

URBAN RESIDENCY & PUBLIC TRUST IN THE CHINESE GOVERNMENT DURING CRISIS - CELINE WANG

OVERALL THEORY

Those who live in urban areas in China are more likely to have negative sentiments toward the government during crisis. This is based on the assumption that people living in the cities tend to be more used and would expect higher quality of public service delivery, and they also tend to have better access to a wider variety of information sources which would foster increased scrutiny of local and central government performance.

HYPOTHESIS

There is a negative correlation between urban residency and support for the government in China during Covid-19.

DATA SET : «THE PUBLIC OPINION EFFECTS OF CRISIS PROPAGANDA IN CHINA»

<https://www.openicpsr.org/openicpsr/project/142681/version/V1/view#:~:text=Principal Investigator,Dan Chen, University of Richmond>

This data set collected survey results on the level of trust people have in their local and central governments during Covid-19, and their Hu-kou (Chinese housing registration system) registration, it also recorded a variety of variables that should be controlled, including respondent's party membership, age, income, and the level of public satisfaction on local¢ral governmental Covid-19 policies.

INDEPENDENT VARIABLE: URBAN RESIDENCY

OPERATIONALIZATION 1 - Classification of respondents based on their geographical location using administrative codes, housing registration system (Hu-kou system), based on population density in order to determine whether urban (1) or rural (0)

OPERATIONALIZATION 2 - Survey questions answered by the respondents with questions such as 'Would you describe the area you live in as 1.Very urbanized, 2.Urbanized, 3.Suburban or 4.Rural? '. A numerical scale can also be used. Respondents are then categorized according to their chosen level of urban/rural residency.

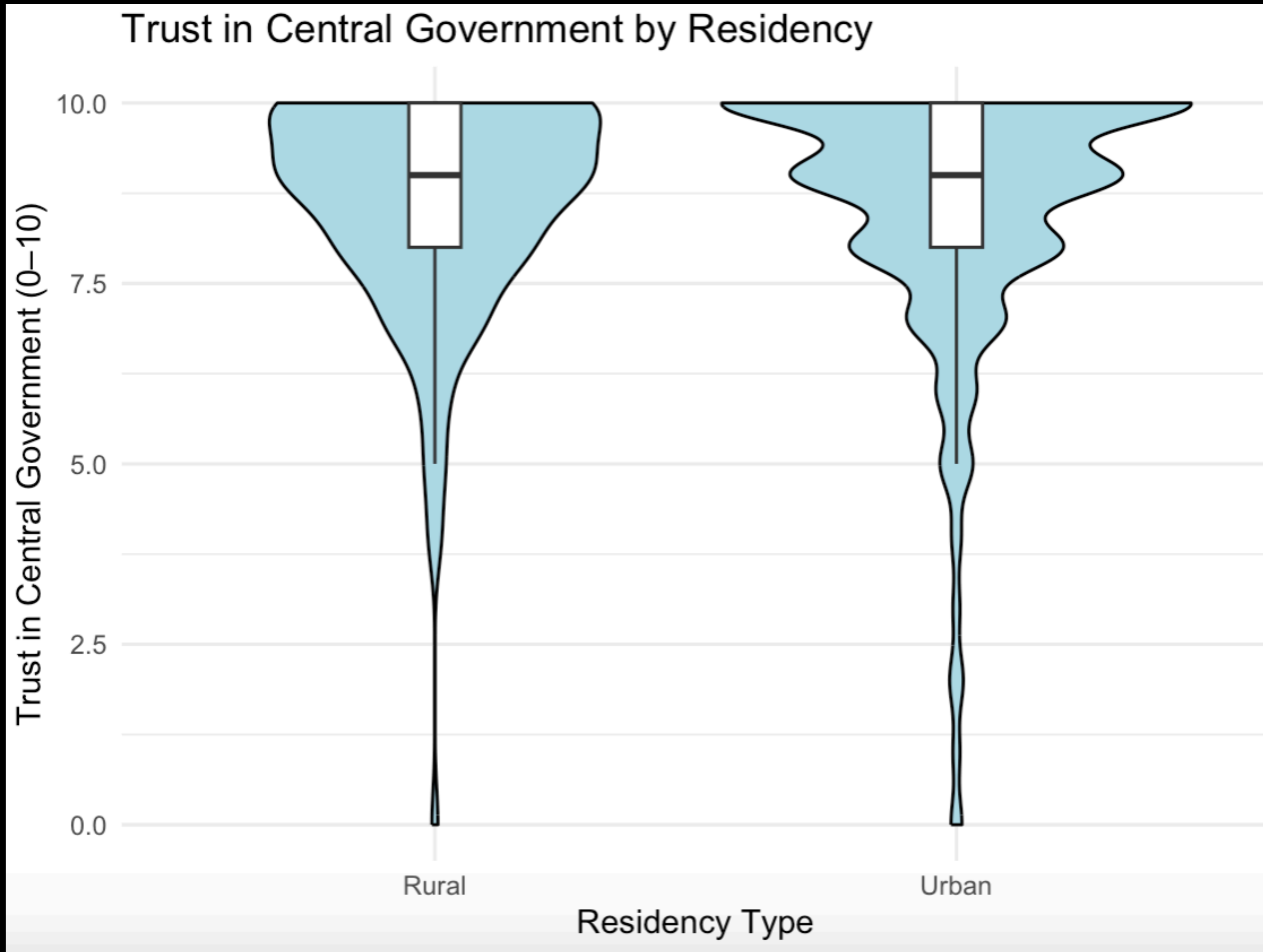
DEPENDENT VARIABLE: TRUST IN THE GOVERNMENT

OPERATIONALIZATION 1 - Analysis of comments on social media platforms (e.g. Weibo, Rednotes, Zhihu etc)

OPERATIONALIZATION 2 - Survey questions measuring trust in or satisfaction with government policies, with questions such as 'On the scale of 1-10, how much do you trust your government?' Or 'On the scale of 1-10, how much do you think the policies your government adopted in reaction to the pandemic are effective?'

CONTROL VARIABLES

- **INCOME LEVEL** - a possible mechanism. Must be controlled to test whether the relationship is : Urban residency —> Higher income —> Less trust. As it could be possible that people living in urban areas are likely to have higher income, and people with higher income are likely to be more critical towards harsh government policies on Covid-19, as they are more likely to have stable employment, better access to information, and a stronger sense of personal autonomy. As a result, they may be less tolerant of restrictive or coercive measures, perceiving them as infringements on individual rights or economic freedom.
- **Age** - a demographic variable that may influence levels of political trust. Older individuals may have lived through different political eras and accumulated longer-term experiences with the state, making them either more trusting due to greater identification with authority and national stability, or less trusting due to historical grievances or unmet expectations. Additionally, older people may be more concerned about health risks posed by the pandemic, making them either more supportive of strict government measures (if they feel protected) or more critical (if they feel inadequately safeguarded). Age may also correlate with media consumption habits and digital literacy, which shape perceptions of policy effectiveness.
- **PARTY MEMBERSHIP** - whether a person is a member of the CCP. This is likely to directly influence trust in government, as party members are likely to be more socially and professionally encouraged to express more trust (there are more regulations on the political expressions of party members), they are also more likely to internalize state narratives and view government action more favorably. This can be attributed to two factors: first, individuals who already hold positive attitudes toward the government are more inclined to seek party membership; second, once admitted, party members are routinely exposed to state-sponsored ideological training and propagandistic materials through mandatory study sessions and political education programs.
- **POLICY PERFORMANCE** - measured by survey results and polls which shows the respondent's evaluation of the government's performance in managing the COVID-19 outbreak, these evaluations are represented in the dataset as two separate variables: localvirus and centralvirus, which reflect trust or satisfaction with local and central crisis management, respectively. This should be controlled as perceived effectiveness of government action and its competency is likely to be a direct driver of trust, when this dataset was created in 2021, the pandemic was one of the most dominant issues in public discourse, with strong effects on how citizens assessed the state. Measurements are explained by the creator of the data: <https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1304&context=polisci-faculty-publications>



TRUST IN CENTRAL GOVERNMENT

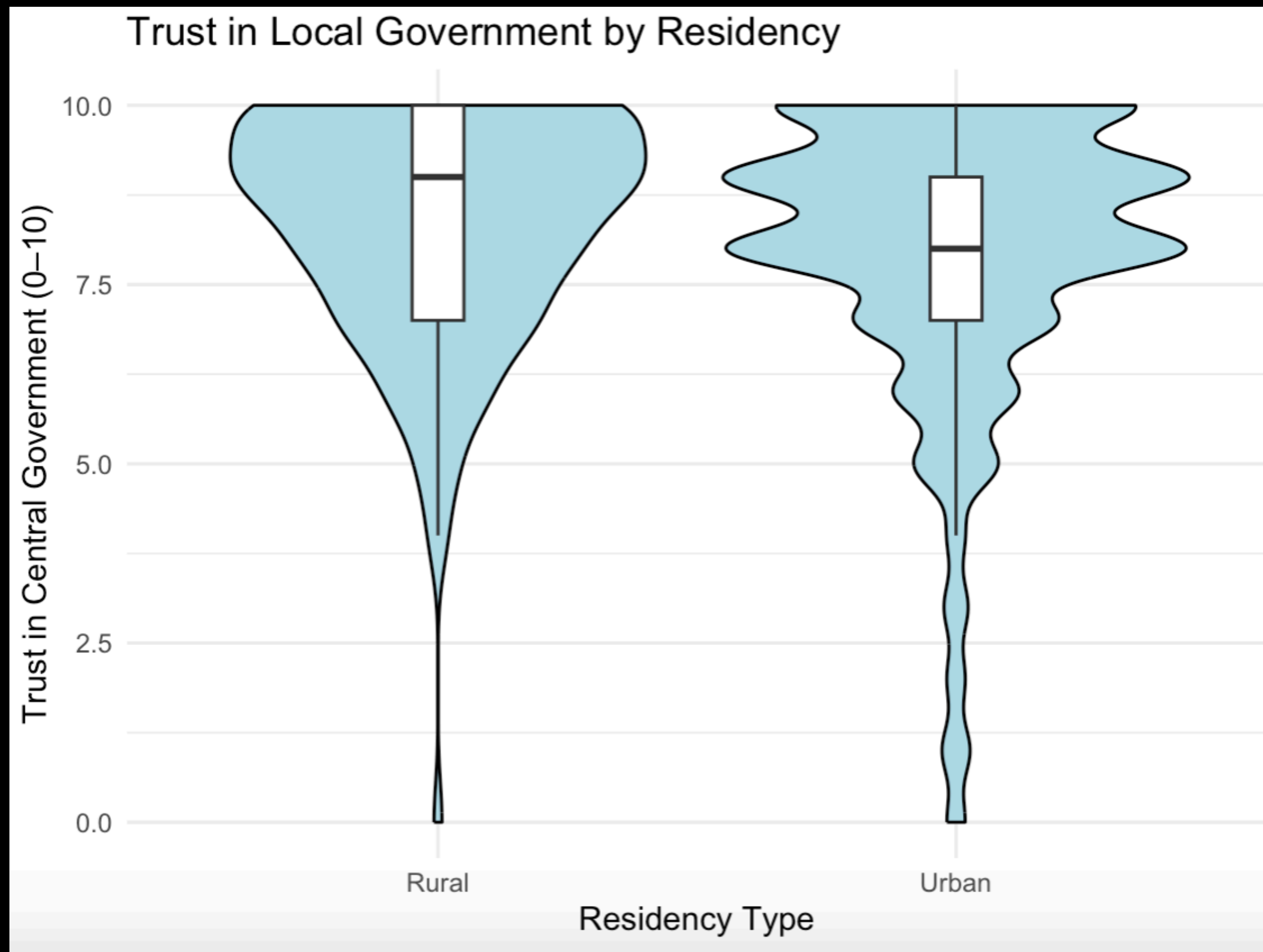
Mean score of urban residents:

8.573661

Mean score of rural residents:

8.642857

Showing a very weak negative correlation, with a greater proportion of urban residents expressing extreme trust (a score of 10.0). However, level of trust varies more between urban subgroups, making the shape of the violin plot more irregular, thicker tail at the lower bottom shows that more urban residents showed extreme distrust compared to rural residents.



TRUST IN LOCAL GOVERNMENT

Mean score of urban residents:

7.909598

Mean score of rural residents:

8.357143

Showing a stronger negative correlation between urban residency and trust. On average, urban residents showed a lower average level of trust. The thicker lower tail of the urban violin plot indicates that a larger proportion of urban respondents expressed extreme distrust. Additionally, a higher number of rural residents reported the maximum trust score, suggesting that extreme trust was more common among the rural population.

STATISTICAL TEST: TRUST IN CENTRAL GOVERNMENT

	ESTIMATE	STD.ERROR	T-VALUE	P-VALUE
INTERCEPT (RURAL)	8.66197	0.15218	56.919	<2E-16 ***
URBAN	-0.08831	0.16380	-0.539	0.59

Since my independent variable (hukou) is a binary variable and my dependent variable (trust) is a continuous variable, the most appropriate statistical test to use would be the t-test, however, since a t-test simply compares the means of two groups on a single continuous variable, it does not account for other variables that might influence the dependent variable. In this way, since I had the need to include several control variables, I chose to run a regression.

This regression table shows that, on average, urban residents reported 0.08831 points lower in trust in the central government compared to rural residents, this finding is consistent with my hypothesis. However, a p-value of 0.59 is statistically insignificant (using the 0.05 threshold), indicating that the observed difference is likely due to random variation. As a result, we cannot confidently conclude that urban residency has a significant impact on trust in the central government based on this model alone.

STATISTICAL TEST: TRUST IN LOCAL GOVERNMENT

	ESTIMATE	STD.ERROR	T-VALUE	P-VALUE
INTERCEPT (RURAL)	8.3662	0.1662	50.332	<2E-16 ***
URBAN	-0.4566	0.1789	-2.552	0.0108 *

This regression table shows that, on average, urban residents reported 0.4566 points lower in trust in the central government compared to rural residents, this finding is consistent with my hypothesis, showing a visibly stronger negative correlation. A p-value of 0.0108 is below the conventional 0.05 threshold, showing a statistically significant result has been obtained, this means that the observed difference is unlikely to be due to random chance.

STATISTICAL TEST: TRUST IN CENTRAL GOVERNMENT (CONTROLLED)

	ESTIMATE	STD.ERROR	T-VALUE	P-VALUE
INTERCEPT (RURAL)	0.33058	0.20780	1.591	0.11195
URBAN	-0.08928	0.08064	-1.107	0.26848
CENTRAL VIRUS POLICY SATISFACTION	0.81440	0.02501	32.565	< 2E-16 ***
LOCAL VIRUS POLICY SATISFACTION	0.14969	0.02472	6.057	1.95E-09 ***
INCOME	0.01463	0.02013	-0.727	0.46761
AGE	0.01324	0.01153	1.149	0.25102
PARTY MEMBERSHIP	0.27123	0.07096	3.822	0.00014 ***

STATISTICAL TEST: TRUST IN LOCAL GOVERNMENT (CONTROLLED)

	ESTIMATE	STD.ERROR	T-VALUE	P-VALUE
INTERCEPT (RURAL)	-0.62892	0.27058	-2.324	0.02030 *
URBAN	-0.29993	0.10500	-2.857	0.00437 **
CENTRAL VIRUS POLICY SATISFACTION	0.21910	0.03256	6.729	2.84E-11 ***
LOCAL VIRUS POLICY SATISFACTION	0.75395	0.03218	23.428	< 2E-16 ***
INCOME	0.06810	0.02621	2.598	0.00951 **
AGE	0.04906	0.01501	3.268	0.00112 **
PARTY MEMBERSHIP	0.21052	0.09240	2.278	0.02290 *

FINDINGS

After adding the control variables, we see that the results for the effect of urban residency on the trust of the central government remains statistically insignificant, a weak negative correlation remained. However, for trust in the local government, adding the control variables made the result more statistically significant, and a stronger negative correlation remained.

It is particularly interesting to see that the negative correlation is significantly stronger when the respondents are asked about their attitude towards the local government, suggesting that urban residents may be especially critical of local-level governance. There can be many possible explanations for this variation, firstly, it may be the case that local governments are, in practice, the primary unit responsible for implementing pandemic-related policies, the central government is emblematically significant but yet very distanced from people's everyday lives, thus, urban residents may express more grievance and distrust towards the local government for reasons such as higher expectations for service delivery, and better access to different information sources. Secondly, rural communities often have a stronger sense of community cohesion and mutual reliance, which can foster higher tolerance toward local authorities and greater solidarity in times of crisis.

For both model, public satisfaction of the covid-19 related policies appeared to be the strongest indicator, showing a visible strong correlation with trust in the government, especially for trust in the central government. Public satisfaction with the policies of the central government is most strongly correlated to trust in the central government, and satisfaction with the local government's policies are most strongly correlated to trust in the local governments. This suggests that during times of crisis, such as the pandemic, citizens' trust in political institutions is closely tied to their perceived effectiveness and responsiveness of government action. This however, doesn't necessarily imply a causal relationship, as cyclical or reverse causality may be present in this relationship.

Taking only the statistically significant model (local government) to account, we see that despite public satisfaction being the strongest indicator, urban residency is still a reasonable indicator to choose, as it showed the strongest correlation out of all other factors (age, party membership and income).

Overall, the statistical tests show that the hypothesis is true, but it only produced valid result for trust in the local governments.

CHALLENGES & ISSUES

RESEARCH DESIGN

- **Urban/Rural classifications can be overly simplistic** - people living on city skirts, densely populated towns etc have not been taken into consideration. Secondly, only using the Hukou system to determine urban residency can produce inaccurate results, as it is very common for people registered in rural areas to move to urban cities, with their Hukou still registered at their place of birth. A possible solution would be to use a composite measure of urban residency—one that combines Hukou registration with actual place of residence, and implement a numerical scale (e.g from 1-10) instead of making it a binary, self-report survey can also be used.
- **Reliance on survey results** - concepts may be subjective and interpreted differently by different respondents. Possible selection bias may occur, as those who choose to respond to surveys are likely to be those who have stronger opinions (positive or negative). A possible solution would include validation questions or multiple indicators for key concepts, such as trust or satisfaction, to reduce the risk of misinterpretation and improve conceptual reliability, and using standardized definitions.
- **Authoritarian context of China** - Social media contents might be censored and respondents may withhold or distort their true opinion (especially party-members), with concerns about surveillance. This problem is very difficult to overcome, one possible approach would be to use qualitative methods with in-depth interviews to get deeper insights into people's experiences.

DATA

- **Small sample size for rural residents** - the data set contained 896 samples for urban residents and only 142 for rural residents, this creates a significant imbalance and may be a key reason to why statistically insignificant results were produced. A solution to this problem would be to include more respondents living in rural areas.
- **More control variables can be added** - the data set also included factors such as medical treatment received by respondents, the province they are from, their gender and education level. Moving forward, incorporating these variables into the regression models could offer a more nuanced understanding of the factors shaping political trust. For example, the distance of the respondent's province of residence from Beijing might affect their trust in the central government as well.