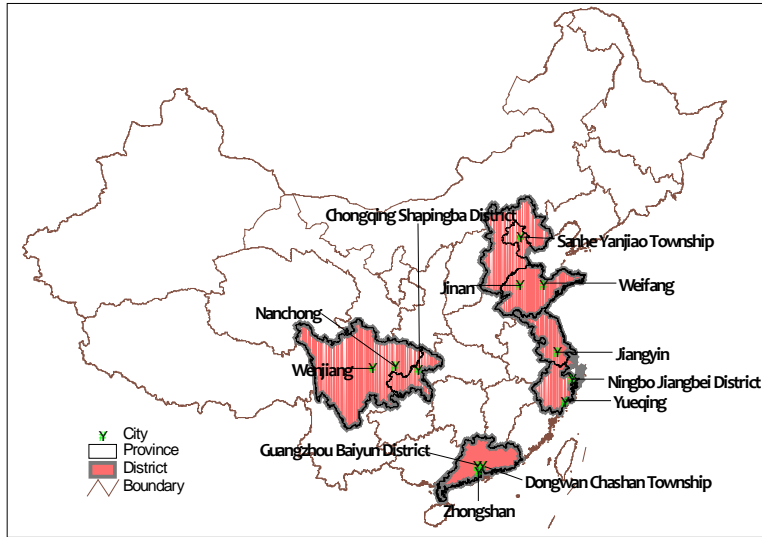


Table 1: Measurements of Political Trust in 12-City Suburban Survey

Province	City	Local trust	Central trust	Distance
----------	------	-------------	---------------	----------

Zhejiang	Wenzhou	-0.73	1.00	1.73
Zhejiang	Ningbo	-0.09	1.29	1.38
Jiangsu	Wuxi	0.70	1.34	0.63
Hebei	Langfang	0.32	1.31	0.98
Shandong	Weifang	1.15	1.70	0.55
Shandong	Jinan	0.45	1.53	1.08
Guangdong	Guangzhou	0.42	1.10	0.67
Guangdong	Zhongshan	0.55	1.28	0.72
Guangdong	Dongguan	0.42	1.07	0.64
Chongqing	Chongqing	0.28	1.48	1.19
Sichuan	Nanchong	0.81	1.61	0.80
Sichuan	Chengdu	1.01	1.78	0.77
Average		0.44	1.37	0.93

Data source: authors' 2009 survey. Trust in this table is calculated as the average level within city.

Table 2: Proportion of Dispossessed Farmers in Each City

Province	City	Total sample	Dispossessed farmers	
			number	percent
Zhejiang	Wenzhou	79	58	73.4%

Zhejiang	Ningbo	102	90	88.2%
Jiangsu	Wuxi	101	79	78.2%
Hebei	Langfang	108	53	49.1%
Shandong	Weifang	109	59	54.1%
Shandong	Jinan	102	88	86.3%
Guangdong	Guangzhou	104	29	27.9%
Guangdong	Zhongshan	83	20	24.1%
Guangdong	Dongguan	90	32	35.6%
Chongqing	Shapingba	103	56	54.4%
Sichuan	Nanchong	105	92	87.6%
Sichuan	Chengdu	109	105	96.3%
	Overall	1195	761	63.7%

Data source: authors' 2009 survey.

Table 3: Proportion of Dispossessed Farmers in 6-Province Rural Survey

Province	Sample size	Dispossessed famer size	share
Jiangsu	355	29	8.2%
Sichuan	350	56	16.0%
Shaanxi	382	73	19.1%
Jilin	373	42	11.3%
Hebei	372	11	3.0%

Fujian	378	56	14.8%
Overall	2210	267	12.1%

Data source: authors' 2008 survey.

Table 4: Descriptive Statistics for Key Variables

	12-city Suburban Survey					6-province Rural Survey				
	Obs.	Mean	Std. Dev	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
Land requisition (1=yes)	1195	0.637	0.481	0	1	2210	0.121	0.326	0	1
Gender(1=male)	1195	0.700	0.460	0	1	2210	0.608	0.488	0	1
Age	1195	49.032	11.603	17	86	2210	49.69	11.412	19	87
Education (years)	1195	7.743	3.270	0	19	2210	6.13	3.326	0	16

							7			
Marital Status (1=married)	1195	0.941	0.236	0	1	2210	0.935	0.246	0	1
Village Cadre(1=yes)	1195	0.059	0.236	0	1	2210	0.029	0.166	0	1
CCP Member (1=yes)	1195	0.230	0.421	0	1	2210	0.076	0.264	0	1
Veteran (1=yes)	1195	0.094	0.292	0	1	2210	0.045	0.207	0	1
Household income per capita (logged)	1195	9.216	1.259	0	12.	2210	8.334	0.993	2.	11.
Household land area per capita (unit: mu)	1195	0.531	0.882	0	15.	2210	1.541	1.921	0	33.
Relatives as local officials (1=yes)	1195	0.125	0.331	0	1	2210	0.162	0.369	0	1
Family member with migration experience (1=yes)	1195	0.433	0.496	0	1	2210	0.612	0.487	0	1
Family members politically persecuted (1=yes)	1195	0.125	0.331	0	1	2210	0.106	0.308	0	1
Family members honored by government (1=yes)	1195	0.294	0.456	0	1	2210	0.208	0.406	0	1
Family member war experience(1=yes)	1195	0.191	0.393	0	1	2210	0.259	0.438	0	1

Data sources: authors' 2008 and 2009 surveys.

Table 5: Determinants of Political Trust: Ordered Logit Results

Data sources VARIABLES	12-city Suburban Survey		6-province Rural Survey	
	Local	Central	Local	Central
Land requisition (1=yes; 0=no)	-0.426*** (-2.709)	-0.034 (-0.189)	-0.466*** (-2.953)	0.243 (1.288)
Gender	-0.342**	0.343**	-0.356***	0.263**

(1=male; 0=female)	(-2.521)	(2.299)	(-3.879)	(2.347)
Age	0.014**	0.050***	0.010**	0.021***
(year)	(2.226)	(6.713)	(2.239)	(4.205)
Education	0.018	0.049*	-0.015	0.040**
(years)	(0.851)	(1.959)	(-0.999)	(2.304)
Marital Status	0.098	-0.080	-0.003	-0.231
(1=married; 0=unmarried)	(0.460)	(-0.304)	(-0.018)	(-1.106)
Village Cadre Status	0.474*	0.894***	0.281	0.739**
(1=yes; 0=no)	(1.785)	(2.727)	(0.966)	(2.101)
CCP Member Status	0.282*	-0.136	0.207	-0.164
(1=yes; 0=no)	(1.910)	(-0.829)	(1.124)	(-0.826)
Veteran Status	-0.091	0.811***	-0.114	0.115
(1=yes; 0=no)	(-0.370)	(3.218)	(-0.533)	(0.522)
Household income per capita	-0.006	-0.004	0.034	0.031
(Logged)	(-0.104)	(-0.085)	(0.717)	(0.548)
Household land per capita	0.119*	-0.011	0.004	-0.018
(before expropriation)	(1.695)	(-0.142)	(0.181)	(-0.553)
Relatives as local officials	0.134	-0.038	0.221*	-0.017
(1=yes; 0=no)	(0.758)	(-0.192)	(1.828)	(-0.126)
Family member with migration experiences	0.111	0.386*	-0.037	-0.220**
(1=yes; 0=no)	(0.656)	(1.955)	(-0.404)	(-2.058)
Family members politically persecuted	-0.068	0.057	-0.248*	-0.108
(1=yes; 0=no)	(-0.398)	(0.288)	(-1.776)	(-0.671)
Family members honored by government	0.038	-0.096	0.190*	0.275**
(1=yes; 0=no)	(0.297)	(-0.669)	(1.754)	(2.034)
Family members participated in the wars	-0.319**	0.075	-0.030	0.241**
(1=yes; 0=no)	(-2.103)	(0.450)	(-0.294)	(2.089)
Village Dummy	Yes	Yes	Yes	Yes
Observations	1,195	1,195	2,210	2,210
Pseudo R ²	0.0887	0.1260	0.0518	0.0681

Data source: authors' 2008 and 2009 surveys. Robust z-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

o o o o