

HOW DO THE AFFLUENT INFLUENCE AUTHORITARIAN RESPONSIVENESS? THEORY AND EVIDENCE FROM URBAN CHINA *

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Abstract

While scholarship on advanced democracies has documented a prevailing unequal political responsiveness driven by the affluent's influence through electoral mechanisms, we still know little about the existence and magnitude of such bias in authoritarian countries that lack competitive elections. This paper shows an implicit privilege of the wealthy in an authoritarian context. Matching unique administrative data on municipal service records with apartment complex-level housing prices in downtown Shanghai, we demonstrate that the local government resolves cases more swiftly for residents living in pricier areas. To understand the mechanism, we conducted semistructured interviews and proposed a simple model illustrating that the implicit bias arises from the unique incentives facing bureaucrats and political leaders under authoritarian rule. We also provide evidence that excludes several alternative explanations, including issue heterogeneity, verbal signals, and local funding discrepancies.

Keywords: Government Responsiveness, Bureaucracy, Inequality, Housing Price, Authoritarianism, China

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Political responsiveness is a cornerstone of representative democracies, as politicians respond to citizens' preferences (Dahl, 1971; Przeworski et al., 1999). Recent literature reveals that this responsiveness is not exclusive to countries with competitive elections (Besley and Coate, 2003; Sances, 2016). It even appears in autocracies, where political representation is often nominal (Chen, Pan and Xu, 2016; Jiang and Zeng, 2020; Lueders, 2021). However, governments do not treat all citizens equally in their responsiveness (See the review by Elkjær and Klitgaard, 2021). The influence of affluence in politics is pronounced and substantive in democracies (Gilens, 2005). Research has identified two primary sources of this disparity. The first arises from elected politicians favoring the affluent and well-educated, often due to factors such as voter turnout, interest group donations, and tax contributions (Schlozman, Verba and Brady, 2012; Sances, 2016). The second stems from bureaucratic biases that manifest in daily administrative tasks, resulting in favorable treatment of businesses (Yackee and Yackee, 2006) and biases against marginalized groups, such as the poor (Erikson, 2015), immigrants, and ethnic minorities (Einstein and Glick, 2017; Olsen, Kyhse-Andersen and Moynihan, 2022).

Unequal access to bureaucratic services serves as a crucial form of political inequality that determines the welfare of citizens. While evidence shows that unequal responsiveness appears in both mature and emerging democracies, we know little about the magnitude of such inequality in authoritarian countries, which lack meaningful representation through which the affluent influence the policymaking process through an institutionalized channel. On the one hand, authoritarian leaders may prioritize equal responsiveness, as they tend to use efficient governance to replace elections as the source of regime legitimacy. They may command bureaucrats to provide responsiveness to all groups of citizens, thereby reducing concerns about civil disobedience. On the other hand, unequal bureaucratic responsiveness can be more severe under authoritarian rule, where political leaders fail to monitor bureaucrats who pander to the rich due to a lack of electoral incentives.

This study addresses this debate by theoretically and empirically examining how the affluent influence government responsiveness in an authoritarian context. We primarily focus on how spa-

tial inequality biases bureaucratic responsiveness in China. We demonstrate that wealth status can implicitly distort responsiveness. Combining quantitative analysis of administrative data, qualitative interviews with street-level bureaucrats, and a formal model, we show that the rich enjoy an implicit privilege: their petitions receive quicker government responses than those of the poor. Response time is a critical and objective measure for government service quality (Dipoppa and Grossman, 2020). However, bureaucrats do not explicitly discriminate against the poor in petition resolution.

To understand the mechanism giving rise to this implicit bias toward the rich, we develop a model to characterize the interaction among citizens, bureaucrats, and political leaders. We analyze how two distinctive survival logics lead to this implicit bias. First, authoritarian leaders are primarily concerned with political stability and thus use various means to prevent massive unrest. To reduce collective actions, political leaders devise a supervising mechanism to guarantee that the poor receive adequate public service. Therefore, the poor are not discriminated against in petition resolution. In contrast, as subordinates of political leaders, bureaucrats are less concerned about collective action. They are evaluated by political leaders based on the completion of daily administrative work. Faced with limited resources, bureaucrats prioritize resolving petitions raised by individuals with a higher capacity to incur costs to themselves (e.g., filing a lawsuit or reporting to upper government). As the wealth status of citizens is a strong signal of their capacity, we show that bureaucrats prioritize petitions submitted by the rich over those from the poor. This logic is supported by our semistructured interviews.

To document the implicit privilege of the rich, we analyze how spatial inequality manifests in municipal service responses in China's largest city, Shanghai. The urban context of China serves as an ideal case to study the effect of wealth inequality on government responsiveness. While achieving rapid economic growth, China has faced severe inequality problems in recent decades, with its Gini coefficient reaching 0.73 in 2012 (Xie and Jin, 2015). Furthermore, our focus, Shanghai, has seen escalating inequality; its Gini coefficient ranks second among China's thirty-one provincial units (Bhattacharya et al., 2018). Despite rising inequality, China exemplifies an authoritarian

regime that advances responsiveness without competitive elections. The government establishes various venues to respond to its citizens, such as online consultation forms, mayor mailboxes, and legislative deputy services (Dimitrov et al., 2014; Truex, 2017; Manion, 2015; Distelhorst and Hou, 2017; Ding, 2020).

Our main empirical analysis draws on a unique administrative dataset of all 12345 hotline petition records between 2016 and 2019 in urban Shanghai, China. Like the 311 services in the United States and Canada, the 12345 hotline is a nonemergent municipal service platform that allows citizens to submit complaints to local governments. By dialing 1-2-3-4-5, citizens can complain to the municipal government about various issues, such as the environment, noise, housing, schools, and local businesses. Local governments typically respond to these complaints within two weeks with a resolution. Our administrative data include detailed information on each petition, including its call transcript, caller's address, time of resolution, case type, resolution outcome, and responses to a follow-up survey. Following the literature (Christensen and Ejdemyr, 2020; Lueders, 2021), we use resolution time and decision to measure responsiveness. In addition to examining the 12345 hotline records, we measure wealth inequality by focusing on its spatial variation. Specifically, we match the caller's address with apartment complex-level preowned housing price data.

In doing so, we estimate the disparity in government responsiveness to residents in rich and poor areas. By controlling for the type of petition topics and other confounders, our main specification shows that citizens from a rich community receive significantly quicker resolutions than their peers in poor communities. We do not find that the government provides more positive resolutions to complaints by the rich than those by the poor, given the same issue type. We also address the causal concern in identifying the effect of housing prices on responsiveness using an instrumental variable approach. We use the historical foreign settlement boundary as the instrumental variable to conduct two-stage least squares (2SLS) estimation. Our 2SLS result shows that response time decreases by 0.25 working days if the housing price where the caller resides is 20% higher. In other words, those residing in high-end apartments with the top 5% property price receive a response at least one working day earlier than a resident in an apartment priced at the

district average. Given that the law requires a government response within 15 working days, the magnitude of the quicker response is nontrivial.

In addition to showing a salient effect of property price on response priority, we provide evidence that excludes several alternative explanations. We first address the concern that the rich and the poor have heterogeneous issues that fail to be captured by government-classified case types. Our text analysis of all petition transcripts shows that petitions from the rich and poor are homogeneous within every case type. Therefore, it is unlikely that the priority is driven by different content. Another concern is whether other possible signaling mechanisms exist. According to the theory, citizens cannot truthfully reveal their capacity by cheap talk, in other words, sending verbal signals when calling the hotline. We analyze four types of verbal signals that might affect government responsiveness: (1) legal knowledge, (2) threats of collective action, (3) reporting to upper government, and (4) demonstration of party membership. We conduct a text analysis, extracting keywords related to each signal using call transcripts. We demonstrate that callers rarely mention keywords related to these signals when using the 12345 hotline. Our regression analysis indicates that the rich do not use these verbal signals more often than the poor. Last, we exclude the possibility that disparity in local funding results in richer neighborhoods receiving quicker responses. Using government budget reports and detailed local spending data, we demonstrate that richer neighborhoods neither receive more funding from the upper-level government nor spend more. Increased public expenditure also does not result in quicker response times or more positive resolutions.

By documenting this implicit bias toward the rich, this paper speaks to a growing body of research on authoritarian responsiveness ([Chen, Pan and Xu, 2016](#); [Meng, Pan and Yang, 2017](#); [Lueders, 2021](#); [Pan, 2020](#)). As [Grossman and Slough \(2022\)](#) notes, government responsiveness appears in three sets of dyadic relationships: politician-citizen, politician-bureaucrat, and bureaucrat-citizen. Building on this framework, we characterize how the rich in authoritarian contexts influence all three relationships. Our findings shed light on the importance of spatial inequality in shaping government responsiveness and how the rich enjoy an implicit advantage, even in non-

democratic contexts. Before showing these empirical results, the next two sections introduce the background of China's rising inequality, the 12345 municipal service, and a theoretical framework that shows how the distinct incentives of bureaucrats and political leaders lead to an implicit form of unequal responsiveness.

Background

Rising Inequality in Urban China

Along with its rapid economic growth, China has experienced rising inequality in the past few decades. According to [Xie and Zhou \(2014\)](#), China's income inequality has increased significantly, with a Gini coefficient ranging from 0.53 to 0.55. The unequal distribution of wealth is even more pronounced. According to a nationally representative survey, the wealth Gini coefficient reached 0.73 in 2012 ([Xie and Jin, 2015](#)). The top 1% of the wealthiest individuals own over one-fourth of the national household wealth, while the household wealth of the poorest 25% accounts for only 2% of total household wealth.

Although the urban-rural divide and regional disparity are two primary contributors to China's rising inequality, within-city inequality is also acute. Our case, Shanghai, is not only the wealthiest city in China but also one of the most unequal places in the country. According to [Bhattacharya et al. \(2018\)](#), Shanghai's within-city Gini coefficient ranked second among China's 31 provincial units in 2012 (Figure F.1). In another across-city comparison by [Chen, Liu and Lu \(2018\)](#), the Gini coefficient of Shanghai ranked 7th out of 252 Chinese cities.

In the urban context of China, housing is a significant component of wealth inequality. In 1988, China initiated housing reforms to privatize urban housing. The reform transitioned the nature of urban housing from a benefit provided by working units (danwei) to a commodity. While urban residents do not own the land, they can purchase and sell their apartments at market prices ([Zhu, 2018](#)). Housing privatization has profoundly impacted the wealth disparity among urban residents in China. Housing capital gains have fuelled household wealth accumulation ([Wang et al., 2020](#)).

The median housing price in Shanghai saw a 13-fold increase over 19 years, rising from 3,659 RMB in 2001 to 50,199 RMB in 2019. In this paper, we use housing prices as a proxy for the wealth status of urban residents for several reasons. First, housing assets comprise the largest portion (over 70%) of urban household wealth in China (Xie and Jin, 2015). Second, most Chinese people own private housing: private housing ownership surged from 50% in 1978 to over 95% in 2015 (Piketty, Yang and Zucman, 2019).

12345 Municipal Service

We examine the urban unequal responsiveness using the case of 12345 municipal service records. 12345 hotline is the most prevalent nonemergent government service system among Chinese municipalities. The Shengyang municipal government was the first to introduce a major hotline in 1983, allowing citizens to request municipal services. Later, various government agencies and local governments opened separate hotlines in their jurisdictions to respond to the requests of citizens (Meng and Su, 2021). Beginning in 2010, Chinese municipalities integrated all government service hotlines into the 12345 system so that citizens only needed to call one number to request municipal services. In 2021, 313 of 333 Chinese municipalities had opened 12345 hotlines for citizens.¹

We mainly focus on the 12345 municipal service in H District, Shanghai. Shanghai is an ideal context to analyze the effect of wealth inequality on the wide gap between the rich and the poor in urban China. Specifically, H District constitutes the traditional urban core of Shanghai — it is the seat of the Shanghai municipal government, and a part of it used to be the French Concession and the International Settlement. According to the 2020 Census, H district has 660 thousand residents in a living area of 7.4 square miles. Its population density (89.18 thousand residents per square mile) is one of the highest in the world (Manhattan in New York City is 77 thousand per square mile). In 2021, H district was also the wealthiest urban district in China, with a GDP per capita of 438 thousand RMB (67 thousand USD) that is over 2 times that of Shanghai and 5 times that of

¹http://www.gov.cn/fuwu/2021-01/07/content_5577726.htm

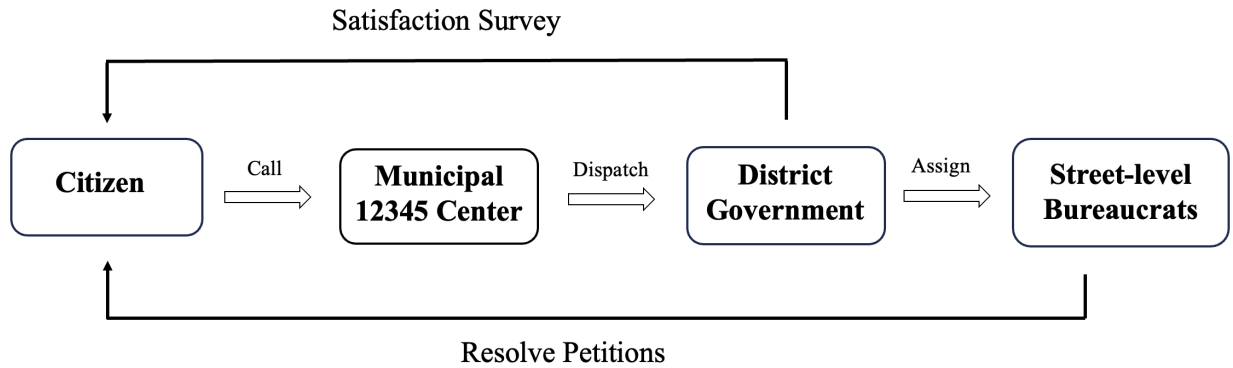


Figure 1: 12345 HOTLINE WORKFLOW

China.²

The Shanghai municipal government opened the 12345 hotline in October 2012, combining over 230 separate government service phone numbers into one unified system. Over the first decade, the Shanghai 12345 hotline received over 30 million complaints through various channels, using phone calls, smartphone applications, and website platforms.³

Figure 1 illustrates the workflow of the Shanghai 12345 hotline. Typically, a case is handled by three tiers of governmental agencies: the municipal-level 12345 center, the district government, and street-level bureaucrats (either district departments or neighborhood officers). Initially, the municipal 12345 center accepts a petition and opens a case in the system. Table F.1 displays the media through which citizens access the 12345 hotline service. Our data suggest that the vast majority of citizens reach out to the municipal service by phone (98.1%).

Operating as a nonemergency 24-hour hotline, the platform categorizes complaints into nine types: (1) Infrastructure and Transportation, (2) Public Security, Politics, and Law, (3) Social Management, (4) Science, Education, Culture, and Health, (5) Safety and Regulation, (6) Utilities, (7) Economy, (8) Social Organization, and (9) Others. Figure F.2 depicts the distribution of these case types. Each year, the H district government receives over 10,000 cases from residential areas, on average. Of the various case types, complaints concerning infrastructure and transportation are

²The GDP per capita of Shanghai was 173.6 thousand RMB (27.2 thousand USD) and that of China was 81 thousand RMB (12.5 thousand USD) in 2021.

³<https://finance.sina.com.cn/tech/2022-04-02/doc-imcwiwss9581356.shtml>

the most prevalent (77%), followed by public security, politics, and law complaints (8%) and then social management complaints (7%). In the subsequent step, the municipal 12345 center directs cases to the appropriate district-level agency based on the location of the case. For instance, if a resident complains about an infrastructure issue in H District, the H district government takes responsibility and channels it to the pertinent street-level agency within its jurisdiction, in this scenario, the construction and management commission. The street-level bureaucrats in these departments and dispatched agencies that manage the cases can view the case records, which include the address details, giving them insights into the potential wealth status. Based on our interviews, local officials, particularly those in the neighborhood office (*jie dao*), a dispatched agency of the district government in various neighborhoods, are well acquainted with the specifics of their jurisdiction, including real estate property — a trend consistent with the literature (Tomba, 2014; Read, 2000). Furthermore, sometimes the address information mentions the name of the apartment complex in urban China, allowing officials to estimate the potential property value. For example, if the property name contains “Garden” (*hua yuan*) or “Riverside” (*bing jiang*), it is likely a high-end commercial property. Conversely, if the case address mentions “New Village” (*xin cun*), it can be inferred to be an older Soviet-style apartment building established before housing was commercialized.

Once the case is addressed, street-level bureaucrats report back to the district government and offer feedback to the citizen via phone. The district government also sends an invitation inviting the citizen to complete a satisfaction survey regarding the quality of service after the street-level bureaucrats provide a resolution. Based on our interviews, government responsiveness plays a crucial role in performance evaluations, where the higher-tier government prioritizes three metrics: (1) the total number of cases received and processed, (2) the average resolution time, and (3) the overall satisfaction rate.

We present an example to show how the response appears in the administrative records. The example is a noise complaint recorded in 2017. The 12345 hotline center recorded the case description as follows: “*Caller reflects that location A conducts major home repair around 6:00 am*”

every day, which has been going on for more than a month. The same construction is carried out during the long holiday, affecting residents' normal rest and life. Appeal: Carry out construction at a specific time. (Reply required)"

In this case, the district bureau of housing security and management took 13 days to respond to the caller and stated that the petition was valid but lacked a legal or policy foundation. The official response was as follows: *"After receiving the petition, our bureau promptly contacted the construction unit. This is a major renovation project for the entire building, and the construction unit has adjusted the work schedule to minimize disturbances. Additionally, we have intensified on-site management."*

The 12345 municipal service center monitors the entire resolution process and logs pertinent information, including call pick-up time, address, phone number, description, type of complaint, response time, resolution decision, and citizen evaluation. We utilize comprehensive data from these administrative records to explore inequality in the 12345 municipal services. The subsequent section details the data and variables employed in our quantitative analysis. In undertaking this, we fully acknowledge the significance of conducting the research, which encompasses interviews, data processing, and data sharing, in an ethical fashion. The study has been approved by the Institutional Review Board at the authors' affiliated institutions, and we stringently abide by all regulations to ensure the safeguarding of individual rights, privacy, and confidentiality (see SI [A](#) for additional details). The final dataset used for quantitative analysis and replication purposes does not contain any personally identifiable information.

A Simple Model

This section proposes a simple theoretical framework to illustrate two empirically testable hypotheses on how wealth inequality shapes government responsiveness in the context of urban China. We show how the different survival logics of political leaders and bureaucrats lead to biased responsiveness that favors the rich, who can send credible signals to the government. On the one hand,

bureaucrats prioritize the petitions from the rich and thus solve their complaints rapidly; on the other hand, the fear of unrest leads to minimal public service to the poor. Those incentives are supported by our semistructured interviews. The detailed formal model and its proof are shown in the SI B.

Our setup is a call-based municipal service with three players. One is a citizen who suffers disutility and asks for the service by submitting a petition (e.g., regarding noise, environment, education) to the government. A street-level bureaucrat determines the amount of effort or resources to use to address the petition, thereby affecting the response time and resolution decision. The third player is a political leader who is the direct principal of the bureaucrat and supervises the bureaucrat; the political leader can be the district chief or party secretary in the context of urban China.

Because of the limited resources and complex administration, it takes time for bureaucrats to resolve a petition. As [Ting \(2021\)](#) notes, waiting time reflects governance service quality. Therefore, if citizens use the petition system, the utility of citizens is also discounted depending on efficiency (government quality). Other than using the public service system, citizens have two alternative means to voice their demand. First, they can use private resources. For example, citizens connected with political leaders can directly use their connections to resolve their issues. Moreover, citizens can use the legal system to defend their interests if the petition response from the municipal service is not satisfactory. We use parameter $\theta \in [0, 1]$ to gauge citizens' ability, including their social networks, knowledge of policies and laws, etc. It is natural to think that citizens incur additional costs for bureaucrats when using alternative channels (filing lawsuits or directly complaining to connected leaders). For example, bureaucrats have to spend additional effort on lawsuits ([Gordon and Hafer, 2005](#)). Second, in extreme cases, citizens can also choose a costly form of petition – protest – that is often responded to by authoritarian governments because it is the primary threat to autocratic rules ([Acemoglu and Robinson, 2001](#); [King, Pan and Roberts, 2013](#); [Wasserstrom and Perry, 1994](#); [O'Brien and Li, 2006](#)). Successful protests in China are viewed as a political failure for local leaders; those who fail to prevent massive collective actions face “one

vote veto”. Typically, they have no chance to be promoted in their career.

Political leaders receive fixed rent if they are not deposed and care about career advancement. Both depend on whether collective action occurs in the area. Political leaders can prevent such action by supervising whether bureaucrats successfully address citizens’ petitions. Political leaders can learn whether the demand is well responded to; if not, they can resend the case to the department and order someone to reconsider the case resolution, a pattern mentioned by the bureaucrat we interviewed.

Unlike political leaders driven by the imperative of maintaining stability, bureaucrats are more concerned with their careers, which are primarily evaluated based on their ability to complete administrative tasks. In interviews with district government bureaucrats, they expressed, “*We are less concerned about political stability, as this falls mainly under the purview of the chief executives of political leaders. Instead, our primary concern is the day-to-day administrative workload.*” They further emphasized, “*For instance, citizen-initiated lawsuits can significantly impact our work efficiency.*” Therefore, the bureaucrat mainly balances the cost of effort and satisfaction from citizens.

Because the public complaint system serves all citizen and responses take time, citizens who have higher ability may find that it is preferable not to use the public system; instead, they can bypass this stage and directly use private resources to obtain the service. Therefore, it is without loss of generality to assume people use private resources only after they receive feedback from bureaucrats.

Based on the model, we derive several formal results in SI B. Notably, both the bureaucrat and political leader hope to know citizens’ capacity, and citizens also have an incentive to reveal their type. The reason is straightforward. If θ is public information, on the one hand, the political leader can design the best supervising strategy that can both prevent protests and minimize the supervision cost. On the other hand, the bureaucrat can effectively assign efforts and prevent unnecessary costs.

Signaling through costless messages. In the real world, θ is not observed. The first available method for residents is to send a costless message when they complain through the public service

system. For example, in a field experiment, [Chen, Pan and Xu \(2016\)](#) finds that if people submit requests online with collective action threats, county governments are more likely to respond and provide informative responses. In our call-based municipal service system, however, rational citizens with lower capacity can tell a lie to imitate citizens with higher capacity. The main reason is that communication through phone calls is costless and unverifiable: anyone can threaten to take legal action or announce that they have a personal tie with higher officials.

Proposition 1. *In the call-based municipal service with pregame cheap talk, all equilibria are noninformative. (All proofs are in the SI B.)*

Accordingly, we expect no significant difference in how citizens use verbal signals to show their underlying capacity: we offer evidence to support this proposition in the Alternative Explanation section (Table 3).

Unequal Responsiveness to Wealth Status. Since citizens with low θ always have an incentive to report a higher type, the politician leader and bureaucrats must rely on other information to effectively learn their types.⁴ We argue that θ is highly related to wealth status, and we use housing price p to approximate wealth.⁵ Purchasing a house is one of the most important and expensive decisions that most people ever make in their lives ([Ansell, 2019](#)). The substantial cost is not affordable to everyone. In addition, the price of real estate property is positively correlated with education, income, social status, connections, and family background. In the empirical context of this paper, citizens have to truthfully report the exact address or apartment complex name to the 12345 hotline to receive a government response: citizens have no incentive to lie because bureaucrats will arrive at the scene. Both street-level bureaucrats and citizens are familiar with the local housing area and corresponding housing prices, as we mentioned in the background; thus, bureaucrats can effectively learn θ from the price p .

Proposition 2. *In the call-based municipal service with noisy signals, the nonprotest pure-strategy subgame perfect equilibrium has the following two properties:*

⁴The established scholarship shows several meaningful signals that convey information. For example, people use verbal signals (such as accents) to discriminate against immigrants ([Wolfson and Manes, 1985](#); [Kayaalp, 2016](#)).

⁵See more discussions on θ , wealth, and housing prices in the background section.

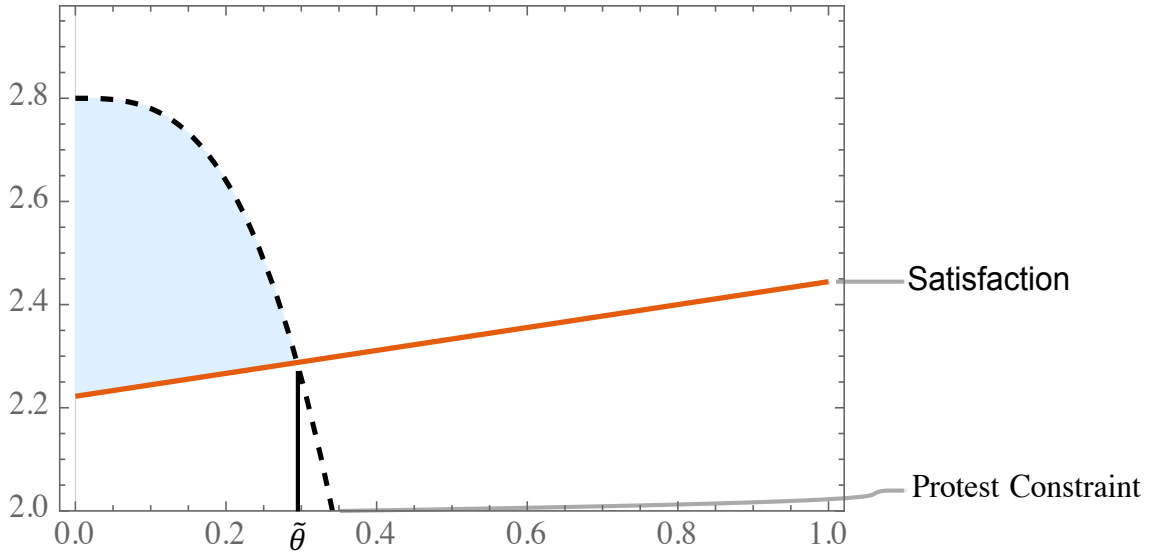


Figure 2: DUALITY OF UNEQUAL RESPONSIVENESS: NUMERICAL EXAMPLE

(1) Allocated resources from the bureaucracy are increasing in housing prices p .

(2) There exists a housing price \tilde{p} for which the politician resends cases such that housing price $p_i < \tilde{p}$.

The above proposition reveals two interesting patterns in the equilibrium. First, the bureaucrat tends to invest more effort in the rich (higher p) because housing price as a signal is highly correlated to the underlying type θ . Second, if the bureaucrat does not pay enough attention to the poor, petitions from the poor are less likely to be solved. This may increase the probability of collective action. Therefore, in equilibrium, the supervising mechanism (i.e., the politician leader) effectively identifies and remedies the bias by resending petitions from the poor and letting other bureaucrats who have spare time readdress the petition.

Figure 2 illustrates the two results with a numerical example.⁶ The horizontal line represents the housing price p . The upward solid curve denotes the satisfaction that a citizen with wealth p receives in equilibrium. This reflects that the rich can obtain more favors from the bureaucracy.

⁶See SI B for details.

The dashed curve denotes the lower bound of satisfaction needed to prevent protest in equilibrium. The intersection determines the critical value $p = \tilde{\theta}$. Citizens whose wealth $p_i < \tilde{\theta}$ are not satisfied with the response from the bureaucrat. Their intensity of dissatisfaction is reflected by the height of the light blue area. The political leader must send such complaints back to bureaucrats to prevent protests. Accordingly, we derive the following two main hypotheses:

H1: Bureaucrats prioritize petitions by the rich over those by the poor.

H2: Bureaucrats do not discriminate against the poor regarding petition resolution.

Data and Variables

We empirically test these hypotheses using administrative records from the 12345 hotline in H district, Shanghai, China. H district recorded over 120,000 complaints between 2016 and 2019. Although we are interested in how spatial inequality, measured by property prices, influences district-level government responsiveness, an empirical concern is that the issue in the petition might not have occurred where the petitioner resides. To address this, we employ a spatial matching method to pinpoint petitions originating in residential areas. We initially gathered spatial information for each case from the Google Maps API, which includes longitude and latitude. After accessing these geographic data, we determined residential addresses by merging the data with apartment-complex polygons. Figure 3 offers an illustration: the red dot represents a residential address located within an apartment complex, while the black dot signifies a case emerging from nonresidential areas. By using this matching method, we identified over 43,000 cases that occurred in residential zones, accounting for approximately 37% of all petitions.

We employ two measures of responsiveness as outcome variables, following the literature on government responsiveness (Dipoppa and Grossman, 2020; Lueders, 2021). First, we measure the speed of response by focusing on resolution time. As Dipoppa and Grossman (2020) suggests, response time is a subjective measure that suffers less from manipulation and has abundant spatial and temporary variation. While our administrative records do not provide information on the

Figure 3: IDENTIFYING RESIDENTIAL ADDRESS



Note:. The figure is an illustrative figure to show how we identify residential addresses. The red dot denote that the caller is in a residential address, and the black dot denotes that in a non-residential address. The purple polygon denotes all residential areas in H district.

precise time spent on each resolution, the district government assigned a label to indicate the extent to which the petition is delayed. Petition cases are classified into four types assigned different colors. Cases with green labels are on time, which means the complaints are resolved within 10 working days. Those that experienced minor (10-13 working days) and intermediate (13-15 days) delays are labeled yellow and orange, respectively. “Red” cases refer to complaints with significant delays that take government over 15 business days to provide feedback to citizens. The left panel of Figure 4 shows the distribution of response time. In our sample, 73% of the petitions were resolved on time, while 23% and 3% experienced minor and intermediate delay. Only 17 cases (less than 1%) were resolved with significant delay, taking the government over 15 working days to respond. In our regression analysis, we assign the mean value of each category as a continuous measure of response time (in days). Specifically, on-time cases are coded as 5 days, cases with

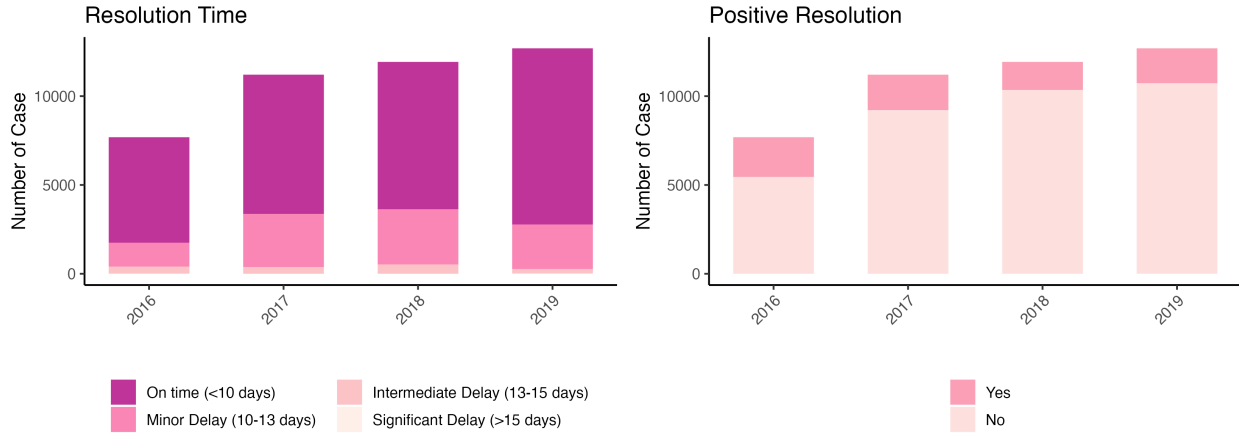


Figure 4: DISTRIBUTION OF ALLOCATION DURATION AND RESOLUTION

Source: H 12345 hotline records.

minor delay as 11.5 days, cases with intermediate delay as 13.5 days and cases with significant delay as 15 days. We also check the robustness using an ordinal measure (Table F.3).

Another outcome of interest is the extent to which the government positively responds to the petition. In our administrative data, resolution decisions are classified into four types: “actually resolved (shi ji jie jue)”; “show explanation” (jie shi shuo ming); “demand is too high” (su qiu guo gao), and “record it for reference and record” (can kao bei an). Examples of each type of resolution are shown in SI C. In the baseline specification, we use a conservative approach that only considers cases with actual resolution as a positive response. In doing so, we use a binary indicator, coding positive resolution as 1 and 0 otherwise. The right panel of figure 4 shows the distribution of case resolutions. Between 2016 and 2019, the H district government provided positive resolution to a small portion of cases (17.2%) under our conservative measure. Table F.2 shows summary statistics of these two outcome variables, along with other treatment and control variables. Again, we check the robustness using an ordinal measure (Table F.3). We also verify that both resolution time and positive resolution are important measures of responsiveness by showing their strong correlation with the overall stratification of callers in the follow-up survey conducted by the district-level government that supervises street-level bureaucrats (see details in SI D).

We use housing price as the key variable of interest to document the spatial variation in wealth inequality. We scraped the housing price data from *Fangtianxia.com*, a major real estate broker-

age in China that is publicly listed on the New York Stock Exchange (Fang Holdings Ltd, NYSE: SFUNY).⁷ Housing prices are at the apartment complex level (xiaoqu). In Chinese cities, most residents live in apartment complexes managed by home owner association firms (wu ye). Considering that the new sales of real estate are undervalued because of government restrictions on new sales, we use preowned housing prices. In our sample, the preowned property price in H district varies across different apartment complexes, ranging from 7,000 to 1,40,000 RMB per square meter (approximately 92.2 to 1,858 USD per square foot).

We control for a set of individual covariates that address several other biases that might exist in the 12345 municipal services. We first consider gender bias by controlling for a binary variable that is coded as 1 if the caller is female and 0 otherwise. We also control for bias against native origins. In China, bias toward nonlocals prevails in major cities because of the relatively low social and economic status of people who do not have local hukou, a home registration indicator that distinguishes locally born residents. We account for this confounder by developing a proxy for local residential status. While the 12345 database does not ask for the hukou status of the caller, we use a telephone search engine developed to extract the registration location of each phone number. We use a binary measure, coding telephone numbers registered in Shanghai as 1 and 0 otherwise. Moreover, we account for bias toward foreigners. In China, non-Chinese foreigners and overseas Chinese enjoy preferential treatment in various policy domains, including housing, family planning, and banking (Bork-Hüffer and Yuan-Ihle, 2014). To control for the preferential treatment of foreigners, we develop a binary proxy for foreign or overseas Chinese status by coding whether the case description mentions a set of keywords that are related to foreigners or overseas Chinese.⁸ Last, we consider the anonymity of the call. Anonymous callers might have different concerns in petitions than nonanonymous callers. For example, scholars show that anonymous users are more

⁷Notably, we do not have the time-variant, apartment complex-level housing price. The apartment complex price data were scraped in a batch in late 2017. Using such microlevel, cross-sectional data enables us to measure the spatial variation in housing prices. We verify that the spatial variation in housing prices remains stable over time using aggregate-level, time-variant data. Moreover, we show that most residential areas (ban kuai), a real estate term that refers to a cluster of apartment complexes, have a similar trend over time (Figure F.3).

⁸Keywords related to foreigners and overseas Chinese include huaqiao, haiwai, taibao, taiwan, hongkong, waiji, waiguoren, and other nationality, such as American, Canadian or Japanese citizens

likely to voice politically sensitive concerns than nonanonymous users (Chen, 2021). The 12345 hotline allows callers to remain anonymous but still records addresses. We construct a binary indicator, coding an anonymous caller as 1 and nonanonymous caller as 0.

In addition to individual-level covariates, we account for the effect of the political cycle on responsiveness. The literature shows that authoritarian leaders enhance responsiveness before elections to enhance political legitimacy (Lueders, 2021). In the context of China, scholars also show a cyclical pattern of government behavior, including tax collection, repression, and public spending (Guo, 2009; Pan, 2019; Chen and Zhang, 2021). Following the practice in the literature, we develop proxies for local and national political cycles by focusing on the sessions of the People's Congress and the People's Political Consultative Conference (two sessions) at the national and local levels (Guo, 2009). We use two binary indicators of national and local sessions, coding the case as 1 if the reporting date is one month before or during the period of the national and local sessions. In addition to the cycles of national and local legislatures, we take into account the political turnover of chief executives, a crucial determinant of public resource allocation in China (Hou and Li, 2023; Li, Li and Zhang, 2023). In the context of this paper, changes in the leadership of these district governments might also affect government responsiveness. For example, district heads who face promotion may accelerate responsiveness to demonstrate their competence. To account for this political turnover effect, we create a binary indicator that is coded as 1 if the case is recorded when the district leader has experienced political turnover.

Effect of Housing Price on Bureaucratic Responses

We estimate the effect of housing prices on government responsiveness using over 40,000 hotline petitions recorded from 2016 to 2019. As a key empirical concern is that residents who live in poor or rich neighborhoods might raise different complaints, we choose to use a case type fixed effects specification that allows us to compare how bureaucrats respond to the rich and the poor given the

same issue. The model is specified as follows:

$$Y_{i(jt)} = \beta_1 \log(\text{Price}_{i(jt)}) + \delta_1 X_i + \gamma_j + \zeta_t + \epsilon_{ijt},$$

where $Y_{i(jt)}$ denotes the two forms of responsiveness measures: response time (number of days) and resolution of case i with type j that is handled in year t . $\log(\text{Price}_{i(jt)})$ is the logged housing price of the caller’s apartment complex. X_i denotes the set of case-level covariates and political cycle variables (local and national two sessions, executive turnover). As bureaucrats may handle cases differently, we control for case type fixed effects γ_j to address the concern about issue heterogeneity. We also control for year-month fixed effects (ζ_t) to exclude year-month specific shocks, such as seasonal trends and national and traditional holidays. The standard errors are clustered at the apartment complex level.

Table 1 shows the effects of housing prices on two measures of responsiveness. Columns 1 to 3 report the results for response time (in days). We begin the analysis by regressing response time directly on housing price in Column 1, controlling for type and year-month fixed effects. The model yields a negative and significant estimate of housing price, suggesting that callers from rich neighborhoods receive a quicker response than their poor counterparts. In Columns 2 and 3, we gradually add case-level covariates (gender, local resident status, foreign status, and anonymity) and political event controls – local and national two sessions, and local political turnover. The estimates of housing price increase slightly and remain statistically significant. In contrast to the significant estimates in Columns 1 to 3, the estimated effects of housing price on positive resolution in Columns 4 to 6 are small and statistically indistinguishable from zero.

While the baseline OLS estimation provides compelling evidence on the implicit bias toward the rich in response time, such estimation might be biased for several reasons. First, OLS estimation may suffer from the reverse causality problem that hotline responsiveness quality can affect housing prices; for example, people pay a premium for better public service. Second, we might suffer from omitted variable biases, such as citizens’ preferences, that fail to be captured by the

Table 1: Baseline Specifications

	Resolution Time			Positive Resolution		
	(1)	(2)	(3)	(4)	(5)	(6)
Price	-0.200** (0.096)	-0.225** (0.093)	-0.225** (0.093)	0.005 (0.010)	-0.0004 (0.010)	-0.0005 (0.010)
Female		-0.105*** (0.040)	-0.104*** (0.040)		0.031*** (0.005)	0.031*** (0.005)
Local		0.746*** (0.060)	0.745*** (0.060)		0.009 (0.006)	0.009 (0.006)
Foreign		0.092 (0.290)	0.094 (0.291)		-0.025 (0.023)	-0.024 (0.023)
Anonymous		0.176*** (0.057)	0.175*** (0.057)		-0.076*** (0.006)	-0.076*** (0.006)
National Two Sessions			-0.485*** (0.113)			0.014 (0.014)
Local Two Sessions			0.495*** (0.146)			0.039** (0.016)
Executive Turnover			0.703** (0.294)			0.028 (0.035)
Type FE	Y	Y	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y	Y	Y
<i>N</i>	43,498	43,498	43,498	43,500	43,500	43,500
Adjusted R ²	0.030	0.037	0.038	0.053	0.062	0.063

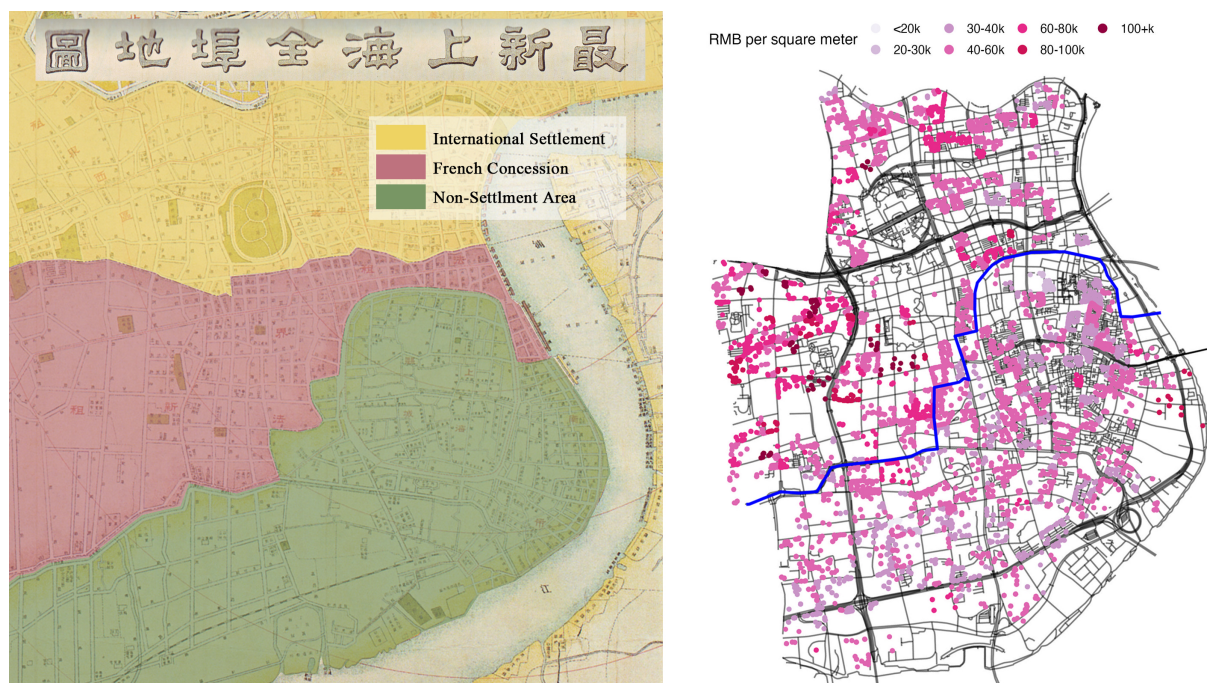
Notes: Standard errors clustered at the apartment-complex level are reported in parentheses. FE denotes fixed effects. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

government-coded case types. To address these concerns, we use an instrumental variable (IV) approach to estimate the effect of housing prices on responsiveness. Our instrumental variable analysis exploits a historical determinant of housing prices in central Shanghai⁹: the foreign settlement area that consists of the French Concession and the International Settlement established after the Qing government, which opened Shanghai as a treaty port to westerners. The left panel of Figure 5 shows the geographical boundary. The International Settlement (yellow area) is located in the north, and the French Concession (red area) is in the middle. The green part is the nonsettlement area, which used to be called the “Southern City” (nan shi) and is located in the southern part

⁹For example, Miguel and Roland (2011) use geographical boundaries as an IV to estimate the effect of US bombings on economic development.

of the current H district.¹⁰ The price premium of the settlement area emerged in the late 19th and early 20th centuries. According to Wang (2009), housing prices in the settlement area soared when compared to the nonsettlement area because of (1) the immigration of rich gentries in Jiangsu and Zhejiang fleeing from the war against the Taiping army; (2) foreign investment in real estate; (3) better infrastructure, such as street lights, sewage, and various aspects of public services; and (4) legal protection under the rule of the settlement agency. Lu Xun, a prominent leftist writer who lived in Shanghai in the 1930s, wrote in a letter to a friend that the primary reason he preferred renting a house but paying higher rents in the settlement area was safety.¹¹

Figure 5: HOUSING PRICE IN H DISTRICT



Note: The left panel is the Shanghai Full Port Map published in 1925. The yellow and red areas denote the two parts of the settlement area: the French Concession and the International Settlement (Concession Internationale). The green part is the Non-Settlement Area. In the right panel, darker colors denote addresses with higher prices. The blue line denotes the settlement boundary.

Although foreign settlement was abolished during World War II and the new government ruled by the Communist Party of China replaced the housing market with a housing allocation system in

¹⁰The French Concession expanded over time in the late 19th and early 20th centuries. We use the latest boundary (1914) as the geographical cutoff for causal identification. A detailed description of the settlement is provided in SI E.

¹¹Lu Xun, the letter to Cao Jinhua, 1936.

the 1950s, housing prices re-emerged after the readoption of the commercialized housing market in the 1990s. Currently, many celebrities, professionals, entrepreneurs, and ex-pats live in townhouses and apartments in the former settlement area. Two reasons account for the persistence of the price premium of the settlement area. First, the establishment of settlements shapes the urban landscape of downtown Shanghai. The municipal government of Shanghai, People’s Park (former Shanghai Race Club), the Bund, and many historical architectures, high-end apartments, and townhouses are located in the former settlement area. In addition to having an effect on the urban landscape, the foreign settlement has a cultural heritage. Native Shanghainese call the settlement area the “upper corner” (Shang Zhi Jiao), which means a high-end neighborhood, and the nonsettlement area the “lower corner” (Xia Zhi Jiao), which means a slum-like community (Shen, 2015). For these reasons, the settlement boundary formed in the early 20th century predominantly determines the spatial variation of housing prices in central Shanghai, albeit with a considerable amount of new construction. The right panel of Figure 5 shows the current disparity in housing prices across the settlement boundary. The red line denotes the boundary between the settlement area and the nonsettlement area.¹² We use darker colors to denote residential addresses with higher housing prices, and we observe a clear pattern that housing prices in the area that used to be the settlement are significantly higher than those in the nonsettlement area.

In addition to the eyeball test of price disparity, we estimate a 2SLS model as follows.

$$\begin{aligned} \log(\text{Price}_{i(jt)}) &= \alpha_1 \text{Settlement}_{i(jt)} + \delta_1 X_i + \gamma_j + \zeta_t + \epsilon_{ijt} \\ Y_{i(jt)} &= \beta_1 \log(\widehat{\text{Price}}_{i(jt)}) + \delta_2 X_i + \gamma_j + \zeta_t + \epsilon_{ijt} \end{aligned}$$

where the outcome variable in the first stage, $\log(\text{Price}_{i(jt)})$, is the logged housing price of the address where the caller of case i with type j reports in year t . The instrumental variable $\text{Settlement}_{i(jt)}$ is a binary indicator that is coded as 1 if the call is from the settlement area and 0 otherwise. In the second stage, we regress the two outcome variables on the predicted housing

¹²The settlement area experienced several waves of expansion. We use the latest boundary established in 1914 as the border.

price using the first-stage specification. Again, we also control for a set of case-level covariates (X_i) including gender, residential status, foreign nationality, anonymity, and timing (whether during the national or local two sessions) as well as the case type and year-month fixed effects.

Table 2 presents the results of the 2SLS estimation. Column 1 shows the first stage, showing a positive estimate for *Settlement*, which is statistically significant at the 1% level. The estimation suggests that housing prices in the settlement area are approximately 29% higher than those in nonsettlement areas. After presenting the first-stage result, we show the second-stage estimation of response time in Column 2. Consistent with the OLS estimate in Table 1, the coefficient on housing price is again negative and significant at the 1% level, suggesting that the response time is 0.25 working day shorter if the housing price of the place the caller lives is 20% higher. Specifically, in the context of central Shanghai, our results suggest that, on average, a resident who lives in an apartment with a district average price (48,000 thousand RMB per square meter) is expected to receive a response at least one working day later than a resident who lives in a high-end apartment with a price over 86,000 RMB per square meter (approximately 5% of H apartment complexes have this price). Columns 4 and 5 report the results of petition resolution using IV and reduced-form estimations, respectively. In contrast to the significant estimates in Columns 3 to 4, the estimated effects of *Price* on the positive response are small and statistically insignificant. Taken together, our analysis offers compelling evidence on the implicit bias toward the rich neighborhood in response time. However, the district government does not favor the rich over the poor areas in the decision on petition resolution.

We conduct several other robustness tests in addition to the 2SLS analysis. Our first concern is about the differences between OLS and IV estimates. We address this concern following the latest guide in IV estimates and diagnose our estimates with various refined methods (Lal et al., 2021). The results are shown in Figure F.4. All estimates are similar to the baseline estimate, reducing our concern about the weak instrument. Second, a key premise of the IV approach is the exclusion restriction that the instrument affects the outcome through only our key independent variable conditional on baseline controls. While this assumption is not empirically testable, we

Table 2: 2SLS Specifications

	Price	Resolution Time		Positive Resolution	
	First Stage	IV	RF	IV	RF
	(1)	(2)	(3)	(4)	(5)
Settlement	0.298*** (0.036)		-0.373*** (0.070)		-0.006 (0.007)
Price		-1.255*** (0.295)		-0.021 (0.025)	
F Statistics	69.03				
Type FE	Y	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y	Y
Controls	N	Y	Y	Y	Y
<i>N</i>	43,500	43,498	43,498	43,500	43,500
Adjusted R ²	0.238	0.028	0.041	0.062	0.063

Notes: Standard errors clustered at the apartment-complex level are reported in parentheses. FE denotes fixed effects. 1st, IV, and RF denote first stage ordinal least square, instrument variable, and reduced form specifications respectively. Controls are female, local, foreign, anonymous, local two sessions, national two sessions, and local turnover. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

provide suggestive evidence that the exclusion restriction holds, and the effect of historical settlement does not influence government responses through other channels. In our study, we confirm that the settlement boundary is not strongly correlated with the four types of bias controlled for in the baseline specifications (female, local, foreign, and anonymous) (Table F.4). In addition to analyzing the exclusion restriction, we are concerned that the results might be driven by idiosyncratic cases sent through channels other than phone calls, such as website messages or WeChat. We show that all results hold using the phone call-only sample F.5. Moreover, Table F.6 shows that our baseline results are robust to alternative measures, such as a binary measure of resolution time, dispatch duration, and the minute-level response time, which is available only between September 2018 and August 2019. Both IV and OLS estimates are negative and significant, consistent with our baseline specifications. Finally, we address the concern about the clustering nature of our data. In addition to clustering standard errors at the apartment complex level, we use the spatially adjusted standard errors proposed by Conley (1999). The results are similar to our baseline findings

(Table F.7). Overall, these analyses provide consistent evidence for the implicit bias in response time.

Alternative Explanations

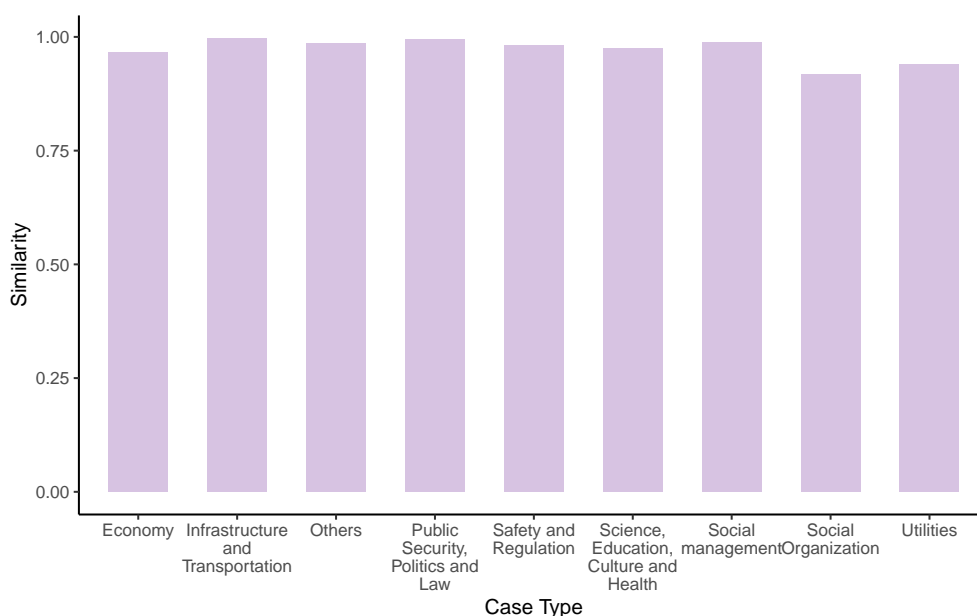
Our theory suggests that the implicit privilege of the rich is primarily driven by bureaucrats' strategic reactions to a credible signal – the housing price. This section presents evidence to rule out several alternative explanations, including petition heterogeneity beyond the type of petition, verbal signaling, and discrepancies in public expenditure between the rich and the poor.

Petition Heterogeneity

Our initial concern pertains to unobserved petition heterogeneity beyond the case type. It is possible that slower responses to the poor arise because their petitions are more challenging to resolve. Despite controlling for petition types in all empirical analyses, petitions classified by the 12345 hotline center under the same type might still demonstrate heterogeneity. To address this, we conduct a text analysis of all petition transcripts to gauge issue similarity between the rich and the poor. For each government-coded petition type, we categorize cases into two groups (high or low) based on the property price of the caller's residence. We measure the similarity of requests from poor or rich callers using cosine similarity, a metric that ranges from 0 to 1, with a larger value indicating greater textual similarity. Figure 6 presents the results comparing petitions from individuals residing in areas with housing prices either above or below the average. Across all nine case types as classified by the government, petitions from the high-price group (property price above the district average) and the low-price group (property price below the district average) exhibit substantial similarity, with cosine similarities between 0.92 and 0.99. Additionally, in the SI G, we compare the similarity of petition transcripts between the top and bottom 30% concerning housing prices. In summary, the text analysis suggests that there is minimal issue heterogeneity within each government-coded petition type. This implies that our baseline within-type estimation is not

adversely affected by unobserved case heterogeneity, reaffirming our foundational findings.

Figure 6: TEXT SIMILARITY



Verbal Signaling

Our second concern is about the verbal signal in citizens' complaints. According to our proposition 2, both political leaders and bureaucrats use housing prices as a credible signal to learn about citizens' type θ . However, these petitions might also contain other signals. As proven by proposition 1, it is difficult for high-capacity citizens to verbally signal their type because the low types also have an incentive to use this costless strategy. Therefore, we expect no significant difference in how citizens signal in their calls to show their underlying capacity. We empirically test this implication by developing several measures of the signal conveyed by callers.

First, citizens can signal to bureaucrats their ability to use legal channels if their complaints are not resolved. Rightful resistance is common in China; citizens use legal means to challenge government rulings (O'Brien and Li, 2006). In the case of the 12345 hotline petition, callers can threaten to sue the local government if their complaint is not fully resolved. Although not all citizens, especially those with lower capacity θ , can afford the high legal cost, the verbal threat

of using the legal channel to defend their rights is costless. In addition to the use of laws, [Chen, Pan and Xu \(2016\)](#) identifies three other types of verbal signals: (1) collective action; (2) threats of tattling to upper-level authorities; and (3) showing loyalty by mentioning Communist Party membership.

Using the transcripts of the petition calls, we conduct a text analysis to develop measures for the four types of verbal signals: legal, collective action, tattling to the upper government, and CCP membership (details of the coding rule are provided in [SI H](#)). We extract the keywords related to each signal from the transcripts of the 12345 calls. We construct four binary measures for these signals, coding them as 1 if the citizen mentions such keywords in the call and 0 otherwise. Consistent with our expectation, citizens rarely use verbal signals in municipal services in China, as shown by the summary statistics of each signal ([Table F.8](#)). Only approximately 3%, 0.8%, 1.8%, and 0.1% of the callers mention legal terms, collective actions, reporting to upper-level government, and CCP membership when using the 12345 hotline. Furthermore, we perform a 2SLS analysis using these four verbal signals as outcome variables. [Table 3](#) presents the results. All estimates for the price are small and statistically insignificant, suggesting that wealthier citizens do not use verbal signals on legal terms, collective action motives, upper authority pressure, or political loyalty to obtain better responsiveness.

Local Funding

Another plausible explanation for the quicker response to the affluent could be a mechanical reason: their neighborhoods might have more funding than their less affluent counterparts. While such a mechanism is prevalent in countries with robust local property tax systems that fund local governments, it does not apply to urban China for several reasons. First, although Shanghai was among the pioneer Chinese cities in adopting property taxes, its enforcement remains lax, with the majority of homeowners enjoying exemptions. Additionally, while district governments have the authority to collect taxes, their subdivisions, known as neighborhoods, the lowest administrative units, lack the authority to distribute revenue. Instead, they can only receive transfers from dis-

Table 3: Analysis of Verbal Signal

	Legal		Protest		Upper Gov		CCP Member	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Price	0.008 (0.005)		0.001 (0.003)		0.0002 (0.003)		0.0004 (0.001)	
Price		0.003 (0.013)		-0.001 (0.007)		-0.001 (0.007)		0.001 (0.002)
Type FE	Y	Y	Y	Y	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y	Y	Y	Y	Y
<i>N</i>	43,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500
Adjusted R ²	0.006	0.006	0.010	0.010	0.007	0.007	0.001	0.001

Notes: Standard errors clustered at the apartment-complex level are reported in parentheses. FE denotes fixed effects. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

trict governments. Furthermore, we calculated the per capita transfers and expenditures for each neighborhood from the district government and aligned them with the caller's addresses. Table 4 indicates that the spatial distribution pattern of public transfers and expenditures is progressive. Correlation analysis shows that residents in less rich neighborhoods, on average, receive more funding from district governments and have higher public expenditures than those in wealthier neighborhoods (Columns 1 and 2). Moreover, public expenditure positively correlates with resolution time (Columns 3 and 4) but does not show a strong relationship with the final resolution decision (Columns 5 and 6). This suggests that neither district transfers nor expenditures are behind the faster responses in wealthier neighborhoods. These findings negate a mechanical funding mechanism that drives the implicit bias highlighted in our primary analysis.

Conclusion

This paper unveils a form of spatial inequality through a standardized bureaucratic procedure handling citizens' complaints. Using detailed administrative data from urban Shanghai, China's largest

Table 4: Public Expenditure Analysis

	Price		Resolution Time		Positive Resolution	
	(1)	(2)	(3)	(4)	(5)	(6)
District Govt. Transfer	-0.181*** (0.065)		0.755*** (0.152)		-0.006 (0.013)	
Expenditure		-0.190** (0.080)		0.722*** (0.160)		-0.009 (0.018)
Type FE	Y	Y	Y	Y	Y	Y
Year-month FE	Y	Y	Y	Y	Y	
Controls	N	N	Y	Y	Y	Y
<i>N</i>	40,540	40,540	40,538	40,538	40,540	40,540
Adjusted R ²	0.030	0.028	0.040	0.039	0.063	0.063

Notes: Standard errors clustered at the apartment-complex level are reported in parentheses. FE denotes fixed effects. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

and wealthiest city, we highlight an implicit privilege for the affluent. While government agencies display no explicit bias against the less wealthy in resolving their petitions, they do implicitly prioritize the rich by offering them faster responses.

Our paper delves into the intricate nature of unequal government responsiveness. The current literature offers theoretical perspectives from three dyads. One stream of scholarship, focusing on the interaction between politicians and voters, underscores the role of electoral incentives that compel politicians to execute public policies with bias toward specific groups of citizens (Besley and Coate, 2003; Sances, 2016). The second stream of scholarship emphasizes the relationship between bureaucrats and citizens, suggesting that local embeddedness is a pivotal factor behind unequal responsiveness. Studies indicate that bureaucrats often exhibit favoritism based on hometown, ethnicity, and nationality (Xu, 2021; Bhavnani and Lee, 2018). The third strand focuses on the interaction between politicians and bureaucrats and highlights how strategic behaviors lead to unequal responses to voters' preferences in democracies (Slough, 2021; Wirsching, 2022). Our theory synthesizes all three actors in a single framework. We characterize how distinct survival incentives from politicians and bureaucrats and credible signaling from the rich result in unequal government responsiveness in an authoritarian regime.

Furthermore, our research emphasizes the crucial role of street-level bureaucrats in public service delivery, a literature stream pioneered by [Lipsky \(1980\)](#). While voters may sanction biased politicians through periodic elections, they interact regularly with street-level bureaucrats for routine governmental services, such as licensing, parking tickets, and infrastructure maintenance. The well-being of citizens, particularly those of lower socioeconomic status, can be significantly impacted by biases within the bureaucratic system, especially prevalent in authoritarian regimes that lack meaningful bureaucratic oversight.

Policy interventions should prioritize addressing biases exhibited by these street-level bureaucrats. However, such biases are often opaque to both citizens and external observers, making them challenging to identify and rectify. One potential solution involves bolstering transparency, shown to positively impact legislative responsiveness in authoritarian regimes ([Todd et al., 2021](#)). Another approach worth exploring is the enhancement of top-down monitoring, an institutional reform aimed at countering unequal bureaucratic responsiveness. The literature demonstrates the efficacy of such monitoring in mitigating corruption and curbing the preferential treatment of politically affiliated firms ([Olken, 2007](#); [Ni and Su, 2019](#)). Finally, bureaucratic performance evaluations should pivot toward objective metrics, such as response times, rather than subjective indicators prone to manipulation, such as self-reported satisfaction or resolution rates. Future studies should delve deeper into these proposed policy instruments to minimize biases in governmental responsiveness.

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