

# Sources of Authoritarian Responsiveness: A Field Experiment in China\*

Jidong Chen<sup>†</sup>      Jennifer Pan<sup>‡</sup>      Yiqing Xu<sup>§</sup>

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## Abstract

Scholars have established that authoritarian regimes exhibit responsiveness to citizens, but our knowledge of why autocrats respond remains limited. We theorize that responsiveness may stem from rules of the institutionalized party regime, citizen engagement, and a strategy of preferential treatment of a narrow group of supporters. We test the implications of our theory using an online experiment among 2,103 Chinese counties. At baseline, we find that approximately one third of county level governments are responsive to citizen demands expressed online. Threats of collective action and threats of tattling to upper levels of government cause county governments to be considerably more responsive. However, while threats of collective action cause local officials to be more publicly responsive, threats of tattling do not have this effect. We also find that identifying as loyal, long-standing members of the Communist Party does not increase responsiveness.

KEYWORDS: authoritarian rule, responsiveness, accountability, field experiment

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<sup>†</sup>Department of Politics and Program in Political Economy, Princeton University. Email: jidongc@princeton.edu.

<sup>‡</sup>Department of Government, Harvard University. Email: jjpan@fas.harvard.edu.

<sup>§</sup>Department of Political Science, Massachusetts Institute of Technology. Email: xyq@mit.edu.

# 1 Introduction

Scholars have known for some time that authoritarian regimes can exhibit responsiveness to citizens (Distelhorst and Hou 2014*a,b*; Malesky and Schuler 2010; Truex 2014; Wang 2004; Weeks 2008). But our knowledge of why autocrats respond to citizen demands remains limited. We have a general notion that responsiveness exists under authoritarianism because it relates to the political survival of autocrats (Bueno de Mesquita and Downs 2005; Magaloni 2008*a*), but we lack understanding of the specific sources of authoritarian accountability.<sup>1</sup>

What evidence exists suggest that accountability in non-democracies derives from informal institutions, ranging from social capital to patronage. Singerman (1996) shows how informal networks are used by Egyptian citizens to obtain public good and services from government officials. Bratton (1994) points out how Senegalese farmers use patronage networks to advocate for policies. Tsai (2007) shows that informal institutions of solidary groups lead to governmental accountability among Chinese villages. Lam (1997) finds that personalistic relationships help Taiwanese farmers obtain particularistic benefits from local officials.

However, informal accountability may not be a sufficient explanation of responsiveness under authoritarianism. First, the solidary groups identified by Tsai (2007) are unlikely to exist in urban localities. Second, scholars have argued that carefully designed formal institutions uphold the survival and durability of some authoritarian countries (e.g., Magaloni and Kricheli 2010; Nathan 2003). An important feature of these institutions is to solicit information from citizens, but their relationships with regime responsiveness are not well understood.

In democracies, responsive government has been theorized to be generated through several different mechanisms (Griffin and Flavin 2007; Grose 2014). Responsiveness could stem from the incentives of democratic institutions—specifically, through pressure for (re)election (Besley and Case 1995; Canon 1999; Powell 2000; Grose 2005, 2011; Grose, Malhotra and Van Houweling 2013; Haynie 2001). Responsiveness could

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<sup>1</sup>Responsiveness and accountability are different notions. Accountability turns on the ability of various parties to sanction power-wielders in some way while responsiveness of power wielders to various parties could be obtained simply due to benevolence or serendipitous alignment of goals (Grant and Keohane 2005; Malesky and Schuler 2010). In line with previous scholarship, in the paper, when we use the term “accountability,” we refer to the sanctioning/punishment mechanisms that force government officials to be responsive; when we use the term “responsiveness,” we refer to the extent to which government officials respond to citizen demands.

result from citizen engagement, from citizens who exert pressure through political action (Hirschman 1970; Putnam 1993; Verba, Schlozman and Brady 1995; Cleary 2007). Finally, there is an established literature on greater responsiveness toward insiders, especially with respect to the development and orientation of the welfare state in consolidated democracies (Rueda 2005), or toward coethnics (Butler and Broockman 2011; Broockman 2013).

While authoritarian regimes typically lack the electoral institutions, unfettered media, and robust civil society found in democracies, emerging research on authoritarian responsiveness echo certain findings from democratic regimes. In particular, three potential explanations of authoritarian responsiveness emerge from early evidence. First, there is a growing body of research on non-democracies that suggests formal institutions such as legislatures and assemblies could play a role in generating authoritarian responsiveness. Malesky and Schuler (2010) show that locally nominated delegates and full-time delegates in Vietnam are more likely to exhibit responsiveness. Manion (2013) suggests that in urban China local elections facilitate the provision of particularistic goods as rewards to constituencies. Truex (2014) finds that the opinions and motions of the members of China’s National People’s Congress address issues deemed most serious by the people they claim to represent. Second, citizen engagement, particularly collective action, has a long history of precipitating government responses in authoritarian regimes (Bernstein and Lu 2003; Chen 2012; Li 2014; Lorentzen 2013; O’Brien and Li 2006; Perry 2002; Wasserstrom and Perry 1994), and as venues for citizen engagement expand with the rise of new media, possibilities for political action increase (King, Pan and Roberts 2013; Meng, Pan and Yang 2014). Finally, under authoritarianism, preference for insiders can be an outcome of an autocrat’s strategy of rewarding the loyal to mitigate elite threats and maintain survival (Geddes 2006; Hanson 2013; Lust-Okar 2005; Magaloni and Kricheli 2010; Magaloni and Wallace 2008).<sup>2</sup>

Motivated by these three potential sources for authoritarian responsiveness, we theorize that subnational agents in an authoritarian regime may be responsive to citizen demands through the interplay of incentives generated by formal party insti-

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<sup>2</sup>The definition and scope of who is considered an “insider” may vary greatly between democracies and autocracies. In research on the welfare state, insiders can represent a large proportion of the population, whereas “insiders” who are loyal to autocrats likely represent a narrow, elite segment of the population. We recognize that this difference in scope may lead to substantively distinct outcomes of responsiveness. The point we want to make is that there is evidence in both democracies and autocracies that *preference for* certain groups of individuals leads to responsiveness.

tutions and individual concerns. We test the implications of our theory by examining the roles that formal party institutions, citizen engagement, and displays of loyalty play in generating government responsiveness through an online field experiment among 2,103 Chinese counties. We evoke the oversight of upper levels of government to assess the effect of China's cadre evaluation system, also known as the *nomenklatura* system, a Chinese Communist Party (CCP) institution that controls access to positions of power, on responsiveness. We test threats of collective action to assess the impact of citizen engagement on responsiveness, and we test claims of long-standing CCP membership to ascertain the effect of loyal insider status on responsiveness.

We find that county-level governments respond to citizen demands for government assistance in obtaining social welfare approximately one-third of the time. Both threats of collective action and threats of tattling to upper levels of government if county officials fail to provide assistance cause county-level governments to be 30 to 35 percent more responsive (i.e., causal effect of 8 to 10 percentage points). Both treatments also cause the governments to provide more direct information in their responses to citizens. However, a striking difference between these two sources of responsiveness is that threats of collective action cause local officials to be more publicly responsive, while threats of disclosure to upper levels of government do not have this effect. We also find that identifying as loyal, long-standing members of the CCP does not cause increased responsiveness.

Together these results show that formal party institutions and citizen engagement both play important roles in generating responsiveness in an authoritarian context. Responsiveness to threats of tattling to upper levels of government means that party institutions of the authoritarian regime, specifically, China's cadre evaluation system, has a direct impact in causing officials to respond to citizen requests. Responsiveness to threats of collective action could be explained either by an interaction between the cadre evaluation system and citizen participation or by citizen engagement alone. In the former explanation, lower level officials respond to threats of collective action to control the image they present to their superiors in order to improve their advancement prospects within the party. In the latter explanation, lower level officials respond to threats of collective action because they want to mitigate social contention to maximize rent-seeking and/or minimize administrative burdens, irrespective of career concerns.

The role of formal rules of the political system in generating responsiveness has

implications for how sources of accountability differ between democracies and authoritarian regimes. While responsiveness in both autocratic and democratic regime stems from a desire by political leaders to maintain their survival in power, elected officials at all levels of power in democracies should at least in theory be responsive to citizens because voters can remove central and local politicians from office.<sup>3</sup> In authoritarian regimes, even if local officials do not care about citizen preferences *per se*, they do respond to citizens because of incentives created by the cadre evaluation system. In other words, politicians in democracies are ultimately responsible to their voters whereas officials in autocracies are ultimately responsible to their superiors, though this culpability may in turn generate some responsiveness to citizens even if they are not directly concerned with citizens' well-being.

The role that formal rules of the party play in generating responsiveness expands our understanding of authoritarian institutions beyond the electoral and parliamentary context. A fast growing body of research has focused on the role of elections and legislatures in authoritarian regimes (Boix and Svobik 2007; Blaydes 2011; Gandhi 2008, 2009; Gandhi and Przeworski 2006, 2007; Lust-Okar 2006; Magaloni 2008*b*; Malesky, Abrami and Zheng 2011; Malesky and Schuler 2010; Wright 2008). However, much less attention has been paid to other types of formal institutions found in authoritarian regimes, and we begin to address that gap with this analysis.

Finally, the finding that claims of CCP membership and loyalty to the regime do not result in greater responsiveness seems to suggest that the strategy of buying off core supporters among the masses with preferential services and benefits is not being used by the government.<sup>4</sup> It is worth emphasizing that the claim of loyal, long-standing CCP membership, in contrast to threats of collective action and tattling, is deferential, which suggests that in this authoritarian context, threats rather than deference may be more likely to lead to responsiveness.

In Section 2, we describe a theory of how subnational agents in a single-party regime are motivated to respond to citizen needs. Section 3 details our experimental design and discusses the ethics of our research, as well as the steps we took to ensure the security of our research subjects, our research team, and future research of this

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<sup>3</sup>While responsiveness is a key feature of democratic theory, in practice, the presence of electoral competition does not always yield responsiveness (Ashworth 2012).

<sup>4</sup>One caveat is that the regime's core supporters might be a much smaller group of people than long-standing, loyal CCP members. Our finding is consistent with scholars' claims that the CCP is becoming depoliticized (Zheng 2009) and that there is increasing distance between citizens and officials, especially in urban areas (Tsai and Xu 2013).

type. We describe the characteristics of government forums in Section 4 and our results in Section 5. Section 6 concludes.

## 2 Theory

Existential threats to autocrats come either from elite coups or from mass rebellions (Wintrobe 1998, 2007; Haber 2006; Levitsky and Way 2010; Svulik 2012; Boix and Svulik 2013). In order to rule over the masses, autocrats must endow resources to agents (for example, local officials), but those agents can then use said resources to overthrow the regime (Haber 2006). One solution to this dilemma is for autocrats to create an institutionalized party so as to make credible commitments with the agents to ensure that their interests and benefits are recognized (Gehlbach and Keefer 2011). A possible arrangement is that the agents are awarded the chances of being promoted into rent-paying positions in the future if they follow the party rule (Magaloni and Kricheli 2010).

While power sharing agreements may mitigate threats from elites, it does not alleviate the risk the masses pose to the regime. Broadly speaking, the regime can either repress or redistribute to prevent the masses from attempting to revolt (Wintrobe 1998; Haber 2006; Mares and Carnes 2009; Boix and Svulik 2013). The regime can repress using tactics ranging from censorship to physical intimidation to suppress revolt and to decrease the likelihood of future collective action. Alternatively, the regime can redistribute in one of two ways. First, they can engage in broad-based redistribution and public goods provision to increase the overall standard of living and reduce the likelihood that anyone would want to act collectively against the regime. Second, the regime can adopt a strategy of distributing preferential services and benefits to a narrow segment of the population to create core supporters, such as party members in a single-party regime, in order to prevent broad-based coalitions from forming.

However, when implementing these strategies, the single-party regime faces a tremendous information problem. First, they often lack information of the quality of public services provided by the agents and to what extent the masses are satisfied. Second, they are less informed than the agents of potential risks of social instability in each locality, and in particular, the extent to which instability stems from agents' malfeasance. Third, they are uncertain if the resources that are supposed

to buy off potential supporters are used by agents to form their own patron-client relations.<sup>5</sup> These problems are aggravated when the scale of the country is large and a considerable number of agents are engaged by the regime.

Assuming that agents are inclined to seek contemporaneous benefits through corruption or misconduct and spend less effort on providing services to the masses, agents' interests and the interests of the single-party regime are not often aligned. If the agents cannot keep the masses happy with the political status quo and effectively resolve issues that can potentially cause revolt, the party's rule would be jeopardized. Therefore, party institutions, such as the rules of career advancement, can help keep the interests of agents in line with those of the party.

One way to partially resolve this information problem is to enact top-down discipline based on clearly pre-specified rules that make an agent's promotion prospects contingent on his or her capacity to satisfy the masses and, ultimately, to prevent rebellions from occurring. Meeting economic targets, such as targets of GDP growth rate and fiscal revenue, enters the evaluation of local Chinese officials likely because these indicators are easy to measure and capture some part of whether the masses are satisfied with their economic situations (Edin 2003). However, citizen satisfaction with social conditions and their support for the regime are more difficult to measure, and as a result, it is challenging for the regime and its agents to come to mutual agreement on what constitutes adequate performance in these areas. However, the regime can still use high-power incentives to offset the difficulty of measuring these indicators—for example, if any group of citizens in a locality are observed to engage in even a single attempt of collective action, the agent who is in charge of this locality is deprived from the opportunity of being promoted.<sup>6</sup> In addition, the regime may open formal channels to the masses in order to gather information on how well local agents are performing (e.g. Chen and Xu 2014).

Therefore, a sophisticated autocratic ruler, or a ruling party, may reach an explicit or implicit deal with its agents. In other words, the agents are signing a “contract” with their boss (the party) to signify mutual agreement. This “contract” may have easily quantifiable targets, such as reaching a certain GDP growth rate and amount of

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<sup>5</sup>All three problems relate to moral hazard on part of the agent, but they also relates to the fact that local agents know more about the local information. While the moral hazard problem forces the regime to offer incentive schemes to control agents, locally available information makes the regime delegate.

<sup>6</sup>In China, this high-powered incentive is called *yipiao foujue*, or literally, vetoed because of not meeting the requirement of one target (Edin 2003).

fiscal revenue. More importantly, it may also include more “qualitative assessments,” by which we mean targets that are difficult to assess quantitatively, such as the number and magnitude of collective action events, the volume and nature of complaints against the agent’s misconduct filed by ordinary citizens, or cases in which political dissidents raise fundamental challenges to the regime’s rule. *Ceteris paribus*, agents who are able to meet qualitative requirements in addition to quantitative targets have a higher chance of being promoted to higher offices. The career prospects of agents who fail to deliver against qualitative assessment crumble even though these agents are competitive on quantitative targets.<sup>7</sup>

Being fully aware of these outcomes, agents allocate their time and energy to pursue their own benefits in the long run. For example, they may choose to spend more efforts on providing public services to citizens such that the masses are more satisfied with the regime. Agents may also spend substantial time and effort trying to prevent events of social instability from occurring and to decrease the likelihood that their bosses will receive complaints about their incompetence or misconduct. Moreover, it is also possible that the agents will follow the strategy of the regime and rally a core of supporters, e.g., party members, among the general population.<sup>8</sup>

Because a single-party authoritarian regime cares about its survival and because it may employ sophisticated incentive structures to keep its agents in line with its core interest, the authoritarian government may be responsive to the masses in certain occasions. For example, the local government officials may be responsive to citizen demands when they face credible threats from the citizens that may compromise their promotion prospect. Such threats include collective action that is clearly visible to the regime or direct communication between the citizens and agents’ superiors.<sup>9</sup> Local officials may also be more responsive to loyal supporters of the regimes, to adhere to the regime’s strategy of distributing narrow benefits to a small sub-population.

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<sup>7</sup>Scholars of Chinese politics have shown that the central government strives to maintain stability through the cadre evaluation system (Cai and Zhu 2013; Cai 2014; Edin 2003).

<sup>8</sup>Whereas a single-party regime may adopt a strategy of cultivating party members as core supporters, an individual agent of the party regime is less likely to adopt this strategy unless the agent is following the lead of the regime. In China’s context, individual agents are more likely to cultivate patronage-client relationships through personal networks rather than seek out party members, who may be complete strangers, as clients.

<sup>9</sup>Lorentzen (2013) finds that small-scale, narrowly defined protests can mitigate informational problems faced by authoritarian regimes that lack competitive elections, free press, and active civil society. While these types of protests may mitigate informational problems faced by central leaders, in reality, it may not be in the interest of local leaders to allow these types of protests, which would jeopardize their careers.



It is worth mentioning that theoretically it is plausible that local agents have an aversion to social instability even if they are uninterested in career advancement for two main reasons—access to rents and administrative burden. Local agents are already in rent-paying positions, and unrest among citizens could disrupt access to these rents. For example, protest and collective action could lead to capital flight, diminishing the local agent’s sources of rent. Unrest could also decrease the agent control over the locality, hindering ability to extract rents even if sources of rents remain stable. Local agents could also be adverse to collective action simply due to the disutility of the administrative burden it imposes. Protest and “trouble-making” often seek to disrupt the normal functioning of government (Xi 2009), making it difficult for local agents to carrying out day to day activities. Added to the increased difficulty of day to day operations is the administrative burden of dealing with unrest and resolving social contention, such that managing citizen unrest is an onerous task for any local agent. Lastly, there is the interaction between these two explanations—unrest that consumes an agent’s time and resources, also reduces the time available for rent-seeking activities. This possibility of intrinsic aversion to social instability is not contradictory or exclusive to aversion induced by the incentives of party institutions described above; they are in fact complementary.<sup>10</sup>

The aversion to social instability on part of the local agent, whether or not it stems from career concerns, does not necessarily lead to responsiveness. It could also easily lead to repression. However, repression is costly as it makes the regime vulnerable to the security apparatus (Magaloni and Kricheli 2010).<sup>11</sup> Thus, local agents need to balance the cost of repression and responsiveness (Svolik 2012), and as a result, responsiveness at the sub-national level may be limited to smaller-scale, incremental changes. If citizens demand costly changes such as wholesale political reform, the cost for the agent of responding may exceed the cost of repression, making responsiveness a less attractive strategy.<sup>12</sup>

Our theory conjectures the circumstances under which local agents might be responsive to citizen demands due to incentives provided by both formal rules of the party and other concerns such as access to rents and administrative burden. What we

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<sup>10</sup>Recent work suggests that incentive offering and intrinsic preference could complement to each other in solving the agency problem (Besley and Ghatak 2014).

<sup>11</sup>For example, the CCP has encouraged local agents to avoid use of repression when possible. See [http://paper.people.com.cn/rmlt/html/2008-07/16/content\\_65510.htm](http://paper.people.com.cn/rmlt/html/2008-07/16/content_65510.htm).

<sup>12</sup>The credibility of citizen demands is another factor that agents would likely consider alongside the cost of changes and the relatively cost of repression vs. responsiveness.

do not know, however, is how sensitive agents are in responding to citizens because of these incentives. This is because, first, the rules of the party are opaque to outside observers, and second, it is unclear how much effort they require on part of the agent to fulfill. Therefore, we use an experiment to gauge the incentive structure of local government officials in the context of China. We focus on three core hypotheses:

**H1:** Assignment to threats of collective action increases responsiveness of subnational leaders to citizen demands.

**H2:** Assignment to evoking the oversight of upper level leaders increases responsiveness of subnational leaders to citizen demands.

**H3:** Assignment to claims of CCP membership and loyalty to the Party increases responsiveness of subnational leaders to citizen demands.

We choose China to test the implications of our theory for two main reasons. First, China is often regarded as a model case of authoritarian durability (Nathan 2003). Second, China's large, hierarchical single-party structure and its party institution for career advancement allow us to investigate subnational authoritarian responsiveness with sufficient empirical power. China's cadre evaluation system promises government officials at the county and higher levels of government access to the rents associated with political office and promotion conditional on meeting certain performance targets.<sup>13</sup> Although the exact metrics of evaluations vary by locality, the party secretary and top executive are evaluated against performance indicators that include economic targets, such as GDP growth and fiscal revenue collection, as well as social targets such as preventing social unrest and controlling birth rates (Liu and Tao 2007).

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<sup>13</sup>China's administrative structure from top to bottom includes the central level, provincial level, prefectural level, county level, and township level. At each level is a dual Party - government apparatus, with the Party being dominant. The top two officials at each level of the state is the party secretary who exerts political leadership followed-up by the chief executive who leads day-to-day operations for the region (Guo 2009). The prefectural party secretary is in charge of personnel and promotion of CCP and government cadres at the county level; the provincial party secretary is in charge of personnel and promotion of CCP and government cadres at the prefectural level, and so forth.

### 3 Experimental Design

In this section, we detail our experimental design to test the three hypotheses among county-level governments in China.<sup>14</sup> In April 2007, the State Council, China’s chief administrative organ, promulgated the “Open Government Information Ordinance” (OGI), which required county and higher levels of government to increase online transparency. As part of this initiative, the majority of local governments in China have set up government web portals, which contain online forums where citizens can submit questions or comments (Pan 2014).

We identified the websites of all Chinese counties that contain a government portal (2,227, 77%) and recorded a detailed set of characteristics including whether the website contains a public online forum or a place to contact local officials, as well as the requirements for posting to the forum or contacting officials.<sup>15</sup> We found that 2,103 (73%) government websites contain a forum, and we then tested each government forum by submitting a request for assistance in obtaining social welfare and recording the posting process, as well as various characteristics of the government response.<sup>16</sup> Then, the forums were checked 10 and 20 business days after the date of submission for responses by at least two members of the research team for validation, and both the date checked and the date of the responses are recorded.<sup>17</sup> Altogether, we obtain a detailed set of indicators of government capacity and transparency at the county level.<sup>18</sup>

Our outcome of interest is responsiveness, and we measure responsiveness in four ways after the initial post was submitted. Specifically, we measure whether there is a response;<sup>19</sup> and if there is a response, when the response was given, whether

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<sup>14</sup>The counties we examine include counties in rural areas and districts in municipalities, including districts in provincial-level municipalities, such as Beijing, Shanghai, Tianjing, and Chongqing.

<sup>15</sup>Government web portals may contain several methods of contacting the local government. Often there is a “mayor’s mailbox,” an email or online form where issues submitted are not publicly viewable. Besides, there is often a discussion forum with publicly viewable posts, replies, and discussion threads. We utilize publicly viewable forums instead of private messaging options.

<sup>16</sup>All posts were made from within China. We submitted our requests after the “two meetings” (*lianghui*) of the National People’s Congress and the People’s Political Consultative Conference to avoid posting during a political sensitive period where local officials likely have a larger workload.

<sup>17</sup>90.5 percent of the replies on government web portals include the date on which the reply was posted.

<sup>18</sup>The average response rates at the provincial level are depicted in Appendix Figure A1.

<sup>19</sup>When we receive a request from the government for more information, that information request is coded as a response. Our protocol is to not provide further information to the government entity.

the response is viewable by the general public,<sup>20</sup> and finally, the specific content of the response. We include these four measures so that we capture the full extent to which responses may vary. Together, these measures provide us with dichotomous, continuous, and categorical measures of our outcome.

### 3.1 Treatment Conditions

To test the three hypotheses outlined in Section II, we randomly assign each of our treatments to be posted on county government web forums within each prefecture. The treatment conditions were written to be similar in tone and length to existing content found on online government forums. We pre-tested the content of the control and treatment conditions with Chinese citizens and officials to fine-tune their appropriateness for an online forum and their relevance to the concepts we are interested in capturing.

Our treatment design entails a request from a Chinese citizen regarding the Minimum Livelihood Guarantee (*Dibao*), a non-conditional cash transfer program aimed at providing a social security net for Chinese residents whose income falls below a level set by the local government (Solinger 2005, 2010). We chose the *Dibao* program as the subject of our request for several reasons. First, the *Dibao* is a program that covers both rural and urban residents, which is often not the case for Chinese government policies. Second, *Dibao* is implemented across China, unlike employment, housing, environmental and other issues where no national policy exists. Third, *Dibao* should in principle be programmatic since it is a national policy, yet it is not implemented in a programmatic fashion (Chen, Ravallion and Wang 2006). Every household under a certain level of income should be eligible to receive *Dibao*, yet research shows that very few households under the government mandated threshold receive the benefit. Finally, requests for information and assistance with *Dibao* is a topic that frequently appears on government forums, so it is not strange or surprising for the question to be received (Pan 2014).

Because of the fragmentation of local government websites and more generally local governments in China, it is very unlikely that officials in one county will realize that a similar post appears in another county during our experiment. Moreover,

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<sup>20</sup>Based on pre-testing and previous research, we know that certain website may respond privately or make both requests and responses viewable only to the individual submitting the request (King, Pan and Roberts 2014).

because forum content that is public is not indexed by search engines, and because questions about social welfare and *Dibao* are among the most common types of questions found on government forums, the likelihood of identifying the posts of our experiments is low.

The control condition is as follows:<sup>21</sup>

Respected leader:

My wife and I have lost our jobs, and we have been unable to find work for a long time. Our economic situation is very difficult, and we cannot make ends meet. We have to support my elderly mother who is ill and for whom we have to buy medicine. We also have our son who is in school and has school fees and living fees that are difficult to bear. I have tried to apply for *Dibao* through my residential committee, but they say I am not eligible.

Can you help my family obtain *Dibao*? Much gratitude!

Yours,

[Common male name]

This inquiry is phrased to demonstrate some knowledge of *Dibao*, to increase the diversity and richness of government responses and to maximize the likelihood of a more personalized response.<sup>22</sup> For example, the request states that the head of household and his wife have been unable to find work. This signals that the lack of employment is not due to lack of effort because in recent years, some localities have tried to make *Dibao* status contingent on inability to find employment. As well, the inclusion of an elderly, ill mother and school-aged child emphasizes the economic hardship faced by this household, making them a more likely candidate for *Dibao* status. Finally, the inquiry states that the applicant has been turned down by the residential committee. This again shows a certain level of knowledge about the *Dibao* program, which requires applications to be initiated by the residential committee.

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<sup>21</sup>The Chinese version submitted is available upon requests. We do not release the Chinese version in the paper in order to protect the human subjects of this experiment.

<sup>22</sup>Based on pre-testing, if we did not demonstrate knowledge of *Dibao*, it is likely that more responses would have been formulaic—for example, directing the request to the residential committee.

In each of the treatment conditions, the treatment is inserted at the beginning of the new paragraph prior to the phrase “Can you help my family obtain *Dibao*?” To test the effect of threats of collective action on responsiveness, we add the sentence:

People around me are in a similar situation, they face difficulties, and they also can't get *Dibao*. If you can't help, we'll try to figure out what we can do collectively about this situation.

To assess the effect of threat of complaining to upper levels of government on responsiveness, we add the following text to our request:

If this problem cannot be addressed, I'll have to report it to upper-level government officials.

And finally, to measure the effect of claims of long-standing loyalty to the CCP, we add:

I'm a long-standing CCP member, I've always followed the leadership of the Party.<sup>23</sup>

### 3.2 Ethical Considerations

Our experiment entailed the use of deception to protect human subjects, to minimize disruption to the system we are studying, and to protect the safety of our research team. In addition, whenever possible, we make our information requests and the responses to them publicly viewable so this information can benefit others who are seeking advice on the *Dibao* program. The human subjects aspects of our experimental protocol were pre-approved by the Institutional Review Boards of our universities.

One of our guiding principles in conducting this research was to minimize disruption to the system we are studying. Since our experiment entailed submitting requests to government managed websites, this meant minimizing the use of governmental resources. We made requests for county governments to take action in the form of a written response. Based on the subject of our inquiry, pre-testing, and analysis of online forums, we did not believe local governments would take any action beyond

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<sup>23</sup>We pre-registered the research design of this experiment at the Experiments in Governance and Politics (EGAP) website: <http://e-gap.org/design-registration/>.

writing a response, and this prior expectation was borne out by the experiment. The subjects of our research, those responding to requests on government forums, were not debriefed in order to minimize the time government administrators would spend reading and potentially responding to a debrief notice. Minimizing disruption also involves making sure that future posts, whether from citizens or other researchers, are taken seriously. By not debriefing our subjects, we increase the chances of minimizing disruption and decreasing risks to future applicants of the *Dibao* program.

To protect the safety of the research team and for logistical reasons, we did not use confederates in submitting the informational requests. If a confederate had been used, we would have needed to find individuals from households who qualify for *Dibao* in each of the localities where we conducted the experiment. Given the scope of the experiment, it would have been extremely difficult and costly to recruit the appropriate number of confederates, and confederates with similar enough characteristics to support our experimental design. In addition, by not using confederates, we eliminate the potential for inconvenience, however small, that confederates submitting the information requests might face.

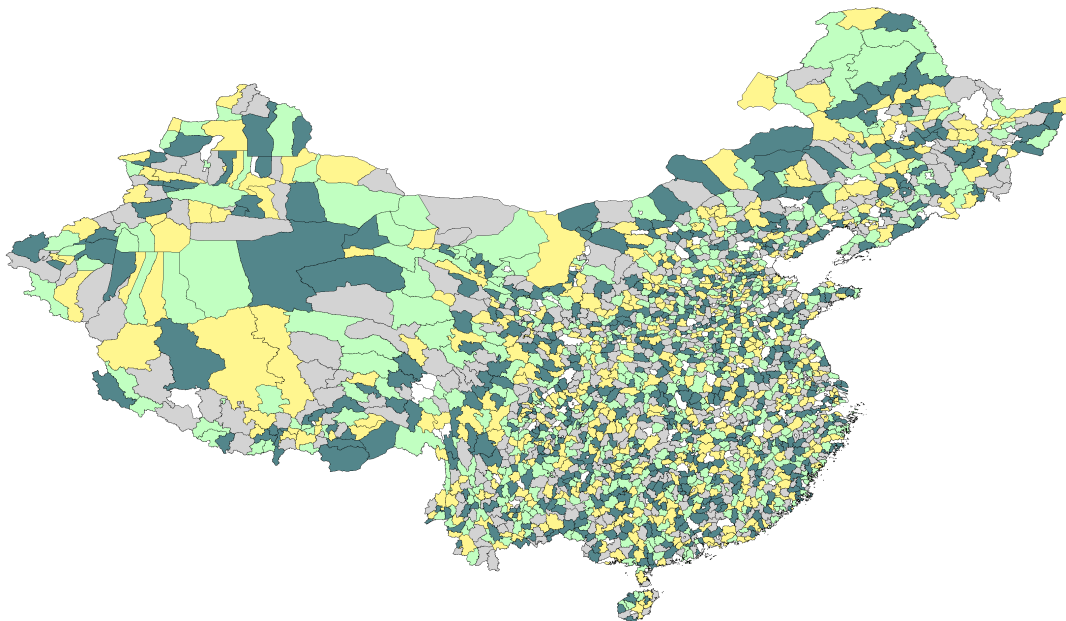
We are unable to reveal all of the details of how we implemented this design, but the statistical and scientific logic behind our experimental choices are straightforward and completely transparent. Furthermore, whenever possible, we make the responses to our request publicly viewable so that others who visit county government forums seeking information on *Dibao* can benefit from the responses to our experiment.

### 3.3 Randomization and Balance

Randomization was conducted within prefectures, which we believe further minimizes the risk of detection. Figure 1 visualizes the random assignment spatially. In this figure, each of the four colors represents a control or treatment group, and the boundaries denote all 2,869 counties in mainland China. Counties receiving the control conditions are gray. Counties receiving treatment one, threats of collective action, are in dark green. Counties receiving treatment two, threats of tattling to upper levels of government, are in light green, and counties receiving the third treatment, claims of CCP loyalty are in yellow. Urban municipalities, where the experiment was conducted at the municipal district level are in white since the level of randomization cannot be displayed on this map.

Table 1 shows the covariate balance across control and treatment groups on a

Figure 1. Treatment Assignment Map of Mainland Chinese Counties



number of different demographic, economic, and fiscal factors. Demographic variables include population in 2000 and 2010, population density, gender ratio, the scope of the migrant population, the percent of households with urban (or non-agricultural) residential permits, the percent of permanent urban residents (resident with urban *hukou*), average years of education, literacy rates, the unemployment rate, the proportion of the work force concentrated in agriculture, industry, and service sectors, as well as the proportion of ethnic minorities. Economic variables include GDP, per capita GDP, 2000-2010 nominal GDP growth, output by sector (agricultural, industrial, services), the number of industrial enterprises above designated size (above 5 million CNY), total investment from households, enterprises, and government, as well as total savings, which is the total outstanding bank deposits of rural and urban households at the end of 2010. Finally, fiscal variables include government revenue and expenditures. As can be seen from Table 1, randomization is successful and our treatment is balanced across all of the above dimensions.



Table 1. Covariate Balance Across Treatment Groups

	Obs.	Control	T1: CA Threat	T2: Tattle Threat	T3: Loyalty Claim	<i>p</i> -value
Log population	2,869	12.7	12.7	12.7	12.8	0.84
Log population (2000)	2,869	12.7	12.7	12.7	12.7	0.85
Population growth (2000-10 %)	2,869	5.06	4.91	5.02	5.07	0.85
Gender ratio (female = 1.00)	2,869	1.05	1.05	1.06	1.06	0.44
Log population density (person/km2)	2,869	14.8	14.8	14.9	15.0	0.49
Migrant (%)	2,869	16.8	16.5	17.1	17.1	0.85
Non-agriculture household (%)	2,869	29.1	29.5	29.1	30.5	0.63
Permanent urban residents (%)	2,869	23.2	23.4	23.1	24.0	0.54
Average years of education	2,869	8.69	8.72	8.69	8.76	0.79
Illiteracy rate among age above 15 (%)	2,869	6.43	6.33	6.33	6.28	0.99
Ethnic minority (%)	2,869	17.1	15.8	15.7	16.3	0.78
Unemployment rate (%)	2,869	3.26	3.26	3.22	3.44	0.54
Work force in agriculture (%)	2,869	52.6	51.8	52.2	50.5	0.48
Work force in industry (%)	2,869	20.0	20.4	20.9	21.3	0.36
Work force in services (%)	2,869	27.2	27.8	26.9	28.2	0.44
GDP per capita (1,000 CNY)	2,821	25.3	25.3	24.4	24.8	0.77
Log GDP per capita	2,821	9.89	9.90	9.89	9.89	0.99
Log GDP	2,821	8.84	8.83	8.84	8.85	0.98
Average nominal GDP growth (2000-10)	2,821	0.15	0.15	0.15	0.15	0.97
Log agricultural output	2,821	7.13	7.13	7.13	7.14	1.00
Log industrial output	2,821	7.96	7.95	7.97	7.99	0.96
Log services output	2,821	7.68	7.69	7.69	7.69	1.00
Enterprises above designated size	2,821	51.7	51.4	52.1	49.9	0.96
Log total investment	2,821	8.43	8.42	8.43	8.45	0.96
Log total saving	2,821	6.77	6.81	6.80	6.82	0.93
Log total government revenue	2,821	5.74	5.72	5.76	5.74	0.98
Log total government expenditure	2,821	7.15	7.13	7.14	7.15	0.91

**Note:** Group means and *p*-values corresponding to F tests of all three treatment indicators are shown in the table. Data are from 2000 and 2010 Census and Provincial Statistical Yearbooks. Variables were measured in 2010 unless otherwise noted.

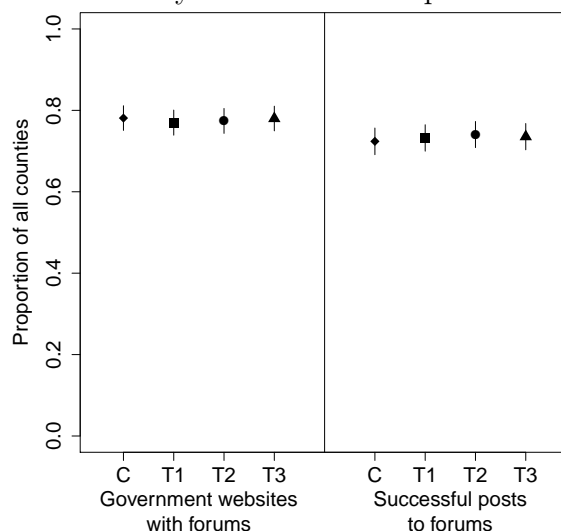
## 4 Characteristics of Government Web Forums

Among 2,869 Chinese counties, online government forums were identified for 2,227 (77%). We attempted to post to all 2,227 websites, and posts were successfully made to 2,103 government forums. For the 124 counties with forums where our posting was not successful, the main reason for failure to post was due to technical difficulties. In these cases, the submission led errors in page loads after a lengthy wait. In each of these cases, at least three attempts were made at submission using different browsers.

Whether a county has an online forum and whether we were successful in posting our request does not affect the validity of our experimental design. Figure 2 shows

that we achieve balance across treatment groups for whether there is a government forum and whether posts are successful. In total, we submitted 519 posts to the control group, 525 posts to the first treatment group assessing threats of collective action, 531 posts to the second treatment group examining threats of tattling to upper levels of government, and 528 posts to the third treatment group focused on claims of long-standing loyalty to the CCP.

Figure 2. Availability of County Government Web Forums by Treatment Group

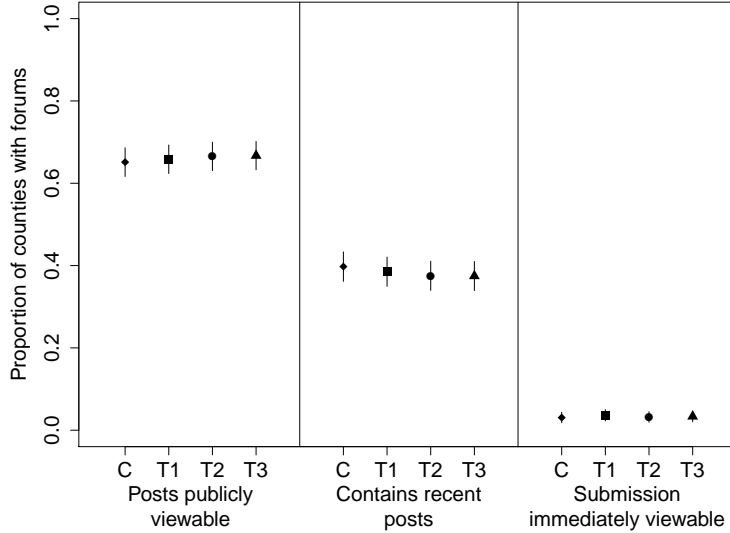


For each forum, we collected information on the characteristics of the forum, including whether existing posts and replies were publicly viewable—in other words, whether someone who does not have an account or is not logged into the site can view posts and replies. We also recorded the dates of the most recent posts and replies. Lastly, we documented whether the posts we submitted were immediately viewable, or whether the posts were first reviewed by authorities before they were released to be publicly viewable. As shown in Figure 3, approximately 70 percent of forums have publicly viewable posts and replies. This means that for 70 percent of government forums anyone who visits the forum URL can view posts and replies without creating an account or logging in.

Approximately 40 percent of forums contains posts by the local government made within the past 30 days. However, less than 5 percent of forums immediately release submitted posts. This means that the vast majority of government forums first review the content of posts submitted before the posts are released to be seen by the

general public. This finding is in line with the high prevalence of review found among government websites (King, Pan and Roberts 2014). As seen in Figure 3, all of these forum characteristics related to openness are balanced across treatment groups.

Figure 3. Openness of County Government Web Forums by Treatment Group

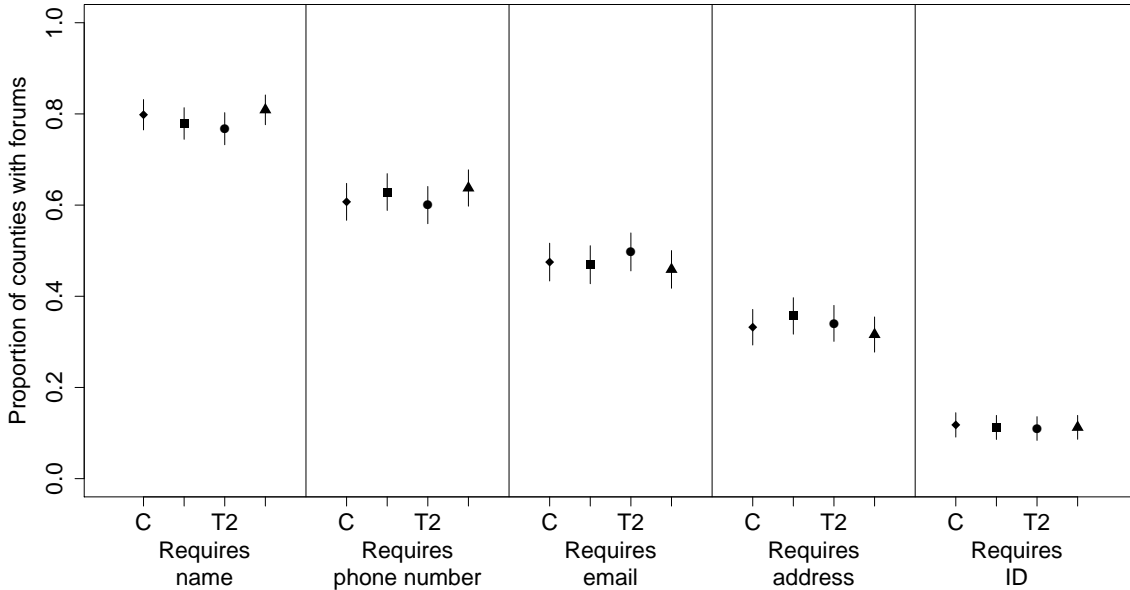


Finally, we collected information on the requirements for submitting posts to the government forum, including whether an email address is required, whether a name is required, whether a personal identification number (*shenfenzheng hao*) is required, whether a phone number is required, and whether an address is required. Since we do not use the information of real confederates, if an ID number, telephone number, or address is required, we randomly generate data to fill in these fields. The same, very common name was used in all requests, and email accounts were created for the experiment. As shown in Figure 4, 80 percent of government forums require users to submit a name, 60 percent require a phone number, approximately 50 percent an email address, 30 to 40 percent an address, and only 10 percent a personal identification number. Posting requirements are also balanced across treatment groups.

## 5 Experimental Results

We begin by looking at whether or not county governments responded to our requests to evaluate overall responsiveness. The response rate to our control group was 32% (95% confidence intervals of 28% to 36%). The black dots in Figure 5 show the

Figure 4. Requirements for Posting to County Government Web Forums by Treatment Group



point estimates for the causal effect of our three treatments on county government responsiveness. The vertical lines are 95% confidence intervals.<sup>24</sup>

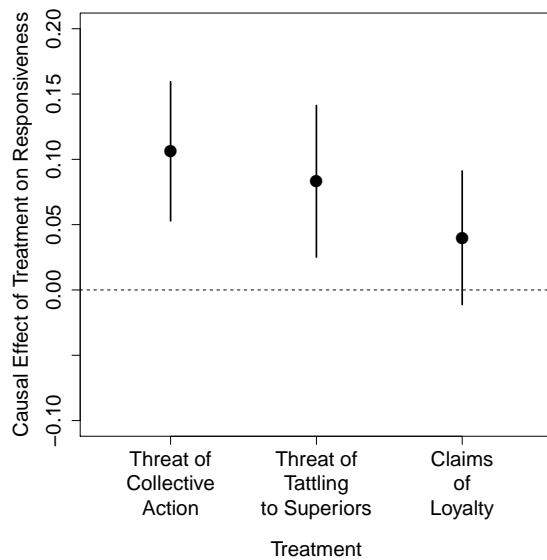
The causal effect on responsiveness is more than 10 percentage points for threats of collective action. Since the base level government response rate to the control group is approximately 30 percent, this means that threatening collective action causes county government to be one third more responsive. For threats of complaining to upper levels of government, the causal effect on responsiveness is also large at 8 percentage points. The causal effects of the two treatments are not statistically different from each other. Finally, the effect on responsiveness of claiming long-standing CCP membership and loyalty to the Party is 4 percentage points, but the result is not statistically significant.

We go a step further and examine these causal effects while controlling other characteristics of the county. Table 2 shows the regression results including control variables and provincial dummies for the set of all counties (unconditional) and for the set of counties where posts were successfully posted (conditional).<sup>25</sup> Control variables

<sup>24</sup>Conference intervals shown in the figures of the results section are based on welsh two-sided t-test. Although the data are binary, the large sample size and mean response rates mean the central limit theorem applies. Conference intervals based on alternative methods produce basically identical results.

<sup>25</sup>Results are based on regression adjustment. In addition to the treatment dummies, we include

Figure 5. The Causal Effects of Treatments on Responsiveness



include log population, the proportion of non-agricultural households, the proportion of permanent urban residents, average years of education, the unemployment rate, and the proportion of ethnic minorities for the county in 2010.

Columns 1 to 3 of Table 2 show the results for all Chinese counties (unconditional models), where the coefficient estimates represent the causal effect of treatments on government response. In Column 1, government response is regressed on our treatment indicators. The model in Column 2 performs the same analysis with the addition of control variables, showing that the coefficient estimates are very stable. Finally, the model in column 3 includes provincial dummy variables in addition to control variables, and again the coefficient estimates remain stable.

Columns 4 to 6 of Table 2 show the results for Chinese counties where we successfully submitted our requests to the government web forum (conditional models). Column 4 shows the regression of government response on our treatments, similar to the unconditional model in column 1. Column 5 shows the regression of government response on treatment variables and control variables and Column 6 includes provincial dummy variables in addition to treatment and control variables. As expected, the causal effects of the treatment increase in the conditional models, but

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demeaned covariates as well as their interactions with the treatment dummies in the regressions (Lin 2013). Huber White robust standard errors are shown, though errors are virtually identical without using robust standard errors. Moreover, because treatment conditions are randomly assigned within each province (the variations of treatment are at the county level), standard errors clustered at the provincial level are qualitatively the same as those in Table 2.

Table 2. The Causal Effects of Treatments on Government Response

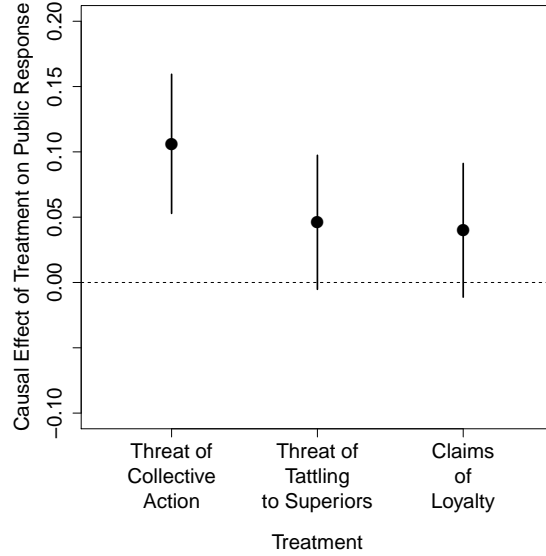
<i>Dependent variable</i>	Government response (0 or 1)					
	Unconditional			Conditional		
	(1)	(2)	(3)	(4)	(5)	(6)
T1: collective action threat	0.077 (0.023)	0.075 (0.023)	0.074 (0.023)	0.101 (0.030)	0.101 (0.030)	0.102 (0.029)
T2: tattling threat	0.068 (0.023)	0.065 (0.023)	0.065 (0.023)	0.083 (0.030)	0.083 (0.030)	0.087 (0.029)
T3: claims of loyalty	0.033 (0.023)	0.031 (0.023)	0.030 (0.023)	0.040 (0.029)	0.038 (0.029)	0.039 (0.029)
Constant	0.232 (0.016)	0.233 (0.016)	0.092 (0.026)	0.320 (0.020)	0.321 (0.020)	0.176 (0.035)
Controls		YES	YES		YES	YES
Provincial dummies			YES			YES
Observations	2,869	2,869	2,869	2,103	2,103	2103

remain very stable with the inclusion of control and provincial dummy variables. Together, the models in Table 2 show that our results are robust whether the analysis is based on all counties or the subset of counties where posts were successfully made. Threats of collective action and tattling generate greater responsiveness from county governments while claims of loyalty do not.

**Public and Private Responses.** In addition to overall responsiveness, we also examine whether the reply to our request is made publicly viewable, or whether the response is kept private. A response is private if it is not accessible without logging into the account, or if the reply is emailed rather than posted publicly. The public response rate to our control group was 21% (95% confidence intervals of 18% to 25%).

As shown in Figure 6, for public responses, the causal effect of threatening collective action is again over 10 percentage points. Given the overall public response rate of approximately 20 percent, threatening collective action increases public responses from the county government by nearly 50 percent. In contrast, the effect of threatening to tattle to upper levels of government and the effect of claims of loyalty on public responses is small, at 5 percentage points and 4 percentage points, respectively. Neither effect is statistically significant. The causal effect of threatening collective action is significantly larger than those of the other two treatments at the 5% level.

Figure 6. The Causal Effects of Treatments on Publicly Viewable Responses



As seen in Table 3, the causal effect of threatening collective action on public responses is robust no matter whether the analysis is based on all counties or the subset of counties where posts were successfully made. Likewise, tattling to upper levels of government and claims of loyalty do not lead to greater public responses.

These results show that authoritarian officials respond to citizens’ demands in different ways depending the forms of threats they receive. Consistent with our theory, the local governments choose the form of responsiveness in the way that minimizes their own costs. When facing a threat of tattling to the upper government, an official prioritizes finding a solution to the problem while preventing “bad news,” which would tarnish his image, from spreading. In this case, a private response is a strategy that provides a solution while limiting the spread of bad news. In contrast, if the bad news has already spreads and collective action is already likely to take place, responding publicly is a strategy that costs less time and energy than identifying and contacting all the discontented citizens who share the same problem.<sup>26</sup>

**Content of Responses.** Finally, we examine the content of replies from county governments that responded to the request for *Dibao*. We coded by hand responses

<sup>26</sup>In Appendix Table A3, we show that, although the overall government response rate is higher in urban areas than in rural areas, the treatments effects exist in both places and the mechanisms behind them seem to be very similar.

Table 3. The Causal Effects of Treatments on Publicly Viewable Response

<i>Dependent variable</i>	Publicly viewable response (0 or 1)					
	Unconditional			Conditional		
	(1)	(2)	(3)	(4)	(5)	(6)
T1: collective action threat	0.079 (0.021)	0.079 (0.021)	0.078 (0.020)	0.106 (0.027)	0.107 (0.027)	0.108 (0.027)
T2: tattling threat	0.038 (0.020)	0.037 (0.020)	0.036 (0.020)	0.046 (0.026)	0.049 (0.026)	0.051 (0.026)
T3: claims of loyalty	0.032 (0.020)	0.031 (0.020)	0.031 (0.020)	0.040 (0.026)	0.040 (0.026)	0.041 (0.026)
Constant	0.153 (0.013)	0.154 (0.014)	0.046 (0.022)	0.212 (0.018)	0.211 (0.018)	0.097 (0.03)
Controls		YES	YES		YES	YES
Provincial dummies			YES			YES
Observations	2,869	2,869	2,869	2,103	2,103	2,103

into three categories: (1) Deferral, (2) Referral, and (3) Direct Information. The content of these three categories roughly increases in terms of length of text and likely increasingly effort on part of the government respondent. We achieve 99% intercoder reliability for agreement in classifying response into these three categories.

Replies are coded as Deferral if the response does not provide an answer to the question of how to obtain *Dibao*. Sometimes a rationale for the lack of information is provided but other times none is given. Oftentimes, the government response states that some piece of personal information is missing in the request. Replies in the Deferral category are on average the shortest replies, and likely require the least amount of effort on part of the county government. The example below is a typical Deferral response:

Hello letter writer! Your question does not contain enough specificity, for example, your address.

Replies are coded as Referral when the government response suggests contacting another agency for further assistance, and provides the contact details of that agency.<sup>27</sup> For example:

<sup>27</sup>We do not show the telephone number or identity of the local governments in accordance with the experimental protocol approved by the Institutional Review Boards of our universities.



Hello, you must meet certain requirements to apply for *Dibao*, based on the situation you describe, we cannot determine your eligibility. Please consult with the department of civil affairs for *Dibao* information. Telephone: \*\*\*\*373.

When replies state that the initial request does not provide sufficient information, but also provides details on how to obtain additional resources and assistance (e.g., a telephone number), the responses are coded as Referral instead of Deferral. For example:

Comrade, hello! Because the situation you describe is not specific enough, to obtain assistance on your question, please call: \*\*\*\*3211, thanks!

Finally, responses are coded as Direct Information when the reply directly provides the information required to answer the questions posted in our request. These replies are generally the longest the length. Direct Information replies provide the most detailed information on what is required to obtain *Dibao* as well as specific the next steps for the requester, which may include contact information on relevant agencies. For example:

XX comrade, hello! First, thank you for your interest and support in our work on civil affairs. Eligibility for *Dibao* is based on household income. In your post, you did not specify your household income, nor did you specify whether you are a rural or urban household. For example, this year, in our city, the rural *Dibao* level is 2400 yuan. If your household's annual income is less than 2400 yuan, you have initial eligibility to apply for *Dibao*. But, whether you can receive *Dibao* is based on a rigorous set of criteria, which I cannot detail line by line here. Please go to the *Hukou* (household registration) office of the township civil affairs department to obtain detailed information. You can also obtain information by phone, our phone number is \*\*\*\*287. In addition, since the district-level civil affairs agency only has ability to review *Dibao* applications, and since the township government leads evaluation of *Dibao* eligibility, you can give your detailed information to the township office, who we believe will take

your detailed information and provide preliminary advice on whether you are eligible to receive *Dibao*.<sup>28</sup>

Looking across our treatment conditions, Table 4 shows the number and percent of responses for each of the content categories by treatment. For requests that threaten collective action and requests with claims of Party loyalty, there is the highest proportion of responses in the Direct Information category and the lowest proportion of responses in the Deferral category. For requests that threaten to complain to upper levels of government, the largest proportion of responses is also in the Direct Information category, followed by the Deferral category, and the smallest proportion of responses fall in the Referral category.

Table 4. Content of Responses by Treatment Group

	No Response		Deferral		Referral		Direct Info	
Control	551	76.9%	33	4.6%	42	5.9%	91	12.7%
T1: collective action threat	496	69.2%	36	5.0%	52	7.3%	133	18.6%
T2: tattling threat	502	70.0%	50	7.0%	44	6.1%	121	16.9%
T3: claims of loyalty	528	73.5%	39	5.4%	58	8.1%	93	13.0%

Figure 7 shows the difference in means of each category of response between each treatment group and the control group.<sup>29</sup> This difference in means represents the causal effect of each treatment on the content of the response. The largest causal effect on content of response is the threat of collective action on Direct Information. The threat of tattling has a smaller causal effect on receiving Direct Information as well as Deferral.<sup>30</sup>

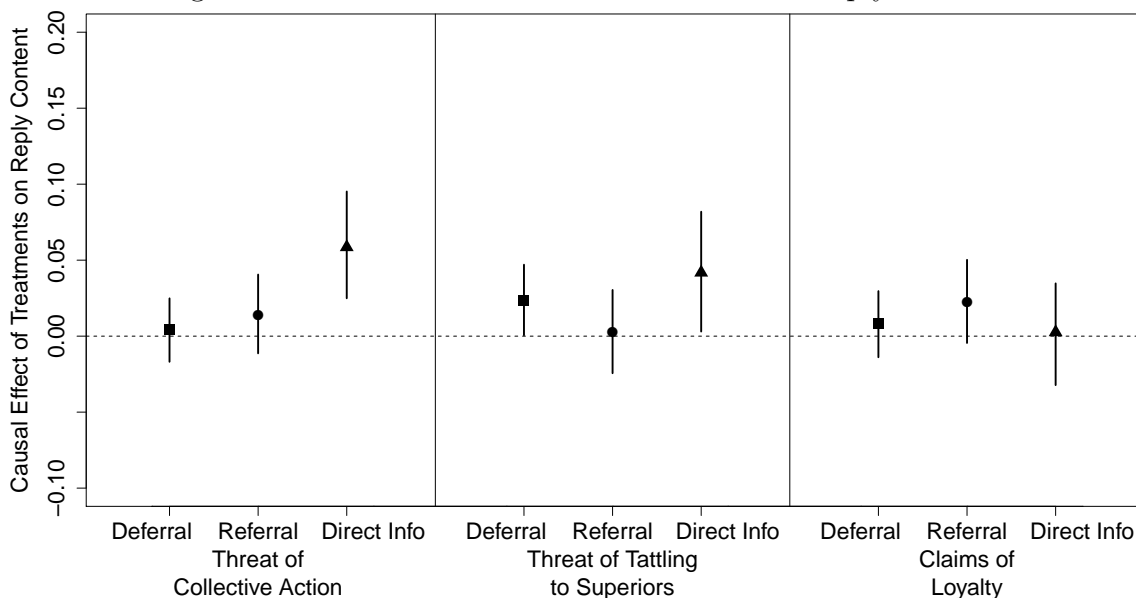
**Speed of Responses.** We find that over 20 percent of responses were provided within one business day, and 70 percent of responses were provided within ten business

<sup>28</sup>Again, we do not release the Chinese versions of the four examples in order to protect our human subjects. They are available upon requests.

<sup>29</sup>The category of no response exists for each group, but is not shown here. Because the four differences in means are correlated with each other, we conduct a bootstrap procedure (of 1,000 times) to obtain the correct standard errors. In each round of bootstrap, prefectures are randomly drawn with replacement from universe of prefectures to make sure the treatment conditions are balanced. Counties belonging to the newly drawn prefectures constitute a new sample. See Appendix Table A1 for full results.

<sup>30</sup>The tattling treatment causes a slight increase in the Deferral responses whereas the threat of collective action treatment does not likely because the government wants to preempt potential collective action by openly reassuring dissatisfied citizens that it takes their concerns seriously. In the case of threat of tattling, it might be preferable for the government to directly solve the problem of the tattler in stead of openly providing information.

Figure 7. The Causal Effects of Treatments on Reply Content



days. We do not find any significant differences in the speed of response between treatment groups.<sup>31</sup>

**Discussion.** The causal effect of threats of collective action on government responsiveness suggests that citizen engagement and/or formal institutions of career advancement are sources of authoritarian responsiveness in the Chinese context. County governments are more responsive when facing these threats either due to concerns that collective action could threaten career prospects or due to the disutility that unrest would pose irrespective of political promotion. The increases in public responses and more personalized responses imply that county governments may want to signal to unsatisfied citizens who threaten collective action that their demands are taken seriously in order to prevent events of social instability from happening.

The result that tattling to upper levels of government has a causal effect of on overall responsiveness but not on publicly viewable responsiveness is a clear indication that career incentives created by formal rules of the CCP regime help produce responsiveness to a certain extent. As described in our theory in Section 2, promotion in an authoritarian regime may depend on qualitative assessments of citizen satisfaction in addition to meeting quantitative targets such as fiscal revenue and GDP

<sup>31</sup>Appendix Table A2 provides additional information on the evolution of the treatment effects over the 28-day period.

growth to ensure that agents are meeting the regime’s goals of maintaining social stability given information problems. The increase in the probability of private responses when faced with the threat of tattling to upper levels of government shows that county officials are concerned with what their upper-level superiors know about citizen dissatisfaction. This concern shows that incentives of career advancement, controlled by upper levels of government, play a role in generating responsiveness. Incidentally, this result also suggests that for county officials, personal networks and connections are not sufficient explanations of career advancement (Shih, Adolph and Liu 2012).

Together, our results suggest that even in a system where accountability is generated through a top-down mechanism, citizen engagement with the authoritarian government is consequential. First, citizen input helps the regime detect official misconduct and malfeasance. Second, citizen engagement that poses a credible threat to social stability and/or career advancement prospects is better rewarded by the government.

The lack of effect of claims of long-standing, loyal CCP membership, however, suggests that government officials do not place priority on deferential requests from CCP members. In other words, we do not find clear signs that local agents are targeting preferential treatment to a narrow core of supporters among the masses at the expense of the welfare of the others, as has been suggested (e.g. Svobik 2012).<sup>32</sup> An important caveat to this result is that perhaps Party membership represents too large of a group to receive preferential treatment, and that only a subset of CCP members are considered true “insiders” who may not use public channels such as government forum to make demands of the regime. Additional research is needed to disentangle and further clarify the role of CCP members and insiders in generating accountability.

It is important to note that our experiment examines the implications of our theory that incentives provided by formal party rules, citizen engagement, and preferential treatment of a narrow group of supporters could generate authoritarian accountability. What we directly test in our experiment is the threat of collective action, the threat of tattling, and claims of party loyalty. In addition, while we speak about responsiveness in general, our experiment does not say anything about

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<sup>32</sup>This finding is also consistent with vote-buying programs in Mexico where municipalities expected to win by landslides received less funding than contested localities (Magaloni 2006).

the extensibility of online responsiveness to government responsiveness in real life, or whether responsiveness to questions beyond social welfare could generate similar levels of responsiveness.

## 6 Conclusion

Based on an online field experiment, we find that almost one third of county governments in China are responsive to citizen requests related to social welfare. We find that threatening collective action causes a 30 percent increase in overall responsiveness (or a 10 percentage point increase in the overall response rate), a 50 percent increase in public responsiveness, and a 46 percent increase in receiving direct, detailed responses. In contrast, while threatening to complain to upper levels of government also causes a nearly 30 percent increase in overall responsiveness, these threats of tattling have no causal effect on public responses. Finally, deferential claims of long-standing loyalty to the CCP do not cause any type of increase in responsiveness.

Our findings suggest that formal institutions and citizen engagement both play a role in generating responsiveness under authoritarianism. However, our findings point to a possible refinement of existing theories that it is the interactions between formal authoritarian rules and citizen engagement that lead to authoritarian responsiveness. In this case, upper levels of government use citizens as an oversight mechanism on subnational leaders, which imbues citizens with the ability to sanction lower level leaders, and generates responsiveness among local leaders to citizen demands.

In contrast to existing literature where citizen engagement and protest are the catalysts for regime change ([Acemoglu and Robinson 2006](#)), our results suggest that in an authoritarian regime capable of building institutions complementary to citizen engagement, citizen engagement could contribute to regime survival, or at the very least, citizen engagement is not necessarily a harbinger of the collapse of institutionalized single-party regimes.

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# A Online Appendix (Not For Publication)

Figure A1 visualizes provincial average response rates. Counties under all treatment conditions within each province in mainland China are pooled together. The maximum average response rate among the 31 provinces is 54 percent. The vastly different response rates in different regions illustrate the importance of geographic stratification in randomization.

Figure A1. Average Response Rate  
(Provinces in Mainland China)

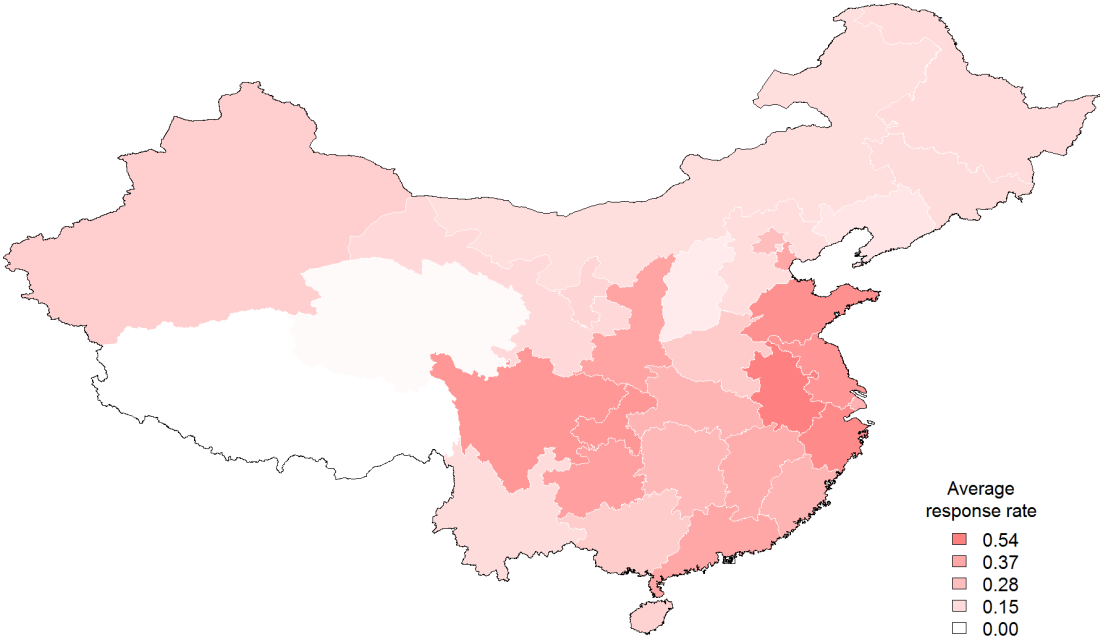


Table A1 reports the differences in means of different types of responses (including no response) between the treatment groups and the control group. The sample consists of all 2,869 counties, including those do not have online forums. The standard errors are based on 1,000 bootstrapped samples. In each round of bootstrap, prefectures are randomly drawn with replacement from the universe of prefectures. Counties belonging to the newly drawn prefectures constitute a new sample.

Table A1. Content of Responses by Treatment Group

	No Response	Deferral	Referral	Information
T1: collective action threat	-0.077 (0.020)	0.004 (0.011)	0.014 (0.013)	0.059 (0.018)
T2: tattling threat	-0.068 (0.023)	0.024 (0.012)	0.003 (0.013)	0.042 (0.020)
T3: claims of loyalty	-0.033 (0.021)	0.008 (0.011)	0.022 (0.014)	0.003 (0.016)
Constant	0.768 (0.018)	0.046 (0.009)	0.059 (0.009)	0.127 (0.014)

Table A2 shows the evolution of the treatment effects during the 28-day period. The sample consists of all 2,869 counties, including those do not have online forums. The outcome variables are government responses within 7 day (5 business days), 14 days (10 business days), 21 day (15 business days), and 28 days (20 business days). The outcomes are coded as zero if no response is received within the specified time period. Huber White robust standard errors are in the parentheses.

Table A2. Speed of Government Responses

<i>Dependent variables</i>	Government Response within			
	1 week	2 weeks	3 weeks	4 weeks
	(1)	(2)	(3)	(4)
T1: collective action threat	0.045 (0.020)	0.046 (0.022)	0.059 (0.023)	0.077 (0.023)
T2: tattling threat	0.040 (0.020)	0.045 (0.022)	0.061 (0.023)	0.067 (0.023)
T3: claims of loyalty	0.032 (0.019)	0.016 (0.022)	0.029 (0.022)	0.033 (0.023)
Constant	0.144 (0.013)	0.215 (0.015)	0.223 (0.016)	0.232 (0.016)
Observations	2,869	2,869	2,869	2,869

Table A3 shows the treatment effects in both urban and rural areas. Urban areas are countries whose permanent urban residents consist of more than 50 percent of the total population and rural areas are countries in which permanent urban residents are less than 50 percent. Both samples are not conditional on having online forums. The outcome variables include three binary indicators: (1) overall response; (2) public response; and (3) response with personalized information. Huber White robust standard errors are in the parentheses. Table A3 shows that, although the overall response rate is higher in urban areas than in rural areas, the treatment effects exist in both places. Moreover, the three treatment conditions have similar impacts on overall responsiveness, probability of receiving responses that are public viewable, and probability of receiving responses with direct information.

Table A3. The Causal Effects of Treatments in Urban and Rural Areas

<i>Dependent variables</i>	Urban			Rural		
	Overall	Public	Information	Overall	Public	Information
	(1)	(2)	(3)	(4)	(5)	(6)
T1: collective action threat	0.065 (0.043)	0.081 (0.038)	0.056 (0.033)	0.080 (0.028)	0.078 (0.025)	0.060 (0.023)
T2: tattling threat	0.041 (0.043)	0.035 (0.037)	0.036 (0.033)	0.081 (0.028)	0.039 (0.024)	0.045 (0.023)
T3: claims of loyalty	0.009 (0.041)	0.023 (0.035)	-0.003 (0.030)	0.042 (0.027)	0.035 (0.024)	0.006 (0.022)
Constant	0.277 (0.030)	0.170 (0.025)	0.125 (0.022)	0.211 (0.018)	0.146 (0.016)	0.128 (0.015)
Observations	952	952	952	1,917	1,917	1,917