Performance Gaps and Organizational Change: Evidence from Budgetary Growth in Chinese Local Governments

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Abstract

Performance gaps, defined as the differences between expected and achieved organizational performance, generate informative feedback for organizations to make subsequent decisions. In this paper, we examine how social and historical performance gaps in the realm of economic development have different effects on the budgetary decisions of Chinese local governments. Using a panel dataset of 287 cities from 2010 to 2016, we find evidence that the performance gap in comparison with the historical expectation is positively related to total expenditure growth, while there is an asymmetric inverted U-shaped relationship between the performance gap based on peer comparison and public spending growth. Additional evidence suggests that performance gaps are also associated with the growth of public education spending in a similar way. Our study provides evidence of performance-based budgeting beyond the Western contexts and offers the base for a generalizable theory on how performance information in high-stake accountability systems shapes local governments' spending decisions.

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Keywords: Performance Gaps, Chinese Local Governments, Budgetary Growth

Brechas de desempeño y cambio organizacional: Evidencia del crecimiento presupuestario en los gobiernos locales chinos

Resumen

Las brechas de desempeño, definidas como las diferencias entre el desempeño organizacional esperado y el alcanzado, generan información útil para que las organizaciones tomen decisiones posteriores. En este artículo, examinamos cómo las brechas de desempeño sociales e históricas en el ámbito del desarrollo económico tienen diferentes efectos en las decisiones presupuestarias de los gobiernos locales chinos. Utilizando un conjunto de datos de panel de 287 ciudades entre 2010 y 2016, encontramos evidencia de que la brecha de desempeño, en comparación con la expectativa histórica, se relaciona positivamente con el crecimiento del gasto total, mientras que existe una relación asimétrica en forma de U invertida entre la brecha de desempeño basada en la comparación con pares y el crecimiento del gasto público. Evidencia adicional sugiere que las brechas de desempeño también se asocian de manera similar con el crecimiento del gasto público en educación. Nuestro estudio proporciona evidencia de la presupuestación basada en el desempeño más allá del contexto occidental y sienta las bases para una teoría generalizable sobre cómo la información sobre el desempeño en los sistemas de rendición de cuentas de alto impacto influye en las decisiones de gasto de los gobiernos locales.

Palabras clave: Brechas de desempeño, Gobiernos locales chinos, Crecimiento presupuestario

绩效差距与组织变革：来自中国地方政府预算增长的证据

摘要

绩效差距是指预期组织绩效与实际组织绩效之间的差异，它为“组织作出后续决策”一事提供信息反馈。本文研究了经济发展领域中的社会和历史绩效差距如何对中国地方政府预算决策产生不同的影响。通过使用一项包括2010年至2016年287个城市的面板数据集，我们发现，与历史预期相比的绩

效差距与总支出增长呈正相关，而基于同行比较的绩效差距与公共支出增长之间存在不对称的倒U型关系。其他证据表明，绩效差距也以类似的方式与公共教育支出的增长相关。我们的研究为西方情境以外的绩效预算提供了证据，并为关于“高风险问责系统中的绩效信息如何影响地方政府支出决策”的一般化理论提供了基础。

关键词：绩效差距，中国地方政府，预算增长

Introduction

How public organizations use performance information to inform important decisions is at the heart of public management research. The growing literature on performance gaps suggests that the gap between performance aspirations and actual performance produces feedback that will shape various important government decisions (Greve 2003), such as goal-setting in the public sector (Ma 2016), innovation (Meier et al. 2015, Zhu and Rutherford 2019), and budget adjustment (Flink 2019). Organizations with performance far below their competitors' average achievements, for instance, are more inclined to introduce radical strategies to address performance failures (Greve 1998). It is thus pivotal to examine the impact of performance gaps on key decisions that lead to organizational changes. While a growing number of empirical studies suggest performance gaps significantly affect organizational decisions, much less is known about how different types of performance gaps unfold their impact on organizations. In this paper, we apply the theory of performance gaps to study budgetary changes in the local government setting.

The literature about the impact of performance gaps on organizational change is primarily examined in the private sector (Shinkle 2012), for which performance metrics are crystal clear and often measured based on firms' market share and profit margins. Public organizations usually pursue ambiguous and multiple goals. Public managers, nevertheless, frequently use performance feedback to inform decision-making and to initiate organizational change (Kroll 2015; Johansen, Kim, and Zhu 2016). Only recently have public management scholars theorized (Meier, Favero, and Zhu 2015; Hong 2019) and empirically tested the linkage between performance gaps and decision making in hospitals (Salge 2011; Rutherford and Zhu 2019), schools (Rutherford and Meier 2015), federal agencies (Nicholson-Crotty, Nicholson-Crotty, and Fernandez 2017), local governments (Nielsen 2014; Ma 2016; Hong et al. 2020), and budgetary changes (Flink 2019). We join this emerging literature on performance gaps and organizational change by integrating theoretical

insights from the rational organization theory (Cyert and March 1992) and the theory of institutionalization.

Different from most of the existing literature that describes linear relationships between performance gaps and organizational change, we theorize that performance gaps spur changes in a non-linear way. More specifically, we posit that there is a nonlinear relationship between performance gaps and organizational change, because public organizations will evaluate the size of performance gaps and act more actively in eliciting change when performance gaps are large. Compared with the "zone of indifference", in which organizational performance is around the threshold of performance aspirations, a large absolute performance gap is positively related to organizational change (Meier, Favero, and Zhu 2015). In addition, such nonlinear relationship is expected to be an asymmetric inverted-U shape, because organizational changes under negative performance gaps would be greater than changes under positive performance gaps (the "negativity bias" proposition).

The empirical analysis in this paper draws from a novel multisource panel dataset of 287 cities across 31 Chinese provinces from 2010 to 2016. As for local government budgeting in China, the years from 2010 to 2016 are characterized by both high economic growth and a substantial increase in government borrowing (Tan & Zhao, 2019). This is also the time-period when performance management became increasingly important for local governments (Liang & Langbein, 2015). In addition, the nationwide budgetary and accounting standards had been kept consistent before 2017, making the fiscal data used in this study comparable.

Focusing on two types of performance gaps, namely historical and social performance gaps, we show that the relationship between performance gaps in the area of economic development and changes in local governments' budgetary priorities is more complex than what is depicted by the existing literature. Our evidence from Chinese local governments suggests that performance gaps affect budgetary change nonlinearly. The specific form and magnitude of organizational change, moreover, are contingent on different types of performance gaps, managerial tenure, and external contexts. In the context of Chinese local governments, we find that the performance gap in comparison with the historical expectation is positively related to total expenditure growth, while there is an asymmetric inverted U-shaped relationship between the performance gap based on social aspiration and public spending growth.

Our study contributes to several important areas of public management research. First, this study adds to the emerging literature on performance gaps and decision-making, as well as renewed scholarly interests in organizational behavior and bounded rationality (e.g., Hong 2020, Wei et al. 2021). Consistent with recent studies in these areas, we find that public organizations

do respond to feedback from performance gaps and adjust their important decisions accordingly. However, we find the heterogeneous patterns of budgetary changes linked to the two different performance gaps, which suggest the links between performance gaps and decision-making are more complex than what is reported by previous studies.

Second, our study contributes new empirical evidence on how performance gaps spur changes in the presence of a high-stake performance appraisal system and short bureaucratic tenure in office. A high-stake performance appraisal system places greater political pressure on local public officials to meet performance targets and to maintain advantageous positions in peer comparison (Liang & Langbein, 2015). A short bureaucratic tenure might press incumbent officials to make changes more quickly (Ma 2016). These local government contexts differ from those in the United States and Western Europe. Our key findings highlight the need to theorize how such different contexts may condition the impact of performance gaps on policy changes.

Third, we contribute to the growing performance-based budgeting literature as our study sits at the intersection of performance management and public finance research. Scholars of public budgeting have long considered the political and economic determinants of budget changes (e.g., population and economic growth, changes in fiscal policies, the role of existing tax and expenditure cap laws, etc.) and describe budget changes as a punctuated equilibrium process featuring both incremental adjustment and large irruptive changes (Robinson et al. 2007, Zhang 2020). Similar to some recent studies on performance-based budgeting (Flink 2019, and Li et al. 2024), our study shows the viability of applying the public management approach to understand local governments' budget changes.

In the remainder of this paper, we first review the literature and theories on performance gaps and develop theoretical hypotheses of organizational change to be tested in this study. We then briefly introduce the context of local governments in China, followed by the presentation of data and methods used in this study. We report the empirical findings, and discuss theoretical and policy implications of our results.

Linking Performance Gaps to Organizational Changes: Theoretical Expectations

Organizational Aspirations and Performance Gaps

The premise that public organizations are rational, goal-oriented, and path-dependent stems from the behavioral model of public organizations and the theory of bounded rationality (Cyert and March 1992, Meier, Favero, and Zhu 2015). Based on their concerns about organizational performance, managers search and use performance information to make important decisions on budgetary allocation (Flink 2019), risk-taking and innovation (Hong 2019), and adjusting managerial strategies (Rutherford and

Zhu 2019). As such, decisions are often made as a function of performance gaps, namely the differences between an organization's actual performance and performance aspirations (Meier, Favero, and Zhu 2015). Theories of performance information and goal-setting suggest that managers typically use two types of aspirations (or reference points) in setting organizational goals (Greve 2003). Meier, Favero and Zhu (2015) theorize that two sources of information are often used to construct managers' prior expectations (i.e., aspirations) regarding the desired level of performance. First, the historical performance of the organization is relevant to future decision-making, particularly the performance of the latest period of time (e.g., the previous year). Although organizational circumstances change over time, organizations are most likely to learn from their past performance. Past performance is particularly relevant in organizational decision-making when organizations characterized by bureaucratized routines and inertia operate in a highly stable hierarchy (Meier, Favero, and Zhu 2015). If the organization has explicitly set formal goals, they are often used as historical aspirations.

Second, organizations use the performance of peer organizations in the same service or geographic area to make decisions. Organizations must compete with peers that share the same market niche or are similar in important attributes (e.g., mission, size, structure). These comparable organizations are industrial benchmarks and can be used to inform organizational change. Although an organization might differ from its peers in many aspects, taken together, they can generate useful information for decision-making (Meier, Favero, and Zhu 2015). For instance, the organization usually uses the average performance of comparable organizations as a proxy for social aspiration.

Organizational aspirations are formed by specific performance metrics, which differ between private and public organizations. For the private sector, profit and revenue are used as key performance indicators to set the bottom line. In the public sector, performance metrics are difficult to set due to goal ambiguity and multiplicity (Rainey and Jung 2015). For public organizations in specific service domains (e.g., schools, hospitals, police departments), performance measurement is usually conducted based on specific policy outcomes (e.g., exam score, death rate, crime rate). In contrast, performance metrics for the whole of government are not well established. A comprehensive performance index composed of several indicators is usually utilized. If there is a consensus on the key performance goals, then they are often prioritized.

Organizations use these historical and social aspirations to set organizational goals and make important changes (Shinkle 2012). These aspirations are compared with actual organizational performance, which generates either positive or negative performance gaps. We define performance gaps as actual performance minus organizational aspirations. As such, and a positive performance gap means an organization produces performance that is above its historical or social aspirations.

Conversely, if an organization's actual performance is below its historical or social aspirations, then the organization is with negative performance gaps (Greve 1998).

Organizational Responses to Performance Gaps

Performance gaps are informative feedback for shaping future organizational decision-making. Organizations learn from performance feedback, which helps to calibrate strategies and improve organizational performance (Greve 2003). Just like the dashboard to signal driving actions, performance gaps inform managers to change organizational priorities and strategies.

Organizational change is the deviation from the status quo and usually involves risk-taking, which means that organizations are reluctant to initiate strategic changes (Fernandez and Rainey 2006). Particularly for public organizations subject to political control and procedural constraints, organizational change is usually stifled. Public organizations are often stereotyped as bureaucracies resistant to changes and innovations, and only external shocks and organizational discontinuities can provoke major changes.

More recently, scholars have demonstrated that performance gaps may send strong signals that stimulate organizational change, even for large public sector organizations. Although the linkage between performance gaps and organizational change has been extensively examined in the private sector (Greve 1998; Baum et al. 2005; Labianca et al. 2009), the literature on the public sector is emerging (Meier, Favero, and Zhu 2015). Prior studies reveal that performance gaps elicit various forms of organizational change in the public sector, including universities (Rutherford and Meier 2015), hospitals (Salge 2011), local governments in different countries (Nielsen 2014; Ma 2016; Min and Oh 2020), and the U.S. federal agencies (Nicholson-Crotty, Nicholson-Crotty, and Fernandez 2017). A few of these empirical studies on performance gaps and organizational change also find that the relationship between performance gaps and organizational change is nonlinear and contingent on both the types and magnitude of aspirations (Meier, Favero, and Zhu 2015).

First, the link between performance gaps and organizational changes differs by the types of performance gaps. Organizations are more likely to initiate substantial changes when performance falls below aspirations, which means that past policies and practices are not successful in achieving performance targets, and organizations may fail without concrete changes. In other words, when organizations are searching for solutions to problems and failures, they are more likely to take the stock of innovation and initiate substantial organizational change. In contrast, the imperative to change is not equivalently high when performance exceeds aspirations, because the organization can still reap benefits from its past successful routines. However, organizational success may also trigger organizational change, since they give resource redundancy, slack, and extra room to try something

new to the organization, which are crucial for its long-term survival. The idea that organizations respond to positive and negative performance gaps (i.e., success and failure, respectively) differently is well-grounded in the prospect theory that decision-makers' responses to negative and positive signals (e.g., losses and returns) are differentiated, and negative signals outperform positive ones in stimulating risk-taking (Kahneman and Tversky 1979).

The "negativity bias" is relevant in examining the differentiating effects of negative and positive performance gaps on organizational change, and we expect negative performance gaps (when performance falls short of the target) to trigger more substantial changes. Some recent empirical studies from both the Western and the Chinese contexts confirm this expectation. For example, Chen (2022, 2024) studies the performance-accountability system in environmental protection, finding that negative performance feedback motivates public organizations' tendency for data manipulation to avoid blame, while positive performance feedback is not associated with such organizational cheating behavior. Similarly, Yu and Chen (2025) explore how performance feedback shapes managerial turnover in Texas public school districts. They find that only negative performance feedback (i.e., receiving a lower performance rating) increases superintendents' turnover.

Second, as both positive and negative performance gaps could trigger organizational change, the magnitude of performance gaps determines when and how organizations are seeking changes. Recent empirical studies on performance gaps and organizational behavior suggest that not all variations in performance gaps will have immediate effects on organizational behavior. Small deviations from performance targets are not sufficient to spur shifts in organizational priorities and changes in management decisions. As such, organizations and/or their managers will stay in the "zone of indifference". Compared with the "zone of indifference" in which organizational performance is around the threshold of performance aspirations, a large performance gap is more likely to trigger organizational change (Meier, Favero, and Zhu 2015).

The underlying behavioral mechanism for expecting an asymmetric and non-linear relationship between performance gaps and change is relative risk aversion. Performance gaps signal the deviation from performance goals and produce feedback that could lead to changes in the status quo, and decisions that spur organizational changes are often deemed as risky and/or uncertain choices (Deslatte et al. 2021; Nicholson-Crotty et al. 2016). The magnitude of performance gaps thus determines when public managers are willing to endorse organizational changes. When their organizations are just near meeting the performance goals, relative risk aversion will lead the status quo to prevail. As the size of performance gaps increases, the probability of organizational change increases exponentially.

Because we focus on two types of performance gaps, namely organizational performance in comparison with historical and social aspirations, we derive the following two hypotheses for the subsequent empirical analysis. The two hypotheses posit that the relationships between performance gaps and organizational change are non-monotonic, which are different below and above the threshold where performance gaps are zero (Greve 1998). Specifically, we posit an inverted-U relationship between performance gaps and organizational change. When the performance gap measure takes negative values (i.e., performance shortfalls compared with the historical and social reference point), organizational changes are likely to be initiated as responses to failures in achieving performance goals. The positive effect diminishes as the size of performance gaps decreases. When the performance gap measure takes positive values (performance exceeding historical and social reference points), organizations are more likely to be satisfied with the status quo, thus, less likely to initiate changes.

Hypothesis 1: Historical performance gap is first positively related to organizational change when it is low (negative); after a certain threshold, the relationship turns negative.

Hypothesis 2: Social performance gap is firstly positively related to organizational change when it is low (negative); after a certain threshold, the relationship turns negative.

Empirical Context: Local Governments and Economic Development in China

While the above hypotheses can be tested in various contexts, we use the case of Chinese local governments in this study for three reasons. First, local governments in China are responsible for implementing various important policies, and they are keen in achieving policy targets to avoid blame and to earn credits (Ma 2016). The changing dynamics of local governments in China thus give an ideal context forr examining the effects of performance gaps on organizational change.

Second, the existing literature about performance gaps and organizational change is predominantly documented in private and/or public sectors in Western countries, but our understanding is largely limited in other country contexts. Given the crucial impacts of managerial context on organizational strategies and performance (O'Toole and Meier 2015), it is intriguing to test these hypotheses in a different country context.

Third, the emerging empirical literature on performance gaps and organizational decisions largely focuses on service organizations or public agencies that enjoy a great deal of bureaucratic discretion in decision-making. In American universities, hospitals, and federal agencies, decisions are often made by career civil servants who do not face pressures from term limits. The Chinese local governments, however,

provide a novel context, whereby there is a high-stake performance appraisal system coupled with a short bureaucratic tenure in office (Rothstein 2014). Hence, it is more likely to observe short-term organizational changes as responses to different performance gaps.

High-Stake Performance Management in Chinese Local Governments

China is governed by a unitary system, with only one ruling party (Chinese Communist Party, CCP) and five tiers of governments, including the central government (State Council) and four local layers (province, prefecture[1], county, and township). The party committee parallels the government at each level, with the former having the last word in decision-making. The People's Congress at each level is the legislative institution and composed of elected deputies, but its role in electing government leaders is rather symbolic. The party committee appoints party secretaries and government heads of the jurisdictions one level below, and they are under formal performance appraisal and procedural scrutiny. Despite the term of office being five years for party and state cadres and maximum two terms according to the state and party constitutions, in practice, most leave their positions after less than five years.

Cadre promotion is largely merit-based and performance-oriented, although political patronage, nepotism, and factionalism are often seen in the practice of political appointments and promotions. The performance metrics of local government are comprehensive, covering economic, social, and environmental aspects (Gao 2010). Among them, economic growth (e.g., annual GDP growth rate) is the top priority (Chen et al. 2017), and can be used as the key performance goal of local governments (Ma 2016). Local governments compete fiercely with each other to attract foreign direct investments, upgrade industries, and boost economic growth, which help to earn career opportunities for local officials (Su et al. 2012). The short time horizon and age restrictions over cadre promotion incentivize local officials to progress quickly. Otherwise, they will be left behind with thin career opportunities (Kou and Tsai 2014). As such, performance appraisal becomes high-stake practices in Chinese local governments. Feedback from performance gaps is often associated with immediate changes in decisions, because local government officials are incentivized to solve the problem and/or to maintain their competitive advantages in a short run.

Chinese local governments, as those in many other countries, are general-purpose governments characterized by the developmental state, managing a wide range of functions that relate to policymaking and public goods provision. Despite China adopts the unitary and centralized government system, in reality, it is often described as "fragmented authoritarianism" (Lieber-

1 There are 15 cities (e.g., Xiamen) directly under the control of the State Council and enjoy sub-provincial authority.

thal 2004). Chinese local governments are highly decentralized to measure and improve economic performance, and they have strong autonomy and discretion to leverage strategies and policy instruments to initiate organizational changes. Although performance indicators for Chinese local governments are abundant (Zuo 2015), performance in economic development is the most important indicator (Ma 2016). Given the hierarchical structure of the personnel management institution, which means only a few candidates can be cherry-picked to higher levels, local governments compete with peers at the same level in the same jurisdiction (e.g., prefecture-level and above cities in the same province) (Ang 2017).

It is economic growth relative to sister cities that matters in performance evaluation and cadre promotion of mayors and party secretaries, which suggests that local officials are very concerned about social performance gap (Chen et al. 2017). Local governments with more competitors in a jurisdiction are thus more strongly incentivized to climb the ladder of career advancement. A recent study shows that spatial competition among local governments is primarily driven by strategic interactions among cities within the same province instead of geographic proximity (Yu, Zhou, and Zhu 2016). In other words, the number of prefecture-level and above cities in a province can be used as a proxy of inter-jurisdictional competition (Lü and Landry 2014). Local officials also pay attention to relative performance to their predecessors, which are a more comparable benchmark to gauge their competence (Li and Zhou 2005). In that case, historical performance gap also matters.

Budgeting for Career Incentives

Local governments are impelled to glean fiscal revenues to energize economic growth, particularly to attract fiscal transfer from the central government (Su et al. 2012). The lion's share of fiscal resources for local governments is primarily acquired from land revenues through selling state-owned land and soaring real estate prices (Chen and Kung 2016). Fiscal resources are usually expended in fixed-asset investments to upgrade industrial and urban infrastructures, which are eye-catching and help to boost economic growth (Chen and Kung 2016). Given soft constraints and negligent discipline of public budgeting, local governments often arbitrarily manipulate fiscal expenditures to align them with career concerns (Wang 2017). For instance, county party secretaries and government heads are more inclined to increase fiscal expenditures "at crucial points during their tenure to improve the prospect of political advancement," i.e., in the third and fourth years in office (Guo 2009, 630).

Since fiscal resources are strategically important for local economic growth and cadre career advancement, it is reasonable to examine whether and how performance gaps affect the change of fiscal expenditures. Specifically we focus on two aspects of budgetary change, budgetary spending growth and the change of public education spending (see our Online Appendix). The growth of budgetary expenditure helps to boost

economic growth, but it may also cumulate mountainous debts and give rise to financial risks. Local governments may only risk growing budgetary spending when they experience negative performance gaps. Governments may also increase budgetary expenditure once they achieve historical aspirations or outperform competitors.

Public education is a long-term investment in human capital, and the benefits to economic growth is promising albeit not immediate. Myopic leaders thirsty for short-term economic growth are reluctant to devote their scarce revenue to public education, which makes it largely underinvested (Lin 2013). The central government of China pledged to increase its budget on compulsory education to account for 4 percent of national GDP in 1993, an international standard adopted by many countries, but it was not until nearly 20 years later (in 2012), that the target was met.[2] Still, several local governments have been lagging behind in securing education expenditure, despite it being a national legislative mandate.

Compulsory education accounts for a large proportion of government spending, and it is particularly challenging for local governments under budgetary austerity to meet the mandatory target of financing education. In our sample of prefecture-level and above cities, for instance, the median public education spending as a share of budgetary expenditure is about 18 percent, suggesting nearly one-fifth of public money is dedicated to this policy task. Whenever local governments are delegated with fiscal decentralization, however, they are inclined to spend less on public education (Wang, Zheng, and Zhao 2012). Given the conflicting incentives of government expenditure on public education, we expect performance gaps will be related to the increment of education share in total spending in the same way of budgetary expenditure growth.

Research Design

Panel Data on Chinese Local Governments

We apply a panel data design by pooling data on 287 prefecture-level and above Chinese cities from 2010 to 2016 (except for four municipalities at the provincial level, e.g., Beijing). Drawing from multiple archival sources (e.g., annual reports of local governments, the Chinese Statistical Yearbooks, and resumes of municipal party secretaries and mayors, etc.), this novel panel dataset offers the possibility to examine how performance gaps at a given time shape local governments' change-related budgetary decisions in subsequent periods.

Measuring Performance Gaps Based on Economic Development

We focus on the annual GDP growth rate as the key performance goal of local governments, which is used to develop historical and social aspirations

2 China to spend 4% of GDP on education. *China Daily*, October 4, 2012, http://www.chinadaily.com.cn/business/2012-10/04/content_15796868.htm.

and performance gaps. We use the performance goal of the past year as our proxy of historical aspiration, which is subtracted from the actual economic growth rate of the past year to form the historical performance gap. Because Chinese local governments explicitly set their goals for economic development, and we can observe the actual economic growth rate for a year, our empirical contexts make it possible to accurately measure the size of performance gaps based on historical aspiration. We operationalize performance gaps by subtracting the aspiration level from a city's actual performance based on the economic growth rate.

Performance Gap = Actual Performance- Performance Aspiration Level (1)

For example, the city of Zhuhai in Guangdong province set its goal in economic development at a growth rate of 9 percent in the year 2013. In that year, Zhuhai City achieved the actual growth rate of 10.55 percent, resulting in a historical performance gap of 1.55 percent (10.55-9). When setting explicit goals in economic development, some Chinese cities have specified a range of economic growth rate, instead of targeting a specific number. For example, Dalian, a city in the Liaoning Province, specified a GDP growth rate of 6.5-7 percent as its goal in 2016. In such cases, we use the mean of the lower and upper bounds, herein the case of Dalian, 6.75 percent, as the aspiration level. Based on our operationalization, a positive measurement score refers to the scenario whereby a city achieved its performance goal set in the previous year, while a negative measurement score refers to the scenario whereby a city failed to achieve a better GDP growth rate compared with the previous year.

Since prefecture-level and above cities mainly compete with other equivalent cities in the same province, we use the average economic growth rate within each province to gauge social aspiration, which is used to calculate social performance gap. For instance, the mayors of Luoyang, Shangqiu, and Xuchang in Henan province did not set specific goals, but instead aimed to be above the provincial average level of GDP growth by one to two percentages in 2011. Again in the case of Zhuhai city, the average economic growth rate of the other 20 cities in Guangdong province is 10.73 percent, and its social performance gap is -0.18 percent (10.55-10.73). In other words, Zhuhai city had a below-average performance in 2011 based on how it compared with its peer cities within the same province.

The data on performance goals are from the government work reports delivered by mayors to the municipal People's Congress, while the data on actual economic growth rates are from the China City Statistical Yearbooks in the accompanying years. To compare the differentiating effects of positive and negative performance gaps, we also develop two spline functions to code the variables (Greve 1998). A positive performance gap is coded as its actual value when it is above zero, while it equals

to zero when it is zero or below zero. By the same token, a negative performance gap equals to its actual value when it is below zero, but it is coded as zero when it is zero or above zero.

Measuring Budgetary Change

We use the annual growth rate of budgetary expenditure to measure changes in local governments' important fiscal decisions. Government budget is usually approved by the municipal People's Congress during its annual convention, in which the annual government report, including performance goals to be achieved, is also presented by the mayor. It is calculated by budgetary expenditure of one year (t) minus that of the previous year (t-1), which is then divided by budgetary expenditure of the previous year (t-1). The data are from the *China City Statistical Yearbooks* in the accompanying years. In all the subsequent empirical models, we also take a log transformation of the annual percent change in budgetary expenditure, as such, our empirical models focus on city-year observations with only spending increase, and we excluded a few cases (less than 5 percent of the sample), whereby cities exercised budget cuts.[3] The resulting dependent variable ranges from -0.5097 to 6.093. The negative values correspond with small expenditure growth, while the positive values refer to more substantial expenditure growth.

Control Variables

We control for variables that may affect the annual change of budgetary expenditure. First, government spending is usually in line with changes in revenue capacity, and we control for an annual growth rate of budgetary revenue. Second, we control for mayor tenure in office, as existing studies suggest that local political turnover affects both economic growth and budgetary decisions (Wu et al. 2020). In our empirical models, we include the time in office of mayors and its squared term, since it is found to affect government expenditure in a nonlinear way (Guo 2009). Both party secretaries and mayors are municipal leaders, but mayors are in charge of economic growth and set government targets. We also include inter-jurisdictional competition in the model since it may trigger stronger competition among prefecture-level and above cities in the same province. We follow the literature to use the total number of prefecture-level and above cities in a province to measure inter-jurisdictional competition (Lü and Landry 2014).

Model Specification

Our dataset is a panel dataset that contains large cross-sectional units (N) and a relatively short time span (T). Our intention is to explain the annual change of budgetary expenditure, and we are primarily interested in within-city variation instead of cross-city variation.

3 During the period of our study, the majority of Chinese cities increased budgetary expenditures due to the common trend of rapid economic growth. By doing so, we narrowed the variance of the dependent variable and thus underestimated its relationship with our independent variables. As a robustness check, we included the cities that exercised budget cuts, and the results are comparable to draw the same conclusion.

Given this substantive consideration, we specify panel data models including city-level fixed effects (Zhu 2013).[4] Fixed-effects models help to take into account unobservable confounding factors at the city level that might affect both economic growth and budget changes. For example, beyond managing goals defined based on economic development, Chinese cities engage in inter-jurisdiction competition among other performance dimensions, such as health, education, and environmental governance (Chen and Jia 2021). Unobserved heterogeneity due to these aspects is absorbed by city-fixed effects. Time-invariant city characteristics such as the administrative rank of cities (e.g., sub-provincial, the provincial capital, and prefecture-level) are also absorbed by city-fixed effect. To account for cross-city heterogeneity, we include heteroskedastic panel-corrected standard error, using cities as the panel units. To further consider the dynamic nature of budget data, which are often described as a strongly autoregressive (inertial) process (DeBoef and Granato 1997; Robinson, Flink, and King 2014), we add a first-order serial correlation parameter (AR1) in our panel model specification.[5]

As a robustness check, we estimate two additional models by dropping the AR1 specification and adding a lagged dependent variable.[6] The substantive results regarding both historical and social performance gaps largely hold, and the regression coefficients are relatively smaller than expected. Given that our data contain large *N* and small *T*, the model specification with city-level fixed effects and a lagged dependent variable is not ideal. Despite these limitations, our results are somewhat robust, even controlling for the lagged dependent variable.

Because the hypothesis we developed requires nonlinear specifications, we estimate panel regression models by a few steps. The first set of models includes only linear terms of the two performance gaps to show some baseline relationships between performance gaps at time *t* and local governments' changing budget allocation in the subsequent time periods. We then add a squared term of the two performance gaps measures to verify if there is an inverted U-shaped relationship between performance gaps and budgetary change. As a robustness check, we estimate an alternative set of panel models using a spline function.

Findings

Performance Gaps and Changes in Total Budgetary Expenditures

Table 1 reports the descriptive statistics of key variables included in the empirical analysis. As

4 Hausman Test suggests that the difference in regression coefficients between fixed and random effects models is systematic, and we need to include city fixed effects in the model specification.

5 The panel unit-root test rejects the null hypothesis of a panel unit root and our dependent variable is panel stationary. We use heteroskedastic panel corrected standard errors with an AR1 term in model estimates.

6 The model estimates are cut to save space but are upon request from the authors.

shown in Table 1, the Chinese cities included in this study vary substantially in terms of performance gaps in economic development (historical and social gaps) and changes in their budgetary expenditures. Based on our sample, we observe that Chinese cities experienced substantially different levels of economic development between 2010 and 2016. The best-performing city had enjoyed an annual growth rate of 13 percent in its GDP, while the lowest-performing city experienced a decrease in GDP by more than 40 percent. Based on the peer-comparison (i.e., social performance aspiration), the largest positive performance gap is roughly 21, while the largest negative performance gap is roughly -26. Turning to log budgetary expenditure changes, we observe that the total city budgetary expenditure changes range from -5.097 to 6.093. For both dependent variables, negative values refer to small expenditure increases, while positive values correspond to more substantial increases in budgetary expenditure.

Table 1. The Descriptive Statistics of Variables

Variable	*N*	Mean	SD	Min	Max
Expenditure growth (log)	1,352	2.669	0.737	-5.097	6.093
Historical Performance Gap (PG)	1,348	-0.860	3.499	-40.95	13
Historical PG (squared)	1,348	12.977	57.465	0	1676.903
Historical PG (negative)	1,348	-1.585	2.800	-40.95	0
Historical PG (positive)	1,348	0.725	1.451	0	13
Social Performance Gap	1,410	0.000	2.666	-26.429	21.066
Social PG (squared)	1,410	7.105	34.008	0	698.497
Social PG (negative)	1,410	-0.777	1.868	-26.429	0
Social PG (positive)	1,410	0.777	1.554	0	21.066
Tenure	1,415	2.700	1.628	1	12
Tenure (squared)	1,415	9.938	12.364	1	144
Competition	1,414	13.124	4.121	1	21
Revenue growth (log)	1,315	2.744	0.833	-3.471	5.167

As posited in the hypotheses, we expect that historical and social performance gaps affect organizational change with different magnitude; and there are nonlinear relationships between the two performance gaps and organizational changes. We first included square terms of performance gap measures in the models. We then use spline function, as an alternative model specification, to examine the different effects of negative and positive performance gaps on budgetary change. Both specifications generate similar substantive conclusions.

Table 2. Performance Gaps and Logged Budgetary Expenditure Growth: Fixed-effects Panel Data Model Estimates

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Historical PG	0.039***		0.053***			
	(0.008)		(0.009)			
Historical PG	-0.002		-0.0001			
(squared)	(0.001)		(0.001)			
Social PG		-0.018*	-0.048***			
		(0.010)	(0.012)			
Social PG		-0.008***	-0.007***			
(squared)		(0.002)	(0.002)			
Historical PG				0.052***		0.050***
(negative)				(0.012)		(0.013)
Historical PG				0.028*		0.057***
(positive)				(0.015)		(0.015)
Social PG					0.052***	0.009
(negative)					(0.017)	(0.019)
Social PG					0.081***	-0.104***
(positive)					(0.017)	(0.018)
Tenure	0.057*	0.084***	0.044	0.058*	0.084***	0.045
	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.031)
Tenure	-0.003	-0.007	-0.001	-0.003	-0.07*	-0.002
(squared)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Competition	0.170**	0.169*	0.177**	0.171**	0.171*	0.178**
	(0.083)	(0.088)	(0.086)	(0.083)	(0.088)	(0.086)
Revenue	0.406***	0.448***	0.387***	0.406***	0.446***	0.385***
growth (log)	(0.030)	(0.026)	(0.030)	(0.030)	(0.026)	(0.031)
Constant	-0.319	-0.461	-0.277	-0.324	-0.422	-0.241
	(0.919)	(0.965)	(0.950)	(0.919)	(0.970)	(0.944)
N	1224	1271	1218	1224	1271	1218
R^2	0.451	0.405	0.479	0.451	0.400	0.476

Notes:

1. The dependent variable is logged budgetary expenditure growth. Heteroskedastic panels corrected standard errors are in parentheses.

2. Significance levels: * p<0.10, ** p<0.05, *** p<0.01.

As shown in Table 2, the coefficients for the square terms of the historical performance gap measure are statistically insignificant in Models 1 and 3. Thus, we do not observe a nonlinear relationship between the historical performance gap and changes in total budgetary expenditures. The coefficients for the linear terms, however, are positive and statistically significant, suggesting a larger historical performance gap (i.e., decreases in GPD growth from last year) is associated with a higher growth rate of budgetary expenditure. Nevertheless, the results in Models 2 and 3 show that both the linear and squared terms of the social performance gap measure are statistically significant, meaning that there is an asymmetric inverted U-shaped relationship between social performance gaps and annual changes in total budgetary decisions. We find partial support to H1.

We further qualify the main findings in Table 2-Model 3 by considering the possibility that there might be an endogenous relationship between performance gaps and budgetary changes in Chinese cities. We re-estimate Table 2-Model 3 using the two-step Generalized Method of Moments (GMM) and report this robustness check in the Appendix. Specifically, we use the Arellano–Bond linear dynamic panel-data model, which is a panel data econometric model suitable for panel data with large N (i.e., a large number of spatial units) and small T (i.e., a short time period). Although it is not a panacea to the endogeneity issues, especially endogeneity due to omitted confounding factors, the GMM approach allows us to model performance gap variables as endogenous regressors by leveraging lagged variables as instruments and including a lagged dependent variable.

As Table A1 shows, the GMM specification produces coefficient signs consistent with those reported in Table 2-Model 3 (fixed effects panel regression). While specifying performance gaps as endogenous regressors produces greater coefficient values than those in Table 2- Model 3, we still reach the same substantive conclusions regarding how performance gaps are linked to budgetary changes.

Furthermore, we use a spline function to compare the differential effects of positive and negative performance gaps, and the results are reported in Models 4-6. Both the negative and positive historical performance gaps are positively related to budgetary spending change, and the results are substantially consistent with the linear relationships reported in Models 1 and 3. We find that a negative social performance gap is positively related to fiscal expenditure growth, while a positive social performance gap is negatively related to budgetary spending change. In other words, the social performance gap is nonlinearly associated with organizational change.

Figure 1 visualizes the relationship between the historical performance gap and changes in total budgetary expenditures. In Figure 1, we predict log annual changes in budgetary expenditures across the full of the historical performance gap measure, holding all other control variables constant. Us-

ing the reference point when the performance gap is zero, we observe that positive and negative historical performance gaps are associated with logged budgetary changes in a linear way. In other words, the effects of historical performance gaps do not split between positive and negative gap values. Furthermore, looking at the substantive effects of historical performance gaps, we find that Chinese cities are more likely to undertake large increases in their total budgetary expenditures when economic development exceeds the goal (i.e., the previous year's growth rate). Conversely, we observe incremental increases in total budgetary expenditures among those that experienced economic slow-down. In other words, we find that positive historical gaps reinforce budgetary expenditures. The results imply that local governments in China are likely to initiate more substantial expenditure growth when they out-

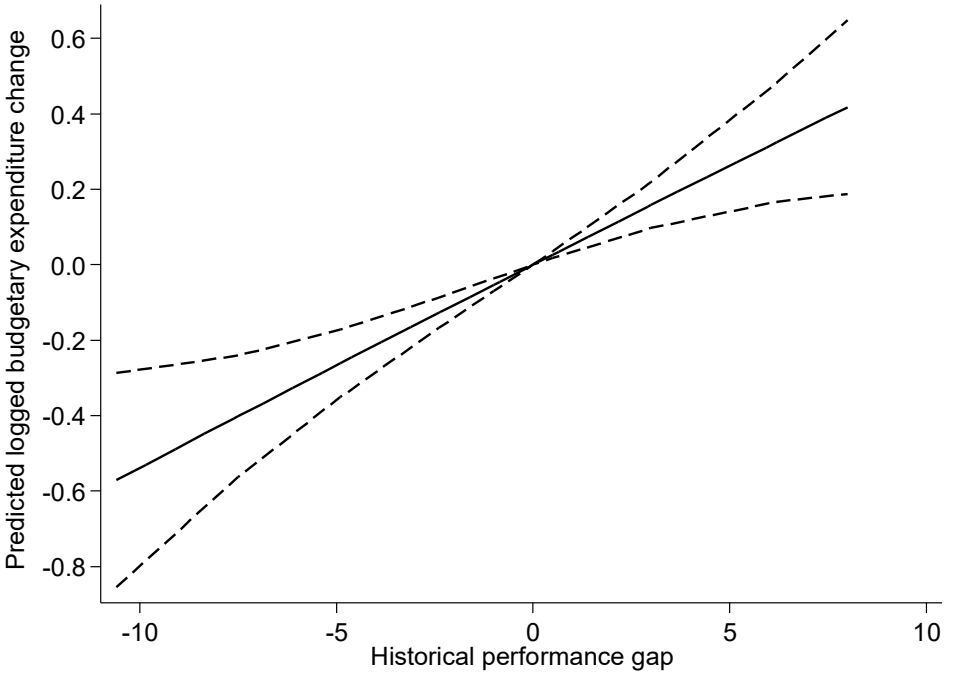

Figure 1. The Relationship Between Historical Performance Gap and Logged Budgetary Expenditure Growth

Notes:

1. The dependent variable is measured as logged budgetary expenditure growth, whereby negative values refer to incremental budgetary increases, and positive values refer to large expenditure growth.

2. The solid line refers to the mean predicted logged budgetary expenditure growth. The reference value is when historical performance gap is zero. The dashed lines refer to the lower and upper bounds of the 95% confidence intervals.

3. The estimates are based on Model 3 in Table 2, and the results are similar if we use Model 6.

perform their economic development goals than when they underperform compared with the historical aspiration. Our empirical results support the slack proposition of organizational change. In other words, a positive performance gap generates abundant room for more substantial organizational changes.

In Figure 2, we visualize the relationship between social performance gaps and logged changes in local budgetary expenditures. Figure 2 shows an asymmetric inverted U-shaped relationship between social performance gaps and total budgetary changes. We add the scatter plots in Figures A1 and A2, showing the bivariate correlations between logged growth in total spending and the two performance gap measures. These figures show that our models do not capture a linear relationship between spending change and performance gaps, and instead, they support our nonlinear hypotheses.

The asymmetric inverted U-shaped relationship suggests that Chinese local governments are most likely to have small increases in total budgetary expenditures when the social performance gap is near zero, which means they would take "satisfying" strategies when they have about average economic growth rate, compared with their sister cities within the same province. The predicted logged budget changes are near zero when the social performance gap is either negative or positive, suggesting they would be less likely to substantially increase total expenditures if the economic growth rate is too low or too high. This finding suggests that when considering peer competition, local governments are quite risk-averse in initiating big budgetary changes.

Turning to the control variables, the results are mixed. We find that tenure in office of mayors is positively related to fiscal spending change, while the nonlinear relationship is not supported in most models (except for Model 5). The results are somewhat different from prior studies of counties in China (Guo 2009), which can in part be attributed to different loci of attention and discretion between prefecture- and county-level officials. In line with our expectation, inter-jurisdictional competition is positively associated with the growth of fiscal spending, suggesting local officials are keen in growing fiscal expenditures in a circumstance with fiercer peer competition. The results confirm that the growth of budgetary revenue is positively related to expenditure growth. In Table A2, we include two models by adding the total population as the control variable, which produces consistent findings to what we report in the main models.

Concluding Discussions

While public management scholars have recently begun to explore how performance gaps shape managerial decisions, little is known regarding the relative importance of different types of performance gaps. In this paper, we develop a theoretical framework and specific hypotheses to explain the nonlinear relationships between historical and social performance gaps and or-

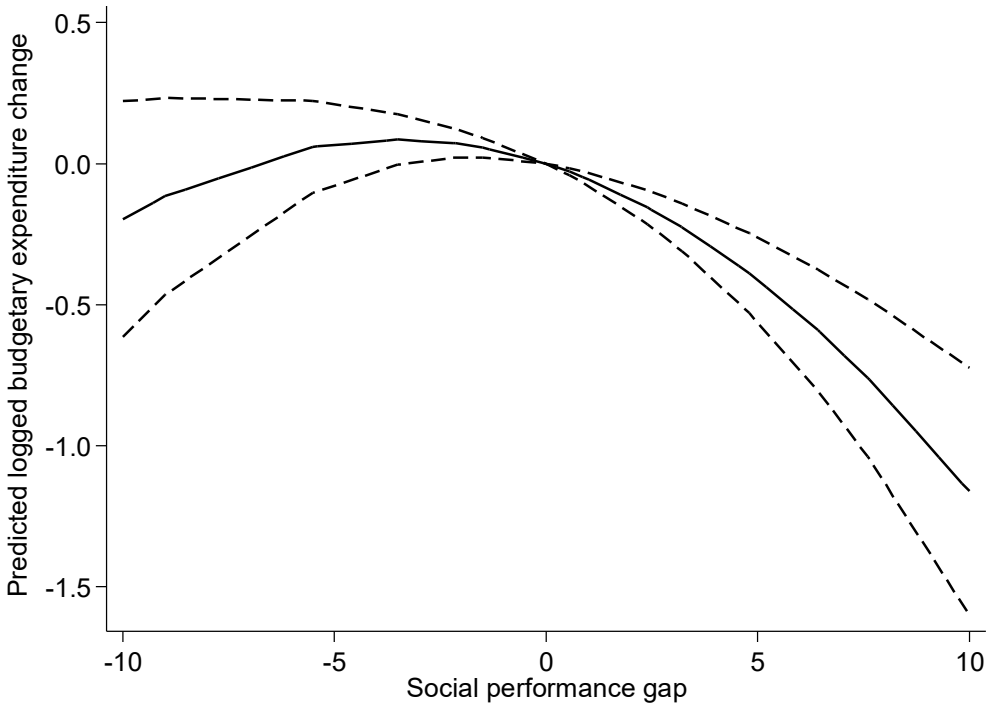

Figure 2. The Nonlinear Relationship Between Social Performance Gap and Logged Budgetary Expenditure Change

Notes:

1. The dependent variable is measured as logged budgetary expenditure growth, whereby negative values refer to incremental budgetary increases, and positive values refer to large expenditure growth.

2. The reference value is when the social performance gap is zero. The dashed lines refer to the lower and upper bounds of 95% confidence intervals.

3. The estimates are based on Model 3 in Table 2, and the results are similar if we use Model 6.

ganizational change. We contend that both social and historical performance gaps will affect organizational change, and the effects of these two types of performance gaps are different. We use the empirical context of Chinese local governments and performance in economic development to empirically test the hypotheses. We find evidence for the differential effects of negative and positive performance gaps, which echoes recent findings from other country contexts such as Nielsen's (2014) study based on Danish schools and the study on American federal agencies by Nicholson-Crotty et al. (2016). Nevertheless, our findings differ from the two aforementioned empirical studies in that we find support to both the slack argument and the crisis hypothesis of organizational change. Chinese municipalities that exceeded performance goals in local economic development are more likely to increase budgets in the sub-

sequent year. Cities that experienced performance shortfalls are less likely to increase budgetary expenditures. Our findings complement the existing literature that reports evidence for the crisis hypothesis (i.e., failures in achieving performance goals would trigger more salient organizational changes) (Chen 2022, 2024; Yu and Chen 2025). As most of the existing empirical studies focus on managerial (individual) decision-making, we add to the literature by showing the differential effects of negative and positive performance gaps on important collective decisions, such as budgetary decisions.

Our study also adds to the emerging empirical literature on performance gaps and organizational change by showing how historical and social performance gaps shape organizational change in different ways (Hong 2019; Wei et al. 2021). We find that historical performance gap based on economic development is positively associated with budgetary changes in a linear way, but the relationship of social performance gap and organizational change takes an inverted U-shape. We measure historical performance gap as the difference between actual performance and prior goal. We observe that local governments succeeding in hitting the performance target are more confident in their capabilities to sustain the momentum, which boosts organizational change. In contrast, governments missing the target may rethink the appropriateness of their prior fiscal decisions, thus exercising some budget cuts. Such organizational changes are consistent with existing studies that report changing goal-setting behavior as responses to negative performance gaps in the context of Chinese local governments. For example, Ma (2016) finds that Chinese provinces failing to achieve economic development goals are most likely to lower the performance target for the future. Such adjustment of performance goals is often coupled with more conservative fiscal decisions in the subsequent year.

Meanwhile, we find that Chinese local governments change their budgetary expenditures differently as responses to social performance gaps. China has a top-down performance evaluation and personnel appointment system in which local officials' performance is usually compared with peers' (Yu, Zhou, and Zhu 2016). As such, social performance gaps have salient effects on local officials' career prospects. Peers' performance is a benchmark or yardstick by which local officials' performance is evaluated. Once local governments outperform peers with the lion's share of premium standing, they are reluctant to change their successful strategies. We find that cities exceeding the average peer growth rate even cut their budget. In contrast, for governments lagging behind peers with a large disparity, it is usually unrealistic to catch up in a short period, and they thus give up on initiating organizational change.

Our study adds to the literature on performance-based budgeting with insights into how different performance feedback shapes local governments' budgetary changes. It is a fruitful way

to integrate theories of performance gaps and decision making into the study on local governments' fiscal decisions. In this regard, our study bridges the two literatures.

This study is limited in several aspects, and we call for future studies to replicate and extend our findings. First, Chinese cities are situated in substantially different political and managerial contexts from cities in many Western countries. While Chinese cities are similar to general-purpose local governments that handle multiple policy-making and public service functions, economic development is deemed as the most important priority across the nation. China also has a top-down high-stake performance appraisal regime, whereby local government officials' career (promotion) prospects are directly tied to their performance in the economic realm. City managers in other countries (e.g., the U.S.) might be elected officials who are accountable for more heterogeneous preferences and interests of local constituents. Because of the salience of economic development indicators and the high-stake performance appraisal system in Chinese, we are able to observe salient short-term (annual) budgetary changes corresponding to gaps in economic performance. It is possible that in more decentralized political and managerial contexts, the relationships between gaps in economic performance and budgetary changes might differ. For instance, budgetary changes might become more incremental in a decentralized system. With these considerations, the findings reported in this study should not be over-generalized. While the GDP growth rate is the most salient performance indicator used in the Chinese performance appraisal system, city governments do not just compete in economic development. The theoretical framework and empirical design of our study can be generalizable to further explore how local governments might respond to performance gaps based on other performance indicators (e.g., education, service provision, environmental indicators, etc.) by changing the budgetary spending.

Our empirical analysis is limited to how performance gaps affect changes in local governments' total budgetary spending. We do not further consider shifts in budgetary/spending priorities and potential tradeoffs between different spending areas. It is conceivable that, in stimulating economic growth, governments could also reprioritize their budgetary spending, such as cutting spending in human service areas (e.g., education and health care) while increasing spending in infrastructure investment and science and technology innovation. A natural extension to our study would be to examine if local governments change their spending priorities as responses to performance feedback, especially negative one.

Furthermore, we focused on how local governments might adjust their annual budgetary expenditures as responses to historical and social performance gaps. Although fiscal decisions constitute a critical decision aspect of local governments, these are merely the starting points to explore how local

governments may react to performance shortfalls and surpluses. Organizational change is a multi-faceted concept that can be measured and studied based on different empirical indicators. A natural extension to our study could be to examine other types of organizational changes that do not directly relate to budgetary changes. For example, there could be government reorganizations, new policies that support technology innovation, and policy changes that support foreign trade and foreign direct investment. These policy shifts might also be used as local governments' strategies to boost economic development. Moreover, Despite economic growth is the predominant performance target at the local level, government officials have to fulfill other task imperatives equivalently, if not more important (Ang 2017). Environmental protection, for instance, has been increasingly prioritized in the government agenda in recent years due to exacerbating air and water pollution (Huang 2024). It is thus meaningful to examine performance gaps in a multitasking circumstance and include other performance metrics. Lastly, we call for future research incorporating other important theories (e.g., goal setting, resource dependency) to deepen our understanding of performance feedback and organizational change.

References

Ang, Yuen Yuen. 2017. *How China Escaped the Poverty Trap*. Ithaca, NY: Cornell University Press.

Baum, Joel A. C., Timothy J. Rowley, Andrew V. Shipilov, and You-Ta Chuang. 2005. "Dancing with Strangers: Aspiration Performance and the Search for Underwriting Syndicate Partners." *Administrative Science Quarterly* 50(4): 536-75.

Chen, Jie, Danglun Luo, Guoman She, and Qianwei Ying. 2017. "Incentive or Selection? A New Investigation of Local Leaders' Political Turnover in China." *Social Science Quarterly,* 98(1): 341-59.

Chen, Shaowei, 2022. "Performance Feedback, Blame Avoidence, and Data Manipulation in the Public Sector: Evidence from China's Official City Air Quality Ranking." Public Management Review, 26(7): 1871-91.

Chen, Shaowei 2024. "Enhancing or Attenuating? How Patronage Ties Moderate the Impact of Performance Feedback on Performance Improvement in the Public Sector." *Public Management Review*. Online First.

Chen, Shaowei, and Kai Jia. 2023. "How Local Governments Prioritize Multiple

Conflicting Goals: Beyond the Sole-Goal Perspective." *Public Administration,* 101(2):522-38.

Chen, Ting, and James Kai-sing Kung. 2016. "Do Land Revenue Windfalls Create a Political Resource Curse? Evidence from China." *Journal of Development Economics,* 123(1): 86-106.

Cyert, Richard M., and James G. March. 1992. *A Behavioral Theory of the Firm*. 2nd ed. Cambridge, MA: Blackwell Business.

DeBoef, Suzanna, and Jim Granato. 1997. "Near-Integrated Data and the Analysis of Political Relationships." *American Journal of Political Science,* 41(2): 619-40.

Fernandez, Sergio, and Hal G. Rainey. 2006. "Managing Successful Organizational Change in the Public Sector." *Public Administration Review,* 66(2): 168-76.

Flink, Carla M. 2019. "Predicting Budgetary Change: The Effect of Performance Gaps." *Journal of Public Administration Research and Theory*, 29(2):227-37

Gao, Jie. 2010. "Hitting the Target but Missing the Point: The Rise of Non-Mission-Based Targets in Performance Measurement of Chinese Local Governments." *Administration Society,* 42(1 suppl): 56S-76S.

Greve, Henrich R. 1998. "Performance, Aspirations, and Risky Organizational Change." *Administrative Science Quarterly*, 43(1): 58-86.

———. 2003. *Organizational Learning from Performance Feedback: A Behavioral Perspective on Innovation and Change*. Cambridge, UK: Cambridge University Press.

Guo, Gang. 2009. "China's Local Political Budget Cycles." *American Journal of Political Science,* 53(3): 621-32.

Hong, Sounman. 2019. "A Behavioral Model of Public Organizations: Bounded Rationality, Performance Feedback, and Negativity Bias." *Journal of Public Administration Research and Theory,* 29(1): 1-17.

Hong, Sounman. 2020. "Performance Management Mets Red Tap: Bounded Rationality, Negativity Bias, and Resource Dependentce." *Public Administration Review,* 80(6): 932–45.

Hong, Sounman, Sun Hyoung Kim, Jieun Son. 2020. "Bounded Rationality, Blame Avoidence, and Political Accountability: How Performance Information Influ-

ences Managerial Quality." *Public Management Review*, 22(8): 1240-63.

Huang, Ting. 2024. "Women Hold Up the Shattering Sky? Performance Feedback on Multiple Conflicting Goals and Women's Representation in Top Management Teams in the Public Sector." *Journal of Public Administration Research and Theory*, 34(4): 515–31.

Johansen, Morgen, Taehee Kim, and Ling Zhu. 2016. "Managing for Results Differently: Examining Managers' Purposeful Performance Information Use in Public, Nonprofit, and Private Organizations." *The American Review of Public Administration*, 48(2):133-47.

Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica*, 47(2): 263-91.

Kou, Chien Wen, and Wen Hsuan Tsai. 2014. "'Sprinting with Small Steps' Towards Promotion: Solutions for the Age Dilemma in the CCP Cadre Appointment System." *The China Journal,*71(1): 153-71.

Kroll, Alexander. 2015. "Explaining the Use of Performance Information by Public Managers: A Planned-Behavior Approach." *The American Review of Public Administration,* 45(2): 201-15.

Lü, Xiaobo, and Pierre F. Landry. 2014. "Show Me the Money: Interjurisdiction Political Competition and Fiscal Extraction in China." *American Political Science Review*, 108(3): 706-22.

Labianca, Giuseppe, James F. Fairbank, Goce Andrevski, and Michael Parzen. 2009. "Striving toward the Future: Aspiration—Performance Discrepancies and Planned Organizational Change." *Strategic Organization*, 7(4): 433-66.

Li, Hongbin, and Li-An Zhou. 2005. "Political Turnover and Economic Performance: The Incentive Role of Personnel Control in China." *Journal of Public Economics,* 89(9-10): 1743-62.

Li, Wenbin, Xiaoyuan Chen, and Yifan Chen. 2024. "The Diffusion of Performance-Based Budgeting Reforms: Cross-Provincial Evidence from China." *Public Performance & Management Review*, 47(1): 114-46.

Liang, Jiaqi, and Laura Langbein.2015. "Performance Management, High-Powered Incentives, and Environmental Policies in China." *International Public Management Journal*, *18*(3), 114-46..

Lieberthal, Kenneth. 2004. *Governing China: From Revolution through Reform*. New York, NY: W. W. Norton.

Lin, Tingjin. 2013. *The Politics of Financing Education in China*. London, UK: Palgrave Macmillan.

Ma, Liang. 2016. "Performance Feedback, Government Goal-Setting, and Aspiration Level Adaptation: Evidence from Chinese Provinces." *Public Administration,* 94(2): 452-71.

Meier, Kenneth J., Nathan Favero, and Ling Zhu. 2015. "Performance Gaps and Managerial Decisions: A Bayesian Decision Theory of Managerial Action." *Journal of Public Administration Research and Theory*, 25(4): 1221-46.

Min, Byung Hee and Yongmin Oh. 2020. "How Do Performance Gaps Affect Improvement in Organizatonal Performance? Exploring the Mediating Roles of Proactive Actvities." *Public Performance & Management Review,* 43(4): 766-89.

Nicholson-Crotty, Sean, Jill Nicholson-Crotty, and Sergio Fernandez. 2017. "Performance and Management in the Public Sector: Testing a Model of Relative Risk Aversion." *Public Administration Review*, 77(4): 603-14.

Nielsen, Poul A. 2014. "Learning from Performance Feedback: Performance Information, Aspiration Levels, and Managerial Priorities." *Public Administration*, 92(1): 142-60.

O'Toole, Laurence J., and Kenneth J. Meier. 2015. "Public Management, Context, and Performance: In Quest of a More General Theory." *Journal of Public Administration Research and Theory,* 25(1): 237-56.

Rainey, Hal G., and Chan Su Jung. 2015. "A Conceptual Framework for Analysis of Goal Ambiguity in Public Organizations." *Journal of Public Administration Research and Theory*, 25(1): 71-99.

Robinson, Scott E., Floun'say Caver,Kenneth J. Meier,Laurence J. O'Toole Jr. 2007. "Explaining Policy Punctuations: Bureaucratization and Budget Change." *American Journal of Political Science*, 51(1): 140-50.

Robinson, Scott E., Carla M. Flink, and Chad M. King. 2014. "Organizational History and Budgetary Punctuation." *Journal of Public Administration Research and Theory,* 24(2): 459-71.

Rothstein, Bo. 2014. "The Chinese Paradox of High Growth and Low Quality of

Government: The Cadre Organization Meets Max Weber." *Governance*, 28(4): 533-48.

Rutherford, Amanda, and Kenneth J. Meier. 2015. "Managerial Goals in a Performance-Driven System: Theory and Empirical Tests in Higher Education." *Public Administration,* 93(1): 17-33.

Rutherford, Amanda, and Ling Zhu. 2019. "Managing the Gaps: How Accountability Standards Affect Decision Making." *Public Performnace & Management Review*, 42(5):1029-61.

Salge, Torsten O. 2011. "A Behavioral Model of Innovative Search: Evidence from Public Hospital Services." *Journal of Public Administration Research and Theory,* 21(1): 181-210.

Shinkle, George A. 2012. "Organizational Aspirations, Reference Points, and Goals: Building on the Past and Aiming for the Future." *Journal of Management*, 38(1): 415-55.

Sohn, Hosung, Dongsook Han and Kwang Bin Bae. 2021. "The Effect of Performance Information on Actual Budget Allocation: The Role of Policy Type." *Public Performance & Management Review*, 45(6):1-21.

Su, Fubing, Ran Tao, Lu Xi, and Ming Li. 2012. "Local Officials' Incentives and China's Economic Growth: Tournament Thesis Reexamined and Alternative Explanatory Framework." *China & World Economy*, 20(4): 1-18.

Tan, Jie, and Jerry Zhirong Zhao, 2019. The Rise of Public–Private Partnerships in China: An Effective Financing Approach for Infrastructure Investment? *Public Administration Review*, *79*(4), 514–18.

Wang, Wen. 2017. "The Effects of Political and Fiscal Incentives on Local Government Behavior: An Analysis of Fiscal Slack in China." *International Public Management Journal,* 20(2): 294-315.

Wang, Wen, Xinye Zheng, and Zhirong Zhao. 2012. "Fiscal Reform and Public Education Spending: A Quasi-Natural Experiment of Fiscal Decentralization in China." *Publius: The Journal of Federalism,* 42(2): 334-56.

Wei, W., Wang, C., Zhai, W., & Li, W. 2023. "Honor List" and "Shame Roll": Quasi-Experimental Evidence of the Effect of Performance Feedback under Political Control. *Journal of Public Administration Research and Theory*, *33*(1), 122–38.

Wu, Jing, Hao Li, and Keyang Li. 2020. "Local Political Chief Turnover and Economic Growth: Evidence from China." *Economics of Transition and Institutional Change,* 28(3): 441-66.

Yu, Jihai, Li-An Zhou, and Guozhong Zhu. 2016. "Strategic Interaction in Political Competition: Evidence from Spatial Effects across Chinese Cities." *Regional Science and Urban Economics,* 57: 23-37.

Yu, Jinhai and Xin Chen. 2025. "Does Negative Feedback on Financial Performance Affect Managerial Turnover?" *Public Management Review*, Online First.

Zhang, Wen. 2020. "Political Incentives and Local Government Multiplier: Evidence for Chinese Provinces (1978-2019)." *Economic Modeling*, 87: 59-71.

Zhu, Ling. 2013. "Panel Data Analysis in Public Administration: Substantive and Statistical Considerations." *Journal of Public Administration Research and Theory,* 23(2): 395-428.

Zuo, Cai (Vera). 2015. "Promoting City Leaders: The Structure of Political Incentives in China." *The China Quarterly*, 224: 955-84.

Appendixes

Table A1: Robustness Check Based on GMM Specification

Variable	Fixed Effects Model (Table 2-Model 3)	GMM
Historical PG	0.0529***	0.0751***
	(0.009)	(0.196)
Historical PG	-0.0001	0.005
(squared)	(0.001)	(0.002)
Social PG	-0.048***	-0.079***
	(0.012)	(0.026)
Social PG	-0.007***	-0.015***
(squared)	(0.002)	(0.004)
Tenure	0.044	0.009
	(0.030)	(0.007)
Tenure	-0.001	0.001
(squared)	(0.004)	(0.008)
Competition	0.177**	-0.301
	(0.086)	(0.315)
Revenue	0.387***	0.346
growth (log)	(0.030)	(0.059)
Constant	-0.277	5.999
	(0.950)	(4.242)
Lagged DV	--	-0.076
		(0.067)
N	1218	637
R^2	0.479	

Notes:

1. The dependent variable is logged budgetary expenditure growth.

2. Significance levels: * p<0.10, ** p<0.05.

Table A2: Empirical Results Adding City Population (in Millions) as an Additional Control Variable

Variable	DV: Logged Growth in Total Spending (Robustness Check for Table 2-Model 3)
Historical PG	0.053***
	(0.009)
Historical PG	-0.0001
(squared)	(0.001)
Social PG	-0.048***
	(0.012)
Social PG	-0.007***
(squared)	(0.002)
Tenure	0.045
	(0.030)
Tenure	-0.001
(squared)	(0.004)
Competition	0.177**
	(0.086)
Revenue	0.387***
growth (log)	(0.030)
Population	0.001**
(in Millions)	(0.0005)
Constant	-0.277
	(0.950)
N	1,218
R^2	0.480

Notes:

1. Significance Levels: *** p<0.01; ** p<0.05; * p<0.10.

2. Both models are estimated, including city-fixed effects.

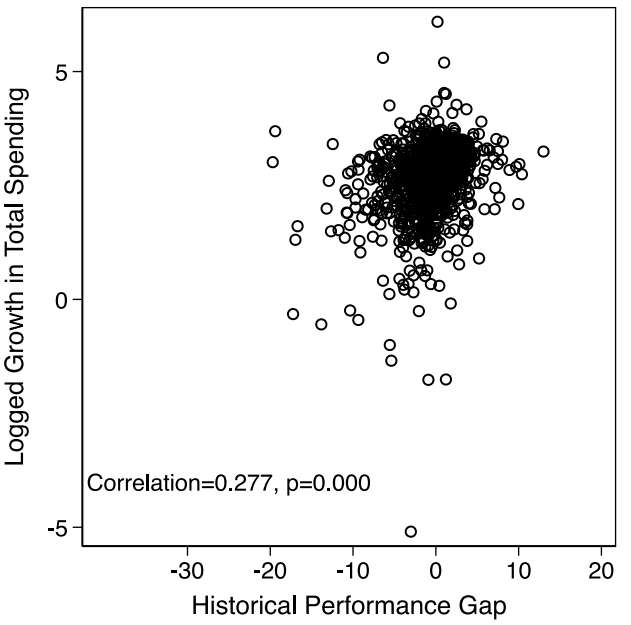

Figure A1: Bivariate Correlation between Logged Growth in Total Spending and Historical Performance Gaps

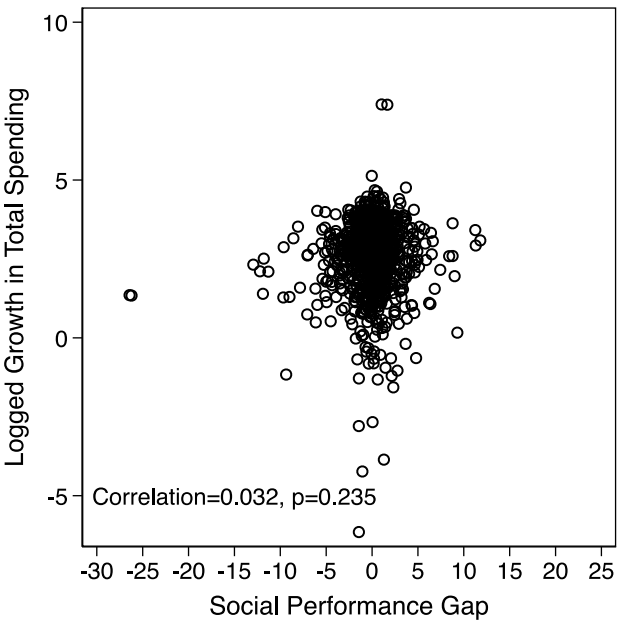

Figure A2: Bivariate Correlation Between Logged Growth in Total Spending and Social Performance Gaps

Power Balance, Institutionalization, and the Governance of Serendipitous Networks—Evidence from Neighborhood Governance in Beijing

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Abstract

Research on network governance has primarily focused on "goal-directed" networks, leaving the governance of serendipitous networks underexplored. Drawing on resource dependence theory and institutional theory, this paper proposes a new framework to explain the formation of different governance structures. It identifies the balance of power and the degree of institutionalization as key variables shaping organizational interactions, leading to distinct governance structures. Using evidence from neighborhood governance networks in Beijing, the study demonstrates how the interplay between power dynamics and institutionalization gives rise to four governance structures: shared governance, inertial governance, insurgent coalition domination, and lead organization governance. This research advances our understanding of serendipitous network governance and offers new insights into the reciprocal relationship between power and institutionalization.

Keywords: serendipitous networks, power balance, institutionalization, neighborhood governance

Equilibrio de poder, institucionalización y gobernanza de redes fortuitas: evidencia de la gobernanza vecinal en Beijing

Resumen

La investigación sobre gobernanza de redes se ha centrado principalmente en las redes orientadas a objetivos, dejando poco explorada la gobernanza de las redes fortuitas. Basándose en la teoría de la dependencia de recursos y la teoría institucional, este artículo propone un nuevo marco para explicar la formación de diferen-

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tes estructuras de gobernanza. Identifica el equilibrio de poder y el grado de institucionalización como variables clave que configuran las interacciones organizacionales, dando lugar a distintas estructuras de gobernanza. Utilizando evidencia de las redes de gobernanza vecinal en Pekín, el estudio demuestra cómo la interacción entre la dinámica de poder y la institucionalización da lugar a cuatro estructuras de gobernanza: gobernanza compartida, gobernanza inercial, dominio de la coalición insurgente y gobernanza de la organización líder. Esta investigación profundiza en nuestra comprensión de la gobernanza de redes fortuitas y ofrece nuevas perspectivas sobre la relación recíproca entre poder e institucionalización.

Palabras clave: redes fortuitas, equilibrio de poder, institucionalización, gobernanza vecinal

权力平衡、制度化与“自发性网络”治理——来自北京社区治理的证据

摘要

网络治理研究主要聚焦于“目标导向”网络，而“自发性网络”(serendipitous networks)治理尚未得到充分探究。基于资源依赖理论和制度理论，本文提出一项新框架来解释不同治理结构的形成。本文将权力平衡和制度化程度确定为影响组织互动的关键变量，从而产生不同的治理结构。本研究利用北京社区治理网络的证据，展示了权力动态和制度化之间的相互作用如何产生四种治理结构：共享治理、惯性治理、叛乱联盟主导、以及领导组织治理。本研究加深了我们对“自发性网络”治理的理解，并为权力和制度化之间的相互关系提供了新的见解。

关键词：自发性网络，权力平衡，制度化，社区治理

Introduction

Interorganizational networks often involve organizations from the public, business, and nonprofit sectors. In some networks, these organizations share goals and work together voluntarily, while in others, they may come into play with “different role positions and carry different weights” (Agranoff

& McGuire, 2001, p. 315). With different authorities and resources, organizations in networks may occupy different power positions. Powerful organizations may dominate networks and advance their agenda (Purdy, 2012). Klijn and Teisman (1997) conceptualized the complex interactions between all involved actors as "games" in which actors try to maximize their interests and influence. These games often result in different governance structures in these networks.

The internal governance structure of a network produces a significant effect on its functioning and effectiveness by shaping the allocation of resources and coordination of joint effort (Provan & Kenis, 2008; Raab et al., 2015). Governance structure, sometimes referred to as governance mode, encompasses "the use of institutions and structures of authority and collaboration to allocate resources and to coordinate and control joint action across the network as a whole" (Provan & Kenis, 2008, p. 231). It determines how decisions are made, how resources are allocated, and how conflicts are resolved in networks. Despite its critical importance, early network research often assumed that the structures of governance networks are uniform (Provan & Kenis, 2008). Since then, scholars have deepened our understanding of forms of governance structure and their relationships with network effectiveness. For example, Provan and Kenis (2008) identified three forms of governance structures: shared network governance, lead organization governance, and network administrative organization governance. Subsequent research has largely focused on how governance structures, particularly network administrative organizations, affect network effectiveness (Saz-Carranza et al., 2016). However, existing literature has primarily focused on the governance structures of "goal-directed" or "purpose-oriented" networks, overlooking the vast number of less structured, serendipitous networks.

Goal-directed networks have relatively clear network-level goals identified and agreed on by network members (Nowell & Milward, 2022). However, in practice, network members often come together not around clear, specific goals but around a broader shared purpose, such as addressing homelessness in a metropolitan area or responding to natural disasters (Carboni et al., 2019). Network purpose is the "collective cognitive construct to close the gap between an observed and a desired condition or satisfy the unrealized needs" (Carboni et al., 2019, p. 212). Recognizing this distinction, scholars have started to use the term "purpose-oriented networks" to describe networks that are oriented towards a common purpose rather than explicit goals (Nowell & Milward, 2022). In contrast, a large number of networks, which are characterized as "serendipitous networks," do not have clear goals or even a common purpose to drive the process of interaction. In serendipitous networks, individual actors make important choices, such as who to connect with or what to transact, without the guidance from any central network agent. Network members "form ties or partnerships based on their own interests" (Kilduff & Tsai, 2003, p. 90).

The distinction between purpose-oriented networks and serendipitous networks has important implications for the governance structures. For example, serendipitous networks, driven by random variation, selection, and retention processes, usually do not have external administrative organizations or even a lead organization to govern these networks. As a result, the governance typologies proposed by Provan and Kenis (2008) may not adequately capture the governance structures of serendipitous networks. Despite their prevalence, little research has explored how such networks are governed. This gap in our understanding is particularly critical given the widespread presence of serendipitous networks in real-world settings.

This paper addresses this gap by proposing a new framework to explain how power dynamics and institutionalization influence the governance structures of serendipitous networks. Drawing on empirical data from neighborhood governance networks in Beijing, China, this study develops four ideal types of governance structures: shared governance, inertial governance, insurgent domination, and lead organization governance. By examining the governance of serendipitous networks, this research contributes to a more nuanced understanding of network governance beyond goal-directed and purpose-oriented networks.

Neighborhood Governance Networks in Beijing

The empirical context of this study is neighborhood governance networks in Beijing. China's urban neighborhoods used to be firmly controlled by the government in the planned economy era. Street Offices (SOs) were the lowest level of government. Residents' Committees (RCs) were the most basic unit of social organization and were controlled by the SOs. Housing was provided by state-owned enterprises or local governments. The public housing system could hardly keep up with people's increasingly higher standards of living and thus could not be sustained. Housing Reform, an important part of China's overall economic reform, was launched in the late 1990s, and a real estate market was created. Commercially developed neighborhoods have become the main type of neighborhoods in most cities. New types of neighborhood organizations, such as Homeowners' Associations, have become important stakeholders in neighborhood governance, significantly changing the governance of urban neighborhoods.

In China's rapidly growing housing market, urban residents purchase their own homes and have the legal right to form Homeowners' Associations (HOAs) to manage communal properties and protect their property rights. However, weak enforcement of the Property Rights Law allows developers and other entities to exploit communal spaces for financial gain. As a result, while HOAs are legally intended

to play a key role in decision-making regarding communal properties, homeowners often face significant obstacles in establishing them. Even when HOAs are successfully formed, their influence remains severely limited due to a lack of political and economic resources compared to local governments and business interests. China's political system offers citizens few opportunities to vote and provides limited institutional mechanisms for holding local officials accountable. Although homeowners can seek legal recourse to defend their rights, the legal system is often inaccessible to ordinary citizens and vulnerable to manipulation, as demonstrated in one of our cases. Additionally, HOAs typically have far fewer economic resources than developers or property management firms. While they may generate some revenue from property management fees or renting communal spaces, their financial capacity is usually insignificant in comparison. Beyond these structural challenges, limited political engagement opportunities contribute to a lack of democratic experience among homeowners. Many residents exhibit a passive "authoritarian personality," often hesitating to question government decisions or advocate for their collective interests (W. Wang et al., 2017). This further weakens the ability of HOAs to function effectively as representatives of homeowners' rights.

The RCs and the SOs, who used to be the dominant players in neighborhood governance, still have the public authority in these commercial-developed neighborhoods. The RCs, which are supposed to be "self-management, self-education and self-service mass organizations," are actually firmly controlled by Street Offices. They are responsible for a variety of administrative functions, such as family planning and neighborhood safety. Like many other levels of government in China, their primary goal is to maintain social stability. SOs are the lowest level of government in urban areas. Beijing Municipal Bureau of Statistics (2023) showed that, as of 2022, the City of Beijing had 165 SOs overseeing 3,431 RCs. Though SOs usually cover a larger area and may have dozens of neighborhoods, current laws and regulations give SOs a direct role in neighborhood governance. According to the regulation in Beijing, homeowners must form their HOAs under the direction of SOs. They must first establish a preparatory group and then submit a formal letter of application to SOs. SOs then designate the head of the preparatory group, who is usually the director of the RC in the neighborhood. Homeowners also have to submit all their application materials to SOs. Therefore, SOs and RCs have considerable influence over the process of establishing HOAs—they can affect how fast and smooth the entire process goes. Of course, the scope of their authority goes far beyond this—when homeowners have conflicts with developers or property management firms over properties, SOs work as mediators and even arbitrators according to Chinese laws. Therefore, SOs and RCs are very powerful players mainly because of their political authority.

Business organizations, including developers and property manage-

ment firms (PMFs), also play a crucial role in commercially developed neighborhoods. Developers construct properties and sell homes to buyers, and in theory, they should exit these neighborhoods once all units are sold. In practice, however, their interests remain deeply embedded. Weak enforcement of the Property Rights Law provides developers with numerous loopholes to exploit. To maximize profits, developers often exaggerate apartment sizes or leave unresolved construction quality issues. Many also hire their own subsidiary companies as property management firms, imposing high fees that do not match service quality. These PMFs frequently collaborate with developers to conceal construction defects.

Business organizations wield significant economic power. The booming real estate industry in China is highly profitable, enabling developers—both large industry giants and smaller firms—to mobilize substantial financial resources. This economic power can easily translate into political influence. As Lindblom (1977) noted, business interests possess both structural and instrumental power. Their structural power stems from their role as a primary tax base, with local governments in China heavily reliant on real estate development for revenue. Consequently, local governments often form informal pro-growth coalitions with developers (T. Zhang, 2002). Meanwhile, developers' instrumental power arises from bribery and the exchange of interests with local government officials, further entrenching their influence.

The previous governance structure has been changed greatly, with new players actively engaging in neighborhood affairs. Although there have been some laws and regulations on the legitimate roles of these players and their relations, these laws are either incomplete or not well enforced. In many cases, common understandings of roles and interorganizational relationships have not been reached. Government, business, and civic organizations have diverse institutional logics, interests, goals, and sources of legitimacy in neighborhood affairs, and they actively participate in these affairs in order to maximize their interests. Although these organizations operate within neighborhoods, they are driven by their own interests rather than a shared goal or purpose. They form ties primarily to advance their own influence, resulting in serendipitous networks. Neighborhood governance in China is highly spontaneous and loosely structured, making it an ideal setting to study how different governance structures emerge within such networks.

The transformation of neighborhood governance in China has drawn significant scholarly attention, particularly regarding the role of homeowners as a new and influential actor in neighborhood governance. Researchers have examined various aspects of homeowners' participation, from their impact on democratic engagement to their role in shaping power dynamics at the neighborhood level. Several studies highlight the role of homeowners' participation in governance. Wang, Li, and Cooper (2017) found that involve-

ment in neighborhood affairs helps homeowners develop democratic skills, increase awareness of property and political rights, and cultivate a stronger sense of community. From a coproduction perspective, Zhang and Li (2024) demonstrated that homeowners are more likely than nonowners to report public service complaints to the government, thereby contributing to improved neighborhood governance. This tendency is likely driven by homeowners' greater knowledge of government processes and their motivation to protect property values. Another stream of research explores the effectiveness of homeowners' associations (HOAs) in representing homeowners' interests. Studies suggest that factors such as the level of homeowner participation in neighborhood affairs significantly influence an HOA's ability to advocate for residents (Guan & Liu, 2021; F. Wang, 2014). Beyond individual homeowner participation, scholars have also examined the broader power shifts in neighborhood governance. Yip and Zheng (2024) analyzed how the emergence of HOAs reshapes power relations at the neighborhood level, revealing its political implications.

While these studies offer valuable insights into the role of homeowners, they largely adopt an actor-based perspective, focusing on individual or organizational agency. What remains missing is a network perspective—one that views governance as a dynamic system of interdependent actors, including government agencies, community organizations, private businesses, and citizens, who collaborate, negotiate, and compete to shape policies and manage local issues. Given the widespread application of the network perspective in urban governance research (Blanco, 2013; Da Cruz et al., 2019; Davidson et al., 2019), this gap is particularly striking and warrants further exploration.

Research Design and Data Collection

This paper employs the comparative case method as the major research design. Since the major objective was to study the governance structure in each neighborhood governance network, the unit of analysis is the network. The success of the comparative case method depends on obtaining cases that vary in governance structures so that meaningful comparisons can be conducted. The relative frequency distribution of each governance structure is not important (Ragin, 2009). King, Keohane, and Verba (1994) argued that random sampling might worsen the problem of selection bias in small-N studies. Therefore, this research adopted snowball sampling in order to get cases that varied in their governance structures. Through the director of a local nonprofit organization specializing in homeowners' rights protection in Beijing, I was able to connect with the first seven neighborhoods located in different parts of Beijing. I visited each of them and then asked them to recommend neighborhoods with similar or different governance structures. I stopped data collection after visiting 22 neighborhoods because I felt that I had reached the point of data sat-

uration (Small, 2009). Additional cases provided little new information on governance structures or power dynamics at that point. Different types of cases allowed me to compare the interorganizational power relations and degree of institutionalization and see how these differences give rise to different modes of governance structures.

My research methods are qualitative. In order to gain a comprehensive understanding of inter-organizational power relations and institutionalization, I conducted interviews with homeowner activists, government officials from both RCs and SOs, and property management firm executives. Each interview lasted 90-120 minutes. In order to collect network data, I asked interviewees to nominate the organizations that they often collaborated with on neighborhood affairs. The nomination was then verified in subsequent interviews. If there were inconsistencies, I asked interviewees to clarify how they collaborated and determined whether it counted as a collaborative relationship. Since collaboration is mutual in nature, in the end, 22 symmetrical collaborative networks were constructed based on the network data. Network data analysis was conducted by using UCINET. I also used participant observation to collect data. I attended HOAs' meetings to collect information on their governance, their relationships with other players in neighborhood governance, and other issues to answer the above research questions.

Theoretical Framework

How can we understand the interactions of organizations in serendipitous networks, which may further affect the internal governance structures of these networks? Given the lack of a common purpose or a clear goal, organizations are driven by their interests (Kilduff & Tsai, 2003). Klijn and Teisman (1997) characterized the situation like this as "games" in which actors try to maximize their interests and influence. Whether or not organizations succeed in advancing their interests, however, is likely to be influenced by their power relative to other network members, and whether collaboration is institutionalized as the legitimate way of conducting business.

Power has long been recognized as an important variable in explaining inter-organizational interactions (Agranoff & McGuire, 2001; Choi & Robertson, 2014; Emerson, 1962; Gray & Hay, 1986). Benson (1975) argues that interactions between organizations must be explained ultimately at the level of resource acquisition. Emerson (1962) developed a novel idea of the source of power—he argued that power resides in the other's dependency: the power of A over B is equal to the dependence of B on A. Pfeffer and Salancik (1978) further developed this exchange-based view of power into a theory of resource dependence in order to analyze inter-organizational power and organizations' management of their environments. This theory generally argues that organizations that have critical resources that are not available from

anywhere else will have more power over dependent organizations, and they thus may take advantage of their power when interacting with others. Hardy and Phillips (1998) developed a broader view of power and identified three sources of inter-organizational power—formal authority, control of critical resources, and discursive legitimacy. Formal authority refers to "the recognized, legitimate right to make a decision" (p. 219); for example, government agencies usually enjoy this form of power. The control of critical resources becomes one source of power due to the dependence of other organizations on these resources, which is consistent with resource dependence theory. Resources may include money, personnel, information, or technologies that can be used to influence other organizations. Organizations with discursive legitimacy have power because they are considered to have the expertise and legitimacy to speak about a specific issue. For example, Greenpeace is often considered to have discursive legitimacy in environmental issues. These different sources are not mutually exclusive, and one organization may possess authority, resources, and discursive legitimacy simultaneously. This broader view of power provides a more fine-grained framework to analyze power relations in organizational domains.

Agranoff and McGuire (2001) argued that power should be the center of any general network management theory because it has important implications for the patterns of interactions in networks. A balanced power distribution is favorable for interest representation, deliberation, and achieving cooperative participation (Choi & Robertson, 2013; Hardy & Phillips, 1998). In contrast, imbalanced power distribution may lead to a number of negative outcomes. Powerful organizations with more authority, resources, or discursive legitimacy may use their power to exclude certain stakeholders, silence different voices, and advance their own interests. Organizations in weaker power positions may take different measures to mitigate power imbalances. Emerson (1962) maintained that organizations may reduce their dependence on a certain organization by exploring alternative sources of resources or by building coalitions with others to change the relative distribution of resources. Hardy and Phillips (1998) proposed four strategies that organizations can use in their engagement with other organizations: collaboration, compliance, contestation, and contention. For example, in the UK refugee system, the Refugee Legal Center became a separate organization because of government support and also received funding from the government, so it chose "compliance" as its strategy to interact with the government.

The use of power to advance interests in networks, however, is not unchecked. Network members' values, norms, beliefs, and taken-for-granted assumptions, particularly whether they accept collaboration as the appropriate or legitimate way of doing things, affect the use or effectiveness of power. Institutional theory recognizes that organizations are embedded in an "institutional" context that prescribes appropriate and

socially legitimate ways of doing things (Barley & Tolbert, 1997; Greenwood et al., 2014). Institutions structure our behaviors, lead us to interpret the world in certain ways, and, more importantly, shape our understanding of what the "legitimate" ways of doing things are (Meyer & Rowan, 1977; Phillips et al., 2000). The institutional context exerts profound influence over organizational forms and structures, the diffusion of innovation, and organizational survival (Kennedy & Fiss, 2009; Meyer & Rowan, 1977; Tolbert & Zucker, 1983; Westphal et al., 1997).

Institutional theory gives us a fresh perspective on collaborative governance as a new institution. The institutionalization of collaborative governance is defined as the wide acceptance of collaborations between governments, businesses, and nonprofit organizations as a legitimate way of governing complex modern societies. The past few decades have witnessed the gradual hollowing out of the state and the transformation from government to governance in response to a wide range of societal changes (Milward & Provan, 2000; Rhodes, 1997). Contextual change provides opportunities and incentives for organizations to question rather than replicate scripted patterns of behaviors (Barley & Tolbert, 1997). People may question the ineffective or inefficient government-centered approach of governing and start to regard cross-sector collaboration as the standard approach to tackle the so-called "wicked problems"—for example, we have reached the point where "it is difficult to imagine successfully addressing global problems, such as the AIDS pandemic or terrorism, and domestic concerns, such as the educational achievement gap between income classes and races, without some sort of cross-sector understanding, agreement, and collaboration" (Bryson et al., 2006).

In any specific cases of collaboration, the degree of institutionalization may vary. The reason is that collaboration happens in a context where various aspects of it need to be negotiated, including the definition of the problem, the appropriate roles and scope of an organization, and the legitimate responses to the problem (Benson, 1975; Phillips et al., 2000; Thomson & Perry, 2006). The negotiations may lead to institutionalization because they touch on fundamental and complex issues and thus may give rise to new rules, norms, and understandings (Lawrence et al., 2002). Although through repeated interactions, organizations may reach shared understandings of these critical aspects of collaboration and develop common rules regarding problem and role definitions, these practices and behavioral patterns are not equally institutionalized (Barley & Tolbert, 1997). The degree of institutionalization may depend on "how long an institution has been in place and on how widely and deeply it is accepted by members of a collective" (Barley & Tolbert, 1997, p. 96). Lawrence et al. (2002) argued that collaboration has institutional effects because it facilitates the structuration process described by DiMaggio and Powell (1983): The intensity of inter organizational interactions increases, coalitions can form, information can be

exchanged, and mutual awareness of involvement can develop.

Lowly institutionalized collaboration may have a high possibility of internal conflicts, especially when organizations come from different sectors. They may act on their own knowledge or scripts, which are deeply influenced by the institutional logic of their sectors in the process of institutionalization (Alexander, 1998; Barley & Tolbert, 1997; Phillips et al., 2000). Member organizations have not yet reached a common understanding of key aspects such as problem definitions, the appropriate roles and scope of an organization, coordination procedures, and interorganizational relationships. Without sufficient negotiations to reconcile these different institutional logics, conflicts may ensue. The lack of wide support and legitimacy in these key aspects of collaboration may cause a number of problems. For example, different problem definitions imply different solutions and stakeholders. Black and Rose (2002) studied the case of the mental health community and found that an organization attempted to redefine the mental health problem as a social problem rather than a "disease" as it is conventionally defined. This new definition clearly implied a new solution and needed to incorporate new stakeholders, greatly changing the existing distribution of resources and power in the domain. Even if there are clear definitions of the problem and who should be involved, consensus on the proper roles of each participant is also critical. Clear definitions of the role and position of an organization in a domain directly affect its resources. Benson (1975) pointed out that "authority and money flow to an agency on the basis of its sphere of activities—services provided, clients served, and so forth" (p. 236). Conflicts will arise if an organization's sphere of activities is encroached upon by other organizations.

A Typology of Governance Structure

Based on my fieldwork and the theoretical framework outlined above, two dimensions, the balance of power and the degree of institutionalization, were identified as two critical factors that may affect interactions between organizations and governance structures. The degree of institutionalization describes the degree to which members of governance networks have reached common understandings of problem definition, the roles of each member, and the direction(s) to go. Based on DiMaggio and Powell (1983), three indicators were used to evaluate the degree of institutionalization of collaborative networks. The first indicator is role definition, which assesses whether organizations have been founded to take their legally defined roles in neighborhood governance. The second indicator is role acceptance, which evaluates the degree to which organizations respect role definitions and accept other organizations to fulfill their respective roles. The third indicator is the density of relationships, which measures how closely organizations share information and work together. We would expect that in high-institution-

alized neighborhoods, through repeated negotiations, governance structures, and inter-organizational relationships are clearly defined and widely accepted. The governance structures thus enjoy high legitimacy, and the possibility of inter-organizational conflicts is low. The balance of power describes the degree to which the distribution of power in a network is balanced. The analysis will consider three sources of power: authority, resources, and discursive legitimacy (Hardy & Phillips, 1998), as well as organizations' capabilities to use these sources of power to their advantage. We would generally expect that if power is balanced in a neighborhood network, organizations are more likely to compromise with one another in order to solve conflicts; in contrast, some organizations may dominate neighborhood governance if power is highly unbalanced. The interactions between the two dimensions thus give rise to a 2×2 typology of governance structures, as Figure 2.1 shows.

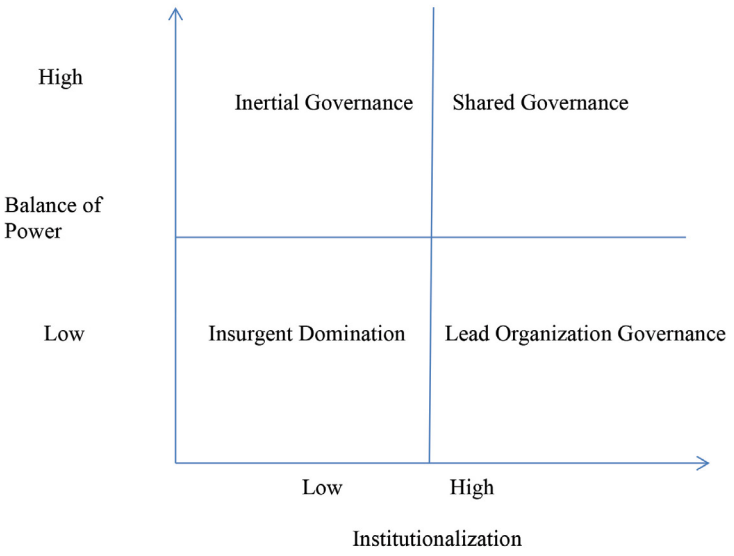

Figure 1. A Typology of Internal Governance Structures

Shared Governance (High power balance, high degree of institutionalization)

If power is relatively balanced in an interorganizational network, meaning that the distribution of authority, resources, and discursive legitimacy is roughly even, then it is hard to exclude any organizations in the governance of these networks, and each organization has the opportunity to participate. In the meantime, if these organizations also have a high degree of consensus on problem definition, the roles of each organization, and the future directions of collaboration, the possibility of conflicts may be low, and each organization will take on what they need to do. Under these conditions, a shared governance structure may emerge.

The Shang-Di neighborhood is a good case of shared governance. This neighborhood was developed soon after China's Housing Reform and was one of the first few commercially developed neighborhoods in Beijing. This project was just one of the many projects that the developer, a large state-owned real estate development firm, built. This project was not a major source of revenue, and the developer pulled out of the neighborhood soon after all units were sold. Therefore, the developer did not use its economic resources to gain influence or power in this neighborhood. All members of the RC were also property owners, so they were very supportive of establishing the HOA. The SO did not set too many obstacles either, so the political authority did not become a major barrier. Led by some visionary homeowners who were lawyers, scholars, and high-level managers in multinational companies, homeowners soon established one of the first few HOAs in Beijing. They also did several experiments, including establishing a monitoring committee to monitor the work of the HOA, to enhance the organizational capacity. The HOA firmly held the position as the legitimate representative of homeowners in the governance network. They used a bidding process to hire a property management firm to provide property management services. Public, business, and civic organizations had relatively equal power in this network, and no organization had the power to exclude or marginalize others.

In addition, organizations effectively negotiated their roles and responsibilities, developing a mutual understanding and respect for each other's domains. For example, unlike some Residents' Committees who saw HOAs as a competitor and trouble, the director of their RC told me that:

> *"Some people hold a negative view of HOAs, thinking that they messed things up. Some say they are different from us (RC), (but) I don't think so. I think they are similar to us. HOAs are established because people need them. I think HOA members bring us some fresh air. For example, Mr. Guo (HOA director) is a professional manager, and he shares with me some good management experience… We want (all organizations) to use each other's strengths and work together to make things better."*

Similarly, Mr. Guo, the HOA director, stated that the HOA and RC had a good working relationship, although they did not agree on everything:

> *"The HOA and RC complement each other: sometimes the RC takes the initiative to do something that they are not supposed to do, (in this circumstance) I usually take a step back; of course, when they fail to do what is supposed to, I will take the lead."*

The property manager also had a very clear understanding of their role:

> *"Legally, we are the service provider, and the HOA is the service receiver. As the provider, we listen to their needs. As a property*

management firm, our responsibility is to serve the homeowners. Of course, we serve for fees. Sometimes, when problems arise and do not cost too much, I ask my boss if we should use our money and labor to solve the problems. My main objective is to do our job well."

As DiMaggio and Powell (1983) pointed out, another indicator of high institutionalization is the increase in the extent of interaction among organizations in the field. A network analysis was conducted, and the density score of the network was 1, suggesting that every organization cooperated with everyone else.

As the above discussion indicates, the relative balance of power in this network made it possible for all members to participate. A high degree of institutionalization led all organizations to focus on what they were supposed to do. As a result, a shared governance structure was formed, as Figure 2 indicates. The network had a high-density score of 1 and a low centralization score of 0, suggesting it was a completely decentralized network. In this neighborhood, organizations respected each other and collaborated effectively. For example, the HOA always invited leaders from the RC and the property management firm to attend their regular meetings in order to enhance mutual understanding.

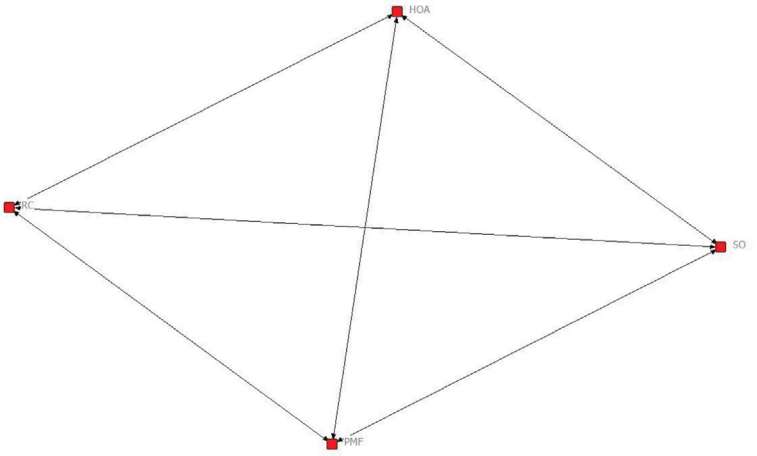

Figure 2. The Network of Shang-Di Neighborhood

Inertial governance (High power balance, low degree of institutionalization)

A second governance structure is inertial governance, which arises when power is balanced but the degree of institutionalization is low. Under this circumstance, the distribution of power, which may come from different sources, is relative even. All organizations have the opportunity to participate. However, the definitions of problems and the roles and scopes of

each organization are not well negotiated or accepted. The lack of common understanding means that the legitimacy of the governance structures is relatively low. Organizations may thus have conflicts with one another. However, the relatively even distribution of power makes it very difficult for any organization to impose its preferences on other organizations. As a result, organizations are often unable to act solely based on what they believe is right or necessary. This may lead to disengagement or minimal effort in collaboration.

Feng-Dan neighborhood was a case in point. It was a high-end neighborhood with both apartment buildings and single-home houses. The power distribution in the neighborhood was relatively balanced, and no organization had the capability to exclude others. Some homeowners who owned single-home houses were high-level government officials and had powerful political connections. Therefore, homeowners successfully established their HOAs in 2005 with minimal resistance from the RC or SO. The HOA became the legal representative of homeowners and successfully hired a property management firm through bidding. However, as time went by, many HOA members lost their commitments to their HOAs, and the HOA became weaker and weaker in terms of organizational capacity. Although the RC and SO did not obstruct homeowners from establishing their HOA, they later stepped in to fill the vacuum left by its weakness, gradually playing a more influential role in the neighborhood. The property management firm was hired by the HOA, but they had the expertise and economic resources to manage properties and even to evade the HOA's monitoring. The property management firm even challenged the weaker HOA frequently after being hired.

The degree of institutionalization was low in this network, especially regarding the roles of each organization. First, homeowners themselves were not clear about the role of the HOA, which, to some degree, weakened the organizational capacity of the HOA. The HOA failed to serve as the legal representative of homeowners. For example, as one HOA member said: *"Our HOA could not work because people have very different opinions. We could not hold any meetings because people keep quarreling (in these meetings)."* When asked why the property management firm dared to challenge the HOA, given that it was hired by the HOA, the interviewee explained, *"This has nothing to do with the fact that they were hired by us. Our HOA is too weak. We do not have a consensus; internally, homeowners have too many different opinions."* Second, even if the property management firm and the local government understood their roles, in many cases, they did not do what they were supposed to do, and sometimes they intentionally engaged in extra-role behaviors. For example, decision-making regarding property management and hiring property management firms should be the HOA's responsibility, and the RC and SO only had a vague legal role in facilitating this process. The SO, however, managed to manipulate the bidding process and hired a property management firm that was ranked

third or fourth by homeowners. Unlike the one in the Shang-Di neighborhood, the property management firm did not see itself merely as a service provider and, therefore, did not feel obligated to listen to homeowners' needs. One HOA member complained that the management firm charged high management fees but failed to fulfill their responsibilities:

> "*We told them that homeowners were not satisfied with their work, but they simply did not listen to us. In their eyes, we (HOA) are just nothing…we are really pathetic. It is like we should kneel ourselves to beg them to work: please do your job, and you can charge as much money as you want.*"

Another indicator of the low degree of institutionalization was the low-density score of 0.583, which showed that only 58.3% of all possible collaborative relationships existed in this network. The organizations were not collaborating closely with one another, resulting in an inertial governance structure. Figure 2.3 shows the network structure.

In this neighborhood, although conflicts between organizations may arise due to the low degree of institutionalization, the relatively balanced power structure reduces the possibility or severity of conflicts. As much as some organizations wanted to impose their problem or role definitions on others, they did not have the power to do so. For example, even though the SO once manipulated the bidding process, it could not completely marginalize the HOA on neighborhood affairs. The relatively balanced power structure created a deadlock in this network. Organizations gradually lost interest in collaborating with one another. They exerted only minimal effort to fulfill their responsibilities or cooperate with one another, resulting in the so-called collaboration inertia (Huxham & Vangen, 2000). Benson (1975, p. 235) argued that this type of non-cooperative network is frequently encountered because "none can muster power sufficient to dictate terms to the others."

Insurgent Domination (low balance of power, low degree of institutionalization)

Imbalanced power distribution and low institutionalization can give rise to a third type of governance structure: insurgent domination. Research suggests that asymmetrical power relations within a network can lead to various issues, such as the exclusion of certain members and the marginalization of diverse perspectives (Agranoff & McGuire, 2001). In such networks, powerful organizations often dominate governance and may even form coalitions to consolidate their advantage (Cook, 1977). Low institutionalization exacerbates power struggles in these imbalanced networks, as organizations lack a shared understanding of the core issues and their respective roles. However, this lack of structure does not disadvantage everyone; some organizations exploit vague problem definitions and role ambiguity to engage in extra-role behaviors that serve their interests. One

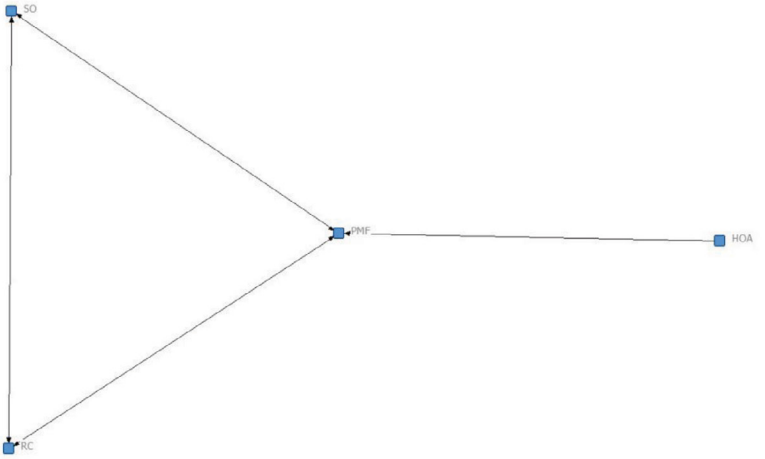

Figure 3. The Network of Feng-Dan Neighborhood

key strategy for these insurgent organizations is to form coalitions, securing their dominance and entrenching a governance structure that is difficult to dismantle. While powerful organizations can coerce weaker ones into accepting their terms, the major flaw of this governance model is its fundamental lack of legitimacy.

Rong-Feng exemplifies insurgent domination. In this case, the developer was a small firm with no established track record in real estate development. Consequently, it depended heavily on the revenues generated from this neighborhood, reinforcing its drive to maintain control. To maximize their revenue, the developer established a subsidiary company to take charge of property management in Rong-Feng. They charged high property management fees while providing inferior services. The developer also sold homeowners' communal properties for tens of millions without giving homeowners any compensation. To maintain the revenues, the developer used its economic resources and political connections to influence local governments' decision-making. The RC and SO had the political authority to at least help homeowners protect their communal properties, but they chose to work closely with the developer. The reasons were, first, the RC occupied 300 square meters of office space that was homeowners' communal property; second, the developer had powerful political connections in higher-level governments. Though homeowners were led by some experienced activists, they were much weaker and had almost no economic or political resources compared with business and government organizations.

To make things worse, the degree of institutionalization was very low in this neighborhood. The imbalanced power dynamics undermined any basis for negotiating roles and interorganizational relationships. The developer and property management firm apparently did not see themselves just as service providers because they seriously violated homeowners' property rights.

Homeowners wanted to establish their HOA in order to better represent their interests and protect their property rights. However, the RC and SO were not cooperative partly because of their fundamentally different problem definitions from homeowners'. They saw homeowners' organizing as a threat to social stability. For example, one official at the SO told me:

> *"The HOA is a good thing, but it is not very compatible with the contemporary Chinese political system. People in high-end neighborhoods are better because they can accept this. In some other neighborhoods, it's OK if you don't tell these homeowners. Once you tell them that these (communal) properties are theirs, then they want these properties, but they did not know how to orderly claim and use these properties… Social stability is gone."*

This government official clearly saw stability as a priority and worried that homeowners' organizing may cause instability. One interviewee at the Rong-Feng neighborhood told me that:

> *"The government always held us up whenever we took one step forward. Once I went to the SO, the deputy director said, 'This homeowner from Rong-Feng came to create troubles again.' They could not care less about our interests."*

The fundamental difference in problem definition became another source of conflicts between homeowners and local governments, making it even harder for homeowners to gain governments' support. Both the business interests and local governments benefited from violating homeowners' property rights. Therefore, neither of them had the incentive to clarify the roles of each organization or seek an agreement on problem and role definitions that all parties could accept. Instead, they formed a coalition in order to gain absolute power over homeowners. Homeowners, who were the legitimate property owners, were too weak to effectively challenge the coalition. They were thus excluded from the governance of their neighborhood. "Insurgent" organizations with little legitimacy dominated, resulting in this insurgent domination governance structure. As Figure 2.4 shows, there were clearly two cliques of organizations in the network. One was made up of the business interest and local governments, including the developer, property management firm, the RC, and the SO. The other clique comprised the HOA and its consultant firm. The network density score was only 0.47, which was much lower than the density scores of the previous two networks.

Lead Organization Governance (low balance of power, high degree of institution)

The last governance structure is lead organization governance, which is formed under the conditions of low balance of power and high degree of institutionalization. As the above discussion suggests, asymmetrical power relationships are like-

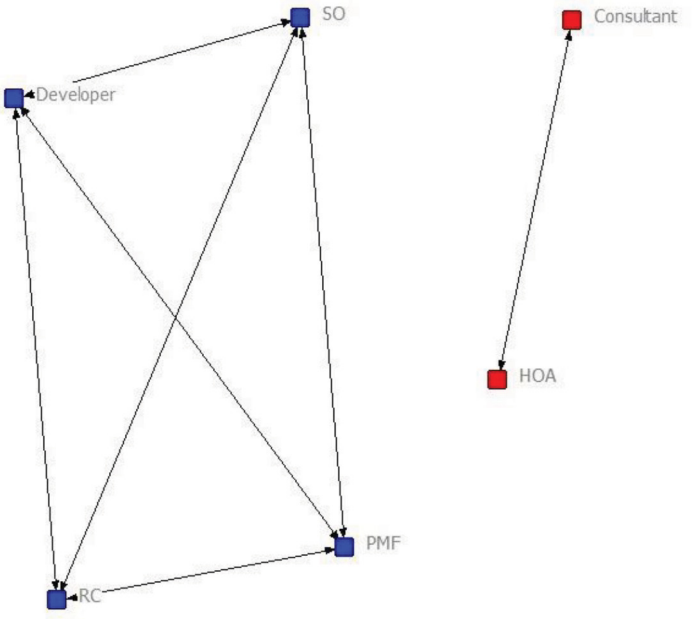

Figure 4. The Network of Rong-Feng Neighborhood

ly to cause powerful organizations to dominate network governance. However, a high degree of institutionalization and shared understanding of role and problem definitions may check the use of power and keep powerful organizations from infringing upon others' sphere of activities. Therefore, powerful organizations may have significant influence in a network, but they usually do not impose their problem and role definitions on weaker organizations. The governance structure has a high degree of legitimacy.

Chao-Yang Garden had this lead organization governance structure. Chao-Yang Garden was developed by a Hong Kong developer soon after China's housing reform in 1998. It was a high-end neighborhood that had been originally developed for foreigners in Beijing. The developer pulled out of the neighborhood after all units were sold and maintained little influence in the neighborhood. The RC and SO had the political authority to monitor the HOA, but they could not benefit much from engaging in neighborhood affairs. They thus chose to be neutral. The HOA was established in 2001 and was one of the first few HOAs in Beijing. As the representative of homeowners, the HOA was led by some experienced activists and had been working well since it was founded. The HOA successfully hired property management firms on its terms through bidding processes and designed a good mechanism to share revenues with property management firms. The HOA had the upper hand in its relationship with the property management firm. With plenty of economic resources, the HOA hired a full-time secretary to take care of daily affairs. In this neighborhood, the HOA was the

most powerful organization with both economic resources and discursive legitimacy. The HOA even declined RC's request for some funding to support cultural activities, citing that this was not the HOA's responsibility.

This network was highly institutionalized, with clearly defined roles, problem definitions, and interorganizational relationships. The RC and SO recognized that the HOA was solely responsible for property-related decisions and chose not to intervene, instead focusing on their own responsibilities, such as delivering social services. The property management firm, hired by the influential HOA, also had a clear understanding of its role. Viewing itself as a service provider and the HOA as its employer, the firm maintained full financial transparency and worked closely with homeowners. As the representative of homeowners, the HOA held well-organized regular meetings to make property management decisions. Figure 2.5 illustrates this network's high level of collaboration, reflected in a density score of 0.73, indicating strong interorganizational cooperation.

Although the figure cannot show the power relations between organizations, my fieldwork suggested the HOA played a central role. It controlled not only discursive legitimacy but also considerable economic resources, which made it the most powerful player in the network. However, it did not infringe upon others' sphere of activities or impose its problem and role definitions on others. It generally respected other organizations but firmly defended its legal roles. Compared with the abovementioned "insurgent domination" governance structure, this governance structure also has an imbalanced power structure; however, one key difference is that the high degree of institutionalization becomes an institutional force that helps to regulate how organizations interact with each other and stop the most powerful one from infringing upon others' sphere. This type of governance is accepted by organizations and has legitimacy.

Discussion and Conclusion

Drawing on resource dependence theory and institutional theory and based on neighborhood governance networks in Beijing, this paper develops a new framework to explain how different types of governance structures are formed. The balance of power and degree of institutionalization are two important variables that affect how organizations interact with one another, resulting in four different governance structures: shared governance, inertial governance, insurgent coalition domination, and lead organization governance. Table 1 presents a summary of the four neighborhood governance networks representing four types of governance structures. The balance of power determines who can participate in neighborhood governance, but the degree of institutionalization checks and balances the use of power. Shared governance and lead organization governance exhibit higher levels of network density, suggesting a healthy level of collaboration among organizations.

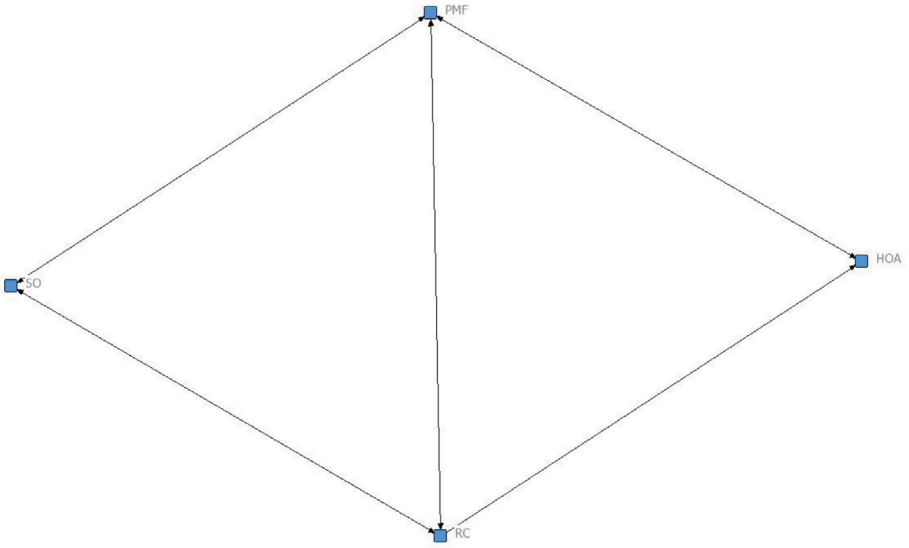

Figure 5. The Network of Chao-Yang Garden

Table 1. A summary of four governance structures

Neighborhood Name	Power balance	Institutionalization	Network density	Governance structure
Shang-Di	Balanced	High	1	Shared Governance
Feng-Dan	Balanced	Low	0.583	Inertial Governance
Rong-Feng	Imbalanced	Low	0.47	Insurgent Domination
Chao-Yang Garden	Imbalanced	High	0.73	Lead organization governance

One key contribution of this paper is that it deepens our understanding of the governance structures of serendipitous networks. The governance structure of serendipitous networks is a surprisingly understudied area (Provan & Kenis, 2008). Serendipitous networks are more common in the real world than goal-directed networks, yet they are often left unstudied in the public administration literature. Provan and Kenis (2008) studied the governance structure of goal-directed networks, but their typology may not work for serendipitous networks in which the network change is primarily driven by serendipity (Kilduff & Tsai, 2003). Organizations usually interact with others on the basis of their interests and take a "tit-for-tat" strategy. The behaviors of organizations are not planned and are affected by various circumstances. Therefore, the

framework developed in this paper may deepen our understanding of how organizations interact with one another in serendipitous settings and fill a critical gap in the current literature. It may provide building blocks for further theoretical development.

Another contribution of this paper is that it furthers the research on the relationship between power and the institutionalization process. Previous research has studied the relationship between power and institutionalization (Phillips et al., 2000). The basic argument is that the rules, interpretations and problem definitions of powerful members are more likely to be institutionalized (Phillips et al., 2000). Some scholars went so far as to argue that institutionalization is a political process that reflects the interests of powerful members (Maguire et al., 2004; Seo & Creed, 2002). Despite its theoretical insight, this argument ignores the possible effect of institutionalization on power dynamics. This research studies different modes in which power may interact with the institutionalization process and highlights a reciprocal relationship: a high degree of institutionalization may also serve as a check to power use. The shared normative beliefs about the roles and scopes of each organization, as well as taken-for-granted assumptions, may force organizations to conform to these normative beliefs and constrain or even stop powerful organizations from infringing upon the sphere of activities of other organizations.

Drawing on institutional theory and resource dependence theory, this research offers valuable practical insights. According to institutional theory, Alexander (1998, p. 349) argued that "actors" knowledge of their social context is the basis for the dual interaction between social structures and action. In other words, actors rely on social knowledge or scripts shaped by their previous institutional logic, and their actions, in turn, influence how they engage with other organizations. This knowledge plays a crucial mediating role in interorganizational dynamics. To institutionalize collaboration as a new governance approach, it is essential to raise awareness among all involved actors. Alexander (1998, p. 349) emphasized the importance of "enlightening potential participants in an interorganizational system with an awareness of their interdependence and revealing to them their potential mutual objectives and common goals." In the context of neighborhood governance in China, RCs and SOs are often deeply influenced by government-driven institutional logic, making it difficult for them to adapt to a collaborative governance model. Raising their awareness of how property rights define the limits of their authority can help shift their perspective, encouraging them to see HOAs as partners rather than challengers. However, education and awareness-raising are not straightforward solutions, nor do they always succeed. As Benson (1975) noted, agreements on collaboration—such as defining problems and roles—are only achievable when an organization does not perceive its interests as being threatened.

Another key practical implication is that the four ideal types of gov-

ernance networks can serve as valuable benchmarks for practitioners assessing their own governance structures. By comparing their neighborhood governance to these models, practitioners can quickly identify strengths, weaknesses, and areas for improvement, particularly in terms of power balance and institutionalization. For instance, a balanced distribution of power is a critical factor in fostering meaningful participation in neighborhood governance. From this perspective, homeowners seeking to establish HOAs and local officials aiming to mediate neighborhood conflicts can use these ideal types to evaluate whether power dynamics are skewed and whether adjustments are necessary. If power is overly concentrated in certain organizations, they may need to encourage broader participation or break entrenched alliances to foster a more equitable governance structure. Conversely, if governance is too fragmented or unstructured, forming strategic alliances could help build stability and coordination. By applying these ideal types as diagnostic tools, practitioners can move beyond trial-and-error approaches and instead make more informed, strategic decisions to enhance governance effectiveness and collaboration in their neighborhoods.

This paper also has some limitations. One is that, like all typologies, the four types of governance structures are ideal types, which may not be able to capture all the nuances in reality. In the real world, some neighborhoods may not fit neatly, and their boundaries are more blurred. The typologies developed in this paper are by no means an exhaustive or perfect reflection of all governance structures in reality. The goal is to deepen our understanding of how governance structures are formed from the perspective of power balance and institutionalization. I would argue that this framework is useful in explaining existing governance structures and predicting what structures may arise, but unfortunately, there will be a margin of error, and in some cases, the margin may be significant. Another limitation is that the networks under study were quite small—each network had about 4 to 7 organizations. The relationships between organizations may increase exponentially as more organizations are involved in networks. Large networks may have different patterns of interactions between organizations. Therefore, caution is needed when generalizing the conclusions to larger networks. Third, as a qualitative research, it is hard for this paper to provide "airtight proof for a causal inference" (Odell, 2001, p. 176) due to the fact that this method cannot control all possible causal factors. The strength of this paper is not to establish a causal relationship in any sense but to explore the "mechanisms" through which governance structures arise.

References

Agranoff, R., & McGuire, M. (2001). Big Questions in Public Network Management Research. *Journal of Public Administration Research and Theory*, *11*(3), 295–326.

Alexander, E. R. (1998). A Structuration Theory of Interorganizational Coordination: Cases in Environmental Management. *International Journal of Organizational Analysis (1993– 2002)*, *6*(4), 334.

Barley, S. R., & Tolbert, P. S. (1997). Institutionalization and Structuration: Studying the Links between Action and Institution. *Organization Studies*, *18*(1), 93–117. https://doi.org/10.1177/017084069701800106

Benson, J. K. (1975). The Interorganizational Network as a Political Economy. *Administrative Science Quarterly*, *20*(2), 229–249.

Black, B. L., & Rose, S. M. (2002). *Advocacy and empowerment: Mental health care in the community*. Routledge.

Blanco, I. (2013). Analysing urban governance networks: Bringing regime theory back in. *Environment and Planning C: Government and Policy*, *31*(2), 276–291.

Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review*, 44–55.

Carboni, J. L., Saz-Carranza, A., Raab, J., & Isett, K. R. (2019). Taking dimensions of purpose-oriented networks seriously. *Perspectives on Public Management and Governance*, *2*(3), 187–201.

Choi, T., & Robertson, P. J. (2014). Deliberation and decision in collaborative governance: A simulation of approaches to mitigate power imbalance. *Journal of Public Administration Research and Theory*, *24*(2), 495–518.

Cook, K. S. (1977). Exchange and Power in Networks of Interorganizational Relations*. *Sociological Quarterly*, *18*(1), 62–82. https://doi.org/10.1111/j.1533-8525.1977.tb02162.x

Da Cruz, N. F., Rode, P., & McQuarrie, M. (2019). New urban governance: A review of current themes and future priorities. *Journal of Urban Affairs*, *41*(1), 1–19.

Davidson, K., Coenen, L., Acuto, M., & Gleeson, B. (2019). Reconfiguring urban

governance in an age of rising city networks: A research agenda. *Urban Studies*, *56*(16), 3540–3555.

Emerson, R. M. (1962). Power-Dependence Relations. *American Sociological Review*, *27*(1), 31–41.

Gray, B., & Hay, T. M. (1986). Political limits to interorganizational consensus and change. *The Journal of Applied Behavioral Science*, *22*(2), 95–112.

Greenwood, R., Hinings, C. R., & Whetten, D. (2014). Rethinking institutions and organizations. *Journal of Management Studies*, *51*(7), 1206–1220.

Guan, T., & Liu, T. (2021). Participatory representation in a Non-Western context: The case of Homeowner Associations in Beijing. *Urban Affairs Review*, *57*(4), 984–1014.

Hardy, C., & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an interorganizational domain. *Organization Science*, *9*(2), 217–230.

Huxham, C., & Vangen, S. (2000). Ambiguity, complexity and dynamics in the membership of collaboration. *Human Relations*, *53*(6), 771–806.

Kennedy, M. T., & Fiss, P. C. (2009). Institutionalization, framing, and diffusion: The logic of TQM adoption and implementation decisions among US hospitals. *Academy of Management Journal*, *52*(5), 897–918.

Kilduff, M., & Tsai, W. (2003). *Social networks and organizations*. Sage.

King, G., Keohane, R. O., & Verba, S. (1994). *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton University Press.

Klijn, E.-H., & Teisman, G. R. (1997). Strategies and Games in Networks. In *Managing Complex Networks: Strategies for the Public Sector* (pp. 98–118). SAGE Publications Ltd. http://knowledge.sagepub.com/view/managing-complex-networks/n6.xml

Lawrence, T. B., Hardy, C., & Phillips, N. (2002). Institutional Effects of Interorganizational Collaboration: The Emergence of Proto-Institutions. *The Academy of Management Journal*, *45*(1), 281–290. https://doi.org/10.2307/3069297

Lindblom, C. (1977). *Politics and markets: The world's political economic systems*. Basic Books.

Maguire, S., Hardy, C., & Lawrence, T. B. (2004). Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, *47*(5), 657–679.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, *83*(2), 340–363.

Milward, H. B., & Provan, K. G. (2000). Governing the hollow state. *Journal of Public Administration Research and Theory*, *10*(2), 359–380.

Nowell, B., & Milward, H. B. (2022). *Apples to apples: A taxonomy of networks in public management and policy*. Cambridge University Press.

Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective.* Harper & Row.

Phillips, N., Lawrence, T. B., & Hardy, C. (2000). Inter-organizational collaboration and the dynamics of institutional fields. *Journal of Management Studies*, *37*(1). http://onlinelibrary.wiley.com/doi/10.1111/1467-6486.00171/abstract

Provan, K. G., & Kenis, P. (2008). Modes of Network Governance: Structure, Management, and Effectiveness. *Journal of Public Administration Research and Theory*, *18*(2), 229–252. https://doi.org/10.1093/jopart/mum015

Purdy, J. M. (2012). A Framework for Assessing Power in Collaborative Governance Processes. *Public Administration Review*, *72*(3), 409–417. https://doi.org/10.1111/j.1540-6210.2011.02525.x

Raab, J., Mannak, R. S., & Cambre, B. (2015). Combining Structure, Governance, and Context: A Configurational Approach to Network Effectiveness. *Journal of Public Administration Research and Theory*, *25*(2), 479–511. https://doi.org/10.1093/jopart/mut039

Ragin, C. C. (2009). *Redesigning social inquiry*. University of Chicago Press.

Rhodes, R. A. (1997). *Understanding governance: Policy networks, governance, reflexivity and accountability*. Open University Press.

Saz-Carranza, A., Salvador Iborra, S., & Albareda, A. (2016). The Power Dynamics of Mandated Network Administrative Organizations. *Public Administration Review*, *76*(3), 449–462. https://doi.org/10.1111/puar.12445

Seo, M.-G., & Creed, W. E. D. (2002). Institutional Contradictions, Praxis, and

Institutional Change: A Dialectical Perspective. *The Academy of Management Review*, *27*(2), 222–247. https://doi.org/10.2307/4134353

Small, M. L. (2009). 'How many cases do I need?' On science and the logic of case selection in field-based research. *Ethnography*, *10*(1), 5–38.

Thomson, A. M., & Perry, J. L. (2006). Collaboration processes: Inside the black box. *Public Administration Review*, *66*, 20–32.

Tolbert, P. S., & Zucker, L. G. (1983). Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935. *Administrative Science Quarterly*, 22–39.

Wang, F. (2014). Determinants of the effectiveness of Chinese homeowner associations in solving neighborhood issues. *Urban Affairs Review*, *50*(3), 311–339.

Wang, W., Li, H., & Cooper, T. L. (2017). Civic engagement and citizenship development: The case of homeowners' participation in neighborhood affairs in Beijing. *Administration & Society*, *49*(6), 827–851.

Westphal, J. D., Gulati, R., & Shortell, S. M. (1997). Customization or conformity? An institutional and network perspective on the content and consequences of TQM adoption. *Administrative Science Quarterly*, 366–394.

Yip, N.-M., & Zheng, Y. (2024). Self-governance of condominiums in urban China: A strategic action field perspective. *Urban Studies*, *61*(14), 2719–2736.

Zhang, T. (2002). Urban development and a socialist pro-growth coalition in Shanghai. *Urban Affairs Review*, *37*(4), 475–499.

Zhang, Y., & Li, W. (2024). How Does Homeownership Shape Public Service Coproduction? Evidence from a Public Complaint System in Beijing, China. *The American Review of Public Administration*, 02750740241247565.