Constituency Service under Nondemocratic Rule: Evidence from China

Greg Distelhorst, Massachusetts Institute of Technology **Yue Hou**, University of Pennsylvania

Why do nondemocratic regimes provide constituency service? This study develops theory based on a national field audit of China's "Mayor's Mailbox," an institution that allows citizens to contact local political officials. Analyzing government responses to over 1,200 realistic appeals from putative citizens, we find that local service institutions in China are comparably responsive to similar institutions in democracies. Two key predictors of institutional quality are economic modernization and the intensity of local social conflict. We explain these findings by proposing a demand-driven theory of nondemocratic constituency service; in order to sustain the informational benefits of citizen participation, the responsiveness of service institutions must increase with citizen demand. We then offer supplementary evidence for this theory by analyzing the content of real letters from citizens to local officials in China.

onstituency service—officials' efforts to solve problems raised by citizens—is an important component of political representation. Classic studies of constituency service demonstrate how the incentives of electoral politics motivate and shape officials' responsiveness to the public (Cain, Ferejohn, and Fiorina 1987; Fenno 1978). Yet these studies offer little help in explaining the political logic of constituency service in nondemocracies. This study develops theory about the drivers of constituency service in a nondemocratic regime, thereby shedding light on the logic of political representation in the absence of electoral politics.

The rapidly growing literature on nondemocratic institutions (Blaydes 2010; Brownlee 2007; Gandhi 2008; Hou 2015; Jensen, Malesky, and Weymouth 2014; Levitsky and Way 2010; Lust-Okar 2005; Magaloni 2006; Malesky and Schuler 2010; Truex 2016) has yet to address constituency service institutions, but it is clear that the nondemocratic logic must diverge from the democratic one. Democratic responsiveness to constituent requests turns on electoral reciprocity: representatives believe that delivering constituency service yields electoral payoffs (Cain et al. 1987), elected representatives offer more assistance to citizens eligible to vote in their own districts (Broockman 2013), and expansion of

constituency service is credited with driving the long-term increase in incumbency advantage in the United States (Cain et al. 1987; King 1991). If nondemocracies provide similar forms of constituency service, a different theoretical framework is required to explain this behavior in the absence of an electoral link between officials and the public.

Field studies of constituency service have a rich history in democracies, spanning both advanced industrialized countries (Broockman 2013; Butler and Broockman 2011; Butler, Karpowitz, and Pope 2012; Carnes and Holbein 2015; Dropp and Peskowitz 2012; Loewen and MacKenzie 2013; Putnam 1994; White, Nathan, and Faller 2015) and emerging economies (McClendon 2016; Spada and Guimarães 2013; Spada et al. 2012). This study adopts a similar approach to studying constituency service under nondemocratic rule. It uses a national field audit of service institutions in contemporary China to develop theory on nondemocratic constituency service. We analyze the behavior of local institutions in response to 1,225 realistic service requests from putative citizens, avoiding the potential biases of self-reported data from government agencies or citizens. Like other studies conducted in democratic contexts, examining official responses to fictitious constituent requests captures real, albeit small,

Greg Distelhorst (gregd@mit.edu) is the Mitsubishi Career Development Professor and an assistant professor of global economics and management at Massachusetts Institute of Technology, Cambridge, MA 02139. Yue Hou (yuehou@sas.upenn.edu) is an assistant professor of political science at the University of Pennsylvania, Philadelphia, PA 19104.

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 appendix with supplementary material is available at http://dx.doi.org/10.1086/690948.

The Journal of Politics, volume 79, number 3. Published online May 9, 2017. http://dx.doi.org/10.1086/690948 © 2017 by the Southern Political Science Association. All rights reserved. 0022-3816/2017/7903-00XX\$10.00

000

decisions that officeholders make about whether to provide service to the public.

The audit reveals that this institution provides a surprisingly high level of service. China's mayors' offices offered helpful responses to 43% of appeals in the audit, making these agencies more responsive to information requests than the offices of elected representatives in several previous studies of democracies. Examining variation across localities, we find that quality of service is predicted not by traditional measures of state capacity or economic development but rather by modernization of the economy—the dominance of the industrial and service sectors—and higher levels of local social unrest. These effects appear in both traditional regression analyses and new machine learning approaches that mitigate concerns about misspecification bias.

We argue that this pattern—high responsiveness to prosaic citizen appeals and higher responsiveness in economically modernized localities-suggests a logic of nondemocratic constituency service that goes beyond short-term efforts to prevent collective action. Building on insights from the political economy of nondemocratic regimes, we argue that constituency service institutions deliver valuable information about society to nondemocratic states. However, these informational benefits depend on sustaining voluntary public participation. If citizens lose faith in the institution and become politically disengaged, the state loses access to this information. The government therefore nurtures public participation by providing constituency service of reasonable quality and increasing service quality in response to public demand.1 Finally, to illustrate how effective constituency service institutions can generate information about public service failures and social conflict, we analyze the content of a sample of publicly available letters from citizens to officials in China.

This study introduces a new institution to the growing body of scholarship on quasi-democratic practices in non-democratic regimes, which to date has largely focused on elections, parties, and legislatures.² In keeping with this literature, we find that authoritarian constituency service goes

beyond "window dressing" to deliver meaningful public service. However, whereas some previous research on non-democratic institutions finds that "parties do not compete and legislatures do not legislate" (Gandhi 2008, 180), the institution we study delivers a level of responsiveness to informational appeals that is comparable to similar institutions in democratic regimes. Although motivated by the collection of information rather than electoral reciprocity, constituency service in China appears to improve the quality of local governance. The concluding section discusses the implications of these findings for theories of authoritarian political development.

CONSTITUENCY SERVICE IN NONDEMOCRATIC REGIMES

In the last decade, a consensus has emerged that nondemocratic institutions matter. Legislatures, political parties, and elections are more than democratic façades in the political economy of nondemocratic rule. Across a variety of regions and regimes, these institutions serve to manage conflict and competition among political elites (Blaydes 2010; Brownlee 2007; Gandhi 2008; Lust-Okar 2005; Magaloni 2006), elicit cooperation from society (Gandhi 2008; Magaloni 2006), coopt political opposition (Lust-Okar 2005; Magaloni 2006), and generate information for the regime (Magaloni 2006; Manion 2016; Truex 2016). These institutions matter not only for the durability of nondemocratic regimes but also for their institutions and provision of public goods (Gandhi 2008; Luo et al. 2007; Wang and Yao 2007).

This inquiry into nondemocratic institutions has yet to explore institutions of constituency service. Service institutions purport to render government officials responsive to the needs of citizens. Although a defining feature of nondemocracies is the weakness or absence of electoral accountability, these regimes provide institutions with the apparent function of "providing help to individuals, groups, and localities in coping with . . . government" (Fenno 1978, 101).³ Institutions for citizens to contact officials are described in studies of traditional communist regimes such as the USSR (Little 1976) and Bulgaria (Dimitrov 2014b), as well as contemporary single-party regimes such as Singapore (Li et al. 2004) and prerevolutionary Egypt (Reddick, Abdelsalam, and Elkadi 2011). In the subject of our study, the People's Republic of China, constituency service is one

^{1.} The idea that authoritarian regimes promote certain forms of mass participation is not incompatible with the claim that authoritarian incumbents seek to limit mass collective action. Certain forms of political participation, such as the service requests we study, are relatively atomized and unlikely to facilitate future collective action.

^{2.} A notable exception to the focus on elections, parties, and legislatures in nondemocracies has been the study of petitioning (*xinfang*) institutions in China (Chen 2008, 2012; Luehrmann 2003; O'Brien and Li 1995). We build on this literature by studying citizen contacting in China on a national scale.

^{3.} Fenno's (1978) definition originally referred to the "federal government," as his research subjects were US congresspeople. We see no need for conceptually limiting constituency service to national-level governments. The public's need for help dealing with government is not specific to any particular jurisdictional scale.

of several "mass line" institutions that are purported to facilitate direct consultation between citizens and officials while maintaining concentration of power in the Communist Party (Chen 2012; Dickson 2016; Tang 2016). Scholarship on these institutions has highlighted their role in facilitating extra-institutional resistance and strengthening control over bureaucratic subordinates (Cai 2010; Chen 2008, 2012; Luehrmann 2003). We contribute to this research by offering a national evaluation of institutional quality and building theory on the drivers of constituency service under nondemocratic rule.

What drives constituency service in the absence of electoral incentives? We exploit subnational variation in service quality across China to test three preliminary hypotheses. One logic of nondemocratic constituency service views it as an issue of state capacity. Local governments are given a variety of mandates from superiors, among them fielding and resolving appeals from citizens. The quality of these institutions may therefore vary with government resources available to staff service offices and efficiently process citizen requests. Nondemocratic regimes exhibit wide variation in coercive and implementation capacities both across countries and subnationally (Bellin 2004; Levitsky and Way 2010). If constituency service is primarily governed by a practical logic of policy implementation, local variation in state capacity will be a strong predictor of the quality of service.

Economic modernization may also help explain the provision of constituency service in nondemocracies. Early modernization theorists such as Lerner (1958) and Lipset (1960) argued that economic change exerts a powerful influence on state-society relations. They view increased urbanization, wealth, education, and communications as altering the public's expectations surrounding the role of government, a relationship that has been elaborated through subsequent survey research (Inglehart and Welzel 2005). Even when modernization does not lead to political democracy, it transforms authoritarian states by creating "competing interests, conflicting normative claims, and divergent behavioral expectations" (O'Donnell 1973, 75-76). Modernization is a syndrome of social and political changes, but the most relevant to constituency service are the changes in public expectations surrounding the role of government. The development of the industrial welfare state increases government involvement in economic life as both a regulator and a provider of social benefits such as health care and education. As citizens' interaction with government agencies intensifies, constituency service institutions are in greater demand to resolve citizen problems and address sources of discontent with policy. These demand pressures may incentivize investment to improve nondemocratic constituency services. This logic predicts improved service quality in settings of greater economic modernization.

Finally, constituency service may be driven by the need to manage social conflict. Public protest and other visible breakdowns of public order represent a major political concern for nondemocratic regimes and have attracted particular attention in contemporary China (King, Pan, and Roberts 2013; Shirk 2008; Wallace 2014). Even protests for ostensibly nationalist causes threaten to turn against the state (Weiss 2014). This makes the management of social stability a major concern for nondemocratic regimes, leading to massive expenditures of official time and resources (Chen 2013; Wang 2014). Constituency service may contribute to managing social conflict in two ways. First, citizen service requests may seek intervention of political officials into their disputes with government agencies, employers, business partners, and other economic actors. These appeals offer an opportunity for service institutions to resolve these grievances before they escalate to more disruptive forms of claims making (Cai 2010; Chen 2012). Second, citizen appeals for service can highlight areas of public policy that contribute to citizen grievances more generally. This information on unpopular or poorly implemented policies can be used to make adjustments that reduce discontent. This logic predicts that increased social instability will be associated with improved provision of constituency service, as local governments invest in better service institutions.

DATA: FIELD AUDIT OF SERVICE INSTITUTIONS

We test these three hypotheses—bureaucratic capacity, economic modernization, and social conflict—using data collected from a multiple-wave field audit of a local constituency service institution in China. The institution we study is commonly known as the "Mayor's Mailbox" (*shizhang xin-xiang*), a channel for citizens to contact local political leaders with questions, complaints, or suggestions (Chen, Pan, and Xu 2016; Distelhorst and Hou 2014; Hartford 2005). Citizens submit their requests for assistance through government webpages or to e-mail addresses established for this purpose. This institution appeared in the early 2000s as a result of a nation-wide "Government Online" campaign initiated by the State Economic and Trade Commission and more than 40 other

^{4.} Our audit found over 50 variants of online channels for contacting city government, with names such as Government Mailbox, Ask-about-Government Web, Mayor's Hotline, Write to the Mayor, and Leaders' Window. The most common name for this institution was Mayor's Mailbox (65%).

ministries and cabinet-level agencies.⁵ By 2014, the Mayor's Mailbox was available on the official webpages of 98% of China's 336 prefecture-level governments.

The Mayor's Mailbox represents a technologically modern addition to the mass line institutions in China, such as petitioning offices (Chen 2012; Luehrmann 2003). Similar to citizen petitions, Mayor's Mailbox complaints are typically received by a general-purpose office and then routed to the most relevant bureau, which then provides a response to the citizen. In some cases the response may involve providing information, whereas in others the agency may rescind a penalty, compensate a victim, or investigate a disturbance. While the agencies it offers access to and services it delivers are highly similar to in-person petitioning, the Mayor's Mailbox also differs in important ways. Whereas visiting petition offices creates opportunities for disruptive protest tactics, online contacting keeps citizens at a physical remove from government buildings and officials.

China's prefectural mayors are the chief executives of prefectural governments. Their appointments and promotions are decided by political authorities, not electoral contests. Mayors generally serve terms of two to three years, in part to combat the development of entrenched local interests and corruption. Their professional incentives reward exceptional economic performance but impose few sanctions for poor performance, short of being prosecuted for corruption (Landry 2008). Although mayors are not directly involved in answering the vast majority of letters received through the Mayor's Mailbox, they are prominently featured in the branding of this service institution. Aside from its name, these webpages often feature mayors' photographs and exhortations to "Write me a letter" (fig. 1).

Between 2012 and 2013, we conducted five field experiments involving the Mayor's Mailboxes of China's prefectural governments.⁶ In each study, prefectural governments received appeals from putative citizens requesting information about various policies. This behavioral measure of constituency service—do officials respond to such requests with helpful information?—offers appealing features compared to alternative empirical approaches. Surveys and interviews that ask political elites to reflect on and report their interactions with constituents may be subject to

nonresponse bias and social desirability bias. Talking about constituency service is much easier than devoting scarce resources to providing service. Field audits can yield national measures of the quality of constituency service that are not subject to these biases and have been usefully employed in a variety of settings (Broockman 2013; Butler and Broockman 2011; Butler et al. 2012; Carnes and Holbein 2015; Dropp and Peskowitz 2012; Loewen and MacKenzie 2013; McClendon 2016; Putnam 1994; Spada and Guimarães 2013; Spada et al. 2012; White et al. 2015).

At the same time, there are important limitations and risks to studying constituency service through field audits. Ethical considerations in the design of field experiments include the use of deception and the possibility that audit stimuli may distort the allocation of official effort (Malesky 2013; McClendon 2013). Our research design was guided by the description of the Putnam (1994) field audit of service institutions in Italy: "slightly deceptive, but innocuous and highly informative" (73). The study was designed to request information expected to be readily available to local officials, and the resulting protocol was approved by the relevant Institutional Review Board. A second potential limitation is that requests for assistance are artificial, written by researchers rather than actual citizens. Using the requests of actual citizens in publicly available letters to government (see table 4 below), we designed our queries to have verisimilitude in both language and topic choice. The following letter was submitted in the first wave of the audit (letters from the other four waves are reported in online app. B):

Respected Leader,

I have been unable to find stable work for a long time, and my economic situation is not good. Do I have the opportunity to apply for the Minimum Livelihood Guarantee? What conditions would I need to satisfy to receive the Minimum Livelihood Guarantee?

With gratitude for leaders' care, [Name]

We measure the quality of constituency service by examining how government agencies responded to these requests. When governments responded to these letters, we coded whether the response was informative or not. Uninformative responses included statements that the request was "accepted" and claims that the service request was too vague. When governments did respond, the majority

^{5.} For an overview of China's Government Online project, see http://goo.gl/fCVEKI (accessed April 26, 2017).

^{6.} The experimental treatments tested the effects of citizen ethnicity, party status, connections to journalists, and connections to officials on government responsiveness to citizen requests. Treatments were assigned using simple randomization; they are therefore uncorrelated in expectation with the predictors of responsiveness analyzed in this study. The first study is detailed in Distelhorst and Hou (2014).

^{7.} In app. C, we list all 54 responses from government that we coded as uninformative.



Figure 1. The Mayor's Mailbox constituency service front page for Nanjing, China, a prefecture of approximately eight million people in eastern China. The button next to the photo of Mayor Miao Ruilin says "I want to write a letter." Source: http://szxx.nj.gov.cn/page/index.jsp (accessed February 6, 2015).

provided useful information about the policy in question, an example of which is provided in the following section.

The audit included letters from a range of citizen identities: unemployed individuals, employed migrant workers, entrepreneurs, and recent college graduates (table 1). They represent a range of socioeconomic strata in contemporary China, with entrepreneurs and university graduates at the upper end and unemployed individuals and migrant workers at the lower end. Each letter requested some type of policy information: access to poverty relief funds, rules

about the minimum wage, business taxation policies, and the process for starting a new business. In each wave, we attempted to submit requests to 336 political jurisdictions. In some jurisdictions we were unable to find an online channel for contacting officials. In others, the channel appeared to exist but was unusable (e.g., e-mail bounced back). In still others, the channel existed, but it placed requirements on requesters that we were unable to satisfy, such as providing identification card numbers corresponding to the individual. As these requirements and govern-

Table 1. Constituency Service Requests in the Audit

Wave	Fielded	Citizen Identity	Service Requested	N
1	July 2012	Unemployed	Accessing poverty relief	258
2	May 2013	Unemployed	Accessing poverty relief	235
3	June 2013	Migrant worker	Minimum wage regulations	260
4	July 2013	Recent graduate	Starting new business	230
5	August 2013	Entrepreneur	Business tax information	242

Note. Key features of the five waves of the field audit. In total, local agencies received 1,225 letters. Translations of each letter are presented in app. B.

ment websites changed over time, the sample size varies by wave from 230 to 260 prefectures, a potential source of bias we examine in the results section.

CHINA'S CONSTITUENCY SERVICE IN COMPARATIVE PERSPECTIVE

China's prefectural governments provided a relatively high level of responsiveness to citizen requests for information. The Mayor's Mailbox offered useful information in response to 43% (532 of 1,225) of appeals for assistance in the queries described above. Clustering errors by prefecture, this yields a 95% confidence interval of 39%–47% for the estimated mean response rate to these service requests. A typical informative response to the query about accessing income assistance (above) is given below:

Dear Comrade,

Whether you qualify for Minimum Livelihood Guarantee (*dibao*) depends on your household income, and you should apply on behalf of your household. According to the new standard implemented this year, if your household income is lower than 350 yuan per month (urban) or 2000 yuan per year (rural), you are eligible to apply for *dibao*.

The application process is as follows: an applicant submits an application, and the street committee or work unit processes the application. Then the district or township government approves or rejects the application. If approved, *dibao* certificates will be distributed and you will be informed on how to collect the *dibao* cash transfer.

Prefectural Bureau of Civil Affairs

The responsiveness of China's mayors' offices falls squarely in the middle of the findings in previous field audits of constituency service in democracies (table 2). The majority of studies have taken place in the United States, where the highest responsiveness (78%) came from local election commissions contacted in White et al. (2015). When it comes to state legislators and congresspeople, response rates were much closer to what we observe in contemporary China, ranging from 19% to 52%. Several of these studies inquired about politicians' policy positions, an inquiry that generally produced lower response rates than service requests (Butler et al. 2012). This may explain the very low responsiveness of Brazilian candidates in Spada et al. (2012). China's mayors' offices also exhibit greater responsiveness than the Italian bureaucrats contacted in Putnam (1994).

China's mayors' offices are comparably responsive to those of many politicians in established democracies, at least when responding to requests for information. However, local context must be kept in mind when interpreting these comparisons. Prefectural governments in China are large bureaucracies with budgets in the hundreds of millions of dollars. They have massive financial and human resources at their disposal, should they choose to dedicate them to providing high-quality constituency service. In contrast, local legislators in the United States generally have relatively limited staff and resources to provide constituency service. Chinese prefectural jurisdictions are also relatively large, averaging nearly four million residents, compared to 711,000 residents in the average US congressional district in 2010.⁸ Service provided through the Mayor's Mailbox in China's prefectures takes place at a larger scale in terms of both government resources and the population served.

EMPIRICAL STRATEGY

To test the state capacity, economic modernization, and social conflict hypotheses of nondemocratic constituency service, we estimate regression models of government responsiveness, using the geographic variation across prefectures to explore the correlates of high-quality service. Our model is

$$Y_{ik} = \beta X_i + \lambda D_{ik} + \eta_k + \varepsilon_{ik}. \tag{1}$$

Equation (1) combines the five studies such that Y_{ik} indicates whether the government in prefecture i provided a helpful response in study k. Our key explanatory variables are prefectural socioeconomic indicators (X_i) . We also include study fixed effects (η_k) . Each wave of the audit also had experimental manipulations that are peripheral to the research question of the present study; we adjust for them by including each experiment's binary treatment indicator (D_{ik}) as a control. The random and nonstratified assignment of experimental treatments means that D_{ik} is not, in expectation, correlated with unobservable prefectural characteristics that might drive variation in service quality. The effects of interest are estimated by β .

We first present ordinary least squares (OLS) regression models with varying combinations of the explanatory variables and province fixed effects. As discussed in the data section, we have multiple observations for each prefecture, but the explanatory variables do not vary within prefec-

^{8.} See US Census Bureau, "Congressional Apportionment: 2010 Census Briefs" (http://www.census.gov/prod/cen2010/briefs/c2010br-08.pdf; accessed April 26, 2017).

^{9.} Although the outcome is dichotomous, fitting logistic models with fixed effects has fallen out of favor because of the incidental parameters problem (Greene 2004). Nonetheless, we report the results of logistic regressions in app. table A3; the main results are robust.

Table 2. Field Audits of Constituency S	Service in Democracies and China
---	----------------------------------

Country	Subjects	Issue	Service Rate (%)	Study		
United States	Election officials	Voter identification	78	White et al. (2015)		
United States	State legislators	Voter registration	57	Butler and Broockman (2011)		
United States	Congresspeople	Immigration	52	Butler et al. (2012)		
United States	State legislators	Immigration	51	Butler et al. (2012)		
China	Mayors	Benefits and regulations	43	•••		
United States	State legislators	Unemployment	42	Broockman (2013)		
United States	Congresspeople	Positions: immigration	38	Butler et al. (2012)		
Italy	Local bureaucrats	Policy implementation	33	Putnam (1994)		
Brazil	Mayoral candidates	Position: tax policy	29	Spada and Guimarães (2013)		
South Africa	Local councillors	Infrastructure	22	McClendon (2016)		
United States	State legislators	Positions: immigration	19	Butler et al. (2012)		
Brazil	Local/federal candidates	Positions: unemployment	14	Spada et al. (2012)		

tures. We compute heteroskedasticity robust standard errors clustered by prefecture to account for the grouped structure of the data.

We then compare OLS estimates to those obtained from kernel-regularized least squares (KRLS; Hainmueller and Hazlett 2014). KRLS is a machine learning estimation procedure that allows for higher-order interactions between predictors, nonlinearity, and heterogeneous effects while also yielding easy to interpret marginal effects. We employ KRLS to address the possibility that the effects we detect are artifacts of model misspecification. Nevertheless, we are aware that KRLS does not protect against omitted variable bias that may limit our study.

We measure economic modernization with the proportion of the local economic output accounted for by the primary sector. Primary-sector economic activity includes farming, forestry, animal husbandry, and fishing. Manufacturing, construction, mining, and utilities make up the secondary sector, and all remaining activity falls into the tertiary (service) sector. The growth of the secondary and tertiary sectors is a standard indicator of modernization and appears in China's official evaluation rubric for municipal modernization (Landry 2008, 83).

Measuring local social unrest on a national scale is an empirical challenge in China. There are no comprehensive public records on local social unrest. To measure local social unrest, we use data on local labor protests gathered by the China Strikes project (Elfstrom 2012). Labor protests, whether collective (Lee 2007) or individual (Fu 2017), are an important part of the landscape of contention in China. This project catalogued labor unrest incidents on the basis of reports by the news media and labor organizations. This measure likely exhibits higher measurement error in rural

areas, where media organizations are more sparse, as well as in localities with greater media restrictions. Nonetheless, it represents a rich source of data on local social conflict in China, and compiling data sets from media reports remains a widely used approach to studying local social unrest in China (Cai 2010; Wallace and Weiss 2015). It is also important to note that many reported labor incidents from China Strikes are derived from independent blogs and individual tips via the project's "submit a report" function. Thus, we expect measurement error to be smaller than in data sets that rely solely on media reports. In total, the data set records 769 labor protests across 177 prefectures between 2008 and 2012. Labor unrest is a particularly salient form of social instability because of the symbolic link between Communist authority and labor, the history of workers' movements in overthrowing authoritarian regimes, and the sheer number of migrant workers in contemporary China.10 As a robustness check, we also use data on the number of anti-Japanese protests (Wallace and Weiss 2015) as an alternative measure of local social unrest.

We measure local government capacity using prefectural government revenue per capita. Local fiscal revenue offers a more direct measure of government capacity than GDP and is arguably less subject to political manipulation (Lü and Landry 2014). Finally, as the Mayor's Mailbox is an online channel of communication, we also explore whether service quality may be explained by the level of internet development across prefectures. We measure local internet development by broadband internet subscribers (per capita). Measures of internet subscribers, labor protests, and gov-

^{10.} At the end of 2013, China's migrant worker population was estimated to be 245 million. See http://goo.gl/d4Ofne (accessed April 26, 2017).

ernment revenue are all logged to produce near-normal distributions. Summary statistics of these variables are shown in appendix A.

Our outcome measure is a binary indicator of whether the government agency provided a helpful response to a request for assistance (1) or not (0). In individual studies we developed more detailed measures of the helpfulness of government responses. However, because of variation in the letters, these scales are not intuitively comparable across studies. The binary indicator of helpful responses offers a relatively straightforward way of aggregating outcome data across studies, at the cost of reducing variation in the dependent variable. Across the five studies, a response is coded as helpful if it provides us with information on the relevant policy or contact information of relevant bureaucracies. Appendix C lists all responses that are coded nonhelpful. Our measure of responsiveness is similar to that of studies conducted in democratic contexts, where responsiveness was measured by whether "the legislator repl[ied] or not" (Butler and Broockman 2011, 467), whether "the reply contained full and accurate information" about the specific policy (White et al. 2015, 134), or whether "the politician supplied the requested information directly or provided the contact information for the bureaucrat" (McClendon 2016, 64). When we were unable to submit a request to a prefecture, that prefecture study observation is excluded from our analysis.11 We submitted 1,225 letters in total and received 532 helpful replies (43.4%). We were able to submit all five requests to 177 prefectures in total, and 40 prefectures were excluded entirely from the audit (app. fig. A1).

RESULTS

We find evidence in support of the economic modernity and social unrest hypotheses but little role for government capacity in explaining the quality of service institutions (table 3). Local government capacity, although a bivariate predictor, has no effect after controlling for the other factors. On the other hand, local labor unrest and economic modernity predict responsiveness in all models. Internet

development, plausibly correlated with economic modernization, is a bivariate predictor of service quality, but its effects shrink to statistical insignificance in the full models.

In columns 7 and 8, we investigate whether these effects are the result of model specification decisions by fitting models using KRLS. The effects of economic modernization and social stability are robust to this alternative estimation procedure. Neither state capacity nor internet development is a predictor of service quality in these flexible models. However, KRLS addresses only the threat of model misspecification, not the possibility of omitted variable bias.

ALTERNATIVE HYPOTHESES

The main results offer support for the hypotheses that economic modernization and social conflict are associated with improved authoritarian constituency service. However, one alternative hypothesis might hold that China is characterized by distinctive regional variation in governance or political culture (Goodman 1997) correlated with our measure of economic modernization. China's wealthy coastal provinces are frequently credited with enjoying superior governance in a variety of dimensions, and these provinces also have larger industrial and service sectors. Examining a map of the predicted probability of local responsiveness to the letters in the audit (fig. 2), we do find that southeastern China exhibits higher-quality institutions than northeastern or southwestern regions. To examine whether our variables of interest were confounded by these regional characteristics, we estimate models with province fixed effects in table 3, columns 6 and 8. If distinctive regional features confounded our estimation, we would expect effects to attenuate. Instead, the effects of social unrest remain significant, and the effects of modernization actually strengthen after controlling for unobserved provincelevel confounders.

A second alternative hypothesis holds that improved constituency service in economically modernized areas may result from the goal of authoritarian governments to co-opt socioeconomic elites. Socioeconomic elites have been implicated in a number of revolutionary democratizing movements (Gandhi 2008), and previous research on authoritarian institutions highlights the importance of co-opting these elites (Lust-Okar 2005; Magaloni 2006). Our audit used citizen aliases from a range of socioeconomic backgrounds, from migrant workers to recent university graduates and entrepreneurs. If constituency service is driven by this need for elite co-optation, we may expect service quality to vary

^{11.} In many cases, failed submissions resulted from a limitation of the research design as opposed to a poor government website. Many websites requested state-issued identification card numbers that our fictitious requesters did not have. In those cases, failed submission simply reflects the mechanics of the study rather than a shortcoming of the constituency service channel.

^{12.} As a robustness check, we use local government expenditure and public-sector employment as alternative measures of local government capacity in app. table A4. Again, neither is a significant predictor of responsiveness.

^{13.} We also measure social unrest by looking at the total number of anti-Japanese protests from August 15 to the end of September 2012

reported in Wallace and Weiss (2014). This alternative measure of social unrest is a similarly strong predictor of responsiveness. See app. table A6.

Table 3. Predictors of Constituency Service Quality in China

	OLS Estimation				KRLS Estimation			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Primary sector share	676***				−.592*	-1.198***	297**	474***
	(.208)				(.326)	(.400)	(.117)	(.106)
Strikes (log)		.103***			.092***	.065**	.052***	.039***
-		(.021)			(.028)	(.032)	(.013)	(.013)
Broadband per capita (log)			.065***		.024	053	.008	010
			(.024)		(.036)	(.046)	(.013)	(.012)
Government revenue per capita (log)				.049**	051	051	013	007
				(.023)	(.039)	(.043)	(.011)	(.010)
Wave fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Province fixed effects						✓		✓
Constant	✓	✓	✓	✓	✓	✓		
Observations	1,225	1,225	1,212	1,225	1,212	1,212	1,212	1,212
R^2	.026	.039	.022	.019	.046	.146	.070	.260

Note. Standard errors clustered by prefecture are shown in parentheses. The outcome is whether local government responded to a request for constituency service with helpful information (1) or not (0). Note that fixed effects in KRLS differ from those in OLS. Rather than adjusting for group-specific means, they allow for complex interactions between each fixed-effects indicator and other predictors in the model.

on the basis of the socioeconomic status of the citizen making the request. However, we find almost no variation in response rate across these social identities (see app. table A2). Audits using migrant workers and university graduates were fielded in consecutive months and resulted in highly similar response rates of 46.2% and 45.2%, respectively. These findings are not consistent with a logic of authoritarian constituency service motivated by elite co-optation.

A DEMAND-DRIVEN LOGIC OF SERVICE QUALITY

Drawing on the results above, this section develops a demand-driven logic of constituency service in nondemocratic politics. Government responsiveness to citizen appeals with effectively no collective action potential and regional variation in this responsiveness suggest a logic that goes beyond short-term prevention of collective action. Instead, our model focuses on the information generated by service requests and government incentives to ensure a steady flow of that information from citizens to officials. After devel-

oping this simple model and exploring its implications, we add supportive evidence from analysis of real constituency service requests in China.

Our logic of constituency service builds on models of nondemocratic politics that posit rulers' interest in collecting information about public preferences and policy outcomes. Government access to this information is implicit in assertions that autocrats seek to secure the cooperation and productive activity of other social groups (Bueno de Mesquita et al. 2002; Chen and Xu 2017; Gandhi and Przeworski 2007; Geddes 1999). How do rulers know which policies incentivize cooperation without obtaining information about public preferences and policy outcomes? Even a stylized "rational autocrat" requires information about how tax policies shape citizen willingness to engage in productive activities (McGuire and Olson 1996; Olson 1993).

Nondemocratic states struggle to collect this information (Lorentzen 2013). Under threat of repression for politically transgressive speech, citizens may withhold information about their preferences (Jiang and Yang 2016), in extreme cases producing revolutionary movements that appear seemingly overnight (Kuran 1991). In the absence of free press, lower-level officials have little incentive to reveal their own poor performance to superiors. Nondemocracies respond to these informational challenges with a variety of institutions that gather

^{*} p < .1.

^{**} *p* < .05.

^{***} *p* < .01.

^{14.} We acknowledge that identities are to some extent confounded with time, as the higher-status requesters appear in later waves. However, waves 2–5 occurred within a four-month window and included both highand low-status requesters, with little variation in responsiveness.

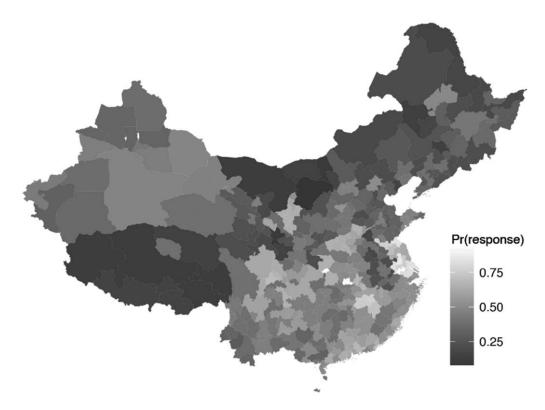


Figure 2. Predicted government responsiveness to constituency service requests. Estimated probabilities of response for each prefecture in the study. White is 100% probability of responding to a letter, and black is 0%. We obtain predicted values from the KRLS model with province fixed effects estimated in table 3, column 8.

information about society and policy outcomes without providing openings for political challenge. Their information-gathering channels include technological and human surveil-lance (Morozov 2012), media freedom within bounds (Egorov, Guriev, and Sonin 2009; Lorentzen 2014), limited electoral contests (Blaydes 2010; Magaloni 2006), public opinion polling (Dimitrov 2014a; Henn 1998), and even monitoring protests (Lorentzen 2013).

Our theory begins by recognizing that constituency service institutions contribute to resolving information problems in nondemocratic regimes, but they can serve this purpose only under certain conditions. The informational value of citizen appeals to authoritarian regimes is established by Dimitrov's recent archival research on the Soviet Union (Dimitrov 2014a), Bulgaria (Dimitrov 2014b), and China (Dimitrov 2015). We build on this insight to develop a model of constituency service that explains varying levels of local responsiveness to citizen appeals. It begins with the citizen (fig. 3). She decides whether to make an appeal on the basis of two considerations: her need for service and the perceived probability that the institution will satisfy her request. Taken together, need and beliefs about government responsiveness determine the expected return of making an appeal. If the expected return is greater than the cost

(largely the opportunity cost of time spent) of composing and submitting an appeal, then the citizen uses the institution. If the citizen expects a negative return, she does not bother.

On the receiving side, government interest in the appeal comes from the information contained therein. Citizen appeals to nondemocratic authorities transmit information from the public to political elites. Appeals may contain information about citizen opinions on public policy, dissatisfaction with government officials, and conflicts between social actors (Dimitrov 2015). The government can extract this information from appeals and use it to identify policy failures and successes, identify agencies that are performing well and poorly, and attempt to resolve potentially disruptive social conflicts.

The constituency service institution either responds to the citizen's appeal or neglects to do so, either by ignoring it or by responding unhelpfully. The citizen observes this outcome and adjusts her beliefs accordingly. If the institution addresses her appeal, the perceived probability that the institution will satisfy future appeals is maintained or improved. However, if it ignores the appeal or offers an unhelpful response, perceived probability of response falls. If the citizen's expected return falls below the cost of submit-

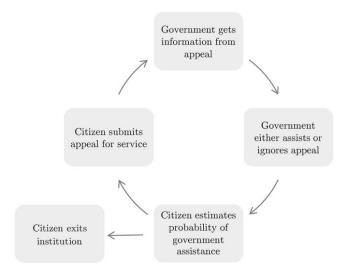


Figure 3. Simple model of constituency service that underlies the demand-driven logic. A citizen decides whether to submit an appeal on the basis of the perceived probability that the institution will satisfy her request. If her expected returns exceed the cost of making a request, she submits an appeal. The government receives information from the appeal, which may be valuable for adjusting policy, identifying low-performing officials, and resolving conflicts. The government then decides whether to address the appeal or not. In response, the citizen adjusts her perceived likelihood of government responsiveness in the future. If her expected returns from participation fall below the cost of making an appeal, the citizen exits and ceases transmitting information to the government through this institution.

ting an appeal, she exits the institution and possibly seeks resolution through alternative means.

In this logic, the amount of information that government can extract from constituency service institutions increases with citizen demand for service. When large numbers of citizens seek service, the government has the potential to obtain more information through service institutions. This implies that the costs to the government of poor service increase in high-demand localities. As citizens' perceived probability of response falls, they forgo larger volumes of information that could have been obtained through the constituency service channel.

Government returns to investing in high-quality constituency service institutions are therefore increasing with citizen demand. The precise accounting varies according to the function relating the number of citizens who participate to the value of the information gleaned by government. For example, it seems likely that the informational returns to the marginal service request are decreasing with increased volume. However, as long as the total value of information is increasing with citizen demand (i.e., the value of the marginal service request is nonnegative), government incentives for responsiveness are also increasing with citizen demand. This is our demand-driven logic of constituency service.

We argue that the pattern of responsiveness revealed by the field audit reflects variation in citizen demand for service with modernization and social conflict. Because higher demand makes these institutions more valuable to government, we observe higher-quality institutions in these higher-demand localities.

Consider first the predictive power of economic modernization over government capacity and internet penetration. As citizens move from agricultural to industrial economic activity, their reliance on public services provided by bureaucratic institutions increases.¹⁵ The agricultural economy in China remains characterized by small household farms organized into villages with populations in the hundreds or low thousands. Village projects account for a significant portion of local public-goods spending, including contributions to roads, irrigation, schools, and sanitation projects (Luo et al. 2007; Tsai 2007). Although these villages are under the jurisdiction of prefectural and county governments, the provision of public goods is relatively communal and village driven, with fewer layers of bureaucracy between individuals and public-goods providers. These features of rural China permit informal institutions such as lineage groups and clans to play an important role in the local provision of public goods (Tsai 2007) and enforcement of property rights (Mattingly 2016).

In urban China, these goods and services are administered primarily by government bureaucracies. At the prefectural level these agencies serve millions of citizens, with duties distributed across a variety of specialized agencies: transportation, industry and commerce, public works, social security, and so forth. This inserts bureaucratic processes between citizens and access to public goods. In addition, a significant share of China's emerging social welfare system is distributed through formal employment relationships characteristic of the industrial and service sectors. Citizens in economically modernized areas are therefore eligible for a range of government programs; these programs deliver benefits but also create confusion and grievances about their administration. Thus, as in other modern regulatory states, Chinese citizens in economically modernized areas find themselves living "in a red tape era in which a lot of people can't get through the bureaucracy" (Cain et al. 1987, 88). We therefore

^{15.} As our model focuses on the transitions that citizens make from agricultural to industrial and service employment, we expect that the local share of agricultural employment would also be a strong predictor of responsiveness. We present these alternative estimations in app. table A9, with the caveat that employment share data are missing from 54 prefectures (16% of the population) in a nonrandom way; the missing data tend to come from prefectures where agriculture is more predominant.

posit that demand for constituency service to overcome these challenges is higher in economically modern localities.

We also posit that higher levels of social conflict—whether that conflict is among citizens or between citizens and officials—drive increased demand for constituency service. When embroiled in disputes with government agencies, employers, business partners, and other economic actors, citizens may appeal to a variety of authorities and institutions. Constituency service institutions, which entreat citizens to bring their complaints to officials, are a natural magnet for such conflicts.¹⁶

The demand-driven logic links this regional variation in the demand for service to variation in institutional quality. We observe more responsive institutions, on average, in localities where citizen demand is the highest: those that are economically modernized and characterized by higher levels of social conflict. The model also explains the puzzlingly high baseline response rate detected in the field audit. The threat of collective action figures prominently in scholarly thought on nondemocratic rule, and recent empirical work confirms that authoritarian officials respond at higher rates to citizen appeals with greater potential for collective action (Chen et al. 2016). However, our audit finds that authoritarian officials also respond to prosaic citizen appeals with minimal collective action potential. For example, our hypothetical student inquiring about starting a business appears to be very far from taking to the street to protest, yet he received the same level of responsiveness as queries about the minimum livelihood guarantee. If the logic of responsiveness is primarily guided by threat of collective action, what is the government's incentive to respond to such requests?

The model explains responsiveness to requests with minimal collective action potential by highlighting the value of voluntary transfers of information from the public to the government. When service institutions are functioning well, citizens proactively transmit this information to government agencies. However, unlike covert surveillance or media coverage, the informational value of constituency service depends on voluntary political participation. Nondemocratic governments must therefore nurture public engagement with service channels to sustain these voluntary flows of information. While the state can initially

promote use of these institutions through the media, sustaining voluntary engagement requires that service institutions offer some probability of resolving the issues these citizens raise.¹⁷ If constituency service institutions are ineffective, citizens' incentives to spend time communicating these problems decline, and the supply of information falls. They may even disengage completely with these institutions, depriving the state of valuable information.

THE CONTENT OF CITIZEN APPEALS

If frustration with bureaucratized public-goods provision and social conflict are drivers of citizen demand for constituency service, we expect these topics to be especially prevalent in citizen constituency service appeals. While we cannot present a similarly complete audit of citizen letters to officials, we can examine a sample of publicly posted appeals to local officials. Many local governments post letters received through the Mayor's Mailbox to their websites. This serves as a public demonstration of government responsiveness and also offers information to wouldbe contacters. We collected and analyzed 100 publicly posted letters from 10 randomly sampled prefectures across China. We present these results with an important caveat: local officials likely screened these letters before making them publicly available. Therefore, they do not constitute a random sample of all appeals submitted by citizens. Our sample likely underrepresents criticisms of government and accusations of official malfeasance.

Observed citizen appeals to the Mayor's Mailbox fell into three broad categories (table 4). First, citizens predominantly requested assistance surrounding public goods and service provided by government. Public-goods appeals can be further divided into three groups. The most common appeals (34%) dealt with access to social services and benefits, including health insurance, housing subsidies, disability benefits, employment training, work injury insurance, pension payments, maternity benefits, and education. Letters included both grievances, typically complaints about not receiving expected benefits, and policy inquiries surrounding conditions of eligibility and other issues. Public-

^{16.} In light of the Lorentzen (2013) argument that protests themselves offer useful information to the regime, it is possible that high-protest localities also receive more information through the protest channel, potentially lowering the importance of collecting information from constituency service requests. We thank an anonymous reviewer for this insight.

^{17.} Dimitrov (2014b) contains a thoughtful discussion of citizens' incentive to complain as a function of their trust in central authorities. In our model, citizens' incentive to complain—recognizing that complaining costs their time and mental energy—depends on the perceived probability that complaining will lead to the satisfactory resolution of their grievance, dispute, or question. High trust in either central or local political authorities could contribute to this belief, but citizens' perception of this probability may be influenced by other factors as well.

Table 4. Content of Citizen Service Requests

Content	%	Example Quotes
Public goods and policy:		
Social benefits: education, health insurance, pensions, subsidies, public housing	34%	 How can I access the Delayed Parenthood subsidy? my employer did not contribute to my housing fund. What is the subsidy for returning farmland to forest?
Infrastructure: roads, public transportation, utilities	23%	 The heating leaves rooms extremely cold. Can you pave a two-kilometer concrete road for us? It is a "three-without" village: without school, without medical clinic, and without phone service or internet.
Regulation: public order, environmental regulation, certifications	23%	 The Mahjongg House is disturbing public order. the natural gas station often shortchanges customers, and the government makes no inquiries.
Economic disputes	17%	 but irrigation was obstructed by local villager Du Guang and other illegal miners. it is already over one year since the contracted date for handing over the property.
Reporting corruption	4%	 You can come investigate; there are many sham village committees. They did not allow villagers working outside the village [to vote by proxy]. Is such an election valid?

Note. Content of 100 letters from citizens to the Mayor's Mailbox in 10 randomly sampled prefectures in May 2014. Percentages sum to greater than 100% because some letters contained multiple topics.

goods appeals also focused on infrastructure (23%). They cited problems with roads, public transportation, parks, heating, and water supply and pertained to both provision ("when will the Jinxing village road be laid?") and maintenance ("why aren't the lights on either side of Qingyun Road installed yet?"). Public service appeals also dealt with regulatory and legal activities (23%). These appeals dealt with policing, enforcement of environmental regulations, professional certifications, family planning policies, and administration of the civil service. Taken together, appeals surrounding public goods and services accounted for 76% of all letters in our sample.

The second major category of letters requested local governments' intercession in economic disputes (17%). Citizens appealed for assistance from mayors' offices in disputes with employers, business partners, service providers such as hospitals and schools, and even other government agencies. One farmer complained about insufficient compensation for fields reclaimed by the village: "Just before harvest, the village suddenly decided to build a reservoir, and they were only willing to offer 500 yuan in compensation. Where is the justice?" Another recounted a dispute with an employer that led to the threat of violent confrontation: "When we arrived we saw that the mine had arranged for over fifty mafia thugs to threaten us! Forget about talking things over! Facing this dangerous situation we called [the police], but over one

hour later no police had arrived." Conflicts over housing fees and residential maintenance were also common.

The third group of appeals contained accusations of official corruption. Only a minority of public letters (4%) reported corruption, but they stood out for their detail. Three letters reported an allegedly corrupted village election: "[the village] stripped nearly 100 people working outside the village of their voting rights. I hope that the busy leaders will take time to come verify this and restore our rights." Another accused village officials of fraud in a program intended to compensate villagers for the conservation of farmland. One threatened to report malfeasant officials to bureaucratic superiors: "If there is no result from the related department at the prefectural level, we will proceed to report to higher levels [of government], reporting all the way to Beijing." As noted above, letters that contain accusations of official corruption are likely screened by officials and therefore underrepresented in our sample.

We proposed above that frustrations with bureaucratized public-goods provision and social conflict were key drivers of citizen demand for constituency service. Consistent with this claim, publicly available citizen appeals deal overwhelmingly (76%) with problems in public goods and services. A significant proportion (17%) also appeal for official intercession in economic and social conflicts. In light of the demand-driven logic of constituency service,

these findings help to explain why we observe more responsive constituency service institutions in China's more economically modernized and higher-conflict jurisdictions.

CONCLUSION

In the absence of an electoral connection between citizens and officials, what drives constituency service in nondemocracies? Our field audit demonstrated that nondemocratic institutions of constituency service can be surprisingly responsive to appeals in the absence of collective action threats. China's Mayor's Mailbox exhibited comparable responsiveness to informational requests to similar institutions in several democracies (table 2). We found that service quality was correlated with both economic modernization and social conflict. Building on these findings and the insight that service institutions offer an important source of information for nondemocratic political regimes, we developed a demand-driven logic of nondemocratic constituency service. In order to sustain voluntary transfers of information from the public, service institutions must be responsive to citizen appeals. Government incentive to respond is therefore increasing with citizen demand.

Rather than replacing classical theoretical frameworks of authoritarian rule that emphasize the prevention of collective action, our logic suggests refinements to that framework. Even if the ultimate motivation of authoritarian rulers is to prevent collective action and stay in power, the channels through which they achieve that goal may involve providing responsive government institutions that ensure a steady flow of information from the public into the hands of official decision makers. This demand-driven logic of service helps to explain why officials with no electoral connection to the public exhibit responsiveness even when they face little threat of collective action. None of the service requests in our field audit appeared likely to generate episodes of social instability, yet local governments still responded to nearly half of them.

Although our model proposes that modernization drives demand for service by creating confusion and grievances surrounding the bureaucratization of public-goods provision, there are other possible causal pathways as well. One possibility is that modernized localities simply have larger proportions of educated and politically sophisticated citizens. These citizens may have a better understanding of both the services they are entitled to and the institutions through which to demand access. This mechanism would be familiar to the original modernization theorists, who viewed increasing education levels as central to the modernization syndrome. While it is difficult to conclusively

adjudicate between these hypotheses in this study, we looked for evidence of the effects of education by adding predictors for public spending on education, schools per capita, and teachers per capita in appendix table A8. None are significant predictors nor attenuate the estimated effect of economic modernization.

Our model also puts information collection at the center and relegates government concerns about collective action to the background. It does so in light of high government responsiveness to requests with very low collective action potential, such as inquiries about starting a new business. However, one alternative interpretation of the effect of social conflict might posit that local conflicts make the government more anxious about collective action in all interactions with citizens, which in turn drives improved responsiveness to all constituency service requests. In this logic, the purpose of improved responsiveness is still to forestall collective action, but this improved responsiveness spills over into requests with low collective action potential. This would mean that not only does the Chinese adage "The bigger the disruption, the bigger the solution" hold, as demonstrated by Chen et al. (2016), but local social conflict actually leads institutions to become more responsive to all citizens. The hypothesis that conflict in an authoritarian regime prompts certain institutions to grow more responsive to the public is not inconsistent with the findings of this study. We leave this hypothesis to future research, noting, however, that this conflict-focused theory leaves unexplained the large impact of economic modernization detected in our study.

While the empirical findings are consistent with a demanddriven logic of constituency service, there are important limitations to drawing causal inferences from cross-sectional studies of observational data. Flexible estimation procedures like KRLS help to address misspecification bias, but they cannot overcome concerns about omitted variable bias, as neither economic modernization nor local social conflict is randomly assigned to localities. It remains possible that unobserved confounders are responsible for the observed correlations between constituency service and China's more economically modern and socially fractious prefectures. While we believe we have controlled for the prime suspects in this study—variation in state capacity, prevalence of internet access, and provincial confounders—future work may investigate each claim using designs that offer stronger identification strategies.

Another limitation is our focus on citizen appeals for information. The field audit measures variation in government responsiveness to citizen requests for information about accessing public goods and policies but cannot shed light on the extent to which this institution offers more substantive forms of constituency service, such as providing access to public services, addressing complaints about public goods, or even changing public policy. Future research may make use of publicly available citizen appeals to explore the possible link between public participation surrounding policy problems and local policy change in China.

By emphasizing the role of economic modernization in authoritarian state-society relations, this study revises a recent emphasis in political science on collective action prevention as the core consideration in nondemocratic political economy. While our results acknowledge the importance of social conflict, they also suggest that broader changes in state-society relations associated with modernization and urbanization alter the relationship between officials and the public. However, our argument also differs from the traditional modernization hypothesis, which links economic development to political democracy: "all the various aspects of economic development—industrialization, urbanization, wealth, and education are so closely interrelated as to form one major factor which has the political correlate of democracy" (Lipset 1960, 41). In contrast to the long-running debate on political transitions to democracy (Acemoglu et al. 2009; Przeworski 2000), we suggest that modernization may promote political development—in this case, improved responsiveness to citizen appeals—within nondemocratic regimes. We see this finding as part of a growing literature that treats the delivery of normative political goods under nondemocracy, including government accountability (Tsai 2007), receptivity to citizen input (Meng, Pan, and Yang 2017), responsiveness (Chen et al. 2016; Distelhorst and Hou 2014; Su and Meng 2016), and political representation (Manion 2016; Truex 2016), as open empirical questions that merit comparative study and can inform theories of nondemocratic rule.

ACKNOWLEDGMENTS

We thank Chad Hazlett, F. Daniel Hidalgo, John J. Kennedy, Melanie Manion, Daniel Mattingly, Andrew Mertha, Mike Sances, Dan Slater, Edward Steinfeld, Rachel Wellhausen, Lily Tsai, and Yiqing Xu and seminar participants at Brown University, University of California San Diego, Shanghai Jiaotong University, and the American Political Science Association annual meeting for helpful feedback. Special thanks to Manfred Elfstrom for sharing his data on labor unrest in China and to Jeremy Wallace and Jessica Weiss for sharing their data on anti-Japanese protests in China. All remaining errors are our own.

REFERENCES

- Acemoglu, Daron, Simon Johnson, James A. Robinson, and Pierre Yared. 2009. "Reevaluating the Modernization Hypothesis." *Journal of Monetary Economics* 56 (8): 1043–58.
- Bellin, Eva. 2004. "The Robustness of Authoritarianism in the Middle East: Exceptionalism in Comparative Perspective." Comparative Politics 36 (2): 139–57.
- Blaydes, Lisa. 2010. *Elections and Distributive Politics in Mubarak's Egypt*. Cambridge: Cambridge University Press.
- Broockman, David E. 2013. "Black Politicians Are More Intrinsically Motivated to Advance Blacks' Interests: A Field Experiment Manipulating Political Incentives." American Journal of Political Science 57 (3): 521–36.
- Brownlee, Jason. 2007. Authoritarianism in an Age of Democratization. Cambridge: Cambridge University Press.
- Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson, and Alastair Smith. 2002. "Political Institutions, Policy Choice and the Survival of Leaders." *British Journal of Political Science* 32 (4): 559– 90.
- Butler, Daniel M., and David Broockman. 2011. "Do Politicians Racially Discriminate against Constituents? A Field Experiment on State Legislators." American Journal of Political Science 55 (3): 463–77.
- Butler, Daniel M., Christopher F. Karpowitz, and Jeremy C. Pope. 2012.
 "A Field Experiment on Legislators' Home Styles: Service versus Policy." *Journal of Politics* 74 (2): 474–86.
- Cai, Yongshun. 2010. Collective Resistance in China: Why Popular Protests Succeed or Fail. Stanford, CA: Stanford University Press.
- Cain, Bruce E., John A. Ferejohn, and Morris P. Fiorina. 1987. The Personal Vote: Constituency Service and Electoral Independence. Cambridge, MA: Harvard University Press.
- Carnes, Nicholas, and John Holbein. 2015. "Unequal Responsiveness in Constituent Services? Evidence from Casework Request Experiments in North Carolina." Working paper, Duke University.
- Chen, Jidong, Jennifer Pan, and Yiqing Xu. 2016. "Sources of Authoritarian Responsiveness: A Field Experiment in China." American Journal of Political Science 60 (2): 383–400.
- Chen, Jidong, and Yiqing Xu. 2017. "Information Manipulation and Reform in Authoritarian Regimes." *Political Science Research and Methods* 5 (1): 163–78.
- Chen, Xi. 2008. "Collective Petitioning and Institutional Conversion." In Kevin J. O'Brien, ed., *Popular Protest in China*. Cambridge, MA: Harvard University Press.
- Chen, Xi. 2012. Social Protest and Contentious Authoritarianism in China. Cambridge: Cambridge University Press.
- Chen, Xi. 2013. "The Rising Cost of Stability." *Journal of Democracy* 24 (1): 57-64
- Dickson, Bruce J. 2016. The Dictator's Dilemma: The Chinese Communist Party's Strategy for Survival. Oxford: Oxford University Press.
- Dimitrov, Martin K. 2014a. "Tracking Public Opinion under Authoritarianism: The Case of the Soviet Union during the Brezhnev Era." *Russian History* 41 (3): 329–53.
- Dimitrov, Martin K. 2014b. "What the Party Wanted to Know: Citizen Complaints as a 'Barometer of Public Opinion' in Communist Bulgaria." *East European Politics and Societies* 28 (2): 271–95.
- Dimitrov, Martin K. 2015. "Internal Government Assessments of the Quality of Governance in China." *Studies in Comparative International Development* 50 (1): 50–72.
- Distelhorst, Greg, and Yue Hou. 2014. "Ingroup Bias in Official Behavior: A National Field Experiment in China." *Quarterly Journal of Political Science* 9 (2): 203–30.

- Dropp, Kyle, and Zachary Peskowitz. 2012. "Electoral Security and the Provision of Constituency Service." *Journal of Politics* 74 (1): 220–34.
- Egorov, Georgy, Sergei Guriev, and Konstantin Sonin. 2009. "Why Resource-Poor Dictators Allow Freer Media: A Theory and Evidence from Panel Data." *American Political Science Review* 103 (4): 645–68.
- Elfstrom, Manfred. 2012. "China Strikes." Computer file. https://chinastrikes.crowdmap.com (accessed April 26, 2017).
- Fenno, Richard F. 1978. Home Style: House Members in Their Districts. Boston: Little, Brown.
- Fu, Diana. 2017. "Disguised Collective Action in China." Comparative Political Studies 50 (4): 499–527.
- Gandhi, Jennifer. 2008. *Political Institutions under Dictatorship*. New York: Cambridge University Press.
- Gandhi, Jennifer, and Adam Przeworski. 2007. "Authoritarian Institutions and the Survival of Autocrats." Comparative Political Studies 40 (11): 1279–1301
- Geddes, Barbara. 1999. "What Do We Know about Democratization after Twenty Years?" *Annual Review of Political Science* 2:115–44.
- Goodman, David S. G. 1997. China's Provinces in Reform: Class, Community, and Political Culture. London: Routledge.
- Greene, William. 2004. "The Behaviour of the Maximum Likelihood Estimator of Limited Dependent Variable Models in the Presence of Fixed Effects." *Econometrics Journal* 7 (1): 98–119.
- Hainmueller, Jens, and Chad Hazlett. 2014. "Kernel Regularized Least Squares: Reducing Misspecification Bias with a Flexible and Interpretable Machine Learning Approach." *Political Analysis* 22 (2): 143–68.
- Hartford, Kathleen. 2005. "Dear Mayor Online Communications with Local Governments in Hangzhou and Nanjing." China Information 19 (2): 217–60.
- Henn, Matt. 1998. "Opinion Polling in Central and Eastern Europe under Communism." *Journal of Contemporary History* 33 (2): 229–40.
- Hou, Yue. 2015. "Participatory Autocracy: Private Entrepreneurs, Legislatures, and Property Protection in China." PhD diss., Department of Political Science, Massachusetts Institute of Technology.
- Inglehart, Ronald, and Christian Welzel. 2005. *Modernization, Cultural Change, and Democracy: The Human Development Sequence.* Cambridge: Cambridge University Press.
- Jensen, Nathan M., Edmund Malesky, and Stephen Weymouth. 2014.
 "Unbundling the Relationship between Authoritarian Legislatures and Political Risk." British Journal of Political Science 44 (3): 655–84.
- Jiang, Junyan, and Dali Yang. 2016. "Lying or Believing? Measuring Preference Falsification from a Political Purge in China." Comparative Political Studies 49 (5): 600–634.
- King, Gary. 1991. "Constituency Service and Incumbency Advantage." British Journal of Political Science 21 (1): 119–28.
- King, Gary, Jennifer Pan, and Margaret E. Roberts. 2013. "How Censorship in China Allows Government Criticism but Silences Collective Expression." *American Political Science Review* 107 (2): 326–43.
- Kuran, Timur. 1991. "Now Out of Never." World Politics 44 (1): 7-48.
- Landry, Pierre F. 2008. Decentralized Authoritarianism in China: The Communist Party's Control of Local Elites in the Post-Mao Era. New York: Cambridge University Press.
- Lee, C. K. 2007. Against the Law: Labor Protests in China's Rustbelt and Sunbelt. Berkeley: University of California Press.
- Lerner, Daniel. 1958. The Passing of Traditional Society: Modernizing the Middle East. Glencoe, IL: Free Press.
- Levitsky, Steven, and Lucan Way. 2010. Competitive Authoritarianism: Hybrid Regimes after the Cold War. Cambridge: Cambridge University Press.
- Li, Hairong, Benjamin H. Detenber, Wai Peng Lee, and Stella Chia. 2004. "E-Government in Singapore: Demographics, Usage Patterns, and Perceptions." *Journal of E-Government* 1 (3): 29–54.

- Lipset, Seymour Martin. 1960. *Political Man: The Social Bases of Politics*. New York: Doubleday.
- Little, D. Richard. 1976. "Mass Political Participation in the U.S. and the U.S.S.R.: A Conceptual Analysis." Comparative Political Studies 8 (4): 437–60
- Loewen, Peter, and Michael MacKenzie. 2013. "Service Representation in a Federal System: A Field Experiment." Working paper.
- Lorentzen, Peter L. 2013. "Regularizing Rioting: Permitting Public Protest in an Authoritarian Regime." Quarterly Journal of Political Science 8 (2): 127–58.
- Lorentzen, Peter L. 2014. "China's Strategic Censorship." American Journal of Political Science 58 (2): 402-14.
- Lü, Xiaobo, and Pierre Landry. 2014. "Show Me the Money: Interjurisdiction Political Competition and Fiscal Extraction in China." American Political Science Review 108 (3): 706–22.
- Luehrmann, Laura M. 2003. "Facing Citizen Complaints in China, 1951–1996." Asian Survey 43 (5): 845–66.
- Luo, Renfu, Linxiu Zhang, Jikun Huang, and Scott Rozelle. 2007. "Elections, Fiscal Reform and Public Goods Provision in Rural China." Journal of Comparative Economics 35 (3): 583–611.
- Lust-Okar, Ellen. 2005. Structuring Conflict in the Arab World. Cambridge: Cambridge University Press.
- Magaloni, Beatriz. 2006. Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico. Cambridge: Cambridge University Press.
- Malesky, Edmund. 2013. "Manipulating Elites." Paper presented at the University of California San Diego Ethics Conference.
- Malesky, Edmund, and Paul Schuler. 2010. "Nodding or Needling: Analyzing Delegate Responsiveness in an Authoritarian Parliament." American Political Science Review 104 (3): 482–502.
- Manion, Melanie. 2016. Information for Autocrats: Representation in Chinese Local Congresses. Cambridge: Cambridge University Press.
- Mattingly, Daniel. 2016. "Elite Capture: How Decentralization and Informal Institutions Weaken Property Rights in Rural China." World Politics 68 (3): 383–412.
- McClendon, Gwyneth. 2013. "Ethics of Using Public Officials as Field Experiment Subjects." Newsletter of the APSA Experimental Section 3:13–20.
- McClendon, Gwyneth. 2016. "Race and Responsiveness: A Field Experiment with South African Politicians." *Journal of Experimental Political Science* 3 (1): 60–74.
- McGuire, Martin C., and Mancur Olson. 1996. "The Economics of Autocracy and Majority Rule: The Invisible Hand and the Use of Force." *Journal of Economic Literature* 34 (1): 72–96.
- Meng, Tianguang, Jennifer Pan, and Ping Yang. 2017. "Conditional Receptivity to Citizen Participation: Evidence from a Survey Experiment in China." *Comparative Political Studies* 50 (4): 399–433.
- Morozov, Evgeny. 2012. The Net Delusion: The Dark Side of Internet Freedom. New York: Public Affairs.
- O'Brien, Kevin, and Lianjiang Li. 1995. "The Politics of Lodging Complaints in Rural China." *China Quarterly*, no. 143:756–83.
- O'Donnell, Guillermo A. 1973. Modernization and Bureaucratic-Authoritarianism: Studies in South American Politics. Berkeley: Institute of International Studies, University of California.
- Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." American Political Science Review 87 (3): 567–76.
- Przeworski, Adam. 2000. Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990. Cambridge: Cambridge University Press.
- Putnam, Robert D. 1994. Making Democracy Work: Civic Traditions in Modern Italy. Princeton, NJ: Princeton University Press.
- Reddick, Christopher G., Hisham M. Abdelsalam, and Hatem Elkadi. 2011. "The Influence of E-Government on Administrative Discretion:

- The Case of Local Governments in Egypt." *Public Administration and Development* 31 (5): 390–407.
- Shirk, Susan L. 2008. China: Fragile Superpower. Oxford: Oxford University Press.
- Spada, Paolo, and Feliciano de Sá Guimarães. 2013. "Investigating Elite Behavior through Field Experiment in Brazil: Do Candidates Answer More to Core or Swing Voters?" *Brazilian Political Science Review* 7 (1): 56–73
- Spada, Paolo, Holger Kern, Feliciano de Sá Guimarães, and Gabriel Cepaluni. 2012. "On Politicians' Office-Seeking Behavior: Evidence from a Pair of Field Experiments in Brazil." Working paper.
- Su, Zheng, and Tianguang Meng. 2016. "Selective Responsiveness: Online Public Demands and Government Responsiveness in Authoritarian China." Social Science Research 59 (September): 52–67.
- Tang, Wenfang. 2016. Populist Authoritarianism: Chinese Political Culture and Regime Sustainability. Oxford: Oxford University Press.
- Truex, Rory. 2016. Making Autocracy Work: Representation and Responsiveness in Modern China. Cambridge: Cambridge University Press.

- Tsai, Lily L. 2007. Accountability without Democracy: Solidary Groups and Public Goods Provision in Rural China. Cambridge: Cambridge University Press.
- Wallace, Jeremy L. 2014. Cities and Stability: Urbanization, Redistribution, and Regime Survival in China. Oxford: Oxford University Press.
- Wallace, Jeremy L., and Jessica Chen Weiss. 2015. "The Political Geography of Nationalist Protest in China: Cities and the 2012 Anti-Japanese Protests." *China Quarterly*, no. 222:403–29.
- Wang, Shuna, and Yang Yao. 2007. "Grassroots Democracy and Local Governance: Evidence from Rural China." World Development 35 (10): 1635–49.
- Wang, Yuhua. 2014. "Empowering the Police: How the Chinese Communist Party Manages Its Coercive Leaders." China Quarterly, no. 219: 625–48.
- Weiss, Jessica Chen. 2014. Powerful Patriots: Nationalist Protest in China's Foreign Relations. Oxford: Oxford University Press.
- White, Ariel, Noah Nathan, and Julie Faller. 2015. "What Do I Need to Vote? Bureaucratic Discretion and Discrimination by Local Election Officials." *American Political Science Review* 109 (1): 129–42.