



STOCKHOLM CHINA ECONOMIC
RESEARCH INSTITUTE

Decentralization and Accountability in Authoritarian Regimes Evidence from Rural China

Vanesa Pesqué-Cela

School of Finance and Management, SOAS (University of London)
Stockholm China Economic Research Institute (Stockholm School of Economics)

Stockholm School of Economics Asia Working Paper

No. 48

December 2017

Decentralization and Accountability in Authoritarian Regimes Evidence from Rural China¹

Vanesa Pesqué-Cela

School of Finance and Management, SOAS (University of London)
Stockholm China Economic Research Institute (Stockholm School of Economics)

Stockholm School of Economics Asia Working Paper

No. 48

December 2017

¹ I would like to thank Professor Tao Ran for providing access to the data used in this paper. I would also like to thank the participants of the Conference on the Political Economy of Democracy and Dictatorship (University of Münster), the 2017 Meeting of the European Public Choice Society (Central European University), as well as of seminars at the Stockholm China Economic Research Institute and the Stockholm Institute of Transition Economics (Stockholm School of Economics) for their helpful comments; all remaining errors are mine. This is a preliminary draft; please do not cite.

Decentralization and Accountability in Authoritarian Regimes Evidence from Rural China

Abstract

Can political decentralization and the introduction of local elections improve government accountability and public goods provision in a non-democratic regime like China? Political decentralization reforms in China have only been implemented at the village level, and have been implemented unevenly across villages. Villages differ substantially in terms of the quality of their elections and the amount of power given to (or taken away from) their popularly elected village committees.

In light of these differences, this paper investigates the relationship between political decentralization processes and government performance in the rural Chinese context, by addressing the question of whether democratically elected village committees are more responsive to villagers' demands for better infrastructure in their communities, when given the power to govern.

To explain differences among villages in terms of whether and how much they invest in new infrastructure, a tobit model of village-financed investment is estimated using cross-sectional survey data collected from over 100 villages. Results from the regression analysis indicate that variation in the degree of political decentralization is positively associated with variation in the level of public goods investment across villages: villages governed by democratically elected village committees tend to invest more in new infrastructures. These results are robust to the endogeneity between governance and public goods provision.

Our findings from rural China illustrate the potential and limitations of political decentralization reforms to enhance government accountability in non-democratic regimes. In some communities, they have improved government performance, but in many others they have failed to make elected local governments accountable to citizens because they have failed to devolve authority and resources to them in the first place. The challenge thus is not only to make decentralization work but, more fundamentally, to make decentralization happen.

Key words: Decentralization; accountability; public goods provision; China

JEL classification: H41; H70

1. Introduction

It has long been argued that decentralization can make government more accountable to citizens in the provision of public goods and services. However, empirical evidence from developing countries shows that, by design or default, decentralization reforms have often failed to create the political, fiscal and administrative institutions required to reduce corruption and to improve the quality of government (e.g., Parker 1995; Agrawal and Ribot 1999; Crook and Manor 1998; Manor 1999; Olowu and Wunsch 2004; Bardhan and Mookherjee 2006; Smoke et al. 2006).

In China, political decentralization reforms have only been implemented at the village level, and have been implemented unevenly across villages. Thirty years have passed since the enactment of the 1987 Organic Law of Village Committees and the gradual introduction of elections in the country's more than 600,000 villages, and yet there are still significant differences among them in terms of how village elections are conducted, and how much power is given to (or taken away from) their popularly elected village committees (e.g., O'Brien and Zhao 2011). This raises the question, addressed in this paper, of whether and the extent to which political decentralization can lead to better governance and public goods provision in China. In particular, do villages that are governed by democratically elected village committees allocate more resources to public goods provision? Are their leaders more responsive to villagers' demands for better infrastructure? Differences in the degree of political decentralization across villages may explain differences among them in terms of the accountability of their leaders and their provision of basic public goods.

To date, however, there is little consensus in the literature on the accountability role of elections in rural China. Some studies indicate that the introduction of elections for village committees has been positively associated with both lower taxation and higher public goods spending in rural communities (e.g. Zhang et al. 2004; Luo et al. 2007, 2010; Wang and Yao 2007; Sato 2008; Kung et al. 2009; Martinez-Bravo et al. 2011). In villages where leaders are directly elected by villagers, taxation is characterized by "greater fairness and less abuse" (Bernstein and Lü 2003: 224). Furthermore, villagers pay less taxes, but do not receive less or lower-quality infrastructure and services. Indeed, popularly elected officials tend to invest more in roads, schools, clinics, drinking water and irrigation systems (Zhang et al. 2004; Luo et al 2007, 2010; Sato 2008; Kung et al. 2009; Martinez-Bravo et al. 2011).

While these studies suggest that institutionalizing free and fair elections in rural communities is in itself sufficient to improve their governance, others suggest that it is neither necessary nor sufficient: villages with high-quality electoral institutions are not more likely to invest in basic infrastructure

(e.g., Tsai 2007ab) or social welfare (e.g., Meng and Zhang 2011), but are as likely as villages with poor-quality electoral processes to divert resources to patronage. Consequently, we are left with the question of why the development of democratic institutions has improved the quality of governance and public goods provision in some villages but not in others.

The main reason why existing studies may not be able to provide a satisfactory answer to this puzzle is that, in their analysis of the effects of political decentralization, the focus is put on whether and how elections are conducted, rather than on what happens after and between elections² – in other words, on the procedural rather than on the substantive dimensions of the political decentralization process in rural communities³. Furthermore, the political dimension of the decentralization process is often examined in isolation from its fiscal and administrative dimensions. As a result, their analysis of the effects of local elections on public goods provision pays insufficient attention to the crucial issue of power in village governance (i.e., control over fiscal resources). In most cases, it is assumed that public goods investment decisions are made at the village level, and are made by popularly elected village committees. Yet, in the context of an authoritarian and increasingly (fiscally and administratively) centralized state, this should not be assumed. Holding free and fair elections for village committees might be a necessary but insufficient condition for improving the quality of governance and public goods provision in rural China: the ability of village democratic institutions to deliver accountability might crucially depend on the degree of control over fiscal resources that village committees actually have. And this, in turn, might largely depend on how political and other (de-)centralization policies are implemented at the grassroots level.

To gain a better understanding of the role of local elections in authoritarian regimes, this paper investigates the relationship between political decentralization processes and government performance in the rural Chinese context, by addressing the question of whether democratically elected village committees are more responsive to villagers' demands for better infrastructure in their communities, when given the power to govern (i.e., control over fiscal resources). Using cross-sectional data⁴ from over 100 Chinese villages and tobit regression analysis, it examines whether village-level differences in (i) the quality of local electoral institutions and (ii) the nature of the local political power structure explain differences in basic infrastructure spending by village governments. It finds that variation in the level of political decentralization is positively associated with variation in

² A notable exception is the study conducted by Zhang et al. (2004).

³ See O'Brien and Zhao (2011) for an analysis of each of these dimensions in the rural Chinese context.

⁴ The data set used in this study is from a survey of 115 villages conducted by the Center for Chinese Agricultural Policy (CCAP) of the Chinese Academy of Sciences in the summer of 2005 (henceforth, CCAP village survey). The data set is described in section 4.1.

the level of infrastructure investment by villages and argues that democratically elected leaders may be more willing and able to mobilize resources from villagers to invest in much-needed public goods.

Additionally, the paper examines some of the main (political, fiscal and administrative) obstacles for village committees to gain control over fiscal resources (i.e., local power) and to respond to villagers' demands for public goods (i.e., local accountability) in the current (de-)centralization framework. In this respect, it raises the question of whether the ongoing processes of fiscal and administrative centralization may undermine village democratic institutions, while failing to establish alternative institutions that address the current accountability gap in village governance.

The paper is structured as follows. Section 2 discusses the conditions under which (political) decentralization is more likely to improve government performance, as well as the factors underlying cross-country and within-country differences in the effects of (political) decentralization. Section 3 provides an overview of the political, fiscal and administrative components of the decentralization process in China's rural areas, as well as of its variation across time and jurisdictions. In so doing, it identifies the conditions under which local elections may (or may not) improve public goods provision in rural communities. In section 4, we first present the data set, econometric model and estimation methods and then report and discuss our regression results. Additionally, we explore the possible endogeneity of political decentralization processes at the village level and adopt an instrumental-variable approach to re-examine their causal impact on public goods investment. Finally, section 5 summarizes our main findings and concludes.

2. Decentralization: Changing Patterns of Power and Accountability – Or Not

Although there is a large literature examining the effects of decentralization on the quality of governance and service provision in developing countries, the empirical evidence remains mixed and inconclusive (e.g., Parker 1995; Agrawal and Ribot 1999; Crook and Manor 1998; Manor 1999; Ribot 2002; Olowu and Wunsch 2004; Bardhan and Mookherjee 2006; Smoke et al. 2006; Faguet 2012). Decentralization has improved government accountability and performance in some countries, but not in others (e.g., Crook and Manor 1998); and in some communities, but not in others (e.g., Faguet 2012).

Cross-country and within-country differences in the effects of decentralization appear to be driven by two main factors. The first one is related to differences in the design and implementation of decentralization reforms. There is abundant evidence that countries, and even regions within countries, have decentralized in different ways and to different degrees. At the same time, there is growing consensus that decentralization is unlikely to lead to improved government performance in less developed countries unless: (i) it takes place along fiscal, administrative and political dimensions; and (ii) it takes the form of devolution, rather than that of mere delegation or deconcentration. Only under these conditions, can resources and decision-making authority be transferred to local governments, and can local governments in turn be made accountable to local citizens (e.g., Parker 1995; Manor 1999; Ribot 2002; Olowu and Wunsch 2004; Bardhan and Mookherjee 2006). In most decentralizing countries in the developing world, the lack of a coherent decentralization policy aimed at both transferring *power* to local governments and strengthening their (downward) *accountability* to the local population, often compromises its effectiveness in improving the quality of local governance and service provision. This is particularly the case in non-democratic regimes (e.g., Olowu and Wunsch 2004), or in authoritarian enclaves within democratic ones (e.g., Lawson 2000), where political decentralization is incomplete and/or is not accompanied by fiscal and administrative decentralization.

A second reason for the lack of conclusive evidence in the literature on the effects of decentralization on service provision in developing countries is that perhaps we should not have expected to find it in the first place. As pointed out by Faguet (2012), the outcomes of any decentralization process are contingent on the specific context where it unfolds. Differences among communities in their social, economic or political characteristics can thus explain why the same decentralization policy may have different effects across communities within the same country. Decentralization is less likely to

improve governance in communities characterized by poverty, inequality and ethnic or religious divisions, where the problems of elite capture and political patronage tend to be more severe (e.g., Bardhan and Mookherjee 2006).

Rural China provides an ideal setting to investigate the relationship between decentralization and government accountability in a non-democratic regime, given the tremendous variation that exists both over time and across jurisdictions in terms of patterns of (de-)centralization, governance, and public goods provision (e.g., Brandt 2014). The most recent and thorough studies investigating the determinants of good governance in village communities draw attention to local contextual factors, namely, patterns of social capital in rural communities and levels of rural-urban migration (Tsai 2007ab; Lu 2015).

To explain why some village governments provide more public goods than others, Tsai (2007a: 356-357; 2007b: 12-19) and Lu (2015: 84-131) examine how – and how effectively - their leaders and residents address the problems of collective action and accountability that typically arise in the context of public goods provision⁵. Tsai (2007ab) finds that villages with certain types of solidary groups, such as village clans or temples, tend to have better infrastructure. She argues that “in political systems with weak formal institutions of accountability, localities with encompassing and embedding solidary groups are likely to have better governmental provision of public goods than localities without these groups, all other things being equal”⁶ (Tsai 2007b: 120). This is because this type of social groups can create a relationship of mutual trust and accountability between villagers and officials – presumably, in ways that political institutions, such as village elections, cannot. Research by Lu (2015), in contrast, suggests that the quality of rural governance is ultimately dependent on the level of rural-urban migration. He argues that in “atomized” communities, where out-migration is relatively higher than in other villages, neither solidary groups such as village clans, nor political institutions such as village elections, can create effective collective action and accountability. These villages thus tend to have a poorer provision of public goods. Put briefly, for Tsai (Tsai 2007b: 257) what explains the emergence of pockets of good governance in parts of rural China is the presence of the “right” kinds of social groups, while for Lu (2015) it is the absence of high levels of migration.

⁵ These problems are related to the incentives for villagers to pay taxes and to contribute to public projects (i.e. the collective action problem), and for village officials to use their own funds to invest in public goods (i.e., the accountability problem).

⁶ Solidary groups are defined as “collections of individuals engaged in mutually oriented activities who share a set of ethical standards and moral obligations” (Tsai 2007a: 356; Tsai 2007b: 4). Examples include temples, churches and lineages. These groups are “encompassing” when they are “open to everyone under the local government’s jurisdiction”, and “embedding” when they “incorporate local officials into the groups as members” (Tsai 2007a: 356, Tsai 2007b: 13).

One of the main arguments of this new literature on the varieties of governance in rural China is that the key to explaining differences in village government performance lies in differences in the social and economic context where village political actors operate. Without denying the relevance of these contextual factors, this paper attempts to re-direct our attention to variation in the design and implementation of (de-)centralization policies as an alternative and complementary explanation for the observed variation in village government performance in the Chinese context.

3. (De-)centralization in Rural China: Political, Fiscal and Administrative Dimensions

The analysis of the political, fiscal and administrative dimensions of the (de-)centralization process in rural China reveals significant variation in each of these dimensions over time and across villages (e.g., O'Brien and Zhao 2010; Fock and Wong 2008; Sun et al. 2013). This variation in the nature of the political, fiscal and administrative institutions in which village political actors are embedded manifests itself in three main ways: (1) whether village committees are elected in democratic elections, and are given the authority to govern village affairs (i.e., political decentralization); (2) the degree of reliance of villages on fiscal transfers from higher-levels of the Party-state to finance their provision of public goods and services (i.e., fiscal centralization); and (3) the level of bureaucratic control exercised by higher-level Party cadres over village officials through the so-called cadre responsibility system (i.e., administrative centralization).

One of the explanations for this variation is related to changes over time in the nature of (de-)centralization policies. The focus of the policies adopted by the central government to improve rural governance has recently moved away from political decentralization towards fiscal and administrative centralization. In the 1980s and especially the 1990s, one of the objectives of the central government was to make village officials more accountable to villagers for their taxation and spending decisions, through the development of new political institutions, such as popularly elected village committees and village representative assemblies (e.g., O'Brien and Li 2000). In contrast, in the 2000s and 2010s, its priority has been to shift power away from villages to higher levels of the Party-state through the centralization of the fiscal and administrative systems, as well as to increase top-down control over village officials, through the development of new or more effective fiscal and administrative institutions, such as earmarked grants and performance contracts (e.g., Oi et al. 2012).

Another explanation is related to how (de-)centralization policies have filtered down to the village level. The fact that today we can observe differences among villages in their degree of political, fiscal and administrative (de-)centralization is largely due to the fact that intermediate governments, such

as provinces and counties, have traditionally enjoyed substantial *de jure* and *de facto* discretion in implementing central policies towards rural areas, as well as in determining their own fiscal, administrative and political relations with lower levels of the Party-state within their jurisdictions (e.g., World Bank 2002, 2007; O'Brien and Zhao 2010; Sun et al. 2013). Differences in local conditions have consequently resulted in differences across jurisdictions in the degree of autonomy granted to villages and, within villages, to popularly elected village committees.

All this has two main implications for our analysis of the conditions under which the development of reasonably good democratic institutions (e.g., free and fair elections) may improve public goods provision in the rural Chinese context. The first one is related *the extent to which* village committees are granted power or control over fiscal resources by county, township and village Party committees, which is primarily determined by the level of political and fiscal (de-)centralization. The second one is related to *the extent to which* village officials are accountable to higher-level Party cadres or to villagers in the way they use the resources under their control, which is not only influenced by the above-mentioned factors but also by the form and degree of administrative (de-)centralization. The potentially positive effects of democratic institutions may be reduced or eliminated if: (i) village committees have little or no control over fiscal resources, while power is centralized in the hands of Party secretaries at various levels; and/or (ii) village committees are primarily accountable to higher-level officials rather than to villagers, and higher-level officials do not give the same priority as villagers to improving the provision of village public goods. In sum, the issue of whether and the extent to which local elections can make local spending more responsive to local priorities might depend on the interplay of the fiscal, political and administrative dimensions of the (de-)centralization process at the grassroots level: who finances village governments and village public goods provision; who (s)elects their leaders; and by whom and how are they held to account for their spending decisions. Each of these factors is examined below⁷.

3.1 Political decentralization: Village committees versus Village Party Branches

China initiated political decentralization reforms at the village level in the late 1980s, with the establishment of elected village committees. These reforms were part of a broader governance reform agenda to tackle the problems of cadre corruption, political discontent and social unrest in the country's rural areas (e.g., O'Brien and Li 2000). Since then, political decentralization reforms have been carried out slowly and, in most cases, only partially: despite having established elected

⁷ In section 4, we will discuss how these different factors are incorporated into the econometric model.

village committees, most villages still have poor elections and/or powerless village committee heads (e.g., O'Brien and Zhao 2010; Sun et al. 2013; Chen 2015).

The main obstacle to the full implementation of political decentralization reforms is the lack of political consensus and commitment among Party leaders at the central and local levels (e.g., O'Brien and Li 2000). The clearest manifestation is the failure of the central Party-state to establish an adequate legal framework to make political decentralization happen. The 1987, 1998 and 2010 Organic Laws of Village Committees have left ample room for local Party officials to thwart political decentralization in two main ways: by manipulating village elections and, especially, by preventing any transfer of power from village Party branches to village committees⁸ (e.g., Schubert and Ahlers 2012; Alpermann 2013).

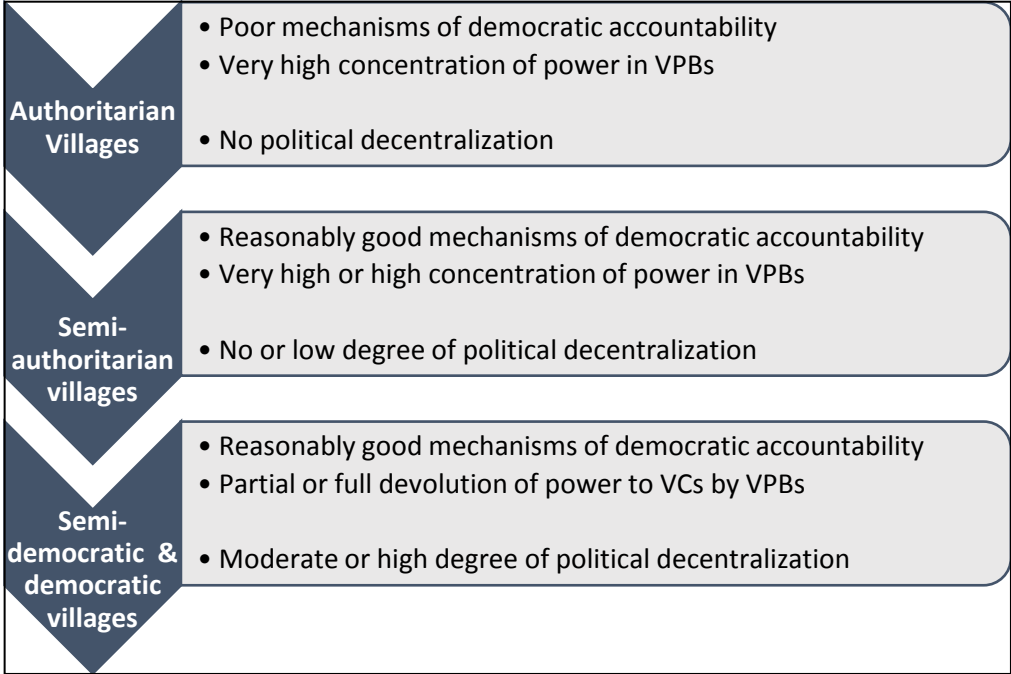
Reflecting this, previous studies have found substantial variation over time and across villages in the “procedural” and “substantive” dimensions of the political decentralization process, that is, in: (i) the quality of village democratic institutions and procedures; and (ii) the political power of (elected) village committees vis-à-vis (appointed) village Party branches (O'Brien and Zhao 2011). Their findings also suggest that there is an increasing asymmetry between the “accountability” and “power” dimensions of the political decentralization process in many parts of rural China, where there is a growing mismatch between the presence of relatively good institutions of democratic accountability and the absence of power in village committees.

This can be seen in figure 1, which distinguishes between three main types of villages according to their implementation of political decentralization reforms. At one end of the (political) centralization-decentralization continuum are villages in which elections are rigged and power remains concentrated in the hands of village Party branch secretaries (i.e., authoritarian villages). In the middle of the spectrum are villages with reasonably free and fair elections but relatively powerless village committees (i.e., semi-authoritarian villages). At the other end of the continuum, we find villages where democratically accountable village committees have been granted some or full authority to govern (i.e., semi-democratic or democratic villages). Only in the latter type of villages (i.e., semi-democratic and democratic villages) has political decentralization really taken place. And, consequently, only in these villages can we expect political decentralization to work.

⁸ On the one hand, the 1987 Organic Law encouraged but did not require villages to hold regular elections for village committees, nor did it establish how these elections should be conducted. On the other hand, while the 1998 and 2010 Organic Laws have closed these legal loopholes, they have opened a new one, by defining the village Party branch as “the leading core” of the village governance system. Tellingly, each version of the Organic Law has been ambiguous about the division of roles and responsibilities between the village committee and the village Party branch (e.g., Alpermann 2013).

In sum, in the context of China’s authoritarian party-state regime, the balance of power between Party and non-Party institutions at each level of the Party-state is heavily tilted towards the former, and this also appears to be the case in many (perhaps most), but not all, villages¹. After three decades of experimenting with political decentralization, villages differ in terms of the quality of their elections, and the amount of power given to their popularly elected village committees. These differences may provide part of the answer to the question of why some villages are better governed and allocate more of their own resources to providing public goods than others. In more democratic villages, where political decentralization reforms have gone further, officials may be more willing and better able to mobilize resources from villagers to invest in basic public goods such as infrastructure.

Figure 1: Classification of villages by degree of political decentralization



Source: own elaboration
 Note: Village Party branches (VPBs); Village committees (VCs)

3.2 Fiscal and Administrative Centralization: Villages versus Higher levels of the Party-state

China has recently undergone far-reaching processes of fiscal and administrative centralization, which have transformed the power and accountability structures in which village officials are embedded. These reforms have reduced the resources and power of villages vis-à-vis higher levels of the Party-state, while increasing their upward accountability to township and county Party committees for the use they make of the resources they still control.

In the fiscal arena, the introduction of the tax-sharing system (1994), the implementation of the tax-for-fee reform (2002-04), and the abolition of agricultural taxes (2004-06) have “hollowed out” village finances (Fock and Wong 2008: 22). These fiscal reforms have limited the autonomy of village governments to determine the level and composition of their expenditures, by reducing their revenue-raising capacity, while making them heavily dependent on discretionary and earmarked transfers from higher-level governments (Fock and Wong 2008; Liu et al. 2009; Bird et al. 2011; Oi et al. 2012; Boyle et al. 2014). Findings from a survey of 100 villages in five provinces show that in 1997 higher-level governments financed about 45 percent of investment in village-level infrastructure, while in 2008 they financed almost 75 percent (Oi et al. 2012). Despite this, not all village governments have become equally dependent on transfers to provide public goods: they still differ in their willingness and ability to fund their own public goods investment (e.g., Bird et al. 2011; Boyle et al. 2014).

In the administrative arena, new policies have been implemented to increase the level of bureaucratic control exercised by county and township cadres over village officials under the cadre responsibility system⁹. Of particular importance is the so-called “cadre-in-residence” policy, whose implementation has resulted in a high number of county and township officials being sent out to work in villages to enforce family planning and other priority policies, as well as to maintain social stability¹⁰ (Oi et al. 2012; Smith 2010). A nationally representative survey suggests that this policy has been implemented in at least 70 percent of the country’s villages (Oi et al. 2012). At the same time, anecdotal evidence also suggests that some village governments have successfully resisted the implementation of this and other administrative policies aimed at reducing their autonomy vis-à-vis higher levels of the Party-state (Smith 2010).

Increasing fiscal and administrative centralization may reduce the potential positive impact of political decentralization on village public goods provision for at least two reasons. First, under a more centralized fiscal system, county and township officials, who are not elected by villagers but appointed by higher-level Party committees, finance and implement a larger share of village-level infrastructure projects. Second, the centralization of the administrative system may change the incentive structure of village officials in a negative way, increasing their accountability to higher levels of the Party, at the expense of their accountability to villagers. This would be negative because

⁹ Under this system, Party committees at each level of the administrative hierarchy (e.g., township Party committees) use annual performance contracts to assign a variety of targets to lower-level officials (e.g., top village officials) and to hold them accountable for fulfilling them (e.g., Tsai 2007b; Birney 2014).

¹⁰ According to Oi et al. (2012: 653), in villages where this policy has been implemented, a township official spends between two and five days per week in the village.

higher-level officials and villagers often have very different policy priorities that compete for resources (e.g., the time of village officials and the village's collective funds)¹¹.

4. Explaining Variation in Village-Level Investment in Public Goods

4.1. Data

The data set used in this study is from a survey of 115 villages conducted by the Center for Chinese Agricultural Policy (CCAP) of the Chinese Academy of Sciences in the summer of 2005. Stratified random sampling was used to select the sample villages. The country was first divided into six regions and one province was randomly selected from each of the regions: Jilin, Shaanxi, Hebei, Jiangsu, Fujian, and Sichuan. All counties in each province were then ranked into quintiles according to their per capita gross value of industrial output, and one county was randomly selected from each quintile. Within each county, two townships were randomly selected from among those with per capita income above and below the median, respectively. Finally, following the same procedure, two villages were randomly selected from each township, resulting in a sample of 120 villages. Fourteen villagers and between two and four officials were randomly selected in each village. The survey covered 378 cadres and 1,550 villagers in 115 villages¹². It collected information about public goods provision; village finances; village democratic reforms; the relationship between villages and townships; the relationship between village committees and Party branches; villagers' political attitudes and participation; the nature and role of community organizations; and the economic, social, demographic and geographic characteristics of the sample villages. Most data were collected for the years 2004 and 2000.

4.2. Econometric model, Variables and Estimation Method

Model

Our main objective in this paper is to investigate the relationship between political decentralization processes and government performance in the rural Chinese context, by addressing the question of whether democratically elected village committees tend to channel more resources to investment in infrastructure, when given the power to govern. To model the relationship between political

¹¹ For instance, findings by Kung et al. (2009) show that village cadres devote most of their time and resources to perform state tasks, such as implementing the one-child policy, rather than to meet community needs, such as improving community infrastructure. To the extent that this is the case, the more accountable villages officials are to higher-level officials the more of their (own) resources will be used for purposes other than providing public goods.

¹² Due to unexpected circumstances, five villages had to be dropped from the final sample.

decentralization and public goods investment, we use tobit regression analysis. The use of a tobit model is justified by the censored nature of our dependent variable, as not all villages made new investments in infrastructure in 2004. The model is estimated by maximum likelihood and assumes that the same factors that explain whether or not a village invests in infrastructure also explain how much it invests. It is specified as follows:

$$PGI_i^* = \alpha(PD_i) + \beta(FC_i) + \gamma(AC_i) + \delta(X_i) + \varepsilon_i, \quad (1)$$

$$PGI_i = 0 \text{ if } PGI_i^* \leq 0, \quad (2)$$

$$PGI_i = PGI_i^* \text{ if } PGI_i^* > 0, \quad (3)$$

where PGI_i^* is the latent or unobservable variable, which captures the incentives and ability of village officials to mobilize and allocate resources to invest in new infrastructure in village i (i.e., public goods investment). PGI_i is the observed variable, namely, the actual investment in new infrastructure made by the village government (rather than higher-level governments) in community i . The observed variable PGI_i is related to the latent variable Y_i^* through the observation rule in (2) and (3). PD_i , FC_i , and AC_i are variables capturing the level of political, fiscal and administrative (de-)centralization in village i . X_i is a vector of institutional, economic, social, demographic and geographic controls that affect the demand, supply and cost of infrastructure delivery in community i . Finally, α , β , γ and δ are the parameters to be estimated; and ε_i is the error term, which is assumed to be normally distributed and homoscedastic.

Variables:

Our dependent variable is the natural logarithm of village-financed investment in new infrastructure in 2004, which on average amounted to approximately 188,000 yuan in the sample villages. There was, nonetheless, great variation among them in terms of the level of funds allocated to investment in new basic infrastructures, such as roads, irrigation and drinking water systems or school buildings, during this period. Villages in the coastal provinces of Fujian and Jiangsu recorded the highest level of infrastructure investment during this period, while villages in Shaanxi and Hebei provinces recorded the lowest.

Our main explanatory variable is a dummy variable (0-1) that captures the procedural and substantive dimensions of the political decentralization process: the quality of village elections; and the political power of the elected village committee vis-à-vis the village Party branch. The political decentralization variable takes on the value 1 in villages where: (i) elections meet the minimum conditions for them to serve as mechanisms of (downward) accountability; and (ii) where political

power has been transferred from the village Party branch to the village committee, whether partially or fully.

To assess the quality of the last village election we examined two crucial aspects of the electoral process: the procedure followed for (a) the formation of the electoral commission and for (b) the nomination of electoral candidates. Arguably, elections are unlikely to be free, fair and competitive unless: (a) the members of the electoral commission are elected by villagers; and (b) the electoral candidates are also nominated by villagers in open primaries. To determine whether the village committee was given the power to govern in the post-election period, we examined the nature of the political power structure at the village level and, more specifically, whether the elected village committee had the authority to make all decisions regarding the mobilization and allocation of village funds or, at least, whether it shared such authority with the village Party branch.

Our data suggest that political decentralization has actually only taken place in approximately one fourth of all the sample villages. Even if most villages have held reasonably good elections for the village committee, political power has remained centralized in the village Party branch in most cases. Villages in Jilin are a case in point. In 95% of the villages in this province, their last election met the minimum democratic standards (i.e., popular selection of electoral commission members and electoral candidates). However, in around 70% of them the elected village committee had no decision-making power whatsoever.

In addition to the degree of political decentralization, other key explanatory variables included in the model are the level of fiscal and administrative centralization. The degree of fiscal centralization is measured by the share of fiscal transfers in total village government revenues, which amounted on average to about 20%. To capture the level of bureaucratic control exercised by higher levels of the Party-state over villages we use a variable that measures the percentage of the priority tasks of village officials that are mandated by the township government. Although this measure of administrative centralization is a rough one, it gives an indication of the degree of upward accountability and subordination of village officials to township cadres. In the average village, over 50% of the tasks performed by village officials during the period of study were mandated by their Party superiors at the township level. This suggests that higher-level governments exert relatively tight control over village governments and raises the question of whether they hold them accountable for improving the provision of village public goods.

To distinguish between the effects on public goods provision of (political) decentralization policies and other factors, a number of institutional, economic, social, demographic and geographic variables

found in the literature on public goods provision in rural China are included in the model as controls. These variables are lagged by one-time period to avoid endogeneity problems.

Firstly, we include a set of economic variables that capture differences among villages in their levels and patterns of economic development, namely: the log of per capita village collective/government revenue; the log of per capita net income; the amount of village farmland; the number of collective, private, and individual (*getihu*) enterprises; the share of village households with access to tap water; and the proportion of those with access to electricity.

Secondly, to account for the effects of the social structure and relations, we include three variables: one indicating the proportion of migrants in the village labour force, a second variable indicating the degree of clan homogeneity, as measured by the proportion of village households belonging to the three largest surname groups, and a last variable indicating the number of village small groups (*xiaozu*).

Thirdly, the model controls for the effects of informal institutions and relations on village public goods provision, by including two variables which indicate (i) the number of ancestral temples and churches in a village, and (ii) the number of fellow villagers that work as officials in the county government¹³.

Finally, to control for the effects of demographic and geographic differences among villages, we include two variables indicating the size of the village population and its distance to the township. Provincial dummies are also included.

4.3 Empirical Results

Table 1 presents the results of the maximum likelihood estimation of the tobit regression. The tobit coefficients and marginal effects are reported in columns 1 to 3¹⁴.

¹³ Existing studies suggest that these two variables may have a negative impact on the ability and incentives of village officials to mobilize resources from local sources to invest in infrastructure. This is particularly the case in villages where social organizations play an important role as non-state providers of public goods (Tsai 2011); or in villages that receive more infrastructure investment from the county thanks to the connections of their leaders with county officials (Luo et al. 2010).

¹⁴ The three types of marginal effects reported in table 1 measure: (1) the changes in the mean of the latent variable (column 1); (2) the changes in the conditional expected value of the observed dependent variable (column 2); and (3) the changes in the unconditional expected value of the observed dependent variable (column 3). The marginal effects reported in columns 2 and 3 are computed using the “margins” command in Stata and are estimated at the mean of the independent variables.

Table 1. Estimation results of the Tobit model

Dependent Variable = Ln (Village infrastructure investment, 10,000 yuan)						
	Tobit MLE Results		Conditional MEs		Unconditional MEs	
	(1)		(2)		(3)	
	Coeff.	SEs	MEs	SEs	MEs	SEs
Political decentralization (0-1)	0.862**	(0.397)	0.717**	(0.325)	0.827**	(0.378)
Fiscal centralization (%)	0.015	(0.011)	0.122	(0.009)	0.014	(0.011)
Administrative centralization (%)	-0.005	(0.006)	-0.004	(0.005)	-0.005	(0.006)
Villagers working in the county government (no.)	-0.008	(0.060)	-0.007	(0.048)	-0.008	(0.056)
Ln(village collective revenues)	0.384**	(0.164)	0.319**	(0.138)	0.368**	(0.158)
Ln(per capita income)	1.085**	(0.548)	0.903**	(0.454)	1.041**	(0.524)
Village arable land (1000 mu)	-0.093	(0.105)	-0.078	(0.088)	-0.089	(0.101)
Village enterprises (no.)	0.024	(0.028)	0.020	(0.023)	0.023	(0.027)
Self-employed workers (%)	0.006	(0.018)	0.005	(0.015)	0.005	(0.017)
Migrant workers (%)	-0.028***	(0.010)	-0.023***	(0.008)	-0.027***	(0.009)
Villagers belonging to the 3 largest clan groups (%)	0.016**	(0.007)	0.013**	(0.006)	0.015**	(0.007)
Village temples & churches (no.)	-0.076	(0.073)	-0.063	(0.061)	-0.073	(0.070)
Village small groups (no.)	-0.092**	(0.043)	-0.077**	(0.034)	-0.089**	(0.040)
Village households with access to drinking water (%)	0.0001	(0.006)	0.0001	(0.005)	0.0001	(0.006)
Village households with access to electricity (%)	0.008	(0.018)	0.007	(0.014)	0.008	(0.017)
Village population (no.)	0.001***	(0.000)	0.0001***	(0.000)	0.001***	(0.000)
Distance to the township (km.)	0.085*	(0.045)	0.071*	(0.037)	0.082*	(0.043)
Provincial dummies	Yes		Yes		Yes	
Constant	-10.022**	(4.953)				
Observations	108					
Pseudo R2	0.1612					
Log pseudo-likelihood	-181.96637					
F	4,69					
Prob > F	0.0000					

Notes: * Significant at the 10% level; ** Significant at the 5% level; *** Significant at the 1% level
Robust standard errors are reported in parentheses. Marginal effects are computed at mean values.

As can be seen in table 1, the estimated coefficient on the political decentralization variable is positive and significant at the 5% level, which indicates that differences in the degree of political decentralization across villages account for differences in their levels of investment in basic infrastructure: more democratic villages tend to invest more. As hypothesized, in communities

governed by democratically elected village committees, their leaders appear to be more willing and better able to mobilize resources to meet villagers' demands for public goods¹⁵. Indeed, an "average" village where political decentralization has taken place invests approximately 80% more in infrastructure than an "average" village where elections are rigged or political power remains concentrated in the hands of the village Party secretary.

In addition to political decentralization, various economic, social and demographic factors also explain differences among villages in terms of whether and how much they invest in infrastructure. In line with previous studies, we find that differences among villages in their level of economic development are significantly associated with differences in their level of public goods provision (Zhang et al. 2004; Luo et al. 2007; Zhang et al. 2007; Kung et al. 2009). Reflecting this, the coefficients on the government revenue variable and on the per capita income variable are positive and significant at the 5% level. As anticipated, richer villages are more likely to invest more in infrastructure.

Equally consistent with previous studies are our findings on the effects of various social and demographic factors (e.g., Tsai 2007ab; Kung et al. 2009; Luo et al. 2010). The negative and significant coefficient (at 1%) on the out-migration variable reveals that villages with more migrants tend to invest less in public goods. On the other hand, the significantly positive coefficient (at 5%) on the clan homogeneity variable indicates that villages with a more homogenous social structure, where a majority of the population belongs to the same clan(s), are more likely to have higher levels of investment in infrastructure. This may be due to the fact that out-migration processes and clan diversity have a negative impact on villagers' incentives and ability to organize for collective action. Finally, we find that the size of a village's population is positively associated with its investment in infrastructure (at 1%), while the number of village small groups is negatively associated with it (at 5%). We fail to find any significant effect of fiscal and administrative centralization, informal institutions (i.e., community organizations) or informal relations (i.e., connections with county officials) on village public goods investment.

To gain a better understanding of the conditions under which political decentralization can improve village public goods provision, we re-ran the tobit regression and replaced our dependent variable with one measuring all public goods investments made by higher-level governments in our sample villages in 2004. With this dependent variable, the coefficient on the political decentralization variable ceased to be positive and significant (not shown in the table). This means that the positive

¹⁵ Findings from a nationally representative survey show that 80% of villagers are dissatisfied with the quality of the infrastructure provided in their communities, and 90% would like village governments to invest more in infrastructure, including roads, drinking water, irrigation, schools and clinics (Luo et al. 2010: 666).

impact of political decentralization on village public goods provision is through its effects on the public goods projects financed by village governments, which represent a declining share of the total.

Three main conclusions can be drawn from the regression results. First, differences among villages in their incentives and ability to fund their own public goods investments mainly result from: (i) differences in their (political) decentralization processes and governing structures; as well as from (ii) differences in their levels of economic development and social capital. Second, variation in the degree of fiscal and administrative centralization across villages is not positively associated with variation in the amount of public goods investment made by village governments. Grassroots democratic institutions appear to be more effective than intergovernmental fiscal and administrative institutions in creating incentives for grassroots officials to meet villagers' demands for better infrastructure. Last but not least, inter-village variation in the degree of political decentralization is only significantly associated with variation in the amount of village infrastructure projects financed by village governments, not higher levels of the Party-state.

4.4. Accounting for the Endogeneity of Political Decentralization

Two possible concerns with the tobit model are the presence of endogeneity¹⁶ and heteroscedasticity. To address these concerns simultaneously, we estimate an instrumental variable model (with a continuous non-censored variable), using the generalized method of moments (GMM) estimator and heteroscedasticity-consistent standard errors¹⁷. In this new model, the dependent variable is the natural logarithm of village total expenditures on infrastructure and services in 2004. All the explanatory and control variables are the same as those included the tobit model.

Four instruments for political decentralization are used in the estimation: (1) A dummy variable taking on the value 1 if (a) the electoral commission was not headed by the village Party secretary in

¹⁶ The main reason behind the concern about the presence of endogeneity is that there may be reverse causality between political decentralization and village public goods investment. In villages governed by democratically elected village committees, village heads might have stronger incentives to allocate a larger share of the village budget to the provision of public goods in order to be re-elected. At the same time, villagers might have stronger incentives to participate in village politics in order to monitor and influence how village funds are spent and what public goods are provided. In other words, the political decentralization process may affect and be affected by village public goods provision, mainly through the channels of political accountability and political participation, respectively. Another possible reason is that, despite our effort to control for as many factors as possible, we cannot rule out the presence of an omitted variable that is correlated with political decentralization and affects village public goods investment.

¹⁷ This choice is explained by the potential problems associated with estimating the effects of the endogenous binary variable of political decentralization using a non-linear instrumental variable tobit model in the presence of heteroscedasticity.

the last election, and (b) if township officials did not intervene in the candidate nomination process through the examination of their qualifications/credentials; and 0 otherwise; (2) A dummy variable taking on the value 1 if proxy voting was prohibited in the last election; and 0 otherwise; (3) the number of participants in the largest collective petition in the village; and (4) the percentage of votes received by the elected village committee head. Each of these instruments is closely related to each of the dimensions of the political decentralization process. First, existing studies suggest that the non-interference of township and village Party officials in the electoral process and the prohibition of proxy voting are essential to avoid various forms of electoral manipulation and corruption in village elections (e.g., O'Brien and Zhao 2011). Second, there is also empirical evidence that the village committee head is more likely to be able to challenge the concentration of power in the hands of the village Party secretary in villages with a relatively strong civil society (Sun et al. 2013), and in cases where he/she has received strong electoral support and thus has the democratic legitimacy that the Party secretary lacks (O'Brien and Zhao 2011). There are no reasons to think that these variables can affect village public goods spending other than through their effects on the political decentralization process. The results of the GMM estimation of the IV model are presented in Table 2.

As expected, the endogeneity test leads to a strong rejection of the null hypothesis that political decentralization is exogenous (p-value = 0.0231). More importantly, the instruments pass the tests of relevance and validity. The F test of excluded instruments is over the benchmark of 10, indicating that our instruments are sufficiently correlated with the endogenous regressor (p-value = 0.0000). The results of the Hansen J-test of overidentifying restrictions indicate that the instruments are uncorrelated with the error term (p-value = 0.9201).

As can be seen in Table 2, our main findings remain robust. Political decentralization is positively and significantly associated with village spending on infrastructure investment and public services (at 5%), even after controlling for endogeneity and heteroscedasticity. Like in the tobit model, the other variables having a significant positive effect on village public goods provision include: the log of village collective/government revenue (at 5%), the log of per capita income (10%), the share of households belonging to the three largest clans (at 1%), and the size of the village population (5%). Also in this case, the variables measuring village out-migration and distance from the village to the township are found to have significant negative effects on village spending on infrastructure investment and public services (at 5%). The coefficients on the fiscal and administrative centralization variables remain statistically insignificant. Taken together, these results further suggest that variation in the levels of political decentralization, economic development and social capital across villages largely explains variation in the levels of public goods and services provided by their leaders.

Table 2. Estimation results of the linear IV model

Dependent Variable = Ln (Village total spending on infrastructure and services, 10,000 yuan)		
	GMM2S	
	Coeff.	SEs
Political decentralization (0-1)	1.563**	(0.677)
Fiscal centralization (%)	0.011	(0.009)
Administrative centralization (%)	-0.006	(0.007)
Villagers working in the county government (no.)	0.046	(0.036)
Ln(village collective revenues)	0.261**	(0.124)
Ln(per capita income)	1.232***	(0.453)
Village arable land (1000 mu)	0.078	(0.090)
Village enterprises (no.)	0.029	(0.027)
Self-employed workers (%)	0.020	(0.019)
Migrant workers (%)	-0.018**	(0.009)
Villagers belonging to the 3 largest clan groups (%)	0.016***	(0.006)
Village temples & churches (no.)	-0.002	(0.057)
Village small groups (no.)	-0.050	(0.034)
Village households with access to drinking water (%)	-0.002	(0.005)
Village households with access to electricity (%)	-0.005	(0.014)
Village population (no.)	0.0004**	(0.000)
Distance to the township (km.)	0.090**	(0.045)
Provincial dummies	Yes	
Constant	-10.378**	(3.939)
Observations	96	
F	6.86	
Prob > F	0.0000	
F test of excluded instruments	11.76	
Hansen J-statistic (p-value)	0.494 (0.9201)	
Endogeneity test (p-value)	5.162 (0.0231)	

Notes: * Significant at the 10% level; ** Significant at the 5% level; *** Significant at the 1% level
Small-sample robust standard errors are reported in parentheses.

5. Conclusion

Authoritarian regimes are often “reluctant decentralizers” (Landry 2008: 9). An analysis of the distribution of resources and authority among different levels of the Party-state in China, and between Party and non-Party institutions in its rural communities, reveals a strong reluctance to

devolve power to villages and, within villages, to democratically elected village committees. Our findings suggest that this has important implications for the quality of local governance and public goods provision in rural communities.

The objective of this paper was to investigate the relationship between political decentralization processes and government performance in the rural Chinese context, by addressing the question of whether democratically elected village committees are more responsive to villagers' demands for better infrastructure in their communities, when given the power to govern.

To explain why some village governments invest significantly in much-needed infrastructure while others do not, a tobit model of village-financed investment was estimated using cross-sectional survey data collected from over 100 villages. Our findings indicate that variation in the degree of political decentralization is positively associated with variation in the level of public goods investment across villages: villages governed by democratically elected village committees tend to invest more in infrastructure. These results are robust to the endogeneity between governance and public goods provision.

Our findings from rural China illustrate the potential and limitations of political decentralization reforms to enhance government accountability in non-democratic regimes. In some communities, they have improved government performance, yet in many others they have failed to make elected local governments accountable to citizens because they have failed to devolve authority and resources to them in the first place. The challenge thus is not only to make decentralization work but, more fundamentally, to make decentralization happen.

References

- Agrawal, A. and Ribot, J. (1999). Accountability in decentralization: A framework with South Asian and West African cases. *The Journal of Developing Areas*, 33(4), 473-502.
- Bardhan, P. and Mookherjee, D. (Eds.). (2006). *Decentralization and local governance in developing countries: a comparative perspective*. Cambridge, MA: MIT Press.
- Bernstein, T. P., and Lü, X. (2003). *Taxation without representation in contemporary rural China*. Cambridge: Cambridge University Press.
- Bird, R., Brandt, L., Rozelle, S. and Zhang, L. (2011). Fiscal reform and rural public finance. In J.Y. Man and Y.-H. Hong, (Eds.). *China's Local Public Finance in Transition*. Cambridge, MA: Lincoln Institute of Land Policy, 227-243.
- Birney, M. (2014). Decentralization and veiled corruption under China's "rule of mandates". *World Development*, 53, 55-67.
- Boyle, C. E., Huang, Q., and Wang, J. (2014). Assessing the impacts of fiscal reforms on investment in village-level irrigation infrastructure. *Water Resources Research*, 50(8), 6428-6446.
- Brandt, L. (2014). Local governance and rural public good provision. In Fan, S., Kanbur, R., Wei, S. J., and X. Zhang (Eds.). *The Oxford Companion to the Economics of China*. Oxford: Oxford University Press, 334-340.
- Cameron, A. C., and Trivedi, P. K. (2010). *Microeconometrics using stata*. College Station, TX: Stata press.
- Crook, R. C. and Manor, J. (1998). *Democracy and decentralisation in South Asia and West Africa: Participation, accountability and performance*. Cambridge: Cambridge University Press.
- Faguet, J.-P. (2012). *Decentralization and popular democracy: Governance from below in Bolivia*. Ann Arbor: University of Michigan Press.
- Fock, A. and Wong, C. (2008). *Financing rural development for a harmonious society in China: Recent reforms in public finance and their prospects*. Working Paper No. 4693. Washington, DC: World Bank.
- Kung, J., Cai, Y., and Sun, X. (2009). Rural cadres and governance in China: incentive, institution and accountability. *The China Journal*, 61-77.
- Lawson, C. (2000). Mexico's unfinished transition: democratization and authoritarian enclaves in Mexico. *Mexican Studies/Estudios Mexicanos*, 16(2), 267-287.
- Liu, C., Zhang, L., Huang, J., Luo, R., and Rozelle, S. (2009). Can Good Projects Succeed in Bad Villages? Project Design, Village Governance and Infrastructure Quality in Rural China. In *2009 Conference, August 16-22, 2009, Beijing, China* (No. 49944). International Association of Agricultural Economists.
- Lu, J. (2015). *Varieties of governance in China: Migration and institutional change in Chinese villages*. New York: Oxford University Press.

- Luo, R., Zhang, L., Huang, J., and Rozelle, S. (2007). Elections, fiscal reform and public goods provision in rural China. *Journal of Comparative Economics*, 35(3), 583-611.
- Luo, R., Zhang, L., Huang, J., and Rozelle, S. (2010). Village elections, public goods investments and pork barrel politics, Chinese-style. *The Journal of Development Studies*, 46(4), 662-684.
- Manor, J. (1999). *The political economy of democratic decentralization*. Washington, DC: The World Bank.
- Martinez-Bravo, M., Qian, N., and Yao, Y. (2011). *Do local elections in non-democracies increase accountability? Evidence from rural China*. NBER Working Paper No. w16948. National Bureau of Economic Research.
- Meng, X., and Zhang, L. (2011). Democratic participation, fiscal reform and local governance: Empirical evidence on Chinese villages. *China Economic Review*, 22(1), 88-97.
- Mu, R. and Zhang, X. (2014). Do elected leaders in a limited democracy have real power? Evidence from rural China. *Journal of Development Economics*, 107, 17-27.
- O'Brien, K. J. and Li, L. (2000). Accommodating "democracy" in a one-party state: Introducing village elections in China. *The China Quarterly*, 162, 465-489.
- O'Brien, K. J. and Zhao, S. (Eds.). (2011). *Grassroots Elections in China*. New York: Routledge.
- Oi, J. C., Babiarz, K. S., Zhang, L., Luo, R., and Rozelle, S. (2012). Shifting fiscal control to limit cadre power in China's townships and villages. *The China Quarterly*, 211, 649-675.
- Olowu, D. and Wunsch, J. S. (Eds.). (2004). *Local governance in Africa: The challenges of democratic decentralization*. London: Lynne Rienner Publishers.
- Parker, A. N. (1995). *Decentralization: the way forward for rural development?* World Bank Policy Research Working Paper No. 1475. Washington, DC: World Bank.
- Rosenzweig, M. R. and Foster, A. D. (2003). *Democratization, decentralization and the distribution of local public goods in a poor rural economy*. Working paper No. 010. BREAD. Cambridge, MA: Bureau for Research and Economic Analysis of Development, Harvard University.
- Sato, H. (2008). Public goods provision and rural governance in China. *China: An International Journal*, 6(2), 281-298.
- Schubert, G. and Ahlers, A. L. (2012a). *Participation and empowerment at the grassroots: Chinese village elections in perspective*. Plymouth: Lexington Books.
- Shen, Y. and Yao, Y. (2008). Does grassroots democracy reduce income inequality in China?. *Journal of Public Economics*, 92(10), 2182-2198.
- Smith, G. (2010). The hollow state: rural governance in China. *The China Quarterly*, 203, 601-618.
- Smith, R. J. and Blundell, R. W. (1986). An exogeneity test for a simultaneous equation tobit model with an application to labour supply. *Econometrica*, 54: 4, 679-686.

Smoke, P., Gómez, E.J. and Peterson, G.E., (Eds.). (2006). *Decentralization in Asia and Latin America: Towards a comparative interdisciplinary perspective*. Cheltenham: Edward Elgar Publishing.

Sun, X., Warner, T. J., Yang, D. L., and Liu, M. (2013). Patterns of authority and governance in rural China: Who's in charge? Why? *Journal of Contemporary China*, 22(83), 733-754.

Tsai, L. (2007a). Solidary groups, informal accountability, and local public goods provision in rural China. *American Political Science Review*, 101(2), 355-372.

Tsai, L. (2007b). *Accountability without democracy: Solidary groups and public goods provision in rural China*. Cambridge: Cambridge University Press.

Tsai, L. L. (2011). Friends or foes? Nonstate public goods providers and local state authorities in nondemocratic and transitional systems. *Studies in Comparative International Development*, 46(1), 46-69.

Wang, S. and Yao, Y. (2007). Grassroots democracy and local governance: Evidence from rural China. *World Development*, 35(10), 1635-1649.

World Bank (2002). *China: National development and sub-national finance - A review of provincial expenditures*. Report No. 22951-CHA. Washington, DC: World Bank.

World Bank (2007). *China: Public services for building the new socialist countryside*. Report No. 40221-CN. Washington, DC: World Bank.

Zhang, L., Luo, R., Liu, C., and Rozelle, S. (2007). Investing in rural China: Tracking China's commitment to modernization. In V. Shue and C. Wong, (Eds.). *Paying for progress in China. Public Finance, human welfare and changing patterns of inequality*. London and New York: Routledge, 117-144.

Zhang, X., Fan, S., Zhang, L., and Huang, J. (2004). Local governance and public goods provision in rural China. *Journal of Public Economics*, 88(12), 2857-2871.