Who Robbed Our Trust?

Identity and Modern Trust Levels

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Note

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Abstract

This study employs data from the CGSS and utilizes OLS regression and RDD to examine the impact of political identity and north-south differences on social trust. The main contributions of this study are as follows. First, the analysis finds that political outlook has a significant and positive effect on social trust, and this effect remains robust across different models, suggesting that Party membership may enhance individual social trust through political identification. Second, this study verifies the systematic north-south disparity in social trust levels whose result is same as previous research. Finally, by employing the Qinling-Huaihe Line as a natural experimental cutoff and implementing the RDD method providing stronger causal evidence demonstrating the important influence of geographic factors on social trust, as trust levels decline with increasing latitude. Overall, this study explores the key determinants of social trust in China from the dual perspectives of political identity and regional culture.

Keywords: Social Trust, Multiple regression, Rice South, Wheat North, CGSS

JEL: Z13, C21, O13, O53

Who Robbed Our Trust: A Study Based on Modern Trust Levels

Introduction

Social trust refers to an individual's trust in others, fellow members of society, and social institutions. It forms the foundation for building social capital. In contemporary society, especially in rapidly developing China, changes in social trust exhibit complex characteristics, with diverse influencing factors and significant regional disparities.

The initial idea for this paper stemmed from Ding's extensive research on the topic of "South Rice, North Wheat", including a paper related to trust (Ding et al., 2018). This sparked the idea for the current study. Based on his article, the initial plan was to explore the impact of historical major flood disasters on modern levels of trust, and I could not achieve that due to the limitations of data which I could not reach that must get via Renmin University of China network environment for the dataset named "Natural disaster information integrated data system in the Qing Dynasty" made by Dr. Xia (2015), but I could not.

Currently, there is a large body of research on trust that discusses the impact of religious identity on trust in the United States (Dhami et al., 2024), while examines the influence of autocracy on social trust through studies conducted in Europe and the United States (Xu & Jin, 2018). Sociological research in China has indicated that folk beliefs significantly enhance residents' levels of social trust by fostering social support and strengthening a sense of identity (Hou et al., 2023; Zhang & Sun, 2023). However, there is currently no research within the field of economics that investigates this issue using contemporary data.

Research on African slavery suggests that the trade of Black slaves was often driven by trust (Nunn & Wantchekon, 2011). The prevailing view today is that racial distrust in Africa is a consequence of the transatlantic slave trade (Araujo et al., 2024; Beckert, 2014; Nunn & Wantchekon, 2011). Therefore, research on social trust is both necessary and meaningful.

This study employs OLS to estimate the impact of identity recognition on social trust with CGSS data. Furthermore, this study conducts a heterogeneity analysis using the Qinling-Huaihe Line and applies the RDD method to examine the extent of these differences.

The rest of the paper is organized as follows. Section 2 introduces the background of the study within the context of China. Section 3 reports the raw data, data processing methods, and summary statistics. Section 4 discusses the main empirical strategy, and section 5 reports the result. Section 6 concludes.

Background

Social Trust in Switching

In studies examining social trust in China, there exists a strong correlation between institutional confidence and generalized trust, suggesting that high levels of trust in governmental institutions may enhance individuals' general trust in others (Steinhardt, 2012). But as time passes, social trust has unquestionably undergone a transformation from questioning whether one should offer help, to doubting whether one dares to do so due to fear of being scammed. But lots of people is doubting about the fact of the old, they didn' t dare to help them which led to a series of accidents. Through web crawling of social news from 2012 to 2019 and classify employing random forest model, discovering north-south regional disparities in incidents stemming from trust deficiency, the result is presented in Table I.

Table I Statistics of social events caused by mistrust

Year	North	South	Total
2012	3	0	3
2013	6	2	8
2014	7	2	9
2015	7	1	8
2016	5	5	10
2017	5	3	8
2018	7	4	11
2019	4	1	5
Sum Up	44	18	62

As what I assumption, social trust is associated with social cognition, and this cognition exhibits regional disparities between the North and South. Thus, this study will focus on identity recognition and the North-South disparities.

Identity

In China, joining the Party requires taking an oath[1], a significant portion of which pertains to identity recognition. According to reports from People's Daily Online, as of December 31, 2023, the total number of Communist Party of China (CPC) members reached 99.185 million. According to World Bank, at the end of 2023, China's total population was 1.41 billion, with Communist Party members accounting for 7.03% of the population. Due to the rigorous Party admission review system, all applicants must undergo a strict qualification assessment and a thorough examination of their political background. Although it cannot be guaranteed that all individuals join the Party based on "identification", there is evidence suggests that Party members demonstrate their identity recognition by engaging in actions that benefit the Party and society (Dickson, 2016). Based on this, this study assumes that Party members are more motivated to help others, thereby exhibiting a higher level of trust.

On the other hand, China is a multi-ethnic country, with the Han population constituting the majority, accounting for approximately 92% of the total population. The remaining 54 ethnic minority groups exhibit differences from the Han in terms of culture, economy, and social behavior (Qian, 2008). Ethnic identity also plays a significant role in shaping individuals' sense of belonging. Some ethnic minorities tend to be more willing to help members of their

[1] The oath English version sourcing from China Daily as follows: It is my will to join the Communist Party of China, uphold the Party's program, observe the provisions of the Party Constitution, fulfill the obligations of a Party member, carry out the Party's decisions, strictly observe Party discipline, protect Party secrets, be loyal to the Party, work hard, fight for communism for the rest of my life, always be prepared to sacrifice my all for the Party and the people, and never betray the Party.

own group, while Han individuals may exhibit a preference for assisting fellow Han people when interacting with individuals from different ethnic backgrounds. When individuals make decisions in resource allocation or reciprocal games, in-group preference driven by group identity is highly significant (Alesina & Ferrara, 2005; Mobius et al., 2016). Moreover, differences among ethnic groups in contexts such as stranger games and cooperative tendencies are closely linked to social norms, cultural values, and historical legacies (Mantilla et al., 2021). Additionally, social identity theory suggests that in the absence of cross-cultural understanding and communication, ethnic identity can further reinforce the divide and trust gap between in-groups and out-groups (Alesina & Ferrara, 2005).

Data

To verify the hypothesis, the CGSS (Chinese General Social Survey), initiated in 2003, is employed to examine the mathematical model, providing multi-level data from social, family, and individual perspectives to address issues of significant scientific and practical relevance. The variables within the dataset can provide support for the regression model in the research.

Basically, I selected age, gender, and other factors as individual characteristic variables for the sample. Trust level was measured using indicators from A33 to A35 in the CGSS questionnaire. After removing outliers, the average was calculated to determine each individual's trust level. Besides, I measured individuals' levels of happiness and cognitive openness to mitigate the impact of these characteristics on the regression analysis. To examine regional differences on this issue, this study adopts the Qinling-Huaihe Line, a classic demarcation between northern and southern China (Talhelm et al., 2014).

In addition to the above variables, some literature argues from the perspective of trust whether religion can enhance firm performance (Lu & Wu, 2020), and some argues social trust with size of enterprises (Ding & Ma, 2024) and some influence of religion in China (Ding et al., 2025). Therefore, I also incorporate religious belief into the selection of variables.

Therefore, lots of variables like religion added to the following models. The descriptive statistics of the key variables are presented in Table II.

Table II Descriptive statistics of core variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Trust	8141	3.3393	.5850	1	5
Han	8148	0.9264	.2612	0	1
Religion	8148	0.0750	.2634	0	1
Outlook	8135	0.1187	.3235	0	1

Regression Analysis Strategy

I start my regression analysis by estimating the effect between trust and the mainly varibles about happiness, nationality and political outlook. Then, to explore the impact of these factors vary across northern and southern China, I apply a RDD estimation.

Benchmark Regression

What the paper explores is whether the identity affects social trust, the simple model should between trust with other factors including ethnicity, religion and political outlook. However, the *Decision of the CPC Central Committee and the State Council on Strengthening Religious Work* states[2]: "Communist Party members are not permitted to adhere to any religion." Ideally, religion and political outlook exhibit perfect multicollinearity. Besides, religious belief is generally more prevalent among ethnic minorities in China.

Therefore, I start by applying OLS regression to examine these (Eqn (1), (2) & (3)). Then, I incorporated city fixed effects (Eqn (4)):

$$Trust_i = \beta_0 + \beta_1 \cdot Han_i + \varepsilon_i \quad (1)$$

$$Trust_i = \beta_0 + \beta_1 \cdot Religion_i + \varepsilon_i \quad (2)$$

$$Trust_i = \beta_0 + \beta_1 \cdot Han_i + \beta_2 \cdot Outlook_i + \varepsilon_i \quad (3)$$

$$Trust_{i,j} = \alpha + \beta \cdot Feature_{i,j} + Z_{i,j} \cdot \lambda + \delta_j + \varepsilon_i \quad (4)$$

[2] Source: http://politics.people.com.cn/n1/2016/0430/c1001-28316211.html

where $Trust_i$ is the trust level of people i; Han_i is a dummy variable to describe whether the people i is Han people; $Religion_i$ is a dummy variable to describe whether the people i has religious beliefs; $Outlook_i$ is a dummy variable to describe whether the people i is a party member; the $Feature_{i,j}$ is the identity features of people i; the $Z_{i,j}$ is city j's characteristics vector, and δ_j is city fixed effects.

Heterogeneity Analysis

To avoid personal factors affecting the regression results, I include several individual characteristic control variables in Eqn (5).

In order to find out the differences caused by geographic location, I employed grouped regression model, using the classic Qinling-Huaihe Line as the cutoff point (Talhelm et al., 2014). Thus, I generate a dummy variable named $location$ to indicate whether the respondent is situated north or south of the Qinling-Huaihe Line (Eqn (6)).

$$Trust_{i,j} = \alpha + \beta \cdot Feature_{i,j} + X_{i,j} \cdot \lambda + Z_{i,j} \cdot \lambda + \delta_j + \varepsilon_{i,j} \quad (5)$$

$$Trust_{i,j} = \alpha + \beta \cdot Feature_{i,j} + \gamma \cdot Position_j + X_{i,j} \cdot \lambda + \varepsilon_{i,j} \quad (6)$$

where the $X_{i,j}$ is people i's characteristics vector; the $Feature_{i,j}$ is the identity features of people i; the $Position_j$ is a dummy variable describing the position of city j.

North-South Differences

Although the heterogeneity analysis has already examined regional differences between northern and southern China, provinces intersected by the Qinling-Huaihe Line were excluded in that section. Here, the focus is on analyzing north-south differences using the distance from the Qinling-Huaihe Line as the key variable employing the RDD model (Eqn (7)).

$$Trust_{i,j} = \alpha + \beta \cdot Feature_{i,j} + \tau \cdot Position_j \cdot f(latitude_j) + X_{i,j} \cdot \lambda + \varepsilon_{i,j} \quad (7)$$

where $f(latitude_j)$ is the instrumental variable to measure the level of position, the format is $(latitude_j - 34)^2$ as the Qinling-Huaihe Line is considered to be at 34 degrees north latitude; all other features are the same as before.

Result

The results of the benchmark regression (Model (1) to (4)) are presented in Table III. Column (1) uses ethnicity as the key explanatory variable, while column (2) focuses on religious belief. Column (3) incorporates both ethnicity and political outlook as core explanatory variables. Columns (4) to (6) extend the specifications in the first three columns by adding control variables.

Table III OLS estimands

VARIABLES	(1) Trust	(2) Trust	(3) Trust	(4) Trust	(5) Trust	(6) Trust
Han	0.0611**		0.0576*	0.0081		0.0048
	(0.0301)		(0.0302)	(0.0304)		(0.0304)
Religion		-0.0306			-0.0153	
		(0.0293)			(0.0263)	
Outlook			0.1223***			0.1093***
			(0.0204)			(0.0201)
Constant	3.2656***	3.3245***	3.2575***	3.3317***	3.3404***	3.3220***
	(0.0291)	(0.0076)	(0.0293)	(0.0289)	(0.0067)	(0.0289)
Fixed Effect	No	No	No	Province	Province	Province
Observations	8,141	8,141	8,128	8,141	8,141	8,128
R-squared	0.0007	0.0002	0.0046	0.0000	0.0000	0.0036

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1*

In the baseline regression results (Table III), Column (1) includes only Han ethnicity (Han) as the key explanatory variable, showing an estimated coefficient of approximately 0.0611, which is significant at the 5% level. Column (2) replaces Han ethnicity with religious belief (Religion), but the effect is not statistically significant. In Column (3), both Han ethnicity and political outlook (Outlook) are included, revealing that the coefficient of political outlook is 0.1223 and significant at the 1% level, indicating a strong positive association between Party membership and higher levels of social trust. Columns (4) to (6) introduce additional control variables and province fixed effects. The results suggest that the effect of Han ethnicity loses significance after these controls are included, while the impact of political outlook remains

strong and significant. Overall, political outlook emerges as the most influential factor in this model, whereas religious belief does not exhibit a notable effect on social trust.

Overall, the results suggest that religious belief consistently exhibits no significant effect on social trust across all specifications. In contrast, political outlook remains significant in every model, indicating its robust association with trust levels. Notably, when both ethnicity and political outlook are included in the regression, the coefficient of ethnicity loses significance, suggesting potential multicollinearity between these two variables. Given this, subsequent analyses primarily focus on political outlook as the key explanatory variable.

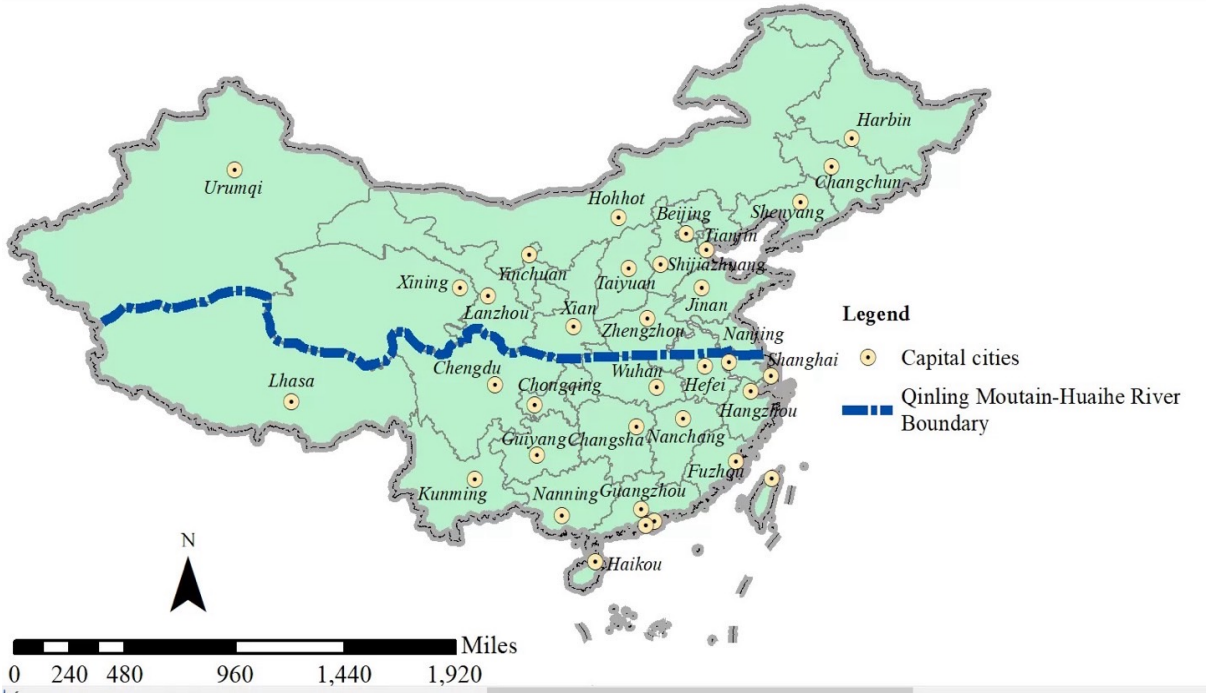

Figure I Qinling-Huaihe Line and main city in China
Source: https://bbs.pinggu.org/thread-6791301-1-1.html

Figure I illustrate the Qinling-Huaihe Line and provincial capitals. Table IV presents the result of RDD estimand. The column (1) reports a benchmark regression result added individual characteristics vectors as control varibales with province fixed effect. Then the column (2) and (3) are the reults of position difference by position and political outlook with position individually to explore the potential impact of geographic positioning on social trust. Besides, the column (4) and (5) add the latitude funciton based on column (2) and (3) to achieve RDD model.

Table IV RDD estimand

VARIABLES	(1) Trust	(2) Trust	(3) Trust	(4) Trust	(5) Trust
Outlook	0.0321		0.0572*		0.0557*
	(0.0333)		(0.0322)		(0.0321)
Position		0.0699***	0.0705***	0.0778***	0.0782***
		(0.0242)	(0.0243)	(0.0247)	(0.0247)
f(latitude)				-0.0006*	-0.0006*
				(0.0004)	(0.0004)
Constant	2.5259***	2.5895***	2.6279***	2.6053***	2.6433***
	(0.1709)	(0.1966)	(0.1987)	(0.1971)	(0.1992)
Control	Individual	Individual	Individual	Individual	Individual
Fixed Effect	Province	No	No	No	No
Observations	2,715	2,718	2,715	2,718	2,715
R-squared	0.0597	0.0557	0.0568	0.0567	0.0578

Standard errors in parentheses
**** p<0.01, ** p<0.05, * p<0.1*

Table IV presents the RDD results, further examining the impact of geographic positioning on social trust. Column (1) provides a baseline regression result with individual characteristics and province fixed effects as controls for comparison. Column (2) introduces the geographic position variable (Position), which remains positive and statistically significant at the 1% level, indicating that social trust levels in southern regions are significantly higher than in the north. Column (3) builds upon Column (2) by incorporating political outlook, which retains a positive coefficient and remains significant at the 10% level, suggesting that Party membership continues to be a key determinant of social trust, even after accounting for geographic factors. These results are consistent with the findings from the baseline regressions, further confirming the existence of north-south trust disparities and highlighting the stable role of political identity in shaping social trust.

Table IV Columns (4) and (5) further introduce the latitude function , formally implementing the RDD framework for estimation. The coefficient of the latitude variable is negative and significant at the 10% level, indicating that as latitude increases (i.e., moving further north), social trust levels decline. This result provides stronger causal evidence for the

north-south trust disparity. Moreover, the effects of both geographic position and political outlook remain robust under the RDD specification, further supporting the notion that social trust is stronger in southern regions, while political identity exerts a consistently positive influence on trust levels regardless of geographic location. These findings validate the identification strategy and suggest that both geographic and institutional factors jointly shape the distribution of social trust in China.

The results from Table IV reinforce the existence of a significant north-south trust disparity. Individuals in southern regions exhibit higher levels of social trust, as indicated by the consistently positive and significant coefficient of the geographic position variable. The inclusion of the latitude function in the RDD framework further strengthens the causal interpretation, showing that trust levels decline as latitude increases. These findings suggest that geographic factors play a crucial role in shaping social trust, while political identity remains a stable and significant determinant across different regions.

Conclusions

This study systematically examines the key factors influencing social trust in China using CGSS data and employing OLS regression and RDD methods. After controlling for individual characteristics and city fixed effects, the results show that political outlook exerts a significant and positive impact across all models, indicating that Party membership effectively enhances individual social trust. Additionally, from a regional perspective, social trust levels in southern China are significantly higher than in the north, and this finding remains robust even after accounting for multiple control variables in the regression models.

After introducing the Qinling-Huaihe Line as a geographic boundary and incorporating the RDD framework, the north-south trust disparity remains strongly supported. Specifically, as latitude increases (i.e., moving northward), social trust levels exhibit a declining trend. Meanwhile, the positive effect of political identity on trust remains stable, demonstrating that

the influence of political affiliation is robust across regions. Overall, this study explores the determinants of social trust from both political identity and regional cultural perspectives, providing empirical evidence for understanding the role of cultural and institutional factors in shaping social trust in China.

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