Fiscal Priorities in Post-COVID Recovery:

Evidence from China

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Abstract

Governments have explored ways to optimize fiscal structures during crises. This capstone project aims to answer the following question: How did COVID-19 severity influence the trade-off between social stability and economic recovery spending among Chinese local governments? While existing literature has demonstrated that the pandemic has created significant fiscal pressures and trade-offs, a gap remains regarding whether post-pandemic budgetary strategies differ based on initial impact severity. This study selected 29 major Chinese cities and used a difference-in-differences (DID) framework to compare pre-pandemic patterns (2015–2019) with post-pandemic adjustments (2023–2024). While it was anticipated that high-severity cities would show a more pronounced shift in priorities, this study found no statistically significant difference in expenditure reallocation between heavily and lightly affected regions. This uniform fiscal performance likely stems from China's highly coordinated fiscal system and shared institutional constraints. This project welcomes further research into fiscal adaptability across different government levels or longer time horizons.

Keywords: COVID-19, Fiscal Policy, Local Government Finance, Public Expenditure, Budget Allocation, Fiscal Trade-offs

Preface

The motivation for researching local fiscal priorities stems from my firsthand experiences during the COVID-19 lockdown in Shanghai. Observing the logistical challenges and the tension between pandemic control and economic activity, I became interested in how it reshapes governmental decision-making. With the invaluable guidance of my advisor, Professor Aleksandar Stojanovic, I have conducted quantitative research using city-level fiscal data to transform these initial observations into a rigorous academic analysis. Through this study, I have been able to identify the patterns of fiscal allocation in the post-pandemic era, providing findings that have relevant implications for understanding local governance and crisis management in China.

Introduction

COVID-19 was not only a global health crisis but also a major economic shock that forced governments to make difficult fiscal decisions. In China, local governments played a crucial role in the epidemic response, implementing strict control measures while managing economic disruption. Although China's fiscal system is characterized by centralization, local governments bear the primary territorial responsibility for responding to public health emergencies. Furthermore, local authorities have more substantial discretion regarding the intensity of epidemic prevention measures, the speed of resource mobilization, and the allocation of fiscal expenditures. Therefore, differences in epidemic severity may have shaped local governments' incentives and constraints, thereby influencing their fiscal decision-making. This variation in local discretion suggests that fiscal responses to the pandemic may also have differed across regions. As China transitions into the post-pandemic era, it remains critical to understand how the severity of the epidemic has shaped local fiscal priorities.

Literature Review

The COVID-19 pandemic represents an unprecedented global shock with profound economic and fiscal consequences. Governments worldwide faced simultaneous pressures of declining revenues due to economic contraction and increasing concerns about public health, social protection, and economic stimulus. (Gordon et al., 2020; Oi et al., 2025) The multi-layered pressure significantly intensified fiscal stress and constrained budgetary capacity. (Nemec& Špaček, 2020; Chernick et al., 2020).

However, governments operate under fundamental resource constraints. At a theoretical level, Fu et al. (2020) argue that COVID-19 reshaped the production possibility frontier (PPF), making public health and economic growth competing objectives. Under such constraints, allocating more resources to public health necessarily implies trade-offs with other policy goals, such as economic performance (Nguyen et al., 2024).

These trade-offs are further intensified by fiscal and institutional constraints. Existing research shows that local government fiscal pressures can adversely affect public health through reduced health expenditures, hindered industrial upgrading, and increased environmental pollution (Zhang et al., 2023). Moreover, fiscal policy adjustments are often constrained by path dependency and increasing complexity under economic uncertainty, making budgetary strategies less flexible and more prolonged over time (Wang et al., 2022).

Empirical studies across countries reflect these constrained trade-offs in practice. In Indonesia, local governments reallocated spending toward health care, social services, economic recovery, and infrastructure (Suwanda, 2024). In the European Union, increased spending on health care and social protection was accompanied by reductions in areas such as culture, housing, and education, further illustrating the reallocation of limited fiscal resources (Franek, 2022). Canada also faced a constrained fiscal environment characterized by rising expenditure pressures and borrowing limitations (Tassonyi, 2022).

Given its role as the earliest outbreak site of COVID-19 and its large-scale, centralized fiscal system, China provides a particularly important context to examine how governments manage these trade-offs. Wu and Lin (2020) classify China’s fiscal responses into pandemic

control, social stability, and economic recovery, suggesting that governments had to balance multiple competing priorities. Similarly, Lyu and Li (2020) emphasize this inherent trade-off by arguing that the fiscal system faced a 'double pressure': achieving immediate socioeconomic goals while maintaining long-term fiscal sustainability. This underscores a general trend where the pandemic-induced shock necessitates a fundamental rebalancing of fiscal priorities.

While existing research provides valuable insights into how local governments responded to the COVID-19 crisis through budgetary adjustments, there are still gaps in understanding how these fiscal strategies have evolved in the post-COVID era, particularly in China. While most studies focus on the immediate fiscal response in the event of a pandemic, few have explored whether local governments still prioritize social stability or whether they have shifted their focus back to economic recovery. In addition, it remains unclear whether there are differences in the fiscal preferences of local governments with varying degrees of pandemic impact. Therefore, this study aims to fill this gap by examining how the severity of the COVID-19 pandemic has shaped Chinese local governments' fiscal allocation decisions in the post-COVID period, particularly their spending priorities between social stability and economic recovery.

Research Question and Hypotheses

This study aims to explore the trade-offs between social stability and economic recovery by analyzing how local governments in China allocated resources after exposure to different levels of COVID-19 severity by examining fiscal data before and after the outbreak. Given

that, the research question is: For Chinese local governments, how does COVID-19 severity differentially affect the post-pandemic composition of general public budget expenditure between (i) social stability and (ii) economic recovery categories, conditional on pre-2019 levels and trends?

The study hypothesizes that the severity of COVID-19 leads to a shift in fiscal priorities, but whether governments favor social stability or economic recovery remains an empirical question.

H1（Social Stability Hypothesis）

Cities that suffered more from Covid allocated a higher share of their post-pandemic budget to social stability spending.

Rationale: Units that suffered more from Covid faced greater social disruptions, leading local governments to prioritize social stability spending to maintain public order.

H2（Economic Recovery Hypothesis）

Cities that suffered more from Covid allocated a higher share of their post-pandemic budget to economic recovery spending.

Rationale: Units that suffered more from Covid experienced greater economic downturns, prompting local governments to allocate more resources to economic recovery efforts to restore economic growth.

Data

We construct a panel dataset of fiscal expenditure outcomes for 29 major city-level local governments in China, covering selected years between 2015-2019 and 2023-2024. The

sample consists of provincial capitals and centrally administered municipalities, resulting in a total of 203 city-year observations. The choice of this time window allows us to capture both pre-COVID fiscal patterns and post-pandemic fiscal adjustments, while avoiding data issues during the pandemic years.

The unit of analysis is the city-level local government. Focusing on major cities enables comparability in government functions and fiscal structures across regions, while also allowing for variation in fiscal responses to external shocks. The sample covers cities across different regions of China, including municipalities directly under the central government and provincial capitals, ensuring broad geographic representation.

Fiscal and Population data

We collect data on local government fiscal expenditures from official statistical yearbooks and corresponding annual budget and final accounts reports (预算/决算). These sources provide detailed and consistent information on government spending across cities and over time.

The fiscal expenditures are categorized into three mutually exclusive groups: economic recovery, social stability, and a residual “Other” category. Economic recovery includes spending on transportation, environmental protection, science and technology, and business-related services. Social stability includes expenditures on public security, social safety net programs, education, and health care. The residual “Other” category groups together expenditures not directly related to substantive policy allocation, such as administrative spending and unclassified items.

For each outcome, we construct expenditure shares using the sum of these three categories as the denominator. Government-managed funds are treated as a separate budget component and are excluded from the analysis.

We also apply specific data-processing steps to ensure the consistency and interpretability of fiscal expenditure categories. We harmonize expenditure categories across cities and years. Categories with name changes but consistent policy content (e.g., “Medical and Health Care and Family Planning Expenditure” later renamed as “Health”) are treated as a single functional category. In addition, to address inconsistencies in reporting granularity, categories that are reported separately in some cases but jointly in others (e.g., “National Defense” and “Public Security”) are aggregated into unified groups. These steps ensure comparability of fiscal expenditure measures across cities and over time.

Cities with incomplete fiscal data for key years are excluded. In particular, Taiyuan and Xining are excluded due to missing fiscal expenditure data for 2023–2024. After these exclusions, the final sample consists of 29 cities observed over multiple years.

To construct per capita fiscal measures, we obtain population data from the China Social and Economic Data Platform provided by CNKI, which compiles official statistical data from authoritative sources. We use residency population data (常住人口) from 2019 as the baseline measure. This choice helps avoid distortions caused by population fluctuations during the COVID-19 period and ensures consistency in per capita calculations across cities and years.

COVID Severity construction

To measure the severity of the COVID-19 shock, we construct a city-level indicator based on cumulative confirmed COVID-19 cases as of October 31, 2022. Using cumulative cases allows us to capture the overall exposure of each city to the pandemic, rather than short-term fluctuations.

To ensure comparability across cities of different sizes, we scale cumulative confirmed cases by population and compute the number of cases per 10,000 residents. The population is measured using 2019 residency data, as stated before.

The COVID-19 case data are obtained from the China COVID-19 Dataset maintained on Harvard Dataverse, developed by the China Data Lab and collaborating institutions. This dataset compiles and harmonizes official case reports across Chinese cities and is widely used for spatial and quantitative research on the pandemic. We use the China-specific dataset that provides city-level daily confirmed cases, from which cumulative cases are constructed.

Table 1

Summary Statistics

Variable	Full Sample (N=29)	High-Severity (N=14)	Low-Severity (N=15)	P-value
Panel A: COVID-19 Severity				
Cumulative cases per 10k residents	4.98	9.31	0.35	0.0231
Panel B: Baseline Fiscal Shares (2019)				
Economic Recovery Share (%)	21.20%	21.70%	20.70%	0.631
Social Stability Share (%)	64.40%	63.60%	65.30%	0.4779
Panel C: Baseline Per Capita Levels (2019)				
Total Expenditure per capita	16485.29	20037.21	12679.66	0.0796
Economic Expenditure per capita	3599.39	4467.08	2669.72	0.1003
Social Expenditure per capita	10131.03	11887.15	8249.48	0.0666
Panel D: City Characteristics (2019)				
Resident Population (million)	10.60	11.31	9.84	0.5851

Table 1 presents the descriptive statistics for our sample cities in 2019, along with a balance test between the high-severity and low-severity groups. Regarding the pandemic intensity, high-severity cities recorded an average of 9.306 cumulative cases per 10,000 residents, which is significantly higher than the 0.353 cases in the low-severity group. This substantial cross-sectional variation in COVID-19 exposure provides the necessary basis for our empirical identification.

On the expenditure side, the social stability shares account for the largest portion of total outlays, averaging 64.4% across the full sample in 2019. In contrast, the economic recovery share represents a smaller portion, at 21.2%.

Importantly, the balance test shows no statistically significant differences in pre-pandemic fiscal shares between the two groups. The economic recovery share for high-severity cities (21.7%) is nearly identical to that of low-severity cities (20.7%), and the social stability shares are also well-balanced (63.6% vs. 65.3%). While high-severity cities exhibit slightly higher per capita expenditure levels, their resident populations are comparable.

Empirical Strategy

Research Design and Identification

Based on the COVID-19 severity measure constructed in the previous section, we classify cities into treatment and control groups using a median split approach. Specifically, we calculate the median value of COVID-19 severity (measured as cumulative confirmed cases per 10,000 population) across all cities in the sample.

Cities with severity levels above the sample median are assigned to the treatment group, representing areas more heavily affected by the pandemic. Cities with severity levels below the median are assigned to the control group, representing relatively less affected areas. By comparing cities with higher and lower levels of pandemic severity, this classification allows us to exploit cross-city variation in pandemic intensity to examine how differential exposure to COVID-19 shapes fiscal allocation decisions.

The sample period is divided into three phases: pre-COVID (2015–2019), a transition period (2020–2022), and post-COVID (2023–2024). The pre-COVID period captures baseline fiscal patterns before the pandemic, while the post-COVID period reflects fiscal allocation after the relaxation of pandemic control policies.

We exclude the transition period (2020–2022) from the main analysis. During this period, China implemented the dynamic zero-COVID strategy, under which pandemic control measures and fiscal responses were highly stringent and subject to frequent adjustments. As a result, fiscal allocation during these years reflects short-term crisis management rather than stable policy priorities, making it unsuitable for identifying post-pandemic fiscal rebalancing.

2023 is defined as the beginning of the post-COVID period. In January 2023, China officially downgraded COVID-19 management from Class A to Class B, marking the end of the dynamic zero-COVID policy. The subsequent infection wave subsided rapidly, with reported cases declining sharply within a short period. This policy shift provides a natural

breakpoint to examine how local governments adjust fiscal priorities in the post-pandemic environment.

We estimate a panel fixed effects econometric model to identify the impact of COVID-19 severity on local fiscal expenditure structures. Our baseline specification is as follows:

$$z_{\{it\}} = \alpha_i + \lambda_t + \beta(Post_t \times HighSeverity_i) + \epsilon_{\{it\}}$$

where $z_{\{it\}}$ is the economic expenditure share (*econ_share*) for city *i* in year *t*. The parameter of interest, β, captures the differential change in fiscal priorities for cities in the treatment group (high pandemic severity) relative to the control group in the post-pandemic period (2023–2024). This coefficient identifies the medium-term structural shift in budgetary allocation once the initial emergency governance (2020–2022) had concluded.

To ensure the internal validity of our estimates, we incorporate a rigorous set of fixed effects. The City Fixed Effects (α_i) account for time-invariant municipal characteristics that might systematically correlate with both pandemic vulnerability and fiscal habits, such as geographic location, historical industrial structure, or long-standing administrative traditions. The Year Fixed Effects (λ_t) control for macro-level shocks common to all provincial capitals, such as national monetary policy shifts, changes in central-to-local transfer rules, or nationwide economic cycles. By including these, our study specifically identifies variations stemming from localized pandemic intensity rather than broader national trends.

Following standard practice in regional economics, standard errors are clustered at the city level. This allows for arbitrary serial correlation in the error term ($\epsilon_{\{it\}}$) within each

municipality over time, addressing the potential concern that fiscal decisions in one year are inherently linked to those in previous years within the same city.

Event Study

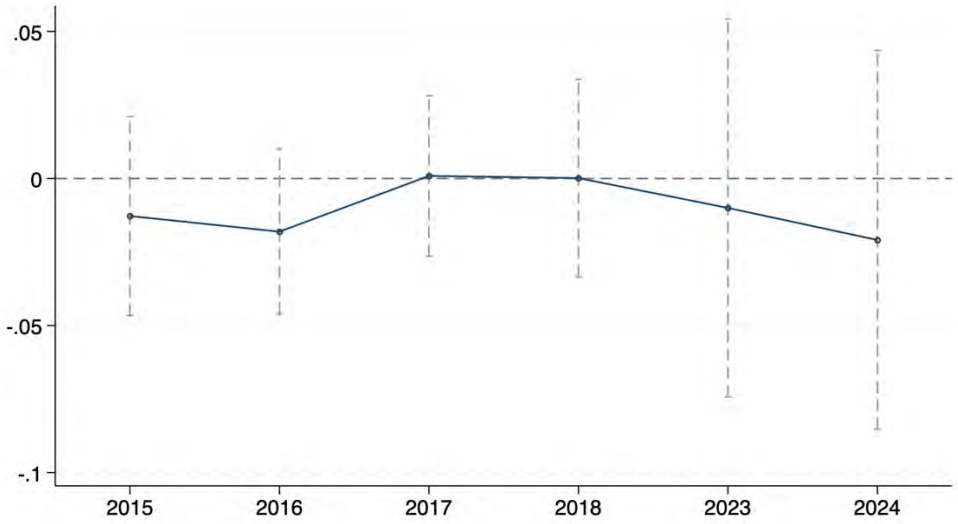
To test for the presence of pre-existing trends and to examine the dynamic effects of pandemic severity on local fiscal structures, we estimate an event study specification as follows:

$$y_{it} = \alpha_i + \delta_t + \sum_{\tau \neq 2019} \beta_\tau \big(HighSeverity_i \times 1(t = \tau) \big) + \varepsilon_{it}$$

In this model, y_{it} represents the economic expenditure share for city *i* in year *t*. The coefficients of interest, β_τ, capture the differential change in fiscal outcomes for high-severity cities relative to the control group in year τ, compared to the baseline year of 2019. If the parallel trends assumption holds, we expect the coefficients to be statistically insignificant for all years prior to the pandemic.

Figure 1

Event Study Estimate



The dynamic estimates and their corresponding 95% confidence intervals are plotted in Figure 1. For the pre-treatment period (2015–2018), the estimated coefficients are small in

magnitude and statistically indistinguishable from zero. The individual coefficients for the pre-trend years are all non-significant, and the joint test for all pre-period coefficients yields a p-value of 0.564. These results fail to reject the null hypothesis of parallel trends, and the estimates are consistent with the assumption that high-severity and low-severity cities followed comparable fiscal trajectories regarding their economic expenditure shares prior to the pandemic. The lack of statistically significant pre-treatment differences provides no evidence of diverging trends before the exogenous shock of the pandemic.

Result

Main Estimation

Table 2

Difference-in-Difference

	Econ Share
Post × High Severity	-0.009
	(0.032)
N	203
Adj.R2	0.518
City FE	Yes
Year FE	Yes
Wild-Bootstrap p	0.824

Note. Standard errors clustered at the city level in parentheses.

Table 2 presents the baseline difference-in-differences estimates examining whether pandemic severity is associated with differential changes in the composition of local fiscal spending. The estimated coefficient on the interaction between the post-pandemic indicator and high-severity indicator is negative, suggesting that cities more severely affected by the pandemic experienced, on average, a 0.95 percentage-point decline in the share of economic expenditure relative to less-affected cities.

However, this estimate is not statistically distinguishable from zero (conventional cluster-robust $p = 0.768$), and the associated confidence interval is relatively wide, spanning both economically meaningful decreases and increases in expenditure shares. This indicates a substantial degree of uncertainty about the estimated effect size and limits the precision with which the relationship's direction and magnitude can be inferred. Importantly, this lack of statistical significance, along with the wide confidence interval, implies that the data are consistent with both moderate decreases and moderate increases in expenditure shares.

To account for the relatively small number of clusters in the sample (29 cities), we further implement wild-cluster bootstrap procedures. The resulting wild-cluster bootstrap p-value ($p = 0.824$) closely aligns with the baseline inference, providing additional support for the conclusion that the estimated effect is not precisely estimated.

Therefore, while the findings do not provide strong evidence of a systematic shift in fiscal allocation across different cities, they also do not rule out the possibility of moderate reallocation effects that the current sample size and model cannot precisely isolate. The results indicate that any potential impact of pandemic severity on fiscal composition remains statistically ambiguous.

Per Capita Estimation

To further examine whether the absence of detectable changes in expenditure shares reflects underlying stability in fiscal allocation or is driven by offsetting movements across categories, this section investigates whether pandemic severity affected the absolute levels of

local fiscal spending. Specifically, we estimate the impact of COVID-19 severity on total, economic, and social expenditures per capita, all expressed in logarithmic terms.

Table 3

Expenditures Per Capita Estimation

	Total PC	Econ PC	Soc PC
Post × High Severity	-0.123	-0.127	-0.079
	(0.107)	(0.174)	(0.102)
N	203	203	203
r2_a	0.737	0.744	0.742

Note. Standard errors clustered at the city level in parentheses.

Table 3 reports the corresponding estimates. Across all three categories: total, economic, and social expenditures, the coefficients on the interaction term are negative, suggesting that more severely affected cities may have experienced modest declines in per capita spending in the post-pandemic period. However, none of these estimates are statistically distinguishable from zero, and the associated standard errors are relatively large, indicating substantial uncertainty in the magnitude of the effects. The implied confidence intervals span both moderate reductions and near-zero changes, limiting the precision with which changes in spending levels can be identified.

Taken together with the share-based results, these findings suggest that the apparent stability in budget composition may not reflect active reallocation across categories but may instead stem from a broader lack of precise estimates of changes in overall and category-specific spending. In particular, the data do not allow us to distinguish between a scenario in which expenditures across categories adjust proportionally and one in which fiscal aggregates remain largely unchanged. While the point estimates for total and social expenditures are

negative, the associated standard errors are large enough that the implied confidence intervals remain wide, encompassing both moderate contractions and slight expansions in spending.

One possible interpretation is that local fiscal responses in the post-pandemic period were shaped by institutional and policy constraints that limited cross-city variation. In the Chinese context, local governments operate within a highly coordinated fiscal system, where expenditure priorities are often influenced by higher-level directives, potentially reducing the scope for differentiated responses based on local pandemic severity. In addition, fiscal capacity constraints, such as revenue shortfalls and pre-existing expenditure commitments, may have further constrained adjustment margins, leading to relatively stable spending patterns across cities despite heterogeneous pandemic exposure.

Overall, while the estimates are plausible of constrained fiscal flexibility and coordinated policy responses, the degree of statistical uncertainty implies that these interpretations should be viewed as suggestive rather than conclusive.

Reallocation Across Categories

To directly assess whether fiscal resources were reallocated across expenditure categories in response to differential pandemic severity, we further estimate separate specifications for economic, social, and other expenditure shares. This approach allows for a more explicit test of whether changes in one category are offset by corresponding shifts in others, thereby capturing potential compositional adjustments within local budgets.

Table 4

Reallocation of Expenditure Shares Across Categories

	(1) Economic Share	(2) Social Share	(3) Other Share
Post × High Severity	-0.00950	0.0110	-0.00148
	(0.0319)	(0.0371)	(0.0180)
N	203	203	203
Adj. R-squared	0.518	0.308	0.210
City FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Note. Standard errors clustered at the city level in parentheses.

Table 4 reports the corresponding estimates. The point estimates suggest a modest decline in the share of economic expenditure alongside a corresponding increase in social spending, while changes in other categories appear minimal. However, none of these estimates is statistically distinguishable from zero, and the associated confidence intervals are relatively wide. Importantly, these intervals substantially overlap across categories, spanning both moderate increases and decreases in expenditure shares. This implies that the estimated differences across categories are themselves imprecisely measured and should not be interpreted as evidence of differential effects across spending types.

This pattern of overlapping confidence intervals limits the ability to identify a clear directional shift in budget allocation or to distinguish effects across categories. In particular, the data do not provide sufficient precision to determine whether resources were systematically reallocated across categories or whether observed differences simply reflect estimation noise.

Taken together, these results suggest that we cannot distinguish between a scenario in which fiscal resources were actively reallocated, for example, from economic to social spending, and one in which overall budget composition remained broadly stable. At the same

time, the estimates do not rule out the possibility of economically meaningful reallocation across categories; rather, they indicate that any such reallocation cannot be distinguished from zero with the available data. As such, while the point estimates may be suggestive of a potential shift in priorities, the lack of statistical precision prevents firm conclusions about the presence or direction of expenditure reallocation.

Tradeoff between Economic and Social Spending

To directly evaluate whether COVID-19 severity affected the trade-off between economic and social spending, we estimate a specification in which the dependent variable captures the relative allocation between these two categories. Specifically, we use the log ratio of economic to social expenditures, which provides a direct measure of shifts in fiscal priorities between growth-oriented and stability-oriented spending.

Table 5

Trade-off Between Economic and Social Spending

	ln(Economic / Social)
Post × High Severity	-0.0479
	(0.178)
N	203
Adj. R-squared	0.473
City FE	Yes
Year FE	Yes

Note. Standard errors clustered at the city level in parentheses.

Table 5 reports the corresponding estimates. The coefficient on the interaction term is negative, suggesting that more severely affected cities experienced a modest decline in the relative weight of economic spending, corresponding to an approximate 4–5% decrease in the economic-to-social expenditure ratio in the post-pandemic period. However, this estimate is not statistically distinguishable from zero and is associated with a relatively large standard

error, implying substantial uncertainty in the magnitude of the effect. The implied confidence interval spans both economically meaningful shifts toward social spending and toward economic spending. This implies that the estimate is too imprecise to determine the direction of the trade-off and should not be interpreted as evidence of no trade-off between the two categories.

This specification provides a direct test of the core trade-off between economic and social expenditures. The absence of a precisely estimated effect in this framework indicates that, even when focusing explicitly on relative allocation, the data do not provide strong evidence of a systematic shift in fiscal priorities.

Taken together with the preceding results, this finding further suggests that the estimates do not allow us to determine whether local fiscal responses involved a clear rebalancing between economic and social objectives, and the confidence interval spans economically meaningful shifts in both directions, leaving the presence and direction of any trade-off unresolved.

A common feature across all specifications is the limited statistical precision of the estimates. With only 29 city-level clusters, statistical power is constrained, resulting in relatively wide confidence intervals throughout. While the point estimates are generally small, the associated intervals are wide enough to encompass both economically meaningful increases and decreases in fiscal outcomes. As a result, the analysis cannot rule out moderate effects of pandemic severity, and the findings should be interpreted as reflecting imprecision rather than definitive evidence of no effect.

Robustness Checks

To ensure the reliability of our baseline null results, we perform three additional robustness checks that address potential concerns regarding variable construction, sample distribution, and the influence of extreme outliers.

Table 6

Robustness Checks

	(1) Continuous	(2) Quartile	(3) Excl. Outliers
Post × COVID Severity	0.000		
	(0.001)		
Post × High Severity		0.014	
		(0.023)	
Post × High Severity			-0.015
			(0.033)
N	203	105	168
r2_a	0.517	0.612	0.387

Note. Standard errors clustered at the city level in parentheses.

To assess the robustness of our baseline results, we conduct three additional tests that address potential concerns regarding functional form, sample partitioning, and the influence of extreme observations.

First, we replace the binary treatment indicator with a continuous measure of pandemic severity (cumulative COVID-19 cases per 10,000 population). This specification tests whether our results are sensitive to the discretization of the treatment variable. As shown in Table 6, Column (1), the estimated coefficient remains close to zero and statistically insignificant, suggesting that the null effect is not driven by the median-split classification.

Second, we adopt an alternative grouping strategy based on quartiles of pandemic severity, comparing cities in the highest quartile to those in the lowest. This approach focuses on more extreme variation in treatment intensity. As reported in Column (2), the estimated effect remains statistically insignificant, indicating no meaningful divergence in fiscal outcomes even between the most and least affected cities.

Finally, we examine whether our results are driven by a small number of highly atypical cases. We re-estimate the model after excluding Wuhan and the four centrally administered municipalities (Beijing, Shanghai, Tianjin, and Chongqing), which may have experienced distinct policy environments. The results, reported in Column (3), remain qualitatively unchanged and statistically insignificant.

Overall, these robustness checks confirm that our main finding of the absence of systematic fiscal reallocation in response to pandemic severity is not sensitive to alternative specifications, sample definitions, or extreme observations.

Conclusion

This paper examines whether differences in COVID-19 severity led to systematic changes in local fiscal expenditure structures across Chinese cities. Using a difference-in-differences framework, the results provide no robust evidence that cities with higher pandemic severity adjusted their fiscal spending priorities relative to less affected cities in the post-pandemic period. This finding is consistent across multiple specifications, including analyses of expenditure shares, spending levels, and direct measures of the trade-off between economic and social expenditures.

A key contribution of this paper is to show that the absence of detectable differences is not confined to a particular outcome measure. Analyses of expenditure levels suggest that the stability in budget shares does not reflect offsetting reallocations across categories, but rather a broader lack of precisely estimated changes in both total and category-specific spending. Similarly, specifications that directly capture cross-category reallocation and the economic–social trade-off fail to identify a systematic shift in fiscal priorities. Taken together, these results indicate that post-pandemic fiscal responses were not characterized by meaningful divergence across cities.

These findings point to a relatively uniform pattern of fiscal adjustment, which may be shaped by institutional and policy constraints that limit local discretion after the COVID crisis. In the Chinese context, a highly coordinated fiscal system and common fiscal pressures, such as revenue shortfalls and existing expenditure commitments, may have constrained both the scale and composition of local government responses. As a result, differences in pandemic severity did not translate into differentiated fiscal strategies at the city level.

More broadly, the results highlight a potential trade-off between policy coordination and fiscal adaptability. While coordinated responses can promote stability and consistency across regions, they may also reduce the capacity of local governments to tailor fiscal policies to heterogeneous shocks. Future research could further explore how institutional structures mediate this balance, particularly over longer time horizons or across different levels of government.

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