

# Countering Capture: Elite Networks and Government Responsiveness in China's Land Market Reform

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Government responsiveness is often viewed as a result of political pressure from the public, but why do politicians facing similar pressure sometimes differ in their responsiveness? This article considers the configurations of elite networks as a key mediating factor. We argue that access to external support networks helps improve politicians' responsiveness to ordinary citizens by reducing their dependence on vested interests, and we test this claim using China's land market reform as a case. Leveraging novel city-level measures of mass grievances and political networks, we demonstrate that the intensity of land-related grievances is on average positively associated with reform occurrence, but this association is only salient among a subset of city leaders who enjoy informal connections to the higher-level authority. We also show that connected leaders tend to implement policies less congruent with local bureaucratic and business interests. These findings underscore the importance of intra-elite dynamics in shaping mass-elite interactions.

Government responsiveness, defined as the ability of government to formulate and implement policies that are signaled as preferred by its citizens (Dahl 1973; Powell 2004; Przeworski, Stokes, and Manin 1999), is a core feature of inclusive regimes and an essential component of good governance (Acemoglu and Robinson 2013; United Nations 2015). An extensive body of research in political science has found that public policy is responsive to societal pressures in a variety of political contexts (e.g., Cleary 2007; Fujiwara 2015; Lax and Phillips 2009; Lorentzen 2013; Miller 2015). However, evidence also suggests that politicians do not respond uniformly. Even in advanced democracies, where public pressure is institutionalized in regular, competitive elections, research has shown that there exists high variability in politicians' policy stances that cannot be explained by their constituencies' preferences (Bafumi and Herron 2010; Fiorina 1974; Rogers 2017) and that some politicians are more likely than others to deviate from their constituencies' ideal policy positions under the influence of special interest groups (Broockman and Skovron 2018; Domhoff 1998; Powell 2012;

Schattschneider 1960). If anything, politicians are likely to have even greater discretion in choosing their levels of responsiveness in authoritarian regimes, where institutional sanctions for nonresponsiveness are much weaker. What explains the variation in responsiveness across individual politicians?

In this article, we study how the configurations of elite-level networks mediate politicians' policy responses to public pressures. We argue that a politician's willingness to listen to and act on the interests of ordinary citizens depends not only on the level of bottom-up pressure they face but also on their interactions with other political and economic elites. More specifically, we argue that in a system where a small group of vested interests enjoy disproportionate policy influence because of their leverage over politicians, access to external support networks can make politicians less dependent on these vested interests by providing them with alternative channels to obtain resources and pursue career ambitions. When faced with rising public demands that are in conflict with the interests of powerful stakeholders, a well-connected political leader is usually in a better position to overcome elite opposition

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Jiang acknowledges support from the National Science Foundation (SES-1560513) and the Research Grant Council of Hong Kong (ECS-24612618). Zeng acknowledges support from the Center for the Study of Contemporary China and the Department of Political Science at the University of Pennsylvania. Data and supporting materials necessary to reproduce the numerical results in the article are available in the *JOP* Dataverse (<https://dataverse.harvard.edu/dataverse/jop>). An online appendix with supplementary material is available at <https://doi.org/10.1086/705595>.

The Journal of Politics, volume 82, number 1. Published online November 11, 2019. <https://doi.org/10.1086/705595>  
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and change policies according to public interests than is someone with limited outside support.

We evaluate these claims in the context of land market reform in China. The case of China is especially interesting because it serves as a “hard case” for testing theories of responsiveness. As a single-party regime with no competitive elections beyond the grassroots level, no fully independent press, and no genuine civil society, government officials in China are not formally accountable to ordinary citizens despite the presence of nonelectoral channels of participation (Shi 1997; Tang 2016). Land management, moreover, is an area especially vulnerable to local elite capture because of the substantial economic rents generated from land development (Mattingly 2016; Tao et al. 2010). We focus specifically on a major policy reform that grants rural residents the right to directly lease out their collectively owned land to industrial or commercial users (thereby eliminating the local government’s role as middleman). This reform is popular among farmers and villagers because it gives them greater discretion over land transfer and allows them to keep a larger share of land value appreciation. However, it is often resisted by entrenched local bureaucratic and business elites who have a vested interest in maintaining the government’s monopoly over urban land supply. This article argues that political leaders’ informal networks are an important factor for explaining why this reform takes place in some localities but not others.

Empirically, all studies of government responsiveness have to grapple with the challenge of measurement. Even in advanced democracies where polls are frequently conducted, scholars sometimes still face difficulties in developing direct measures for public opinion that correspond to specific policy outcomes. This challenge is even greater in contemporary China, where many additional restrictions on surveys exist. We circumvent this problem by leveraging a novel database of online petitions collected from China’s largest electronic petition platform. We use topic models to classify the contents of the petitions and develop a new measure of land-related grievances for every prefecture-level city in China between 2008 and 2013. In addition, we also use a newly available biographic database for Chinese political elites to construct measures that capture informal ties between leading city officials and their provincial superiors based on their past promotion relations. Using a series of hazard models, we show that the intensity of rural land-related grievances is positively associated with a city government’s decision to liberalize the land market. The positive effect of public grievances, however, is only limited to a subset of cities whose leaders (i.e., party secretaries or mayors) enjoy personal connections with the higher-level authority. Substantively, we find that, for a one percentage point increase in grievance intensity from the mean, the odds of reform occurrence

under a connected leader will increase by about 13%; by contrast, the relationship between popular grievances and reform is negative for localities governed by unconnected leaders.

We also explore the mechanisms behind connected leaders’ greater responsiveness. To do so, we construct several measures to capture political leaders’ attitudes toward local bureaucrats and real estate developers, and correlate them with indicators of connections. Consistent with our theory that external networks enhance leadership autonomy, our results suggest that compared to those without connections, connected leaders are more willing to impose disciplinary sanctions on government bureaucrats and are less enthusiastic about promoting the growth of the real estate sector.

Our results have important implications for the study of political institutions and policy responsiveness. A large literature has examined how formal institutions condition policy responsiveness by affecting either the intensity of societal pressure or politicians’ ability to receive, assess, and respond to such pressure. Hellman (1998) and Slantchev (2005), for example, argue that democratic institutions can neutralize the influence of concentrated interest groups on economic policies by giving the people electoral power to hold politicians accountable. Canes-Wrone and Shotts (2004) develop a theory that relates US presidents’ policy responsiveness to their reelection incentives. In authoritarian regimes, Malesky and Schuler (2010) show that in Vietnamese legislatures, both nomination procedures and professionalization influence to whom deputies will respond as well as the quality of their responses. Limited attention, however, has been paid to the role of informal institutions, despite the growing recognition that policy makers’ social networks and personal backgrounds matter for their policy choices (Adolph 2013; Carpenter 2001). This article fills this gap by presenting one of the first studies that theorizes and systematically tests the role of informal political networks in shaping politicians’ responsiveness.

In addition to highlighting a general mechanism that shapes government responsiveness, this study also speaks specifically to a rapidly growing literature on political responsiveness in autocracies. Recent research has shown that nondemocratic governments develop nominally democratic institutions to elicit citizen input in policy making (Malesky and Schuler 2010; Miller 2015; Reilly 2013; Truex 2016) and respond to individual petitions at comparable rates as those in democracies (Chen, Pan, and Xu 2016; Distelhorst and Hou 2017; Meng, Pan, and Yang 2014). These findings have led many to conclude that there exists a kind of “authoritarian responsiveness” in countries like China. Our analysis serves as a cautionary note against such an overly optimistic interpretation: to the extent that replying to petitions is essentially a costless effort, it cannot be taken as indicating that officials will also be responsive to ordinary

citizens when it comes to policy making, which often requires significant commitment in terms of political and economic resources. Instead, our findings suggest that although policy responsiveness does exist in China to some degree, it is not universal. Certain social and political conditions must be met for nonelected officials to be willing and able to translate mass grievances into policy changes.

Moreover, our study contributes to a deeper understanding of the role of patron-client networks in political systems. Research in comparative politics has generally held a negative view of these informal connections, seeing them as a threat to political accountability, administrative efficiency, and overall government performance (Bardhan and Mookherjee 2017; Geddes 1994; Lewis 2007). Yet this perspective is difficult to be reconciled with the historical evidence that many regimes were able to achieve robust performance when operating with a largely patrimonial state apparatus (Rudolph and Rudolph 1979; Silberman 1993). More recently, an emerging body of research has started to explore the possibility that patron-client relations might have contributed to more effective governance in political organizations by facilitating information aggregation and by strengthening agents' performance incentives (Dewan and Squintani 2016; Jiang 2018). Building on this literature, our analysis highlights another important (but somewhat unintended) benefit that these informal relations can offer: In political systems where the threat of local capture is prominent, strong vertical networks with higher-level decision makers can reduce lower-level agents' dependence on influential local elites, making them more willing to adopt policies that will address issues and concerns raised by underprivileged groups.

### REFORM AND CAPTURE IN CHINA'S PARTIALLY LIBERALIZED LAND MARKET

This article examines government responsiveness in the context of China's land market. After more than three decades of economic reform, a vibrant market for land-use rights has emerged in China. However, the reform still remains partial in the sense that the state—especially the local state at the prefecture and county levels—continues to enjoy substantial control over the allocation of land within its jurisdictions (Lin and Ho 2005; Rithmire 2015). For any land to be used for urban construction, local governments must first expropriate it from the existing occupants before the land can be legally sold to industrial or commercial users on an open market (Ho and Lin 2003). The process of land expropriation and relocation is often fraught with contention because the compensation offered to individual occupants is usually much lower than the market value of the land (Hsing 2010). This conflict is especially intense in rural and suburban areas, where land

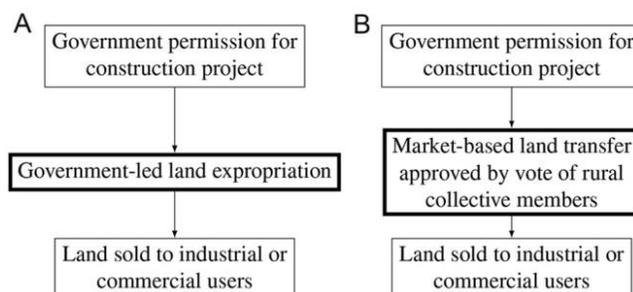


Figure 1. Land development procedures: before and after the reform. A, Pre-reform; B, postreform

is nominally owned not by the state but by rural collectives (Guo 2001). Studies have shown that land-related grievances are one of the most prevalent causes of social instability in China. According to one estimate given by the Chinese Academy of Social Sciences (2013), land taking and forced house demolition cause about 50% of the “mass incidents” in China today.

To deal with the threats of instability, local governments have two broad sets of options. While the most commonly used approach is to suppress resistance on a case-by-case basis through a combination of informal coercion and selective buy-offs (Cai 2008; O'Brien and Deng 2017), another possible option is to address the grievances directly by implementing systemic policy reforms that give farmers a greater say in the urbanization process. A prominent example of such reform is the removal of restrictions on commercial transfer of collectively owned land.<sup>1</sup> As illustrated in figure 1, this reform will further liberalize the land market by allowing rural collectives to directly sell their land (use rights) to industrial or commercial users without first having to surrender it to local governments. Compared to the conventional, state-mediated approach, direct transactions enable villagers to reap a greater share of the land value appreciation from urbanization.<sup>2</sup> This type of land market reform has been advocated by many academics and policy practitioners for more than two decades and was eventually endorsed by the central leadership in 2008.<sup>3</sup> From then until the end of 2014, local

1. In official documents, this reform is usually referred to as “the marketization of rural collective land for construction” (农村集体建设用地入市).

2. While this reform has multifaceted consequences, our interviews with government officials and urban planners from seven provinces consistently suggest that the main reason for local governments to adopt the reform was to reduce rural instability. For more fieldwork evidence on this point, see app. G.

3. The reform was mentioned in the decision of the third plenum of the seventeenth Central Committee. See <https://goo.gl/8rffbz>.

governments were largely given a free hand to experiment with the reform.<sup>4</sup>

Despite widespread land disputes and a generally supportive attitude from the central government, however, most localities have been slow in liberalizing their local land markets. As shown in figure 2, by the end of 2014, only about 21% of cities ( $n = 61$ ) have adopted the reform. This reluctance, according to our fieldwork, is best explained by resistance from two locally influential elite groups: (1) government bureaucrats and (2) large real estate firms. Both groups have a vested interest in maintaining steadily rising land price and a state-dominated system of land supply. For local bureaucrats, proceeds from land lease sales are a crucial source of fiscal revenue upon which their wages and bonuses depend, and the power to approve land transactions is associated with numerous rent-seeking opportunities (Cao, Feng, and Tao 2008; Zhu 2012). To the extent that free circulation of collective land will drive down land prices and undermine the government's status as the monopoly supplier in the land market, local bureaucrats naturally oppose such policy change.<sup>5</sup>

In addition to local bureaucrats, land market liberalization also faces resistance from large local real estate firms with substantial land reserves.<sup>6</sup> Declining land prices will negatively

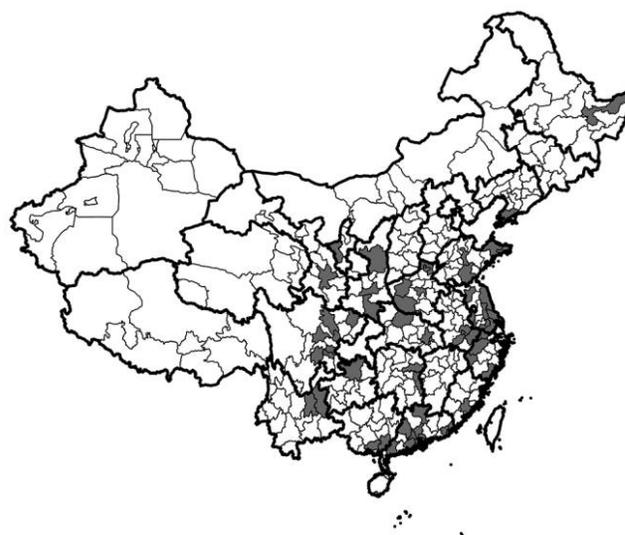


Figure 2. Land market liberalization in China (as of December 2014)

affect these firms in at least two ways. First, they reduce the entry barrier for smaller developers and increase the level of competition in the local market. Second, lower prices also reduce the value of these firms' existing land holdings, which are often used as collateral to acquire bank loans. The depreciation in collateral value means a higher cost of financing, and this can be especially painful to real estate firms because they are often highly leveraged. As a result, firms with large amount of local land reserves also do not welcome land market liberalization.<sup>7</sup>

While the elite groups that opposed the liberalization reform are typically small in size compared to the potential beneficiaries, they nonetheless enjoy much stronger de facto policy influence than ordinary farmers because of their proximity to and leverage over key local decision makers (i.e., the heads of the party and the government). Government bureaucrats, to begin with, are ones who run the local administrative machines on a daily basis. They play an indispensable role in helping politicians implement policies and govern the local population, but this role also gives them the power to obstruct or even sabotage their political leaders'

4. It is worth noting, however, that the reform was not mandatory during this period. According to our fieldwork, despite a generally supportive attitude, the center did not give any specific instruction on reform implementation beyond stating a few general principles. The absence of strong top-down pressure for reform before 2015 was due to several reasons, including a lack of consensus among policy makers as to which direction the reform should take, as well as the fact that the central party leadership was preoccupied with other more significant political tasks, such as managing a once-in-a-decade leadership transition and later on a major anticorruption campaign. This changed in 2015, when the central government decided to accelerate the reform through top-down legislation. In February 2015, 33 counties were designated to be part of a centrally directed experiment, and local experiments outside the 33 counties were subsequently suspended to avoid contradictions with the central initiative (for more details on the 33 counties, see <https://goo.gl/xSibuu>). Comparing this list of designated counties with our own coding of reform occurrence, we find that they overlap in only five cities. We are able to confirm that in all five cases, our coding was based on policy documents issued prior to the beginning of the central experiment. Later, we also show that our findings are robust to excluding observations associated with these designated localities (table A.6) or using only observations before 2012 (table A.7).

5. For instance, one land management official made the following remarks when asked about the reform: "If we cannot expropriate land and sell it to raise money, we won't even be able to pay for civil servants' salaries, let alone fund urbanization . . . this policy [collective land transfer] will just drain up our fiscal resources . . . (and) we have absolutely no interest in supporting it" (personal interview, GZ20161210).

6. Existing research has found collusion between major business interests and Chinese local governments in a number of policy areas. Lorentzen, Landry, and Yasuda (2013), e.g., show that local governments are less willing to adopt open information reform for environmental governance in localities dominated by large local industrial firms. Jia and Nie (2017), moreover, show that collusion

between government regulators and private coal mines were a major cause of excessive coal-mine deaths during a period of decentralization.

7. For developers without substantial local land reserves, their attitude toward the reform is mixed. Although the nominal cost of land purchase will be lower as supply increases, the reform may create additional costs by requiring developers to negotiate directly with village collectives, which typically consist of hundreds of households. According to several real estate firm managers that we interviewed, local governments are seen as more reliable partners than village collectives, in part because the latter sometimes do not honor contracts after a new leadership is elected (personal interview, GD20160310). The liberalization policy thus should not be seen as a result of active lobbying by smaller or outside real estate firms. In app. H.10, we provide more systematic evidence against the lobbying hypothesis.

agenda if they feel that their interests are threatened by leaders' policies (Shirk 1993). Large real estate firms, moreover, often act as important collaborators of local governments, providing various forms of financial and service support when needed; they are also sometimes a source of private benefits to local leaders and their inner circles (Sun, Zhu, and Wu 2014; Zhu 2012). To the extent that these elite groups' assistance and contributions can have close bearings on local leaders' career success and personal well-being, it is unsurprising that their preference for preserving the status quo ended up as the preferred policy position of most local governments.

### ELITE NETWORKS AND GOVERNMENT RESPONSIVENESS

In an environment with widespread elite capture, why did some leaders still choose to respond to rural residents' grievances and adopt systemic reforms that may hurt powerful vested interests? Existing scholarship has offered several possible explanations. One argument suggests that local leaders' responsiveness is shaped by institutional characteristics (e.g., Besley and Burgess 2002; Maestas 2000; Schattschneider 1960; Tsebelis 2002). However, this argument has limited applicability to China as its formal political institutions exhibit little variation across subnational units. Another prominent argument suggests that responsiveness is related to the amount of public pressure coming from societal actors. In the case of China, it has been shown that certain petition tactics, such as making broad public appeals or drawing attention from higher-level leaders, can sometimes make the government more responsive (Cai 2010; Chen 2009; Chen et al. 2016; Heurlin 2016). While bottom-up pressure is certainly important, this explanation also falls short in our particular case for two reasons. First, rural land disputes are indeed quite common in China. They are present in almost every city that is going through rapid urbanization, but only a fraction of cities have chosen to liberalize local land markets. Second, as discussed above, aside from making policy concessions, local leaders can also resort to other options to deal with contentious villagers, such as informal coercion or selective buy-offs. Although these alternative strategies do not resolve the fundamental cause of popular grievances, they are still useful for temporarily curbing social unrest and can be especially attractive to politicians who are unwilling to undertake systemic reforms that could hurt the interests of their core elite constituencies.

We argue that a critical condition for genuine policy responsiveness to arise is that politicians have access to external support networks that reduce their dependence on pro-status quo vested interests. External support networks can come in a variety of forms. In candidate-centered political systems, individual politicians may be able to seek assistance from their

professional, alumni, or even family networks (Dal Bó, Dal Bó, and Snyder 2009). In systems with strong political parties, they can also take the form of personal connections with influential figures within a party (Ike 1972). These networks provide alternative means by which politicians can obtain resources and pursue career ambitions. When this alternative basis of support is available, politicians may see less need to commit themselves fully to the policy position of their interest group supporters, especially when that position is causing rising discontent in other, wider constituencies. In some cases, external networks will also give politicians identities distinct from those of the special interests, and the absence of a common identity can further increase the difficulty of sustaining a durable and mutually trustful relationship between the two parties.

In the context of this particular study, the external networks that we focus on are patron-client relations between higher- and lower-level government officials. These informal relations are part and parcel of Chinese politics, permeating all layers of the political system (Dittmer 1995; Nathan 1973). They are characterized by a long-term, reciprocal exchange of instrumental benefits between two actors of unequal status (Scott 1972). While most of the existing studies on patron-client ties tend to associate them with negative consequences such as inefficiency or corruption, we argue that informal connections to higher-level patrons can sometimes help politicians better resist elite capture at the local level. To begin with, these connections can directly strengthen politicians' bargaining power vis-à-vis local elites by helping them obtain important productive resources and political support elsewhere. Studies have shown that connected leaders are usually favored in the distribution of government-controlled resources such as fiscal transfers, bank loans, and policy quotas (Jiang and Zhang 2015; Shih 2004). Access to resources from above provides politicians with important substitutes for local contributions, enabling them to pursue policy agendas that are not in line with the preferences of local vested interests. Patrons' political support, moreover, helps politicians assert their authority more effectively over local subordinates. When local elites are showing signs of disobedience, for example, instead of trying to co-opt them through policy concessions, a connected leader can choose to "play tough" with the unruly elites without having to worry much about the potential backlash.

In addition to direct support, connections also indirectly enhance local leaders' autonomy by giving them a more credible ambition to move upward.<sup>8</sup> When a local leader expects

8. We thank an anonymous reviewer for suggesting the term "credible ambition."

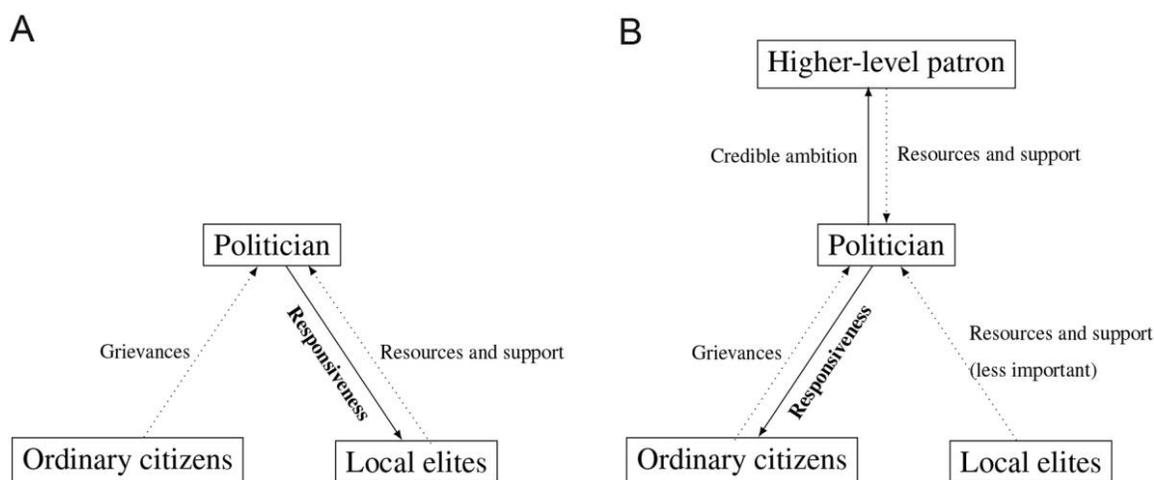


Figure 3. An illustration of the theory. A, Local elite capture; B, responsiveness to ordinary citizens

to be soon promoted to somewhere else, he or she usually has little incentive to invest heavily in a reciprocal relationship with local elites. In some cases, having connections can also increase the salience of social stability issues to local officials. Recent studies have shown that, instead of providing unconditional favors, connections only help an official's promotion when he or she is able to meet certain essential performance targets (Jia, Kudamatsu, and Seim 2015; Li and Gore 2018). Social stability, in particular, is a critical performance target for local leaders (Wang and Minzner 2015). Eruption of large-scale protests is considered to be a major policy failure and can sometimes singlehandedly ruin a promotion case. As likely candidates for promotion, connected leaders can be especially sensitive to the potential damages that social instability could do to their future careers. From their perspective, therefore, systemic land market reform may be a more attractive option to deal with aggrieved farmers than ad hoc suppression, because it offers a more permanent and reliable solution to rural instability. Figure 3 provides a visual summary of our argument.

### A PAIRED CASE STUDY

Before proceeding to a more systematic analysis of the pattern of land market liberalization in China, we first illustrate the preceding arguments using a paired case study of two cities: Kunming and Guiyang. Both are major cities located in southwest China. As shown in table 1, they have comparable levels of economic development, urbanization, and fiscal structure, and both witnessed major spikes in land-related petitions in their recent histories (Kunming in 2009 and Guiyang in 2011). The key difference between the two cases, however, lies in the political leadership. The party secretary who governed Kunming in 2009 was Qiu He, a politician who enjoyed strong connections with not only his provincial party boss but also

key figures in the national leadership.<sup>9</sup> Qiu's higher-level connections allowed him to pursue a governing strategy that kept him distant from his local subordinates. This posture is best exemplified by the following statement that Qiu made on the first meeting that he had with Kunming officials, "As a stranger to Kunming, I am not a friend or relative to any of you. Never having worked here before, I have no hatred or resentment against any of you. Being here all by myself, I will not be held back by anyone or anything, and will do my work without fear or favor."<sup>10</sup> During his time in Kunming, Qiu took a number of draconian measures to cut administrative slack and to put performance pressure on government staff. For instance, he ordered all the leading officials in the city government to publish their off-duty contact information in the local newspaper so that citizens could call them directly to report issues. He also required government staff to be on active duty during weekends to meet a packed work schedule (Qianjiang Evening News 2011). Anecdotes also suggest that Qiu had little regard for local real estate developers but was instead keen to bring in larger developers from the outside (Beijing News 2015).

Qiu's detachment from the local interests was well reflected in his policy decisions. When the city's urban redevelopment started to meet growing social unrest in 2009, he responded promptly by experimenting with a series of new measures that would give villagers more bargaining power

9. Qiu allegedly maintained very good personal relationship with Bai Enpei, who was the provincial secretary at that time (Zhang 2015). He was also known to have close ties with the head of the Central Organization Department at that time.

10. The original quote is "我到昆明工作，人地两疏，和大家无亲无故；从未共事过，与大家无恨无怨；只身一人，无牵无挂；工作一定能无私无畏。" See <https://goo.gl/vnc7jt>.

Table 1. Paired Comparison: Kunming versus Guiyang

Variables\City	Kunming (2009)	Guiyang (2011)
Annual GDP per capita in USD	4,270	4,686
Ratio of built-up area to total urban area	.069	.067
Ratio of own-source revenue to GDP	.111	.135
Total no. of land petitions in the past year	3	4
Total no. of land petitions in the current year	10	9
<b>Connected city leader</b>	<b>Yes</b>	<b>No</b>
<b>Land market liberalization</b>	<b>Yes</b>	<b>No</b>

over government bureaus and developers in the land development process. These measures culminated in a formal policy change that legalized commercial transactions of collective land in 2011.

By contrast, Li Jun, the party secretary of Guiyang in 2011, had much weaker connections than Qiu despite having the same formal rank. Li served as a personal aide to a Politburo Standing Committee member in the late 1990s, but his patron retired before he assumed the position in Guiyang. Without strong backing from above, Li had to pursue a less confrontational governing strategy by working closely with local elites. Unlike Qiu, he not only refrained from applying tough discipline on bureaucratic subordinates but also gave civil servants' multiple raises during his tenure (Guiyang Yearbook Editorial Board 2009, 2012b). He also maintained a cozy relationship with several large local real estate firms. Under his leadership, Guiyang went through a similar phase of rapid urban redevelopment, building a dozen mega real estate projects. Most of these projects, however, were built by local firms that were receiving generous subsidies from the city government.<sup>11</sup> As a result, although the city also witnessed several widely reported land conflicts in 2011, they were not followed by more liberal policy changes as in the case of Kunming. The restrictions on commercial exchange of collective land remain in place today.

To summarize, the paired case study illustrates how informal connections with higher-level patrons help to insulate political leaders from the influence of local vested interests—a crucial precondition for responsiveness. A single comparison, of course, does not offer the most conclusive evidence for

this argument, as there may exist many alternative theories to explain the divergent outcomes between the two cases. In the following pages, we present a more rigorous test of our theory using systematic data from all prefecture-level cities in China.

## QUANTITATIVE ANALYSES

### Dependent variable: Policy on land market liberalization

The key outcome variable of interest is whether a city has issued a formal policy document that allowed the sale of collectively owned land for construction (CLC) on the primary land market.<sup>12</sup> We collected information about CLC reforms by first applying for open information from the mayor's office or land bureau of all city governments on their websites. For those localities that did not respond to our requests, we also conducted keyword searches about this policy on government websites and PKU law ([www.pkulaw.cn](http://www.pkulaw.cn)), a major online database on laws and regulations in China. We code our dependent variable as a dummy that takes the value of 1 if the CLC reform was introduced to a city in a given year and 0 otherwise. By design, reform can only occur once in each city; once the reform occurs, we drop that city's observations for subsequent years.

One potential caveat to our measure is that it focuses on formal policy changes but not the actual outcome of policy implementation. Ideally, we would like to have more direct information on policy outcomes, such as the number of, or total areas involved in, CLC transactions. However, since such data are not publicly accessible, formal policy change is the best available measure we can find for land market liberalization. To the extent that it often takes systematic government efforts to produce these guiding policy documents, it can be seen as a costly (therefore largely sincere) signal about the local government's intention to respond to citizen demands. Even when the implementation is not fully satisfactory, the very presence of formal provisions can give activists and protesters an important lever to justify their demands and put pressure on the government (Distelhorst 2017).

### Independent variables

**Measuring intensity of land-related grievances.** A crucial task in our empirical analysis is to develop a measure of the intensity of land-related grievances. To do so, we leverage a unique data source—online petitions. In the absence of elections and strong representative institutions, the Chinese state has long relied on a system of petitions to collect information

11. Personal interviews, 2016. Also see Guiyang Yearbook Editorial Board (2012a) for examples.

12. The official documents can take several forms, such as "administrative measures" (管理办法), "detailed rules for implementation" (实施细则), or "opinion for implementation" (实施意见).

about public grievances (Shi 1997). With the rapid expansion of internet access in the last decade, governments at various levels have made concerted efforts to develop new, web-based interfaces to engage with citizens, and, as a result, a substantial share of the petition activities now happen in the cybersphere. According to a recent estimate by the National Bureau of Petition, online petitioning is now the most commonly used mode of petition for Chinese citizens, surpassing more traditional means such as letters and personal visits.<sup>13</sup> Local authorities have also created specialized agencies to closely monitor online grievances and regularly report important issues to higher-level decision makers (Jiang, Meng, and Zhang 2019).

In this article, we focus specifically on petitions filed on the Local Leader Message Board (LLMB, [liuyan.people.com.cn](http://liuyan.people.com.cn)), a nationwide petition platform launched by China's central media. The LLMB allows citizens to send complaints to local government officials (i.e., the heads of the party and government) in all subnational units at or above the county level via a virtual "message box." Since its launch in 2008, the platform has received hundreds of thousands of petitions each year from all over the country, making it the most heavily used online petition facility in China.<sup>14</sup> In an earlier project, Jiang et al. (2019) have scraped the entire body of petitions from the website and then used topic models to classify the petitions into 30 distinct topics (see app. D; apps. A–H are available online for the detailed procedures). The topics cover a wide range of personal and community issues, such as unemployment, education, public safety, transportation, wage disputes, property management, and land acquisition. For our analysis below, we focus on the topic of land disputes. Words that have the highest correlation with this topic include 村委会 (village committee), 村干部 (village cadre), 宅基地 (rural residential land), 补偿款 (compensation), 集体土地 (collective land), and 失地农民 (farmers who lost land), all of which are highly pertinent to the issue of land disputes. Between 2008 and 2013, each city government received an average of 200 petitions per year,<sup>15</sup> of which 10 were about land-taking issues. The standard deviation of land petitions is greater than the mean (16.1), sug-

13. See "Online Petitions Are Becoming the Main Method of Petition," <https://goo.gl/7ftqA1>.

14. Aside from LLMB, many local governments have also created their own websites to receive petitions, but the local websites do not have a standardized format and the petition information there is often not as accessible as the central platform. In a different study, we compare the volume of petitions at LLMB with that from a random sample of local petition facilities and find a very strong positive correlation. Results are available upon request.

15. This includes (1) petitions filed to the supervising provincial government regarding a city-level issue, (2) petitions filed directly to the city government, and (3) petitions filed to a county-level government within the city.

gesting that there are quite substantial subnational variations on this issue.

A natural concern with using online content from China's internet, of course, is the issue of government censorship. It is well known that the Chinese government often engages in systematic manipulation of content on social media sites in order to prevent collective actions or to sway public opinion (King, Pan, and Roberts 2013, 2017). While this concern is certainly legitimate, it is less worrisome in our case because the issue in which we are interested (i.e., disputes about land taking) is largely local and nonpolitical in nature.<sup>16</sup> More importantly, even if local governments do have the incentive to influence what is being posted in their "message boxes," manipulation can be rather difficult because the platform is run by a central agency, which typically has little interest in helping local authorities cover up their wrongdoings.<sup>17</sup>

Do online petitions provide an accurate measure of variation in grievances against land-taking across localities? We provide evidence from several validation tests in appendix E. One potential objection, for example, is that since rural residents may be less likely than others to access and use online platforms, our measure could simply be reflecting epiphenomenal variations in the levels of economic development or grievances against house-demolishing activities in urban areas. To address this concern, we examine the correlation between our measure and several key socioeconomic variables, including GDP per capita and the size of the rural sector (as measured by both population and area). Reassuringly, we find that our measure is indeed strongly and positively correlated with the size of the rural sector but has no relationship with either the size of the urban sector or GDP per capita (table A.2; tables A.1–A.16 are available online).<sup>18</sup>

16. Our conversations with staff in the LLMB also suggest that its censorship focuses typically on politically charged complaints but not on complaints about personal matters or local policy issues.

17. The LLMB even has an in-house reporting team that constantly tries to pick newsworthy materials from petitions and conducts its own investigations.

18. More generally speaking, there is a good deal of evidence to suggest that, instead of creating a phenomenon of "digital divide" common in many developing countries (Norris 2001), the expansion of the internet in China did not leave behind the countryside. Since the early 2000s, the government and state-owned companies have made substantial investments in perfecting internet infrastructure in rural areas. In 2009, internet access was already available to over 90% of administrative villages (see <https://goo.gl/CBTGrS>). The recent advancement in 3G and 4G technologies has further expanded internet usage in rural areas by offering a much cheaper and more convenient mode of access. Rural residents have been found to be highly active users in the realm of online commerce and entertainment (China Tech Insights 2017; Pan 2016). In terms of online petitions specifically, Jiang et al. (2019) show that rural users produced about 30%–40% of petitions on the LLMB.

Additionally, we also benchmark our measure against data on land-related protests, which are more extreme expressions of similar grievances. We construct two protest measures, one from the Collective Incidents Dataset (CID) collected by the Chinese Academy of Social Sciences and the other from Peking University's 2009 Chinese Citizenship Awareness Survey (CCAS). Correlating them with the petition variable, we find that the volume of land petitions is positively associated with both protest measures (fig. A.6; figs. A.1–A.6 are available online). These results give us greater confidence in the validity of our measure.

**Measuring city leaders' informal connections.** We follow procedures developed by Jiang (2018) to measure informal connections at the subnational level. This measure identifies patron-client relations by linking lower-level officials with the provincial leaders who were in power when those officials were first promoted to key city leadership positions. More formally, this measure defines a city leader  $C$  as a client of the provincial secretary  $P$ , the de facto leader of a province, if and only if the following condition is met:

**Definition 1.**  $C$  was first promoted to a city leadership position (as city party secretary or mayor) from within the province when  $P$  was serving as the provincial secretary or the governor of that province.

The rationale behind using such a measure is that, because city leadership posts are highly valuable in the Chinese context, they often first go to those who have close personal ties to senior provincial leaders. Interviews with government insiders also suggest that political promotions are widely used by officials themselves to infer the identity of others' patrons when they do not have immediate access to more proprietary information. Empirically, this measure has been shown to be closely associated with important political outcomes, such as promotion and anticorruption investigations (Jiang 2016; Keller 2016). As a robustness check, we also conduct estimations using several alternative measures of connections, and the main results are substantively unchanged (see table A.5).

### Other variables

**Power concentration in the real estate sector.** To measure the influence of real estate firms, we construct a variable of market power concentration among local real estate firms using primary market land transaction records from Land China ([www.landchina.com](http://www.landchina.com)), an online land transaction monitoring system maintained by the Ministry of Land and Re-

sources.<sup>19</sup> Local governments are required by law to report information on each land transaction taking place within their jurisdictions, including the identity and sector of the buyer, the size of land, the amount of payment, the transaction dates, and so on. Because a real estate company's power is closely related to the amount of land it can acquire from the primary market, we calculate a Herfindahl-Hirschman index for local land purchase as a measure of power distribution within the real estate sector.<sup>20</sup> Our expectation is that the real estate sector as a whole will enjoy greater policy influence in localities where a few large companies dominate the primary land market. This implies a negative relationship between the Herfindahl index and the likelihood of reform.

**Revenue imperatives of local bureaucracy.** We include in the regression two variables that measure the intensity of influence from revenue-dependent local bureaucrats. The first is Dependence on Own-Sourced Revenue, measured by the log ratio of government expenditure to its own-sourced revenue. Because revenue from land sales is a major source of fiscal revenue for local governments, we expect that bureaucrats in localities that rely more heavily on their own-sourced revenue (as opposed to transfer from above) would make greater efforts to lobby against land market liberalization, which will above all undermine the local government's privileged status as sole supplier of land in a locality. Second, we also construct a variable of Log Number of Government Employees based on China's 2008 economic census.<sup>21</sup> Local bureau chiefs are likely to have greater bargaining power vis-à-vis their political principals when their departments employ a larger share of the local population. A measure of nongovernment employment is also included to control for the total size of the local employment.

**Additional controls.** We include controls for the size of the local economy (Log GDP) and population (Log Population).

19. We scraped all the land lease announcements published on the website in December 2015. The best data are available for the period after 2007 when electronic markers for transactions were adopted nationwide. Between 2007 and 2014, the website recorded a total of 1,392,024 primary-market transactions (i.e., from governments to developers), of which 43,423 involve real estate companies.

20. Specifically, the index is calculated by  $H = \sum s_i^2$ , where  $s_i$  denotes the share of land area bought by real estate firm  $i$  as a fraction of all real estate companies' purchases in a given city-year spell. Because different provinces may have distinct socioeconomic characteristics and policy environments that could affect the development of the real estate sector, we subtract the provincial averages from the city-level concentration index to account for heterogeneity across provinces.

21. This is done by summing up the number of employees for organizations whose industry code starts with 93 (party organization) or 94 (government agencies).

Economic development can affect not only how citizens engage with their governments but also governments' preferences for land policies. In more economically developed areas, for example, local governments may be more willing to allow the entry of CLC to the market because of a higher demand for land to be used in construction. We also control for the level of urbanization (% of Urban Area) because the amount of available space for construction may be an important factor in local leaders' calculation of whether they should allow market entry of CLC. Finally, individual characteristics of local leaders may also matter for their reform propensity. For example, officials who are going to retire soon may not be willing to pursue risky reforms like land market liberalization. In a more extensive specification, we control for a full set of key demographic and career attributes for political leaders, including their age, gender, education, tenure length, and time spent working in the locality.<sup>22</sup>

### Estimation framework

Given the nature of the event we are interested in, the hazard model is the most appropriate technique for analyzing the data. Our main estimation framework is a Cox proportional hazard model with the following specification:

$$h_i^{\text{reform}}(t) = h_0(t) \exp(\alpha \text{Land Petition Share}_{i,t-1} + \gamma \text{Connected Leader}_{i,t-1} + \delta \text{Land Petition Share}_{i,t-1} \times \text{Connected Leader}_{i,t-1} + \mathbf{X}\beta_i),$$

where  $h_i(t)$  is the hazard function of reform occurrence for city  $i$  at the time  $t$ . Land Petition Share is the variable indicating the share of land-related petitions as a percentage of total petitions,<sup>23</sup> and Connected Leader is a dummy variable indicating whether the city secretary or the mayor has informal connection with the provincial party secretary. The key coefficient interest here is  $\delta$ , which measures the relative responsiveness of connected leaders compared to unconnected ones. Based on our prior discussion, we expect this coefficient to be positive and statistically significant. The term  $\mathbf{X}$  is a vector of covariates. Because different provinces may experience idiosyncratic political and economic shocks that could affect the reform propensity of subordinate cities, later we also estimate a stratified Cox model that includes province-specific

hazard rates. The sample period spans between 2008 and 2013, which best matches with the availability of the key covariates discussed above.

### RESULTS

Table 2 displays the main results. As a test of some basic assumptions that we have about the CLC reform, we first run a regression with only the socioeconomic variables and report the results in column 1. Consistent with our prior discussion about the reform's main opponents, we see that the likelihood of the reform is negatively associated with both the number of government employees in a city and the level of concentration in the local real estate sector. Relatedly, local governments' dependence on own-source revenue is also negatively associated with reform occurrence, although the standard error is too large for us to assert statistical significance. These patterns provide empirical support for our claim that local bureaucratic and real estate elites were the main sources of resistance to the reform.

In model 2, we add two petition variables—the total number of petitions and the number of land-related petitions—and the connection variable. The result shows that holding constant the overall volume of petitions, the number of land-related petitions is positively associated with the reform. This association, however, is somewhat weak. It is also worth noting that the coefficient estimate for the connection indicator is weakly negative, suggesting that political connections themselves do not make a local leader more likely to adopt liberalizing reforms if public pressure is absent.

In model 3, we replace the variable for the total number of land-related petitions with a measure for the share of land-related petitions (as percentage of total petitions), and add the interaction between connection and land petition share. Model 4 introduces a more flexible specification with province-specific stratification, essentially allowing the baseline hazard of reform to vary arbitrarily across provinces. Model 5 further includes a number of additional controls on city leaders' personal characteristics. Throughout models 3 and 5, we see that the coefficient estimate for the interaction term is consistently positive and statistically significant, indicating that land petitions are more likely to lead to land policy changes in localities governed by connected city leaders. More interestingly, we note that the effect of land petitions on policy change is positive only for connected leaders, but negative for unconnected ones. For a one percentage point increase in the share of land petitions, the odds of land market reform in cities with connected leaders increase by about 13% ( $\exp(0.31 - 0.18) - 1$ ,  $p < .01$ ), whereas those in unconnected cities decrease by about 16% ( $\exp(-0.18) - 1$ ,  $p = .03$ ). Since high levels of land grievances typically happen in cities with entrenched land-based

22. These controls are for both the city secretary and the mayor.

23. To facilitate the interpretation of the main variables when interaction is present, we de-meaned the petition share variable by subtracting the average share of land petition in that year from the original variable. All our results remain unchanged when we use the original variable.

Table 2. Main Results

	Dependent Variable: Permitting Transfer of Collective Land				
	(1)	(2)	(3)	(4)	(5)
Log GDP	.4546 (.5809)	.4030 (.5769)	.3689 (.5702)	1.4379 (.9036)	1.5207 (.9613)
Log population	.8448 (.6242)	.8458 (.6268)	.9190 (.6112)	.4159 (.9000)	.4845 (.9085)
Dependence on own-sourced revenue	-.2305 (.5788)	-.2057 (.5959)	-.1107 (.6243)	-.7604 (.8661)	-.7545 (.8182)
% of urban area	6.0539** (2.7774)	6.6985** (2.7677)	5.5734** (2.8047)	1.5826 (4.1114)	.7427 (4.0622)
Log no. of government employees (2008)	-1.3952*** (.5326)	-1.4208*** (.5403)	-1.3395** (.5316)	-1.9774** (.9640)	-2.3157** (1.0643)
Log no. of nongovernment employees (2008)	.4641 (.5956)	.4349 (.5996)	.4684 (.6226)	.4809 (.9089)	.5125 (1.0132)
Real estate market concentration	-5.0888*** (1.8593)	-5.1521*** (1.8576)	-4.6880*** (1.7855)	-8.2125* (4.9873)	-8.6633* (4.7263)
Log real estate investment	.0526 (.4375)	.0424 (.4362)	-.0549 (.4603)	-.0758 (.3659)	-.0620 (.3987)
Total petitions		-.0009 (.0009)	.0001 (.0005)	-.0003 (.0008)	-.0001 (.0008)
Land petition		.0484 (.0308)			
% of land petition (de-meant)			-.1489* (.0791)	-.1938** (.0908)	-.1837* (.0943)
% of land petition × connected city leader			.2208** (.0907)	.3147*** (.0904)	.3061*** (.0946)
Connected city leader		-.4040 (.3361)	-.3247 (.3741)	-.2736 (.4899)	-.3140 (.4966)
Strata: province				✓	✓
Leadership covariates					✓
Pseudo $R^2$	.06	.07	.08	.18	.22
No. of cities	257	257	256	256	256
Observations	1,432	1,432	1,430	1,430	1,430

Note. The model reports the coefficients from Cox proportional hazard regressions with province-specific hazard. Leadership covariates include the following variables for both the party secretary and the mayor: Age, Gender, Education, Tenure.

\*  $p < .1$  (two-tailed test).

\*\*  $p < .05$  (two-tailed test).

\*\*\*  $p < .01$  (two-tailed test).

interests, it is not surprising that unconnected politicians in these localities are among the least likely to adopt liberalizing reforms. Our results suggest that support from external networks makes the greatest difference precisely in these highly captured localities.

### ROBUSTNESS CHECKS AND ALTERNATIVE EXPLANATIONS

We conduct a series of additional analyses to ensure the robustness of our findings. The details of the analyses are reported in appendix H. To briefly summarize, we find that our

results are robust to different ways of coding the dependent or the independent variables (tables A.3–A.5), and hold across various subsample analyses that exclude observations from certain special periods or localities (tables A.6, A.7).

We also consider several important alternative explanations. First, since connected leaders are often younger and have less local work experience than their unconnected colleagues, one may be concerned that the observed effect of connection is in fact driven by these systematic differences. To address this concern, we include in our regressions interaction terms between

land petition share and some key leader attributes that may be correlated with the connection status. Our main finding, however, does not change much with the inclusion of these additional interactions (table A.8).

Relatedly, one may be concerned that our finding is driven by the interaction between political connection and certain preexisting socioeconomic trends that are correlated with land petitions. The level and speed of urbanization, for example, may simultaneously affect public grievances about land expropriation and propel the government to adopt reforms that expand land supply. To address this issue, we run additional regressions that control for interactions between political connection and socioeconomic variables such as rural population share, investment in the real estate sector, and ratio of land lease sales to local fiscal revenue. Again, we find that including these potential confounders caused little change to our estimate of the key interaction term (table A.9).

Because patron-client ties sometimes function as an important mobilization mechanism within the Chinese government (Dittmer 1995), another important alternative story is that connected leaders adopted this reform because they were following orders from their higher-level patrons. While this story is certainly plausible, our interviews with government officials suggest that land market liberalization was actually not an issue of high priority for the higher-level administrators during the period we analyze. It is thus unlikely that provincial secretaries would actively mobilize their followers to carry out the reform. To test this possibility more rigorously, we create two variables to capture provincial leaders' attitudes toward this policy. The first is a binary indicator for whether a provincial government has issued any guiding policy documents in the past to support land market liberalization, and the second measures the percentage of neighboring cities in a province that have adopted similar reforms by a given year (presumably also under the instruction of the provincial government). Table A.10 presents results from regressions that include interactions between these variables and the connection indicator. The coefficient estimates for the two interactions are both small and statistically insignificant, suggesting that higher-level preferences are not the most important consideration in city leaders' decisions to initiate reform.

Finally, we consider the possibility that our finding is driven by unequal distribution of land-related grievances between connected and unconnected leaders. It is plausible that although connected and unconnected officials have the same level of responsiveness, connected officials may appear to be more responsive because they are systematically assigned to places with more widespread land-related grievances. To test this, we regress our measure of land petition intensity on the connection indicators, along with a set of other control variables. We find

no evidence that connected city leaders are facing systematically higher levels of land disputes than unconnected ones (table A.11).

### EVIDENCE ON MECHANISM

The preceding analysis has shown that city leaders who enjoy informal connections with higher-level patrons are considerably more responsive to public grievances than those who do not. In this section, we provide some evidence on the posited mechanism—that is, connection with higher-level patrons makes city leaders more independent from the interests of local elites.

We draw on several additional data sources to construct measures of city leaders' attitudes toward local bureaucratic and real estate interests. To capture city leaders' relationship with local bureaucrats, we use the number of corruption and malfeasance prosecutions of government employees, a figure reported annually in city yearbooks.<sup>24</sup> Our expectation is that more independent leaders will carry out more prosecutions because they are less concerned about offending the interests of their subordinates. For leaders' relationship with real estate interests, we use the annual changes in the share of real estate in total fixed asset investment. The idea here is that leaders who have a close relationship with the real estate sector will be more willing to promote its growth, leading to a larger share of the real estate sector in the economy. We also interact the connection indicator with the market concentration measure to see how the effect of connection varies in localities with different market structures.

Table 3 displays results from the mechanism analysis: column 1 provides evidence on connected leaders' relative detachment from local bureaucrats: the coefficient estimate suggests that compared to their unconnected peers, connected leaders tend to prosecute more government employees when they are in charge.<sup>25</sup> Columns 2 and 3 illustrate connected leaders' independence from real estate interests. Column 2 shows that, compared to localities governed by unconnected leaders, annual growth in the real estate sector is about 0.65 percentage points lower under connected leaders. Column 3 further shows that while market concentration in general tends to increase real estate investment, the positive effect disappears in localities governed by connected leaders (as evidence by the negative sign on the interaction). Taken together, these

24. As a robustness check, we also conduct an analysis using the proportion of a topic on bureaucratic disciplinary in Local Government Work Report as an alternative measure of local leaders' emphasis on discipline matters and find largely consistent result (table A.15).

25. One potential concern is that the result might be affected by the recent anticorruption campaign under the Xi Jinping administration. We show in table A.16 that our results are robust to excluding observations under the Xi administration.

Table 3. Evidence on Mechanism

	Prosecutions of Government Employees (Corruption + Malfeasance)		Δ Share of Real Estate Investment	
	NegBin (1)	OLS (2)	OLS (3)	
Connected city leader	.0492** (.0192)	-.6525** (.2787)	-.6242** (.2708)	
Real estate market concentration		1.2991 (1.3313)	4.2700* (2.5748)	
Connected city leader × real estate market concentration				-4.6017* (2.7836)
Year and city fixed effects	✓	✓	✓	
No. of cities	247	282	282	
Observations	1,545	1,688	1,688	

Note. Model 1 reports the coefficient from a negative binomial count model, and models 2 and 3 report coefficients from fixed-effect models. The following variables are included in the regressions but not shown in the interest of space: Log Fiscal Expenditure, Log Fiscal Revenue, Log GDP, Log Population, Secretary's Age, Mayor's Age, Secretary's Gender, Mayor's Gender, Secretary's Education, Mayor's Education, and province-specific trends. Standard errors clustered at the city level are reported in parentheses.

\*  $p < .1$  (two-tailed test).

\*\*  $p < .05$  (two-tailed test).

\*\*\*  $p < .01$  (two-tailed test).

patterns are consistent with our claim that patron-client connections with senior officials make city leaders less attentive to the interests of local elites.

## CONCLUSION

A key lesson from this study is that government responsiveness is shaped not only by the relationship between the masses and the elites but also by interactions among the elites. Configurations of elite networks can shape political leaders' relative dependence on certain privileged sectors or interest groups, which in turn affects their willingness and ability to implement policy changes according to broader public interests. Using the liberalization of the land market in China as a case, we demonstrate that the emergence of local initiatives to reform a state-dominated land market depends not only on a loud voice of discontent from below but also on the presence of well-connected political leaders who are not afraid of acting against the vested interests of local bureaucratic and business elites. Responsive reforms, in other words, only take place in localities where elite interactions provide conducive conditions for responsiveness to arise.

While our analysis focuses on a single episode in contemporary China, the mechanism of responsiveness we document here is generalizable to many different contexts. To begin with,

this specific reform dynamic can find parallels in other cases from China's recent history. During the late 1970s, for example, agricultural decollectivization was pioneered in provinces where the local population suffered the greatest from the Great Leap Famine and the incumbent leaders had strong personal ties to the paramount leader Deng Xiaoping (e.g., Zhao Ziyang in Sichuan and Wan Li in Anhui) (Fewsmith 2000; Shirk 1993; Yang 1996). Tsai and Dean (2014) also find a similar pattern emerging from the democratic governance reform under the Hu Jintao administration: politicians who encouraged experimentation of new modes of democratic participation at the grassroots level were mostly ones who were well connected and serving in provinces with rising popular unrest.

Beyond China, one prominent example of external networks enhancing policy makers' responsiveness can be found in the early life of Franklin D. Roosevelt. As a member of a wealthy, aristocratic family that could independently provide him with ample political and financial resources, the young Roosevelt was among the first few politicians of his generation to heed demands from civic reform groups and take measures against powerful local political machines such as Tammany Hall (Mitgang 2003). Similarly, according to the developmental state literature, in countries like Japan and South Korea, alumni networks formed in elite universities were instrumental

in maintaining a strong, internally cohesive economic bureaucracy that could work closely with multiple business sectors without being completely captured by their interests (Evans 1995; Johnson 1982). These examples suggest that the responsiveness-enhancing effect of informal networks that we document in this study may be present in both democracies and nondemocracies.

We do recognize, however, that certain conditions must be met for our theory to hold. Most crucially, the posited mechanism requires some degree of neutrality on the part of the high-level patron. Informal networks are unlikely to induce responsiveness if the patron has an incentive to collude with local interests. This implies that our theory may work better in settings where elite capture is a localized phenomenon. Moreover, for this theory to hold in other nondemocratic systems, there must also be some constraints on political leaders' ability to use repression. Otherwise, even a well-connected politician may find it more expedient to suppress discontent through coercive means, rather than to respond with policy concessions.

These caveats aside, the basic message from this study is simple: politicians in real life have to balance multiple interests from different, sometimes competing, constituencies; their responsiveness, therefore, must be understood in the context of the broad social relations in which they are embedded.

## ACKNOWLEDGMENTS

The online petition data used in this project are based on earlier collaborative work with Tianguang Meng and Qing Zhang. For valuable comments, we thank Meina Cai, Wilfred Chow, Devesh Kapur, Lei Guang, Yue Hou, Dongya Huang, Haifeng Huang, Sarah Hummel, Rudral Sil, Rogers Smith, Thomas Talhelm, Mark Templeton, Yuhua Wang, Jackson Woods, Dali Yang, Wei You, Jiangnan Zhu, and seminar participants at Sun Yat-Sen University, University of Hong Kong, University of Pennsylvania. Earlier versions of this article was presented at the Fudan-UC Young Scholar Conference at UC San Diego and the International Symposium on Governance at Shandong University (Qingdao).

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