Political Trust Activation and Crisis: Evidence from Courier Daily Performance Records[*]

HENG CHEN
University of Hong Kong

YUYU CHEN
Peking University

YUXI XIE
University of Hong Kong

QINGXU YANG
University of Hong Kong

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Abstract. We examine how crises activate dormant cultural traits by studying migrant workers' behavior during the early COVID-19 pandemic in China. Using 4 million daily delivery records from 10,000 couriers between 2018 and 2020, we compare migrants from former Chinese Soviet Republic regions with those from other areas. During lockdowns, couriers from Soviet base regions reduced their labor supply by 25 percentage points more than their counterparts, despite no pre-pandemic differences. We find that economic conditions, geographic characteristics, and alternative cultural traits cannot account for these behavioral differences. Instead, historically-rooted distrust in local government—which remained dormant in normal times—was activated by pandemic uncertainty. Further evidence shows that this distrust shaped risk perceptions and information processing, accounting for the behavioral gap. Our findings suggest that crises selectively activate specific cultural traits: while individuals carry multiple hometown legacies, only certain traits become salient depending on the nature of the shock. (JEL: D9, D74)

Keywords: political trust, crisis, activation, cultural trait

1. Introduction

Existing studies have documented that significant historical events can have enduring impacts on societies by reshaping the course of economic development (Acemoglu, Hassan, and Robinson 2011 and Dell 2010) and altering cultural traits (Nunn and Wantchekon 2011). Recent research in this area has established that the effects of historical shocks can remain dormant for long periods of time before emerging to wield influence when the historical legacy is activated (Cantoni, Hagemeister, and Westcott 2020 and Fouka and Voth 2022).

Despite the significance of these findings, our understanding of the activation process remains limited. Historical legacies vary across individuals, yet these variations may lie dormant in certain contexts while becoming decisive in others. A central question emerges: what circumstances transform latent historical footprints into active determinants of behavior?

In this study, we focus on how crises serve as catalysts that activate dormant cultural traits. While historically-shaped traits may not generate behavioral differences in normal settings, crises can create conditions under which these traits become salient and shape individual choices. We show that crises are particularly effective at activating cultural variations related to trust in institutions, as uncertainty makes beliefs about institutional trustworthiness central to decision-making.

We examine this mechanism through individual behavior during the early phase of the 2020 pandemic, a period characterized by heightened health risks and profound uncertainty about the virus, its transmission, and protective measures. Our analysis focuses on migrants from hometowns with distinct historical legacies who worked in identical urban environments. We investigate whether these individuals exhibited systematic differences in risk mitigation behaviors, information processing, and economic decision-making, and whether these differences can be traced to historically-shaped variations in political trust that remained latent until activated by the pandemic crisis.

Specifically, we leverage a novel dataset from a leading Chinese logistics company to address these research questions. The dataset comprises 4 million daily delivery records from 10,000 couriers between 2018 and 2020, providing precise measurements of courier activity before, during, and after the initial COVID-19 outbreak. During the crisis, delivery work became unexpectedly risky due to required human contact, prompting couriers to reduce delivery volume to lower virus exposure–a specific safety-seeking behavior motivated by heightened fear. We use these labor supply adjustments as our measure of crisis response. Crucially, the vast majority of couriers in our sample are migrants who, despite their varied regional origins, faced similar circumstances during the outbreak. This setting allows us to isolate the influence of

hometown origins from current working environments.

We compare migrant couriers originating from the historical Chinese Soviet Republic (CSR) regions with those from other regions. These Soviet base areas were established by the Chinese Communist Party in the 1920s and 1930s as the first experiments in communism. These regions experienced radical land reforms, extreme violence, and multiple regime turnovers, which traumatized the local population. The combination of violence and instability created lasting distrust in local government that has persisted across generations. Today, these regions continue to be marked by economic underdevelopment and lower levels of social capital.

The Chinese Soviet Republic regions provide an important and novel setting for our investigation. First, these areas offer regional variation in exposure to Communist governance before China's 1949 unification under Communist rule. The distinct levels of economic development and social capital in those regions create a laboratory for examining how cultural and economic factors shape crisis responses. Second, while the Cultural Revolution and Great Famine have received extensive scholarly attention, the lasting impact of the Chinese Soviet Republic experience remains understudied despite its historical significance.[1]

Our first key research question focuses on the behavioral differences among couriers originating from former Soviet base areas and non-base areas during crisis, that is, the initial wave of lockdowns in 2020 in this context. We explore whether couriers from CSR base areas reduced their labor supply to a greater or lesser degree than their counterparts from non-CSR base areas. During this period, Chinese governments imposed stringent lockdown measures in cities where the pandemic threatened to spiral out of control. The implementation of lockdowns based on local outbreak severity provides quasi-random variation in crisis exposure. We conduct balancing tests and show that courier characteristics and pre-pandemic performance are balanced between lockdown and non-lockdown cities, and between Soviet-base and non-base region couriers within both city types.

Using a staggered difference-in-differences approach, we find significant "Soviet base effects" on couriers' labor supply decisions. That is, during lockdowns, couriers from Soviet base regions reduced their delivery volumes by 25 percentage points more compared to their non-base counterparts. They also exhibited a higher likelihood of work absence, with an additional half-day absence per week. These disparities in labor supply between the two groups emerged only during lockdown periods. Event study analysis reveals that as the crisis gradually subsided and came under control, delivery

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[1]Paradoxically, although the Communist Party actively celebrated and propagated the Chinese Soviet Republic period's history – including its violent land reforms and social upheavals – empirical research on these regions remains scarce.

volumes between the two groups converged again.

What mechanisms drive the differential responses of couriers during the crisis, given the absence of behavioral differences before and after? In other words, when individual couriers possess multiple traits from their hometowns, which specific traits become salient and drive behavioral differences during crises?

We examine three channels through which hometown background may influence decision-making during crises: economic conditions, geographic attributes, and cultural traits. For instance, couriers from economically underdeveloped regions (such as poverty-stricken counties), distinct geographic settings (such as inland or mountainous areas), or communities with lower social capital (characterized by reduced trust and altruism) may have developed specific behavioral patterns to deal with crisis. These deeply ingrained patterns could be activated when confronting heightened risks during crises. Figure 1 summarizes these potential channels.

We test whether economic and geographic characteristics of couriers' hometowns may account for the Soviet base effect. In a large set of horserace analysis, the Soviet base effect maintains its magnitude and statistical significance while various economic and geographic factors show minimal and insignificant impacts. These results indicate that hometown economic and geographic characteristics unlikely drive the observed behavioral differences.

Next, we examine cultural traits as potential mechanisms. Drawing on survey data from 2,800 couriers employed by the same company, we collected detailed information about their beliefs, values, economic circumstances, and pandemic-related experiences. Our analysis reveals that a set of cultural traits–including altruism, risk preferences, economic commitments, and work attitudes–cannot account for the observed Soviet base effect either.

However, political trust emerges as a crucial mechanism. As documented in Section 3 and Appendix A.2, individuals from CSR regions exhibit significantly lower trust in local government compared to those from other areas, while showing no systematic differences in trust toward the central government or general population.

We find that variations in local government trust could account for approximately one-third of the observed Soviet base effect on crisis response. Given that trust in the local government is closely associated with confidence in its capacity to effectively manage the pandemic and the credibility of information disseminated by the local authorities, a lack of trust in the local government could elevate risk perceptions among couriers and trigger their safety-seeking activities (i.e., reducing their labor supply).

How does activated (dis)trust shape courier decisions? Our survey data on couri-

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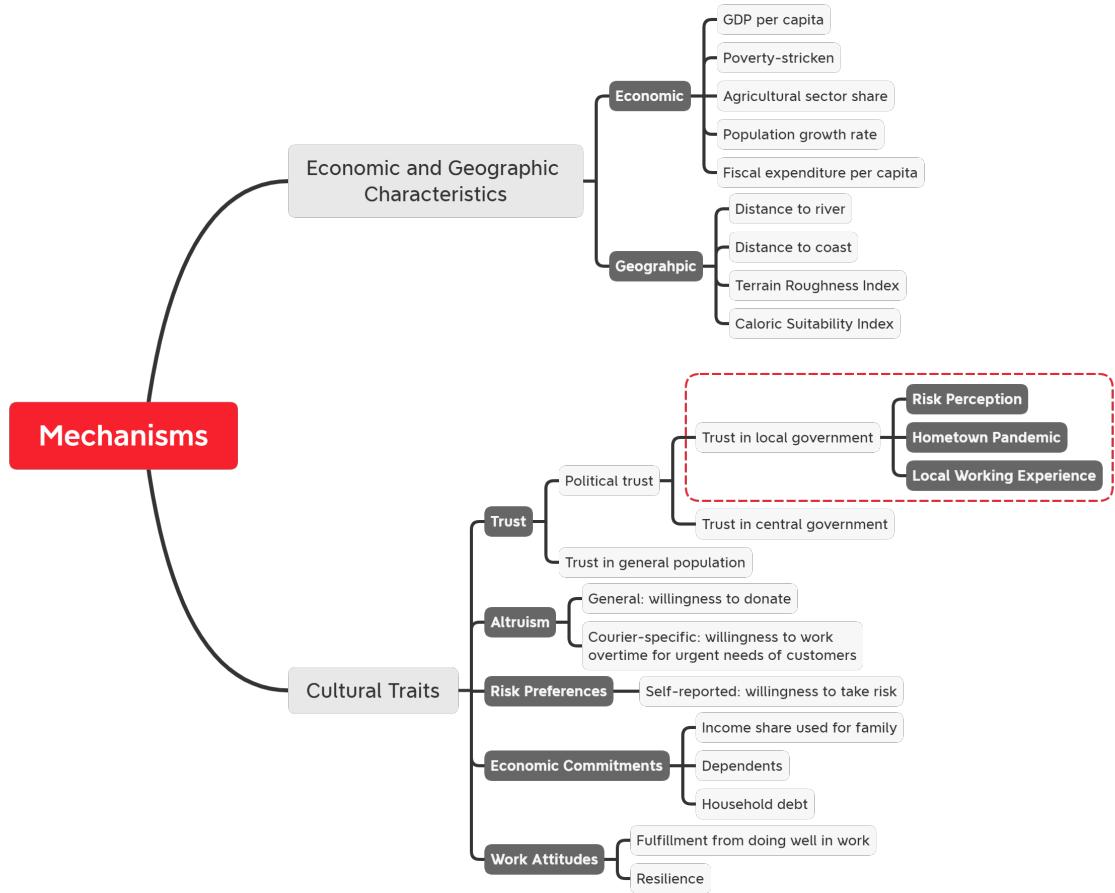
Figure 1. *Summary of Examined Mechanisms.*

ers' crisis experiences reveals two primary channels through which political trust shapes behavior. First, the lack of trust in local government may have affected risk perception during lockdowns. Couriers from low-trust regions reported elevated risk assessments, despite experiencing similar COVID-19 infection rates among their acquaintances. This heightened risk perception correlates with reduced delivery volumes during lockdowns.

Second, trust in local government shaped how couriers utilize different sources of information to assess pandemic risks. Couriers with lower political trust were more likely to turn to alternative sources, such as the pandemic situation in their hometowns. Our findings indicate that couriers reduced their labor supply more significantly when their hometowns experienced severe pandemic conditions during the lockdown period. This effect was especially pronounced among couriers from regions with lower levels of trust in government.

Our further analysis explored two potential channels–local work experience and peer effects–that could interact with political trust. We find that while local work ex-

perience helped reduce panic during lockdowns, it did not account for the observed trust effect or disparities in labor supply decisions. Additionally, we examine whether peer influence contribute to trust activation, and find no significant evidence.

Literature Review Our work advances the literature on history activation in multiple dimensions. Recent research in this area has established the *contingent effects* whereby historical events' impacts can remain dormant for extended periods before being activated when current situations trigger their influence. For instance, Fouka and Voth (2022) demonstrate how memories of World War II German atrocities in Greece resurfaced during the 2009 conflicts between the two countries, leading to decreased German car sales, particularly in regions that suffered severe German reprisals. Cantoni, Hagemeister, and Westcott (2020) find that the recent rise of populism in Germany was activated by the Alternative for Germany Party's ideological shift, which provided a platform for expressing entrenched right-wing tendencies.[2]

Our work contributes to this literature in two important ways. First, while previous studies primarily examine how contemporary events reactivate *collective memories* of specific historical episodes—where individuals consciously recall past events—we demonstrate that crises can activate culturally-embedded *traits* that shape decision-making even when the historical origin is not consciously invoked. In our setting, couriers likely do not actively recall the Chinese Soviet Republic period when deciding whether to work during lockdowns. Rather, the heightened uncertainty of the crisis environment makes their historically-rooted level of political trust—a deeply internalized cultural trait—suddenly salient for assessing risk and determining behavior. This distinction is important because it suggests that historical legacies can influence contemporary decisions through automatic, trait-based mechanisms rather than only through deliberate remembrance.

Second, we show that activation is selective: when individuals possess multiple cultural and economic traits simultaneously, crisis contexts determine which specific traits become operative. In our setting, we find that variations in migrants' hometown political trust—rather than economic conditions, geographic characteristics, altruism, or risk preferences—were activated during the crisis. This selectivity has important implications for understanding when and how historical legacies matter. The same individual carries multiple traits from their historical background, but only certain traits become behaviorally relevant depending on the nature of the contemporary shock. A

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[2]Furthermore, Ochsner and Roesel (2017) find that East Austrian municipalities pillaged by Turkish troops during the sieges of Vienna exhibited significantly higher levels of support for right-wing parties during the 2005 right-wing populists' campaign. Rozenas and Zhukov (2019) discover that mass repression's influence on political loyalty depends on the contemporary political opportunity structure. Communities affected by Stalin's "terror by hunger" exhibited higher loyalty to Moscow when the regime could effectively retaliate, but displayed greater opposition during periods of reduced threat of retribution.

health crisis activates trust in authorities who provide information and protection, while an economic crisis might instead activate traits related to resource scarcity or cooperative norms.

Our work also contributes new evidence on the role of political trust by showing that trust in local government, rather than general social trust or trust in central authorities, drives behavioral responses in this particular setting. This novel evidence enriches the emerging literature on political trust (e.g., Acemoglu, Cheema, Khwaja, and Robinson 2020; Guriev, Melnikov, and Zhuravskaya 2021; Khan, Nasim, Shaukat, and Stegmann 2021).[3]

Finally, our study contributes to the literature on communist regimes (e.g., Alesina and Fuchs-Schündeln 2007, Bai and Zhou 2019, Chen and Kung 2022, Fang, Hou, Liu, Xu, and Zhang 2023, Francois, Trebbi, and Xiao 2023 and Zhuravskaya, Guriev, and Markevich 2024). The establishment of the Chinese Soviet regime represents one of the most significant institutional changes in 20th-century Chinese history. Despite its historical significance, systematic evidence on its long-term consequences remains limited. Our work documents how this early communist experiment continues to influence contemporary economic outcomes.

2. Data and Surveys

2.1. The Logistics Company and Courier Performance Data

The research department of a leading logistics company in China gave us access to a dataset of courier performance records. The company, listed on the Nasdaq, was once valued at more than 100 billion USD. It has over 200,000 couriers working in more than 5,000 express delivery outlets across 31 provinces. Each outlet delivers packages to a specific area of the city. Each courier is randomly assigned to deliver in a non-overlapping subdistrict within the area. The subdistricts are carefully divided to ensure balanced workloads among the couriers.[4] Couriers are assigned to a subdistrict on their first day of work. This assignment will not change unless a formal request is filed by the outlet director and is approved by higher-level management.

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[3]Several studies have examined the impacts of varying levels of political trust, particularly during the COVID-19 crisis, such as its effects on health-related outcomes, including policy compliance (Bargain and Aminjonov 2020), health behaviors (Han, Zheng, Cristea, Agostini, Bélanger, Gützkow, Kreienkamp, Leander, Collaboration, et al. 2023), and vaccine acceptance (Lazarus, Ratzan, Palayew, Gostin, Larson, Rabin, Kimball, and El-Mohandes 2021; Trent, Seale, Chughtai, Salmon, and MacIntyre 2022). Our study examines how political trust shapes individuals' economic decisions during crises. Furthermore, we leverage detailed individual-level decision data to explore the underlying mechanisms regarding how political trust affects both individuals' subjective risk perceptions and their use of different information sources.

[4]Subdistricts were adjusted several times in the earlier years, but have remained the same since 2013.

The company does not set a daily performance quota. Couriers enjoy considerable freedom to arrange their own working schedules, as long as they fulfill the delivery tasks for the subdistricts for which they are responsible. At times, couriers may report to the outlet director that they cannot deliver the assigned packages in a timely manner, mostly due to unexpected difficulties (e.g. extreme weather or traffic incidents) or a sudden surge in demand (e.g. during shopping festivals). In response, the director will reassign some of his or her tasks to other couriers who have the capacity to handle extra packages. A similar rearrangement of tasks occurs when couriers take leave. The flexible work arrangement allows couriers to adjust their schedules by requesting time off or ending their workday early when facing health concerns, personal matters, or other unexpected issues.

All couriers are piece-rate workers; the company did not adjust its rate in 2020. Couriers' income depends solely on their delivery volume; they are all provided with the same set of standard benefits (e.g. medical insurance) specified by the labor law. During the pandemic, the company distributed free medical supplies at outlets including face masks and hand sanitizer, but offered no monetary subsidies. All couriers are at the same rank and lack a clear career advancement path.[5]

The dataset contains more than 4 million daily performance records from January 2018 to December 2020, i.e., daily delivery volumes at the courier level. Given it covers the period before the COVID-19 crisis and the whole year of 2020, it allows us to explore couriers' labor supply decisions before, during, and after the crisis.

The company constructed this sample using a two-stage sampling strategy. First, 1,000 delivery outlets were randomly selected from all of the company's operating outlets in mainland China. Thus cities with more outlets were more likely to be included. Second, current workers were randomly drawn from each outlet. The number of workers drawn from each outlet is proportional to the size of the outlet. Importantly, the sample only includes current employees at their current outlets, with no instances of couriers switching between outlets in the dataset. This approach generated a random sample of 10,000 workers, from which their performance records and personal characteristics were extracted.

Our sample contains workers who were couriers during the entire data period. We exclude supporting and managerial staff and couriers who became managerial staff before the end of 2020. Our final sample contains 7,995 couriers in 946 delivery outlets, which are distributed across 217 cities in 26 provinces. On average, there were 1.4 outlets in each county, 4.4 outlets in each city, 8 couriers in each outlet, and 37 couriers in each city. We restrict the study period to January 2019 to December 2020. A courier's

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[5]The company usually appoints outlet directors and rarely promotes couriers to directors. Outlet directors earn a fixed wage, which is usually less than that of high-performing couriers.

labor supply is measured as the number of packages delivered per day. When couriers are on leave or take holidays, the delivery volumes are coded as missing.

The dataset also provides couriers' personal characteristics, including their birth year, gender, education, marital status, and the first six digits of their ID card number, which we use to locate their hometowns (these numbers correspond to the couriers' county of residence when they registered for an identity card, typically their hometown). We collect information on the demographic and economic characteristics on their hometowns, such as GDP per capita, the share of the agricultural sector in local output, population growth rate and local fiscal expenditure per capita from city and county yearbooks. We further gather information on whether the county is poverty stricken from the publications of the national poverty alleviation office. We also collect geographic features of courier hometowns, including altitude (SRTM30+ Global 1-km Digital Elevation Model, DEM), terrain ruggedness index (calculated from DEM), caloric suitability index (Galor and Özak 2016), distance to the coast, and distance to the nearest river (global self-consistent, hierarchical, high-resolution shoreline database).

To identify the former Soviet base areas, we use the official list of Counties for the Protection and Utilization of Revolutionary Cultural Relics issued by the National Cultural Heritage Administration. There were a total of 13 recognized Soviet base areas during the First Civil War (1927–1937), consisting of 501 counties across 15 provinces.

The couriers in our sample originate from 1,840 counties across 29 provinces; 397 (21 percent) of these counties are classified as Soviet base areas. Couriers who grew up in former Soviet base areas are labeled *base-area couriers* (roughly 20 percent of our sample) and the rest as *non-base couriers*.

Our dataset offers a significant advantage: Close to 90 percent of couriers in our sample are migrant workers who have relocated from their hometowns for work. This feature enables us to disentangle the effects of hometown identity from those of the current working environment.

2.2. Lockdowns and Panics During the Pandemic (2020): Background and Data

Crisis and lockdown. The COVID-19 pandemic began in China in December 2019. The disease rapidly spread to several cities, infecting a substantial number of individuals and imposing a significant threat to public health and the healthcare system. In response to the escalating crisis, the Chinese government implemented a series of stringent measures, the most notable of which was the lockdown of the city of Wuhan on January 23. Subsequently, a total of 23 cities were locked down between January 23 and February 7. In lockdown cities, residents were allowed to leave their homes only for essential purposes such as purchasing necessities or seeking medical treat-

ment. Households were typically permitted to leave a maximum of once a week. The majority of economic activities halted. Only a few industries, including the logistics industry, were granted permission to operate.

Rumors and panic. During the initial stage of the pandemic, there was a significant lack of knowledge regarding the virus. Uncertainty about the situation contributed to the proliferation of rumors and induced panic among the public. Individuals relied heavily on briefs and data published by the local health commissions. However, due to the government's initial attempts to cover up the severity of the pandemic, there was considerable skepticism regarding the accuracy and transparency of the reported numbers. Many individuals distrusted their local government and were inclined to believe the pandemic was more severe than officially stated. There were widespread concerns regarding the contagiousness and severity of the disease, accompanied by apprehensions surrounding the healthcare system's capacity to provide adequate treatment to those infected.

Lockdown data. We treat a city as having entered a crisis mode when a lockdown was in place. Appendix Table A1 lists the 27 cities that experienced lockdowns throughout the year 2020, which we refer to as *lockdown cities*; the rest are *non-lockdown cities*.[6] Most lockdowns, specifically 23 of them, were implemented between late January and early February 2020, after the initial outbreak prompted the Wuhan lockdown. By April 2020, this phase of the pandemic had been effectively controlled. In the rest of the year, only a few cities were locked down to contain sporadic local outbreaks. No city experienced more than one lockdown in 2020. The average length of lockdowns in 2020 was 46.6 days.

We then merged the list of lockdown cities with the location of delivery outlets in our sample. In the resulting sample, 18 cities were locked down and 728 of the 7,995 couriers experienced a lockdown in 2020. To complement our investigation, we also collected the daily number of COVID cases in each city released by the Chinese Center for Disease Control and Prevention.

2.3. Summary Statistics and Balancing Tests

Appendix Table A2 presents the summary statistics for couriers' characteristics. Most couriers were in their thirties in 2020. Around 40 percent have a high school education, and 70 percent were married at the time of the survey. Around 20 percent of the couriers in the sample come from Soviet base areas. While the economic development

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[6]We refer to Chen, Chen, Liu, Luo, and Song (2022) for this list and for the start and end dates of each lockdown. They manually collected the names of lockdown cities and start dates from local government announcements. Where the end dates were not openly announced, they assume the lockdown ended 7 days before the "clearance" day (the first day when no new cases were recorded for the previous 14 days).

of the couriers' hometowns varies, most come from underdeveloped areas. Over 75 percent of the couriers are from counties with a GDP per capita below the national average and an agricultural sector share above the national average.

We conduct balancing tests to check that lockdown decisions were orthogonal to the characteristics of base vs. non-base couriers (Figure 2 displays the results). We first test whether couriers who worked in lockdown vs. non-lockdown cities had different characteristics. The balance test effects are presented as standardized z-score indices with 95 percent confidence intervals. This first set of tests investigates whether non-base couriers who worked in lockdown and non-lockdown cities exhibit similar characteristics, such as birth year, education level, marital status, and gender. The magnitudes of differences in these characteristics are very small and insignificant. The second set of tests examines characteristics of base couriers in lockdown vs. non-lockdown cities and obtains similar results.

Furthermore, we test whether base and non-base couriers have different characteristics within each city type (i.e., lockdown or non-lockdown). The third (fourth) set of tests shown in Figure 2 examines whether base and non-base couriers in non-lockdown (lockdown) cities have systematically different demographic characteristics. All the differences are small and insignificant.

2.4. Large-scale Survey of Couriers

Investigating which cultural attributes influence the behavior of couriers from former Soviet regions requires data on couriers' cultural traits. Since such traits are not directly observable in the main dataset, we conducted a large-scale survey in collaboration with the same logistics company as part of its regular internal surveys. The couriers were accustomed to receiving and responding to such internal surveys, and could earn tokens to redeem on a leading Chinese online shopping platform.

As we were unable to reach the couriers in our main sample, we focused on a group of couriers whose experiences closely resemble those in our sample. Surveying this group allowed us to create various hometown-level indexes and apply them to the couriers in our main sample.

We used two criteria to select this second group of couriers (n = 2,800). First, they must work in one of the 17 lockdown cities (including 52 counties) from our main sample.[7] Second, they must have been employed before 2020 to ensure they were working for the company during the pandemic. Based on our criteria, the company helped distribute a total of 2,800 questionnaires. We received 2,542 valid responses,

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[7]We do not cover counties with fewer than five couriers in our main sample.

	Effect (95% CI)
Non-base Couriers, Lockdown vs. Non-lockdown cities	
Birth Year	-0.16 (-0.35, 0.03)
Currently Married	-0.04 (-0.21, 0.13)
Finish High School	-0.03 (-0.24, 0.18)
Male	-0.08 (-0.23, 0.06)
Base Couriers, Lockdown vs. Non-lockdown cities	
Birth Year	0.01 (-0.10, 0.13)
Currently Married	-0.08 (-0.16, 0.01)
Finish High School	0.02 (-0.05, 0.09)
Male	0.04 (-0.02, 0.10)
Base vs. Non-base Couriers, Non-lockdown cities	
Birth Year	0.03 (-0.12, 0.17)
Currently Married	0.04 (-0.07, 0.15)
Finish High School	0.08 (-0.07, 0.22)
Male	0.01 (-0.08, 0.10)
Base vs. Non-base Couriers, Lockdown cities	
Birth Year	-0.15 (-0.32, 0.03)
Currently Married	0.07 (-0.10, 0.24)
Finish High School	0.04 (-0.14, 0.21)
Male	-0.11 (-0.25, 0.02)

Effect size (in standard deviations)

Figure 2. *Balance Tests. The first (second) set of tests examines whether non-base (base) couriers working in lockdown and non-lockdown cities have similar demographic characteristics. The third (fourth) set of tests depicts the differences in demographic characteristics between base and non-base couriers in non-lockdown (lockdown) cities. All effects are presented as standardized z-score indices with 95 percent confidence intervals. Standard errors clustered at courier home city level.*

most of which were completed within 24 hours.

This survey included an array of measurements to capture various values and beliefs. Given that fear and safety concerns fundamentally drive behavioral responses during crises, we inquire about couriers' risk evaluations and perceptions of different aspects at the onset of the pandemic. We also include measures of risk preferences to assess couriers' general attitudes towards risk. Furthermore, our survey encompasses measures of pro-society values, such as altruism, along with characteristics that could affect the labor supply, such as economic commitments and work ethics. The company provides courier demographics including age, gender, educational attainment, and hometown. Appendix Table A3 describes the courier characteristics in the survey data and demonstrates that couriers in both samples have comparable demographic characteristics.

The survey contained a measure of trust in the general population, but we were not permitted to include any measures of trust in institutions due to the company's self-censorship. We therefore resort to the Chinese General Social Survey (CGSS), which is a large-scale survey project and the primary data resource for China studies.[8] We

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[8]The CGSS, launched in 2003, is a nationally representative continuous survey project. Multiple
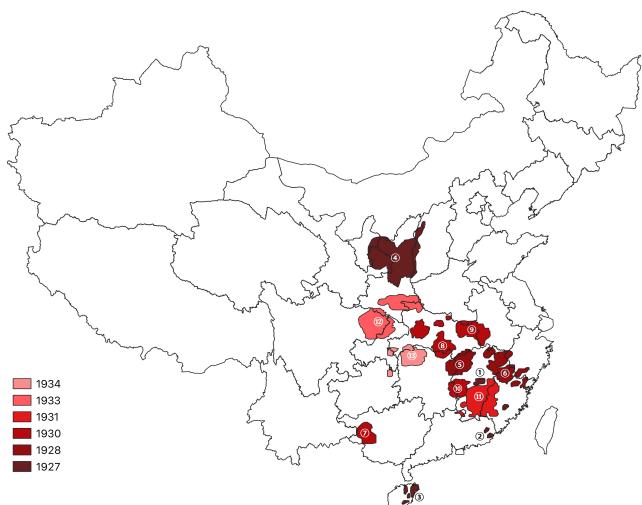
Figure 3. *Distribution of Former Soviet Regions. Areas shaded red represent revolutionary base areas; darker shades indicate earlier CCP occupation. Map data is acquired from the Atlas for the Hundred-Year History of the CCP. There are a total of 13 Soviet regions. The Jinggangshan (①), Hailufeng(②), Qiongya (③), and Shaan-Gan (④) regions were established in 1927. The Xiang-E-Gan (⑤) and Min-Zhe-Gan (⑥) regions were established in 1928. The Zuoyoujiang (⑦), Xiang-Exi (⑧), E-Yu-Wan (⑨) and Xiang-Gan (⑩) regions were established in 1930. The Central Soviet region (⑪) was established in 1931, the Chuan-Shaan (⑫) Soviet region was established in 1933, and the Xiang-E-Chuan-Qian (⑬) region was established in 1934.*

use data from the 2010 wave – the only one that contained questions on individuals' trust in institutions (e.g. local governments, the central government, local media, and public security bureaus) because of their sensitive nature in China.

3. Background: Early Experiences of Soviet Regimes and Legacies

3.1. Early Soviet Experiences

Before the CCP rose to power in 1949, China was a divided nation, especially during the first civil war between the CCP and the KMT. At that time, the KMT-led Republic of China governed the majority of the country, while the CCP established the Soviet Republic of China, which controlled fragmented and isolated Soviet base areas in rural China (see Figure 3). These Soviets represented the CCP's initial attempt to create a government and served as an experimental field for communist ideology. The institutions and policies implemented in the Soviets were markedly different from those in other parts of China: the Constitution of the Soviet Republic of China declared it a "democratic dictatorship of the proletariat and the peasantry" (pp86, Saich 2021).

Nearly one century later, those regions continue to exhibit two distinct sets of features compared to the rest of China. First, contrast to its historical preeminence as the cradle of Chinese communist revolution, the contemporary economic performance of the former Soviet regions lags behind. Till 2018, while the population in the former Soviet regions account for approximately 20 percent of the national population, the total GDP in those regions combined only accounts for 13 percent of the national GDP. Per capita GDP in base regions is 9.5 percent lower than in non-base regions, while fiscal expenditure per capita is 14.3 percent lower compared to non-base regions. Counties in former Soviet regions are also 11 percent more likely to be poverty stricken.

Contrary to prevailing perceptions and portrayals in political propaganda, the base regions exhibit lower levels of social capital and trust in the local government and its affiliated institutions. However, this lack of trust in the government does not extend to the central government or the general public (or strangers). Additionally, individuals from these Soviet base regions exhibit distinctly lower levels of altruism, even though their work ethics are comparable to those from other regions. Appendix A.2 describes the details of the empirical analysis.

What factors are responsible for the poor economic performance and lower social capital of the former Soviet areas? Historical studies suggest that the prevalence of extreme political violence and a high degree of political instability during the CCP occupations were likely contributors. On the one hand, the early Soviet experiences were marked by persistent conflicts and political upheaval. Within the Soviets, the violent implementation of radical policies and political movements strained relations between the CCP and local communities.[9]

On the other hand, continued fights for control between the CCP and KMT led to massive casualties in the Soviet areas.[10] After the defeat of the CCP, the brutal occupation by the KMT resulted in another wave of atrocities, including the burning of villages and massacres of perceived CCP sympathizers. While China's overall population grew slightly during this period, the Soviet regions experienced a sharp drop in inhabitants during the CCP occupation and subsequent KMT reprisals.[11]

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[9]For instance, redistributing land from wealthy landlords to the poor initially garnered local support, but subsequent policies took such radical and violent turns that they inadvertently alienated the local population. The land investigation campaign (*Chatian Yundong*) was designed to uncover "landlords and wealthy peasants disguised as poor and middle peasants " (Huang 2003, Huang 2005, Huang 2011). During the course of the investigation, local officials – driven by political pressure to meet performance targets – labeled numerous poor and middle peasants as class enemies, leading to the seizure of their land and brutal assaults on them and their families.

[10]In the early expansion phase, the CCP's strategy involved instigating uprisings among disadvantaged peasants in KMT-controlled regions. These uprisings often resulted in uncontrollable violence: local residents would unleash fierce reprisals against the CCP and Soviet areas. As the CCP's power grew, the KMT's Chiang Kai-shek launched five suppression campaigns against the Soviet bases starting in 1930, which eventually led to the CCP's retreat and the start of the Long March.

[11]For central counties in the Soviet regions, the post-Soviet population was only 60 percent of the pre-

(a) Before Lockdown   **(b)** During Lockdown   **(c)** After Lockdown
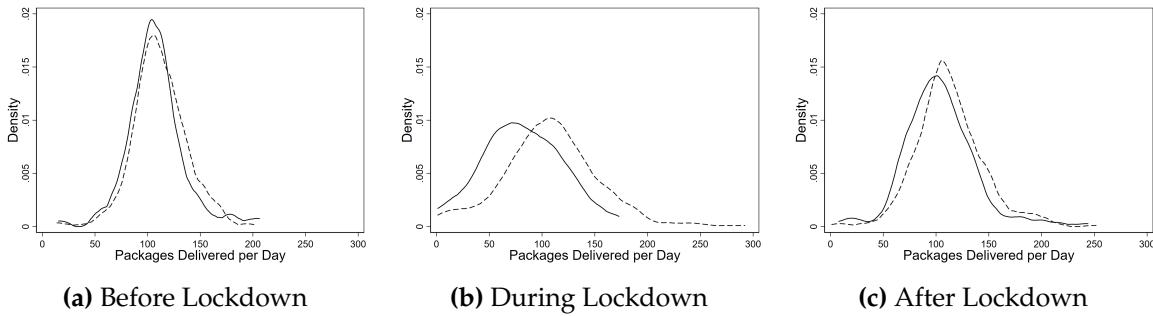
Figure 4. Delivery volume distribution for base (solid lines) and Non-base (dashed lines) couriers in lockdown cities before, during, and after the lockdowns, trimmed at the 97.5th percentile.

Previous studies have shown that political trauma, violence, and conflicts can dismantle social capital (e.g., Dell 2012, Rohner, Thoenig, and Zilibotti 2013, Besley and Reynal-Querol 2014, Lupu and Peisakhin 2017, and Couttenier, Petrencu, Rohner, and Thoenig 2019), cause political distrust (e.g. Lowes and Montero 2021), and obstruct economic development (e.g. Blattman and Miguel 2010 and Trebbi and Weese 2019). This topic is not our focus in this paper. Yet, Appendix A.7 employs an instrumental variable (IV) approach to present supplementary evidence that is consistent with this line of studies: the early Soviet experiences may contribute to the diminished levels of political trust.

3.2. Basic Patterns of Couriers' Performance During Crises

Do these historical backgrounds indeed influence individual behaviors during crises? Specifically, did the behavior of couriers from base vs. non-base areas differ during the pandemic? Figure 4 compares their delivery volumes in lockdown cities before, during, and after the lockdowns. Before the lockdowns, the difference was negligible (Figure 4a). Both distributions become less compressed during the lockdowns, but for base-area couriers it shifts to the left much more than for non-base-area couriers, suggesting that the former reduced their delivery volumes more than the latter (Figure 4b). The pattern after lockdowns (Figure 4c) resembles pre-lockdown levels. In the following section, we empirically test these intriguing behavioral differences using a DID research design.

Soviet population; the losses were disproportionately concentrated among young adults. Soviet base areas in Jiangxi Province experienced a 23 percent decrease in population during the CCP occupation; by 1935, when the KMT regained control, the proportion of young adults in Jiangxi Province's Soviet regions had dwindled to less than 20 percent, and an even lower level in central Soviet counties. The population density of Soviet areas in Fujian Province decreased from 82 people per square kilometer in 1928 to 56 people in 1936.

4. Behavioral Differences During the Crisis

4.1. Empirical Strategy

This section examines labor supply differences between couriers from former Soviet base areas and non-base areas during the COVID-19 pandemic crisis.

Baseline specifications. Since our data is recorded at the courier-day level, we can separate the effects at the intensive vs. extensive margin. We first focus on the former, which pertain to the labor supply adjustment decisions when couriers reported for work. We utilize a generalized DID strategy to compare how couriers from base vs. non-base areas reacted to city lockdowns. We specify the following courier-day-level estimation:

$$
\begin{aligned}
\text{Delivery}_{it} = {} & \beta_0 + \beta \text{Soviet-Home}_i \times \text{LD}_{it} + \alpha \text{LD}_{it} + \gamma_i + \delta_t \\
& + \beta_w \text{Soviet-Work}_i \times \text{LD}_{it} + \beta_D \text{Demographics}_i \times \text{LD}_{it} + \epsilon_{it}
\end{aligned}
\tag{1}
$$

where Delivery_{it} is the log delivery volume of courier i on day t. Soviet-Home_i is a dummy variable coded 1 if courier i comes from a Soviet base area. LD_{it} is a dummy variable measuring courier i's exposure, which equals 1 if the city where courier i works is in lockdown on day t.

We control for two sets of fixed effects: γ_i for individual fixed effects and δ_t for calendar-day fixed effects. The individual fixed effects absorb courier-level characteristics, including Soviet-Home_i. Importantly, because all couriers in this constructed sample do not switch jobs across outlets or cities (see discussion in Section 2.1), outlet and city fixed effects are absorbed too. The day fixed effects account for the common shocks generated by the evolution of the pandemic in all cities on any given day, such as nationwide information about the pandemic.

In addition, to capture any differential effects from courier demographics due to the heightened risks, we include interactions of couriers' demographic characteristics (gender, birth year, whether finished high school, whether married, and migrant status) with the lockdown dummy. Similarly, to control for the impact of the working environment, which could also impact couriers' decisions on labor supply during lockdowns, we introduce a dummy variable, Soviet-Work_i, which takes a value of 1 if the delivery outlet where courier i works is located in a Soviet base area county, and include an interaction term, $\text{Soviet-Work}_i \times \text{LD}_{it}$, in our regression.[12] All standard errors are clustered at the outlet level.

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[12]For instance, the responses of local residents who receive deliveries may differ in base and non-base areas due to their distinct cultural identities. In our sample, only 9.8 percent of delivery outlets were located in the former Soviet base areas.

The main coefficient of interest (i.e., β) on the interaction term Soviet-Home$_i$ × LD$_{it}$ captures whether couriers from former Soviet base areas behaved differently from others during lockdowns relative to normal periods. Fixed differences across individuals cannot drive our estimated effects because we control for individual fixed effects and exploit variations across lockdown and normal periods. Similarly, we difference out changes over time by controlling for calendar-day fixed effects.

We are also interested in whether couriers' delivery volumes reverted to their pre-pandemic levels after the lockdowns. We therefore introduce a dummy variable, Post-LD$_{it}$, which takes a value of 1 when the lockdown city where courier i is working has been reopened on day t. We incorporate Post-LD$_{it}$ and its interaction term with Soviet-Home$_i$ into Equation (1). Similar to Equation (1), we control for the impact of the working location environment and courier demographics by including interaction terms between Soviet-Work$_i$ and Demographic$_i$ and both LD$_{it}$ and Post-LD$_{it}$.

$$
\begin{aligned}
\text{Delivery}_{it} = {} & \beta^L \text{Soviet-Home}_i \times \text{LD}_{it} + \beta^P \text{Soviet-Home}_i \times \text{Post-LD}_{it} \\
& + \beta_w \text{Soviet-Work}_i \times \text{LD}_{it} + \beta_w^P \text{Soviet-Work}_i \times \text{Post-LD}_{it} \\
& + \beta_D \text{Demographics}_i \times \text{LD}_{it} + \beta_D^P \text{Demographics}_i \times \text{Post-LD}_{it} \\
& + \alpha \text{LD}_{it} + \alpha^P \text{Post-LD}_{it} + \gamma_i + \delta_t + \epsilon_{it}.
\end{aligned}
\tag{2}
$$

The coefficient β^L captures whether couriers from former Soviet base areas behave differently from others during lockdowns, relative to the pre-lockdown period. The coefficient β^P captures whether such differences persisted after the lockdowns end.

4.2. Main Results and Consistency

We estimate Equation (1) using the full sample. Column (1) of Table 1 displays the results with controls for working location environment and courier demographics. The coefficient on the interaction term of courier hometown identity and lockdown is negative and significant: base-area couriers reduced their daily delivery volumes during lockdowns by 25.6 percentage points more than their non-base counterparts.

We further estimate Equation (2) and present the results in column (2). The coefficient β^L on the interaction between lockdown and hometown identity remains significantly negative with a similar magnitude. The coefficient β^P on the interaction between the post-lockdown dummy and hometown identity is small and insignificant, which suggests that couriers' delivery volumes returned to pre-lockdown levels after the lockdowns were lifted.

Column (3) presents the results of re-estimating Equation (1) using the subsample that excludes all outlets in base areas and all non-migrant couriers. The estimated co-

Table 1. *Baseline Difference-in-differences Estimation*

	Dependent Variable: Log Delivery Volume					
	All Cities			Lockdown Cities		
	All Couriers		Subsample	All Couriers		Subsample
	(1)	(2)	(3)	(4)	(5)	(6)
Soviet-Home × LD	-0.256***	-0.242***	-0.264***	-0.240***	-0.222***	-0.241***
	(0.082)	(0.077)	(0.093)	(0.078)	(0.073)	(0.090)
Soviet-Home × Post-LD		0.026			0.031	
		(0.048)			(0.048)	
LD	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes		Yes	Yes	
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes
Post-LD		Yes			Yes	
Soviet-Work × Post-LD		Yes			Yes	
Demographics × Post-LD		Yes			Yes	
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes	Yes
N	3,292,530	3,292,530	2,704,091	222,542	222,542	184,903
N-courier	7,239	7,239	5,858	498	498	413

Notes: Columns (1) to (3) present results using the full sample. Columns (4) to (6) present results using only couriers working in lockdown cities. All regressions control for individual and calendar day fixed effects. Columns (1), (2), (4) and (5) include interactions of the lockdown dummy and whether the outlet where couriers work locates in a former soviet region. Interactions of the lockdown dummy and courier gender, birth year, education attainment and marital status are included to control for the effect of courier demographics. Column (3) and (6) further remove all non-migrant couriers and drop all outlets located in the former Soviet base areas. Only coefficients of interest are presented. Robust standard error is shown in parentheses, clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

efficient is essentially the same as those reported in columns (1) and (2), which control for both Soviet-Work$_i$ × LD$_{it}$ and Demographics$_i$ × LD$_{it}$.

We also re-run our exercises on the subsample of cities that experienced lockdowns. Columns (4)–(6) present the estimates using the same specifications as columns (1)–(3), respectively. The estimated coefficients are similar in terms of significance and magnitude to those of the full sample.

Reliability of two-way fixed-effects (TWFE) estimation. Our empirical strategy relies on the consistency of TWFE regressions. However, recent research has raised concerns about issues such as negative weights (De Chaisemartin and d'Haultfoeuille 2020; Callaway and Sant'Anna 2021; Goodman-Bacon 2021; Sun and Abraham 2021; De Chaisemartin and d'Haultfoeuille 2022).[13]

To address this, we first check for bias from "bad controls" using the method developed by De Chaisemartin and d'Haultfoeuille (2020), calculating the proportion of negative weights. In the baseline estimation with the full sample, all weights are positive, with a minimum ATE standard deviation of 1.73, suggesting that the presence of negative weights is unlikely to introduce bias into our estimates. For lockdown cities,

---

[13]In TWFE models, the coefficient β estimates weighted sums of average treatment effects (ATEs) across all 2×2 DID comparisons. If treatment effects vary across groups or over time, the TWFE estimator may not provide consistent ATE estimates.

only 0.3% (23 of 6,171) weights are negative. The small fraction of negative weights is due to outliers in lockdown timing: most cities locked down between January 23 (Wuhan) and February 7 (Harbin), with only Jilin and Baoding locking down in the second quarter in 2020. To further address this, we focus on first-wave lockdown cities (excluding Jilin and Baoding), reducing timing heterogeneity and the risk of bad controls. In this subsample, 100% of weights are positive. The results, shown in columns (1) and (6) of Table A8, are consistent with our benchmark estimates (columns (2) and (6) of Table 1), indicating that negative weights are unlikely to drive our findings.

4.3. Event Study

One crucial assumption underlying the DID strategy is that couriers from base areas would have followed a trend parallel to that of non-base couriers if the lockdowns had not occurred. We employ the following event-study model to test whether this parallel-trends assumption holds:

$$
\begin{aligned}
\text{Delivery}_{it} = \beta_0 + \sum_{k=-16}^{8} \beta^k \text{Soviet-Home}_i \times \text{Week-to-LD}_{it}^k \\
+ \beta_w \text{Soviet-Work}_i \times \text{LD}_{it} + \beta_D \text{Demographics}_i \times \text{LD}_{it} \\
+ \sum_{k=-16}^{8} \alpha^k \text{Week-to-LD}_{it}^k + \gamma_i + \delta_t + \varepsilon_{it},
\end{aligned} \tag{3}
$$

where Week-to-LD_{it}^k ($k = -16, ...8$) are dummy variables for the k-th week relative to the start of the lockdown in courier i's working city on day t. The value $k = 0$ indicates that day t was in the week when the lockdown was imposed; $k = -16$ represents the 16th week before the lockdown and all preceding weeks. Conversely, the value $k = 8$ represents the 8th week after the lockdown and all subsequent weeks. We treat the week before the lockdown ($k = -1$) as the base period. To avoid any contamination from post-lockdown periods, we exclude all observations from the analysis that fall in the post-lockdown period in cities that experienced lockdowns.

Figure 5 shows the estimated coefficients β^k and their 95% confidence intervals. For $k < 0$, β^k is small and insignificant, indicating that base and non-base couriers share a common trend before the lockdown, suggesting no pre-trend bias. For $k \geq 0$, β^k reflects the dynamic impact of hometown identity during the lockdowns. The coefficient β^0 turns negative in the lockdown week, becoming significantly negative for larger k. When $k \geq 6$, β^k is not significantly different from zero, showing that, as the crisis intensifies, the disparity between the two groups increases, but delivery behaviors converge as the situation stabilizes. Additionally, we observe no significant differences in delivery volumes for the two groups before the pandemic (2019), as

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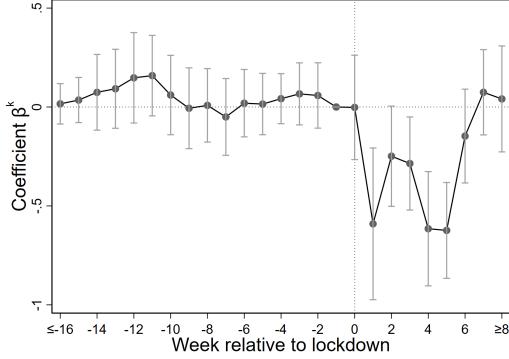
Figure 5. *Event Study for Courier Delivery Volumes. The week before the lockdown is used as the base period. The dots denote the estimated coefficients and the bars 95 percent confidence intervals. Standard errors are clustered at the outlet level.*

shown in column (1) of Table A9 in Appendix 4, indicating high comparability of base and non-base couriers before the lockdowns. This confirms the validity of the parallel-trends assumption.

4.4. Identification Issues, Robustness and Auxiliary Results

Couriers' entry and exit decisions. The pandemic may have influenced couriers' entry decisions. New couriers could have changed their location preferences after observing the COVID-19 outbreak and government actions in lockdown cities. To address this, we restrict the sample to couriers hired before 2020 and re-estimate Equation (1). The results, shown in columns (3) and (8) of Table A8, remain similar, suggesting no selection bias. Interviews with company management revealed that the monthly turnover rate for couriers stayed low at 2–3 percent, with only a slight decrease during the pandemic due to reduced job market activity. Therefore, courier exits are unlikely to affect our findings.

Using neighboring counties only. While base and non-base couriers show no significant demographic differences, migration pattern differences may introduce selection bias. To address this, we refine our sample to include only Soviet base counties and their neighboring counties within a 30 km or 60 km radius, assuming that couriers from adjacent counties share similar migration patterns. Table A10 presents the results. Although the sample size decreases by 66% and 53%, the effect sizes and statistical significance remain consistent.

Dropping lockdown cities one at a time. Our sample contains only 18 cities that experienced lockdowns in 2020. To ensure that our results are not driven by a single lockdown city, we re-estimate Equation (1) excluding the lockdown cities one at a time. All the estimated effects remain statistically significant and exhibit similar magnitudes to

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the main results (see Table A11 in Appendix A.3).

Alternative measures of crisis. We further test the robustness of our results using two alternative COVID-19 crisis definitions. First, we redefine LD_{it} to align lockdown start dates with Wuhan, accounting for potential information spillover. The coefficients remain similar to the baseline estimates (see columns (4) and (9) of Table A8). Second, we use the number of confirmed COVID-19 cases as a risk measure, replacing LD_{it} with $LogCase_{it}$ in Equation (1). Results in columns (5) and (10) of Table A8 show a significantly negative coefficient, indicating that base couriers delivered fewer packages in cities with higher infection risks. A 1% increase in confirmed cases widens the performance gap by 1.8 percentage points.

Extensive margin. The previous analysis examines the Soviet base effect at the intensive margin (i.e. daily delivery volumes). We further explore the extensive margin using two attendance measures: (1) a daily attendance dummy (1 if courier i works on day t, 0 otherwise) and (2) the number of days a courier works in a week. We estimate Equations (1) and (2) at the courier-day level using the attendance dummy and at the courier-week level using weekly attendance. Base-area couriers are less likely to report to work during lockdowns, with the gap at the extensive margin widening to approximately 10% or 0.6 days per week (details in Appendix A.4).

Thus far, our analysis reveals that couriers from Soviet base regions reduced their delivery volumes more drastically than their peers during the crisis, while showing no differential work patterns before or after the crisis period. These pronounced behavioral differences based on hometown background raise two crucial questions: what mechanisms drive the Soviet base effects, and why does Soviet base identity become salient specifically during crises? In Sections 5 and 6, we investigate potential channels–including cultural, economic, and geographic factors–through which hometown background influences crisis decision-making.

5. Cultural Trait Activation: Political Trust

This section investigates couriers' expression of cultural traits during the COVID pandemic crisis. Given that Soviet base regions historically experienced eroded social capital and diminished trust, we begin by investigating trust as a potential mechanism.

5.1. Activating Trust

As trust in the local government is closely associated with confidence in its ability to effectively manage the pandemic and the reliability of the information it releases, a lack of such trust could have heightened the pandemic-driven panic and fear, leading couriers to reduce their labor supply more aggressively to avoid virus exposure.

Section 3 and Appendix A.2 demonstrate that individuals from former Soviet base areas exhibit less trust in the local government compared to those from non-base areas, but no significant differences in trust in the central government or the general population were observed. This section presents empirical evidence to support the hypothesis that (dis)trust in the local government was activated, which influenced couriers' delivery performance during the crisis.

As we cannot directly observe or measure individual couriers' traits such as trust, we construct trust indexes for their hometowns using available survey data.[14] We then assign trust levels to each courier based on the trust indexes of their hometown. This approach has been commonly used in prior studies, including Guiso, Sapienza, and Zingales (2004) and Alesina and Giuliano (2011).

We created our trust indexes in three steps. First, we utilized data from the 2010 wave of the CGSS and regressed trust scales for the general public, local government, and central government on region-level dummies. These regressions controlled for individual and regional factors including age, gender, education, marital status, *Hukou* type, income, unemployment, CCP membership, regional GDP, agricultural sector share, and regional poverty status. We used the region fixed effects coefficients obtained from the regressions to proxy for each region's level of trust. In a second step, we standardized the fixed effects for each trust measure across regions to facilitate a comparable interpretation of the estimation results. Third, we assigned the standardized regional trust indexes to individual couriers in our sample. Using this approach, each courier whose hometown was surveyed in the CGSS survey was assigned a trust index for their region.

Specifically, we constructed prefecture-level indexes of cultural traits and assigned them to couriers in the main sample based on their home prefectures. For couriers whose home prefecture does not appear in the CGSS sample, we assigned the generated index of the geographically closest prefecture to the couriers' home prefecture, if available. In the subsequent analyses, we examine alternative assignment methods as a robustness test and establish that our findings remain robust to alternative assignment methods. The approach we adopted allowed a total of 3,044 couriers in our sample to be matched, including 325 who worked in lockdown cities.[15]

Two comments are worth noting. First, the trust indexes were created independently of whether the hometowns were in a base or non-base area (i.e., they were gen-

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[14]Given the sensitive nature of political trust measures in China, questions about this topic were not allowed in the courier survey.

[15]Ideally, we would have created county-level indexes of cultural traits and assigned them to individual couriers in our sample. However, due to the limited number of couriers residing in counties covered by the CGSS survey, this would have generated an extremely small sample: only 247 couriers could be matched, 12 of whom worked in lockdown cities.

Table 2. *Trust and Courier Delivery Volumes*

| | Benchmark | Trust in | | | | | | |
| | | Local Government | | Central Government | | | General Population | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Soviet-Home × LD	-0.351***		-0.237**		-0.319***			-0.346***
	(0.096)		(0.098)		(0.093)			(0.097)
Local Gov × LD		0.236***	0.159***			0.226***		
		(0.051)	(0.050)			(0.072)		
Central Gov × LD				0.216**	0.160**	0.021		
				(0.086)	(0.080)	(0.109)		
Gen Pop × LD							0.052	0.016
							(0.043)	(0.037)
LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,253,440	1,253,440	1,253,440	1,253,440	1,253,440	1,253,440	1,253,440	1,253,440
N-courier	2,718	2,718	2,718	2,718	2,718	2,718	2,718	2,718

Notes: The regressions are conducted using the subsample of couriers with non-missing demographics who are assigned non-missing trust indexes generated from the existing CGSS survey. Only coefficients of interest are presented. Robust standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

erated without factoring in the Soviet base measure). Second, the constructed indexes only capture variations in trust across courier home prefectures. This measurement could potentially contain noises, including idiosyncratic characteristics of couriers deviating from the hometown average and the influence of their working environment, which might introduce a downward bias in our estimation.

We examine the role of trust during lockdowns in three steps. First, using the merged subsample, we estimate Equation (1) where the coefficient on Soviet-Home$_i$ × LD$_{it}$ serves as our benchmark. Second, we estimate the direct effect of trust by replacing Soviet-Home$_i$ × LD$_{it}$ with Trust$_i$ × LD$_{it}$ in Equation (1). The coefficient on this interaction captures how trust levels influence couriers' labor supply during lockdowns relative to normal periods.

Finally, we conduct a horserace between the Soviet base effect and trust by including the interaction term between trust and the lockdown in Equation (1). Comparing the estimates with the results from the first two steps allows us to assess the extent to which trust influenced couriers' behavior as part of the Soviet base effect.

Table 2 summarizes the results. Column (1) reports the benchmark estimates using the subsample of couriers matched with the trust indexes. Compared to non-base couriers, base couriers decreased their delivery volumes by an additional 35 percentage points. The estimate is larger but still comparable to that of the full sample. Column (2) presents the direct effect of trust in the local government: a one standard deviation increase in trust in the local government boosts the delivery volume during

lockdowns by 23 percentage points.

Column (3) presents the horserace regression estimates. The coefficient on the channel of trust in the local government remains positive and significant. However, the magnitude of the Soviet base effect decreases considerably in magnitude from 35 to 24 percentage points. This suggests that trust in the local government explains a substantial portion of the observed difference in behaviors, i.e., about a third of the Soviet base effect.

We further show that our finding is robust to the construction of the trust index. We construct alternative trust levels for the non-matched courier home prefectures by using the mean trust levels of prefectures within 100 km of the prefecture of interest. This assignment method is valid under the assumption that the trust levels of neighboring prefectures are highly correlated. Using this approach, we matched 2,795 couriers in the main sample, 311 of whom worked in lockdown cities. Table A13 summarizes the results using the alternative assignment methods, which are similar to the approach using the trust levels of the geographically closest prefectures.

Next, we investigate the channel of trust in the central government by using the constructed individual level of trust in the central government. Column (4) presents the results, which indicate that an increase in trust in the central government boosts couriers' delivery volume during lockdowns. In the horserace specification presented in column (5), the coefficient on the Soviet base effect remains significant with only a slight change in magnitude. However, when the interaction term between trust in the local government and lockdown is included in column (6), the effects of trust in the central government disappear, while those for trust in the local government remain significant. These results suggest that it is much less likely that trust in the central government was activated and contributed to the Soviet base effect. The finding is reasonable because local governments were responsible for managing the pandemic in each city.

Finally, we examine the channel of trust in the general population and present respective estimates in columns (7) and (8), which illustrate that trust in the general population has no significant effect on delivery volumes during lockdowns.

The findings in this section go beyond the notion that trust plays a significant role in shaping economic decision-making. We show that it is not just any form of trust, but a particular type of trust that was activated at the individual level during a crisis.

5.2. Political Trust and Risk Perception

To further investigate how political trust shaped couriers' crisis responses (i.e., labor supply decisions in this context), we examine its relationship with perceived risk–a

crucial determinant that impacted how couriers evaluated their work environment and formulated their responses.

We hypothesize that trust in the local government influenced couriers' behavior by altering their risk perceptions during the lockdowns. Among couriers who work in the same outlet and encounter the same level of risks, those who have greater trust in the local government are more likely to have faith in its ability to contain the pandemic. They would be less likely to panic over rumors and misinformation. As a result, couriers with more trust in the local government would perceive the risk of contracting COVID-19 to be lower than those who have less trust. Since a courier's job involves numerous human-to-human interactions, those with a lower perceived risk are more likely to work and deliver more packages during lockdowns, while those with a higher perceived risk may be less willing to work.

To test this conjecture, we created standardized prefectural-level indexes for courier risk perceptions using data from our survey, following the same steps as outlined in Section 5.1. We then assigned these indexes to couriers in our main sample, according to their hometowns. Of the 728 couriers in the lockdown cities subsample with delivery performance data available, we were able to match 478 with our own survey data and 325 with trust indexes constructed from the 2010 CGSS data. Of these matched couriers, 181 were matched with both our survey data and the trust indexes.

The survey asked couriers to rate their perceptions of the risk of infection for the general public at the beginning of the 2020 pandemic on a scale from 1 ("Very low risk") to 5 ("Extremely high risk"). We defined couriers who answered 5 ("Extremely high risk") and 4 ("Very high risk") as having high infection risk perceptions, and those who provided lower values as having low infection risk perceptions. Couriers were also asked to describe the extent to which the pandemic has affected their lives, using a scale from 1 ("Very little") to 5 ("Very much"). We categorize couriers who answered 4 ("Much") and 5 ("Very much") as more influenced. In addition, couriers were asked if any of their acquaintances had been infected by COVID-19, which can be considered an objective measure of infection risk.

First, we examine whether trust in the local government correlates with perceived risk using a sample of 181 couriers with both trust indexes from CGSS data and risk perception indexes from our survey. Column (1) of Table 3 shows that couriers from low-trust areas report higher perceived risks for the general population. A one-standard-deviation increase in trust is associated with a 0.19-standard-deviation decrease in perceived infection risk.

In columns (2) and (3) of Table 3, we explore the relationship between subjective and actual experiences of COVID-19 and the level of trust in the local government.

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Table 3. *Trust in Local Government, Perceived Risk and Delivery Volumes*

	Risk-General	Experience	Infection	Log Delivery Volumes		
	(1)	(2)	(3)	(4)	(5)	(6)
Trust in Local Gov	-0.189**	-0.054	-0.045			
	(0.091)	(0.149)	(0.123)			
Risk-General × LD				-0.080*		
				(0.043)		
Experience × LD					-0.133	
					(0.086)	
Infection × LD						-0.109
						(0.084)
Outlet FE	Yes	Yes	Yes			
LD				Yes	Yes	Yes
Soviet-Work × LD				Yes	Yes	Yes
Demographics × LD				Yes	Yes	Yes
Individual FE				Yes	Yes	Yes
Calendar Day FE				Yes	Yes	Yes
N	181	181	181	154,289	154,289	154,289
N-courier	181	181	181	341	341	341

Notes: The first three columns present the correlations between trust in local government and the perceived and objective infection risk for couriers using the sample of couriers who are assigned both non-missing values of risk perception indexes generated from the conducted large-scale survey on couriers and non-missing values of political trust indexes generated from the existing CGSS survey. Robust standard errors are in the parentheses. The latter three column presents the results for the DID estimation examining whether risk perceptions affect delivery volumes. Only couriers with non-missing demographics are used in the regression. Standard errors are clustered at outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

We find that couriers from low-trust areas (in local government) did not report being more affected by the pandemic. Moreover, lower trust in the local government was not associated with higher actual risks of COVID-19 infection among acquaintances.

In summary, our findings indicate a negative correlation between couriers' level of trust in the local government and their perception of risks associated with the pandemic. However, this type of trust did not affect their self-reported experiences. Therefore, it is unlikely that couriers with various levels of trust in the local government have different experiences that drive their risk assessment.

Next, we examine whether a higher level of perceived risk is correlated with couriers' delivery volumes during the lockdowns, focusing on the subsample of couriers for whom risk indexes could be assigned based on the survey data we collected. Columns (4)–(6) of Table 3 display the estimated results. On the one hand, when the perceived risk of infection for the general population increases by one standard deviation, couriers' delivery volumes during lockdowns decrease by an additional 8 percentage points. On the other hand, we do not find that self-reported experiences or actual COVID-19 infections significantly affected delivery volumes during lock-

downs. Taken together, these results support our conjecture that perceived risk stems from (lack of) trust in local government, which in turn influences couriers' responses during lockdowns.

5.3. Political Trust and Information from Hometown Pandemic

If couriers have a lower level of trust in the local government and the information it provides, they might rely more on alternative sources of information to assess the severity of the crisis. One potential source of information that could help them assess the situation could be the pandemic situation in their hometowns. For example, couriers who receive information about more COVID-19 cases in their hometowns through family or social networks might perceive the pandemic situation as more serious. We would expect couriers with less trust in the local government to rely more on alternative sources of information such as family or social network. In other words, hometown pandemic conditions should have a heterogeneous effect between couriers with high vs. low trust in the local government.

We investigate this conjecture in two steps. First, we focus on the migrant subsample and use the log of the daily number of confirmed COVID-19 cases in the couriers' hometowns (i.e., Pandemic-home) to proxy for the severity of the pandemic in their hometowns. Column (1) of Table 4 replicates the baseline results, and column (2) presents the results when we include the interaction term of Pandemic-home and the lockdown dummy (i.e., LD). We observe a greater decrease in labor supply among couriers whose hometowns experienced more severe pandemic conditions concurrently during the lockdown period. This supports our conjecture that their perception of the severity of the crisis was influenced by the pandemic situation in their hometowns. In column (3), we further include the interaction term for trust in the local government and lockdown. We find that the impact of trust in the local government remains significant and is of a similar magnitude even after accounting for the effect of hometown pandemic conditions.

In a second step, we define a courier as having high or low trust in the local government if their trust index score is above or below average, respectively (i.e., the standardized trust index is larger or smaller than 0) and estimate the impacts of hometown pandemic for each group. The results are summarized in columns (4)–(6). We find that the effect of hometown pandemic conditions is 30 percent greater in magnitude for couriers who have a low level of trust in the local government (0.137 v.s. 0.104). This heterogeneity remains significant when tested using the difference-in-differences-in-differences (DDD) specification, where the interaction term Local Gov $\times$ Pandemic-home $\times$ LD is significantly positive.

Table 4. *Hometown Pandemic and Trust Activation*

	Dependent Variable: Log Delivery Volume					
	Both Types			Low Trust	High Trust	DDD
	(1)	(2)	(3)	(4)	(5)	(6)
Soviet-Home × LD	-0.356***	-0.407***	-0.276**			
	(0.097)	(0.105)	(0.117)			
Pandemic-Home × LD		-0.090***	-0.097***	-0.137***	-0.104***	-0.083***
		(0.028)	(0.026)	(0.036)	(0.016)	(0.021)
Local Gov × LD			0.200***			-0.095
			(0.055)			(0.123)
Pandemic-Home × Local Gov × LD						0.108***
						(0.033)
Local Gov × Pandemic_Home						0.002
						(0.005)
Pandemic-Home		Yes	Yes	Yes	Yes	Yes
LD	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes
Demographic × LD	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Daily FE	Yes	Yes	Yes	Yes	Yes	Yes
N	905,878	905,878	905,878	547,030	358,848	905,878
N-couriers	2,169	2,169	2,169	1,296	873	2,169

Notes: This table summarizes results for the horserace regressions of pandemic in courier hometowns. Only migrant couriers are used in the regressions. For comparability, we only use couriers with non-missing hometown pandemic condition measures in the regressions. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

It is plausible that couriers rely more on information from their hometowns simply because their hometowns are located near where they work. To account for this possibility, we calculate the geographic distance of courier hometowns from the counties they work in (i.e., log distance), and add the interaction term between log distance and LD_{it} to our specification. The results are presented in Table A14 of Appendix 5. The heterogeneous pattern remains similar.

5.4. Local Working Experience and Peer Effects

Local working experience. Migrant couriers may experience panic during crises, but local working experience can mitigate this in two ways. First, couriers with extended local experience can better acquire and interpret local information during lockdowns, allowing for better preparation for unexpected situation. Second, longer time spent in the city may reduce the influence of hometown culture on migrant couriers.

To test this, we define local working experience (Work Exp) as the number of months a courier has worked in the city since January 2018. Column (2) of Table 5 includes local working experience along with the Soviet base effect, while column (1) replicates the baseline results (column (1) of Table 2). As expected, local working experience increases labor supply during lockdowns. Column (3) shows that local work-

Table 5. *Local Working Experience*

	Dependent Variable: Log Delivery Volume		
	(1)	(2)	(3)
Soviet-Home × LD	-0.351***	-0.317***	-0.195**
	(0.096)	(0.095)	(0.092)
Work Exp × LD		0.011**	0.011**
		(0.005)	(0.004)
Local Gov × LD			0.166***
			(0.048)
LD	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes
Demographic × LD	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes
Daily FE	Yes	Yes	Yes
N	1,253,440	1,253,440	1,253,440
N-couriers	2,718	2,718	2,718

Notes: Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

ing experience does not absorb the effect of trust in the local government, with the Local Gov × LD coefficient remaining significant.

Peer effect. Peer interactions may influence trust activation among migrant couriers, with mixed effects. During initial panic, increased peer interactions could heighten distrust and stress, reducing labor supply. However, more peers in the same location could also offer a supportive social network, reducing panic.

We define hometown peers as couriers from the same prefecture working in the same city. On average, 12% of a courier's colleagues are hometown peers. Table 6 presents the results.Columns (1)–(3) of Table 6 show that the peer effect is statistically insignificant. Including an interaction term (column (2)) does not significantly change the Soviet base effect. When accounting for trust in local government (column (3)), the proportion of peers still has no significant impact on labor supply or the Soviet base effect. Redefining hometown peers to include couriers from the same province (columns (4) and (5)) yields consistent results.

6.   Other Hometown Characteristics

While the previous section supports activated political distrust as a mechanism, other factors may contribute to the observed Soviet base effects. This section explores alternative channels, including cultural traits (altruism, risk preferences, work attitudes, economic commitments) and hometown characteristics (economic development, geography). Detailed results are reported in Appendix A.6.

Table 6. *Peer Effect?*

	(1)	(2)	(3)	(4)	(5)
Soviet-Home × LD	-0.366***	-0.344***	-0.233**	-0.361***	-0.256***
	(0.096)	(0.106)	(0.108)	(0.096)	(0.099)
Local Gov × LD			0.147***		0.142***
			(0.051)		(0.049)
Peer-Home City × LD		-0.132	-0.141		
		(0.148)	(0.144)		
Peer-Home Province × LD				-0.081	-0.062
				(0.169)	(0.164)
LD	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes
Daily FE	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes
Demographic × LD	Yes	Yes	Yes	Yes	Yes
N	1,096,326	1,096,326	1,096,326	1,096,326	1,096,326
N-courier	2,351	2,351	2,351	2,351	2,351

Notes: Only migrant couriers are used for the analysis. For comparability, we only use couriers with non-missing peer proportion measures in the regressions. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$)

Altruism. During lockdowns, altruism could be another trait underlying the Soviet base effect that results in the labor supply disparity: more altruistic couriers may have been more likely to consider residents' needs and thus deliver more. Indeed, we find that couriers who came from former base areas exhibit lower levels of altruism (see Section 3). However, in the horserace regressions, the coefficients on the interaction term of all constructed altruism indexes are small and insignificant, indicating that the difference in delivery volumes during lockdowns is unlikely to be attributed to the activation of altruism.

Risk preference. More risk-averse couriers might reduce labor supply to avoid infection. However, we find no significant differences in risk aversion between base and non-base couriers. The risk preference effect remains insignificant in horserace regressions, leaving the Soviet base effect unchanged.

Work attitudes. The differential labor supply between base and non-base couriers during lockdowns may arise from differences in work attitudes. Base couriers might derive less fulfillment from their work and struggle more with lockdown stress, making them more hesitant to work. However, our survey and analysis show that they are unlikely to be a significant factor.

Economic commitments. Couriers who are primary breadwinners tend to have less labor supply elasticity (Heckman 1993). In our context, couriers may be forced to work despite high infection risks due to financial pressures. Base-area couriers have fewer economic responsibilities, but accounting for this does not alter the Soviet base effect, suggesting economic commitments are not a driving factor.

Hometown characteristics: economy and geography. We also consider whether the Soviet base effect could stem from the economic and geographic characteristics of courier hometowns. Even though most couriers are migrant workers, these traits may still influence values and beliefs that affect their work behavior. Couriers from former Soviet base areas, often less developed and impoverished, may have developed distinct coping mechanisms for risk (Haushofer and Fehr 2014), influencing their labor supply during lockdowns. Similarly, those from geographically isolated areas, like mountainous Soviet bases, might have unique decision-making patterns (Nunn and Puga 2012; Rodrik, Subramanian, and Trebbi 2004). However, our analysis shows that including these factors in the regressions does not alter the Soviet base effect. The impact of trust in the local government remains consistent when accounting for interactions between economic and geographic traits and the lockdown dummy, suggesting that hometown characteristics do not substantially influence the observed behavioral differences.

7. Conclusion

In this paper, we document that couriers from former Soviet base regions display notable differences in behavior when faced with a sudden escalation of risk compared to their colleagues from other regions. The heightened risks acted as a catalyst that activated the impacts of historical legacies. Importantly, the specific cultural traits activated appear to be context-dependent. In our setting, trust in local government–rather than general trust or trust in central government–shape behavioral responses. This context-specificity suggests that different crises or settings may activate distinct sets of cultural traits.

This set of findings prompts two additional research inquiries. Firstly, if we agree with the premise that contemporary contexts dictate which traits are activated, then precisely by what mechanism does this occur? Gennaioli and Shleifer (2010) presents a "local thinking" theory that helps answer the question. Couriers might assess the crisis they face and make subsequent economic decisions based on "what comes to mind first." In our scenario, the "stimulus salience" is government credibility, leading to "associative activation." While this explanation is speculative, it opens up a promising avenue for further exploration in this direction.

Secondly, it is also intriguing that trust in the local government explains only a fraction of the behavioral variations between base and non-base couriers. What other factors might drive the heightened panic among base couriers during the crisis? A direction for future research is how environments with a traumatic history can have lasting effects on individuals' cognitive capacity to address risks as well as their defensive behaviors during crises.

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Appendix

A.1.   Additional Tables For Section 2

Table A1. *List of Cities Having Experienced Lockdowns in 2020*

Lockdown City	Province	Start Date	End Date	Scale	In Our Sample
Wuhan	Hubei	2020/1/23	2020/4/8	Full Lockdown	Yes
Huanggang	Hubei	2020/1/23	2020/3/25	Full Lockdown	Yes
Ezhou	Hubei	2020/1/23	2020/3/25	Full Lockdown	Yes
Xiaogan	Hubei	2020/1/24	2020/3/25	Full Lockdown	No
Jingzhou	Hubei	2020/1/24	2020/3/17	Full Lockdown	Yes
Suizhou	Hubei	2020/1/24	2020/3/25	Full Lockdown	No
Huangshi	Hubei	2020/1/24	2020/3/13	Full Lockdown	Yes
Yichang	Hubei	2020/1/24	2020/3/25	Full Lockdown	Yes
Jingmen	Hubei	2020/1/24	2020/3/25	Full Lockdown	No
Xianning	Hubei	2020/1/24	2020/3/25	Full Lockdown	Yes
Shiyan	Hubei	2020/1/24	2020/3/25	Full Lockdown	Yes
Xiantao	Hubei	2020/1/24	2020/3/25	Full Lockdown	No
Tianmen	Hubei	2020/1/24	2020/3/25	Full Lockdown	No
Enshi	Hubei	2020/1/24	2020/3/25	Full Lockdown	Yes
Qianjiang	Hubei	2020/1/24	2020/3/13	Full Lockdown	No
Shennongjia	Hubei	2020/1/27	2020/3/25	Full Lockdown	No
Xiangyang	Hubei	2020/1/28	2020/3/25	Full Lockdown	Yes
Wenzhou	Hubei	2020/2/2	2020/2/20	Partial Lockdown	Yes
Zhengzhou	Henan	2020/2/4	2020/3/23	Partial Lockdown	Yes
Zhumadian	Henan	2020/2/4	2020/2/23	Partial Lockdown	Yes
Hangzhou	Zhejiang	2020/2/5	2020/2/26	Partial Lockdown	Yes
Ningbo	Zhejiang	2020/2/6	2020/2/27	Partial Lockdown	Yes
Haerbin	Heilongijang	2020/2/7	2020/3/10	Partial Lockdown	Yes
Jilin	Jilin	2020/5/13	2020/6/7	Partial Lockdown	Yes
Baoding	Hebei	2020/6/18	2020/7/2	Partial Lockdown	Yes
Urumqi	Xinjiang	2020/7/18	2020/8/26	Partial Lockdown	No
Dehong	Yunnan	2020/9/14	2020/9/21	Partial Lockdown	No

Notes: This table provides the list of cities in China which have experienced lockdowns in 2020 when coping with the COVID-19 pandemic (summarized from Chen, Chen, Liu, Luo, and Song 2022). While our data is randomly sampled, 9 out of 27 cities are not included in our sample. Start Date and End Date denote the date the lockdown was imposed and lifted respectively. Scale denotes the intensity of the lockdown. A full-scale lockdown involves suspension of all traffics, closed-off management for all residential buildings and no leaving from the city, while a partial lockdown only imposed the policies above for a county or a district of the city.

Table A2. Summary Statistics: Courier Characteristics

Variable	Obs	Mean	Std. Dev.	Min	Max
Panel A: Courier Dempgraphics					
Delivery	7,995	130.486	69.261	1.849	1928.164
Workdays	7,995	6.567	0.707	0.078	9
Soviet-Home	7,995	0.195	0.396	0	1
Birth Year	7,995	1988.145	6.085	1962.5	2002.5
Education	7,378	0.434	0.496	0	1
Married	7,855	0.713	0.452	0	1
Male	7,995	0.976	0.152	0	1
Migrant	7,995	0.847	0.36	0	1
Panel B: Hometown Characteristics					
GDP	1727	5.435	3.459	0.68	31.43
Poverty	1716	0.205	0.403	0	1
Agri	1724	0.139	0.097	0.001	0.676
Pop Growth	1603	6.21	4.894	-13.22	21.89
FisExpen	1615	10374.34	6573.979	4450.16	94121.688
Coast Dis	1641	411227.25	330256.55	386.774	2573111.5
River Dis	1641	51056.378	56149.587	108.342	600148.19
TRI	1641	0.387	0.088	0.046	0.872
CSI	1620	3803.133	777.524	0	5881.101

Notes: This table provides courier-level summary statistics. Delivery denotes the daily delivery volumes for each courier. Workdays denotes the total days a courier attend work and deliver at least one package in a week. Each year is divided to 53 weeks, with the last week having 8 or 9 days for regular years and leap years respectively. We provide in the table the summary statistics for average delivery volumes and work days for each courier in the whole research period. Soviet-Home is a dummy variable and equals 1 if courier is from a former Soviet base area. Birth Year denotes the birth years of couriers. The original data records this variable with an accuracy of 5 years. For example, for a courier born in 1984, the data labels him as born between 1980 and 1985. Here we use the medium value of each birth year bin as an approximation, i.e., the courier mentioned above would have birth year 1982.5 in our final data. Education denotes the highest education finished by a courier. Here Education is a dummy variable and equals 1 if the courier has finished high school education. Married is a dummy variable and equals 1 if the courier is currently married. GDP is the GDP per capita in ten thousand RMB for a courier's hometown. Poverty is whether a courier's hometown is poverty-stricken. Agri is the primary share of GDP for a courier's hometown. Pop Growth is the natural popualtion growth rate for a courier's home city. FisExpen is the fiscal expenditure per capita in RMB for a courier's home city. Coast Dis is the distance of a courier's hometown to the coastline in meters. River Dis is the distance of a courier's hometown to the nearest river in meters. TRI is the terrain ruggedness index for a courier's hometown. CSI is the caloric suitability index for a courier's hometown.

Table A3. *Summary Statistics: Courier Characteristics*

Variable	Delivery Volume Data, Lockdown Cities Sample		Ex-post Courier Attitudes Survey, Lockdown Cities Sample	
	Mean/SD	Obs	Mean/SD	Obs
Soviet-Home	0.383	728	0.295	2,542
	(0.487)		(0.456)	
Birth Year*	1987.933	728	1990.212	2,541
	(5.892)		(5.781)	
Education	0.465	507	0.485	2,542
	(0.499)		(0.5)	
Male	0.973	728	0.963	2,542
	(0.164)		(0.188)	

Notes: This table compares summary statistics for couriers in our main sample and couriers in our conducted large-scale survey. The first two columns summarize the characteristics of couriers working in lockdown cities in the main sample (the delivery volume data), while the latter two columns summarize the characteristics of couriers from our own survey. "Soviet-Home" is a dummy variable that equals 1 if the courier is from a former Soviet base area. "Birth Year" denotes the birth year of couriers, and "Education" is a dummy variable that equals 1 if the courier has completed high school education.

* In the delivery volume data, courier birth year is recorded with a 5-year accuracy, and we approximate it by using the median value of each birth year bin. In the ex-post survey, however, we obtain the accurate birth year information.

A.2. Former Soviet Base Regions: Economic Development and Cultural Traits

First, to examine the economic development of the former Soviet base regions, we regress county-level economic indicators from 2018 against the dummy variable Soviet Base, which takes a value of 1 if the county belongs to a former Soviet base region. The results are summarized in Table A4. The GDP per capita of former Soviet base regions lags by 9.5 percent compared to non-base regions, and per capita fiscal expenditure is 14.3 percent lower in former Soviet base areas. Although the share of the agricultural sector is marginally higher, the difference is not statistically significant, and the population growth rate is 1.7 percentage points higher.[16] We find that base counties are 11.2 percent more likely to be poverty stricken than non-base counties.

Table A4. Contemporary Economic Development in the Former Soviet Base Areas

	log GDP per capita (1)	Poverty Stricken (2)	Agricultural Sector Share (3)	Population Growth Rate (4)	log Fiscal Expenditure per capita (5)
Soviet Base	-0.095*** (0.021)	0.112*** (0.023)	0.415 (0.405)	1.776*** (0.209)	-0.143*** (0.018)
Outcome Mean	1.758	0.275	13.802	6.088	9.279
N	2,796	2,868	2,801	2,482	2,503

Notes: This table summarizes the correlation between Soviet base area dummy and indicators of contemporary economic development. The regressions are conducted at county-level, with the dependent variable being economic indicators and the independent variable being whether a county locates in a former Soviet region. Only coefficients of interest are presented. Robust standard errors are in the parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Second, we examine values and beliefs in the former Soviet regions. We start with trust and political trust. Due to self-censorship by the collaborating company, we are unable to directly survey couriers on their trust in the government. We therefore use survey data from the 2010 wave of the CGSS. We regress respondents' responses on a dummy variable, Soviet-Home, which takes a value of 1 if the respondent lives in a county that used to be part of the former Soviet base areas. All regressions control for individual-level demographics such as gender, age, ethnicity, educational attainment, marital status, *Hukou* status, CCP membership, participation in the labor force, and household income. We also control for the aforementioned regional economic characteristics – log GDP per capita, whether the county is poverty stricken, output share of the agricultural sector, population growth rate, and log fiscal expenditure per capita.

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[16]Some economic indicators, such as GDP per capita and the share of the agricultural sector, are available at the county level. Where these indicators have missing values, we substitute them with the corresponding prefecture-level indicator. Other metrics, including the population growth rate and fiscal expenditure per capita, are solely accessible at the prefecture level. To approximate the developmental status at the county level, we adopt the indicators' values from the prefecture in which the county is located.

Table A5. *Trust and Experiences in the Former Soviet Base Areas*

	Trust in			Obedience	Observe	Treated Unfairly
	Gen Pop	Local Gov	Central Gov	to Gov	Protest	by Gov
	(1)	(2)	(3)	(4)	(5)	(6)
Soviet-Home	-0.045	-0.109***	-0.019	-0.127**	0.060**	0.018
	(0.027)	(0.033)	(0.049)	(0.053)	(0.029)	(0.015)
log GDP per capita	Yes	Yes	Yes	Yes	Yes	Yes
Poverty-stricken	Yes	Yes	Yes	Yes	Yes	Yes
Agricultural sector share	Yes	Yes	Yes	Yes	Yes	Yes
Population growth	Yes	Yes	Yes	Yes	Yes	Yes
log Fiscal expenditure per capita	Yes	Yes	Yes	Yes	Yes	Yes
Demographics	Yes	Yes	Yes	Yes	Yes	Yes
Outcome mean	0.162	0.259	0.613	0.313	0.119	0.100
N	5,484	5,469	5,474	5,471	5,482	5,484
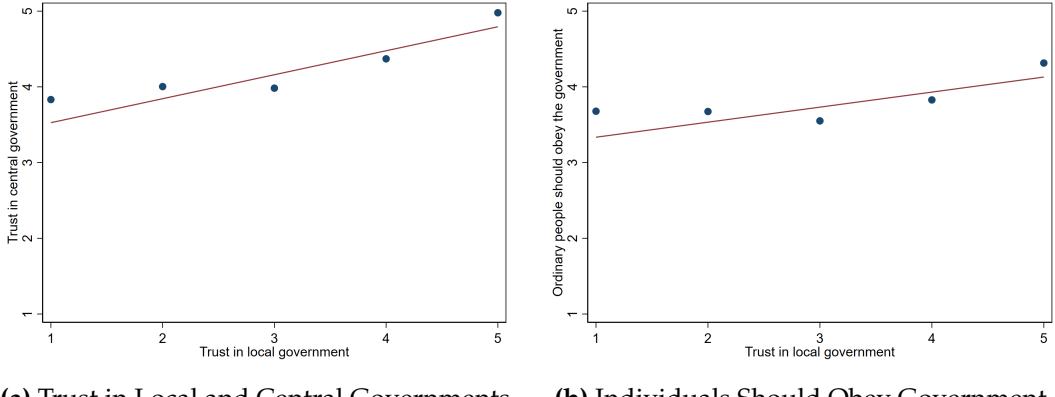
Notes: This table summarizes the correlation between Soviet base area identity and people's beliefs and experiences, using data from wave 2010 of the existing CGSS survey. Basic demographic controls include gender, age, educational attainment, marital status, hukou status, ethnicity, religion, CCP membership and household income and unemployement status. Regional controls include county-level GDP in log and primary sector share in 2018, city-level population growth rate and log fiscal expenditure per capita in 2018 and whether the county is recognized as poverty stricken. Only coefficients of interest are presented. Standard errors are clustered at prefecture level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5 presents the results.

Columns (1) to (3) of Table A5 present the results for trust. Respondents were asked to rate their trust in the general public (or strangers), local government, and central government from 1 ("do not trust at all") to 5 ("absolute trust"). We categorize respondents who select 5 ("absolute trust") as having a high level of trust in the general public or authorities. Our categorization is informative, given that, within the context of China, the majority of responses fall within category 4 ("trust") or 5 ("absolute trust").

The results reported in column (2) indicate that individuals residing in former Soviet base areas exhibit significantly lower levels of trust in local governments, while columns (1) and (3) indicate that there is no significant difference in trust in the central government or the general public between individuals from base and non-base areas. Nevertheless, trust in the local government is positively correlated with trust in the central government (see Figure A1a), which is not surprising.

Another dimension related to trust in institutions is the relationship between the government and citizens. Respondents were asked to express their level of agreement with the statement "ordinary people should obey the government"on a scale from 1 ("Completely Disagree") to 5 ("Completely Agree"). The results using this response as the dependent variable are presented in column (4), which demonstrate that individuals in base areas display lower levels of obedience toward the government. Respondents were also asked whether they had witnessed any mass protests in the past

(a) Trust in Local and Central Governments   **(b)** Individuals Should Obey Government

Figure A1. Correlations with Trust in the Local Government. Figure A1a illustrates the correlation between trust in the central vs. local government, while Figure A1b depicts the correlation between the degree of agreement with the statement that ordinary citizens should obey and trust the local government. Each data point represents the average level of trust in the central government or level of agreement, respectively, based on the conditional trust level in local government being 1 ("do not trust at all"), 2 ("do not trust"), 3 ("indifferent between trust and distrust"), 4 ("trust"), or 5 ("absolute trust").

3 years. Column (5) indicates that individuals from former base areas are more likely to have reported observing protests, which is consistent with the finding of lower levels of obedience attitudes. Furthermore, trust in the local government and obedience attitudes toward the government are positively correlated. Figure A1b suggests that those who have greater trust in the local government tend to agree more that individuals should obey the government.

The survey also asked respondents whether the government has treated them unfairly. In column (6), we find that individuals in base areas do *not* report that they are more likely to be treated unfairly by the government, i.e., the correlation is small and insignificant. It suggests that the expressed lower trust in local government could be a result of beliefs rather than their own personal experiences.

We then examine all the other questions in the survey related to trust in institutions in a similar fashion. Respondents were also asked to rate their trust in various institutions on a 5-point scale. Similar to the variable definition above, we define respondents choosing 5 ("absolute trust") as having a high level of trust in an institution. The specification adopted is similar to that in Table A5 and the results are presented in Table A6. Typical institutions linked to the local government include the court, the police department, and local media.[17] Estimates in columns (1), (3), and (5) indicate that

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[17]During the survey period, the Internet and social media had not yet replaced traditional mass communication as the primary news source. Therefore, the term "media" primarily pertains to conventional media like television channels, newspapers, and magazines, which are disseminated or published in accordance with state guidance and principles.

Table A6. Trust in Other Institutions in the Former Soviet Base Areas

| | Trust in | | | | | |
| | Court | Army | Police | Central Media | Local Media | Congress |
	(1)	(2)	(3)	(4)	(5)	(6)
Soviet-Home	-0.068*	-0.069	-0.111**	-0.081	-0.091**	-0.068
	(0.040)	(0.045)	(0.043)	(0.051)	(0.036)	(0.054)
Demographic	Yes	Yes	Yes	Yes	Yes	Yes
log GDP per capita	Yes	Yes	Yes	Yes	Yes	Yes
Agricultural Sector Share	Yes	Yes	Yes	Yes	Yes	Yes
Population Growth	Yes	Yes	Yes	Yes	Yes	Yes
log Fiscal Expenditure per capita	Yes	Yes	Yes	Yes	Yes	Yes
Outcome mean	0.377	0.595	0.366	0.428	0.226	0.593
N	5,458	5,459	5,468	5,459	5,448	5,452

Notes: This table summarizes the correlation between base area identity and people's trust in institutions. Basic demographic controls include gender, age, educational attainment, marital status, hukou status, ethnicity, religion, household income and unemployement status. County-level log GDP per capita and agricultural sector share, and city-level population growth rate and log fiscal expenditure per capita are also controlled. Standard errors are clustered at prefecture level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

in former Soviet base areas, trust in these three institutions is significantly lower. We also observe that trust in institutions associated with the central government displays no significant disparities between the former base and non-base regions. These institutions encompass the army (column (2)), central media (column (4)), and the National People's Congress (column (6)). Those results align with the patterns we reported earlier.

Next, we turn to another pro-society value – altruism. Our survey of the couriers incorporates a standard measure of altruism by asking respondents how much they would donate to charity if they unexpectedly received 100 yuan. Additionally, we present a scenario-based question to gauge altruistic behavior in their work environment: "Imagine you are about to finish work for the day when a customer calls and urgently needs medication delivered today. Would you be willing to work overtime to make the delivery?" (1 = ("Extremely unwilling to work overtime for the customer"); 5 = ("Totally willing to work overtime for the customer"). Couriers who answer with a 4 ("Willing to work overtime for the customer") or 5 are categorized as altruistic.

We explore the altruistic inclinations of couriers originating from former Soviet base regions by conducting a regression analysis on the aforementioned responses, while controlling for all available demographic attributes (courier gender, age, and educational attainment) as well as the regional economic characteristics of the courier's hometown (log GDP per capita, whether the county is poverty stricken, share of the agricultural sector, population growth rate, and log fiscal expenditure per capita). The results, presented in Table A7, show that couriers from base areas demonstrate significantly lower levels of altruism compared to their non-base counterparts, regardless of

Table A7. *Correlation between Traits and Hometown Identity*

| | Altruism | | Risk Aversion |
	Donation (1)	Help (2)	(3)
Soviet-Home	-5.778***	-0.093***	0.009
	(1.817)	(0.026)	(0.024)
log GDP per capita	Yes	Yes	Yes
Poverty-stricken	Yes	Yes	Yes
Agricultural sector share	Yes	Yes	Yes
Population growth	Yes	Yes	Yes
log Fiscal expenditure per capita	Yes	Yes	Yes
Demographics	Yes	Yes	Yes
Outcome mean	56.978	0.738	0.210
N	1,423	1,423	1,423

Notes: This table summarizes the correlation between base area identity and couriers' level of altruism and risk aversion, using data from the conducted large-scale survey on couriers from the logistics company. Basic demographic controls include gender, age and educational attainment. Regional controls include county-level GDP per capita in logs, whether a county is poverty-stricken and primary sector share and city-level population growth rate and log fiscal expenditure per capita in 2018. Only coefficients of interest are presented. Standard errors are clustered at courier home prefecture level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

the altruism measures used in the analysis (columns (1) and (2)).

We also assess the couriers' attitudes toward risk by having them rate their willingness to take risks on a scale from 1 ("Extremely unwilling to take risk") to 5 ("Totally willing to take risk"). Couriers providing a rating of 1 or 2 ("Unwilling to take risk") are categorized as risk averse. Using a similar specification, we present the results in column (3) of Table A7, which indicate that couriers from both base and non-base areas exhibit comparable risk preferences.

A.3. Additional Tables for Section 4

Table A8. Robustness.

	All Cities					Lockdown Cities				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Soviet-Home × LD	-0.237***	-0.274***	-0.255***			-0.248***	-0.232**	-0.241***		
	(0.081)	(0.103)	(0.084)			(0.075)	(0.099)	(0.080)		
Soviet-Home × LD_Wuhan				-0.282***					-0.238***	
				(0.086)					(0.079)	
Soviet-Home × LogCase					-0.018***					-0.041***
					(0.006)					(0.013)
LD	Yes	Yes	Yes			Yes	Yes	Yes		
LD_Wuhan				Yes					Yes	
LogCase					Yes					Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scale × LD		Yes					Yes			
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3,265,415	3,292,530	2,972,812	3,292,530	1,844,304	195,427	222,542	195,735	222,542	128,372
N-courier	7,174	7,239	4,876	7,239	7,192	433	498	325	498	498

Notes: This table presents results for the robustness tests. Regressions in the first five columns use the whole sample, while regressions in the latter five columns include only couriers in lockdown cities. Individual fixed effects and calendar day fixed effects are controlled in all regressions. The effects of working location environment and courier demographics are also controlled. Only coefficients of interest are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A9. *Courier Delivery Volumes in 2019*

| | Dependent Variable: log Delivery Volume | | | |
| | All Cities | | Lockdown Cities | |
	(1)	(2)	(3)	(4)
Soviet-Home	0.007		-0.075	
	(0.013)		(0.048)	
Trust in Local Gov		-0.009		0.035
		(0.015)		(0.055)
Outlet FE	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes
log GDP per capita	Yes	Yes	Yes	Yes
Poverty-stricken	Yes	Yes	Yes	Yes
Agricultural sector share	Yes	Yes	Yes	Yes
Population growth	Yes	Yes	Yes	Yes
log Fiscal expenditure per capita	Yes	Yes	Yes	Yes
Demographics	Yes	Yes	Yes	Yes
N	1,203,644	485,926	79,813	32,076
N-couriers	4,445	1,777	302	111

Notes: This table summarizes the effect of Soviet base identity and trust in local government on courier delivery volume in 2019, before the COVID pandemic. Outlet fixed effects and calendar day fixed effects are controlled. Courier demographic characteristics, including gender, birth year, education attainment and marital status, and regional characteristics including GDP per capita, whether the county is a poverty-stricken county, agricultural sector share, population growth rate and fiscal expenditure per capita are also controlled. Standard errors are clustered at outlet level.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A10. *Couriers from Base Area Counties and Neighboring Counties within 30/60 km Radius*

	Dependent Variable: Log Delivery Volume							
	Within 30 km radius				Within 60 km radius			
	All Cities		Lockdown Cities		All Cities		Lockdown Cities	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Soviet-Home × LD	-0.269***	-0.263***	-0.231**	-0.221**	-0.279***	-0.265***	-0.269***	-0.252***
	(0.099)	(0.098)	(0.095)	(0.094)	(0.088)	(0.088)	(0.083)	(0.083)
Soviet-Home × Post-LD		0.006		0.010		0.022		0.026
		(0.047)		(0.047)		(0.046)		(0.046)
LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Post-LD		Yes		Yes		Yes		Yes
Soviet-Work × Post-LD		Yes		Yes		Yes		Yes
Demographics × Post-LD		Yes		Yes		Yes		Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,051,153	1,051,153	100,748	100,748	1,505,455	1,505,455	130,046	130,046
N-courier	3,346	3,346	288	288	2,343	2,343	226	226

Notes: This table is a replication of main results using only couriers from base area counties and neighboring counties within a 30 km radius (column 1 to 4) and a 60 km radius (column 5 to 8), respectively. Only coefficients of interest are presented. Standard errors are clustered at outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11. *Robustness of Main Results, Dropping One Lockdown City at a Time*

Lockdown City	All Cities				Lockdown Cities			
Dropped	Coef.	p-value	N	N-courier	Coef.	p-value	N	N-courier
Baoding	-0.251	(0.002)	3,269,807	7,184	-0.256	(0.001)	199,819	443
Shiyan	-0.256	(0.002)	3,290,238	7,231	-0.240	(0.003)	220,250	490
Jilin	-0.243	(0.003)	3,288,138	7,229	-0.229	(0.004)	218,150	488
Xianning	-0.264	(0.001)	3,291,170	7,235	-0.248	(0.002)	221,182	494
Haerbin	-0.261	(0.002)	3,288,238	7,226	-0.245	(0.002)	218,250	485
Ningbo	-0.275	(0.002)	3,266,940	7,188	-0.254	(0.003)	196,952	447
Yichang	-0.257	(0.002)	3,291,167	7,236	-0.241	(0.003)	221,179	495
Enshi	-0.252	(0.002)	3,288,272	7,229	-0.233	(0.004)	218,284	488
Hangzhou	-0.303	(0.001)	3,244,259	7,145	-0.295	(0.001)	174,271	404
Wuhan	-0.293	(0.018)	3,271,680	7,191	-0.269	(0.027)	201,692	450
Wenzhou	-0.218	(0.002)	3,274,475	7,204	-0.207	(0.005)	204,487	463
Jingzhou	-0.256	(0.002)	3,292,530	7,239	-0.240	(0.003)	222,542	498
Xiangyang	-0.248	(0.008)	3,284,074	7,222	-0.229	(0.012)	214,086	481
Zhengzhou	-0.206	(0.026)	3,242,647	7,117	-0.202	(0.023)	172,659	376
Ezhou	-0.257	(0.002)	3,291,196	7,237	-0.240	(0.003)	221,208	496
Zhumadian	-0.266	(0.001)	3,284,257	7,216	-0.245	(0.002)	214,269	475
Huanggang	-0.257	(0.002)	3,292,227	7,238	-0.241	(0.003)	222,239	497
Huangshi	-0.254	(0.002)	3,291,683	7,237	-0.238	(0.003)	221,695	496

Notes: This table summarizes the robustness of the baseline DID results dropping couriers working in one lockdown city at a time. The first column presents the name of the dropped lockdown city. The specification is the same as Equation (1). Only coefficients on the interaction term of Soviet-Home and the lockdown dummy are displayed. Individual and calendar day fixed effects and the effecst of working location environment and courier demographics are controlled. Standard errors are clustered at outlet level.

A.4. Extensive Margin

We estimate Equation (1) using the attendance dummy as the dependent variable and the full sample. Column (1) of Table A12 presents the results. The coefficient for the Soviet base effect is significantly negative, suggesting that base-area couriers worked less during lockdowns than their non-base colleagues, relative to the pre-lockdown normal periods. During lockdowns, base-area couriers' attendance declined by 10.5 percentage more than that of non-base couriers. Column (2) presents the estimates using Equation (2). The Soviet base effect remains significantly negative with a similar magnitude, while the coefficient on the interaction term between the post-lockdown dummy and Soviet-Home is small and insignificant. Thus, similar to the finding at the intensive margin, the gap in attendance returned to pre-lockdown levels after the lockdowns ended. We present the estimation results using the lockdown cities subsample in columns (3) and (4), which are similar.

Columns (5)–(8) of Table A12 summarize the estimates using the week-level specifications as in columns (1)–(4), respectively, while the dependent variable is the number of couriers' work days at the week level. The effect at the extensive margin remains significant and negative. During lockdowns, the gap in the number of workdays per week between base and non-base couriers increased by roughly 0.6 days compared to the pre-lockdown period. The magnitude of the effect is consistent with that estimated using attendance as the dependent variable.

Table A12. Extensive Margin

| | Whether come to work | | | | Work days per week | | | |
| | All Cities | | Lockdown Cities | | All Cities | | Lockdown Cities | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Soviet-Home × LD	-0.105***	-0.110***	-0.097**	-0.102**	-0.569**	-0.609**	-0.551**	-0.583**
	(0.040)	(0.042)	(0.041)	(0.042)	(0.246)	(0.257)	(0.251)	(0.262)
Soviet-Home × Post-LD		-0.011		-0.008		-0.078		-0.058
		(0.012)		(0.012)		(0.085)		(0.084)
LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Post-LD		Yes		Yes		Yes		Yes
Soviet-Work × Post-LD		Yes		Yes		Yes		Yes
Demographics × Post-LD		Yes		Yes		Yes		Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes				
Week FE					Yes	Yes	Yes	Yes
N	3,576,739	3,576,739	242,445	242,445	509,798	509,798	34,555	34,555
N-courier	7,239	7,239	498	498	7,202	7,202	496	496

Notes: This table presents results for the extensive margin, using work days per week as the dependent variable. Column (1), (2), (5), (6) summarize estimates for the full sample, and column (3), (4), (7), (8) summarize estimates for couriers working in lockdown cities. Individual fixed effects, calendar day fixed effects and effects of working location environment and courier demographics are controlled in all regressions. Only coefficients of interest are presented. Standard error are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.5. Additional Tables for Section 5

Table A13. *Robustness of Assignment Methods for Non-matched Prefectures*

	Dependent Variable: log Delivery Volume				
	Basline	100km, Avg.		100km, Weighted Avg.	
	(1)	(2)	(3)	(4)	(5)
Soviet-Home × LD	-0.377***		-0.263***		-0.264***
	(0.096)		(0.091)		(0.092)
Local Gov × LD		0.226***	0.147***	0.226***	0.147***
		(0.053)	(0.054)	(0.053)	(0.054)
LD	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes
N	1,143,481	1,143,481	1,143,481	1,143,481	1,143,481
N-courier	2,477	2,477	2,477	2,477	2,477

Notes: This table tests the robustness of results in column (1) to (3) in Table 2 using alternative methods to assign the generated indexes to couriers in the main sample. While 2,795 couriers are matched with the index, we use 2,477 couriers with non-missing demographics in the regression. Only coefficients of interest are presented. Standard errors are clusteredd at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A14. *Hometown Pandemic and Trust Activation (Robustness)*

	Dependent Variable: Log Delivery Volume					
	Both Types			Low Trust	High Trust	DDD
	(1)	(2)	(3)	(4)	(5)	(6)
Soviet-Home × LD	-0.360***	-0.428***	-0.299**			
	(0.115)	(0.129)	(0.143)			
Pandemic-Home × LD		-0.087***	-0.095***	-0.136***	-0.094***	-0.082***
		(0.031)	(0.029)	(0.044)	(0.019)	(0.022)
Local Gov × LD			0.192***			-0.101
			(0.061)			(0.128)
Pandemic-Home × Local Gov × LD						0.106***
						(0.037)
Local Gov × Pandemic_home						0.003
						(0.005)
Dist to Home × LD	-0.001	-0.046	-0.054	-0.057	0.008	-0.048
	(0.040)	(0.047)	(0.047)	(0.065)	(0.054)	(0.044)
LD	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes
Demographic × LD	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Daily FE	Yes	Yes	Yes	Yes	Yes	Yes
N	789,020	789,020	789,020	461,995	327,025	789,020
N-couriers	1,893	1,893	1,893	1,094	799	1,893

Notes: This table summarizes results for the horserace regressions of pandemic in courier hometowns. Only migrant couriers are used for the analysis. For comparability, we only use couriers with non-missing hometown pandemic condition measures in the regressions. In all regressions we control for individual fixed effects, calendar day fixed effects, and the effects of working location environment and courier demographics. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.6. Other Traits and Hometown Characteristics

This Appendix presents the empirical details for Section 6 in the paper. It examines factors other than political trust that may contribute to the behavioral differences we observe between base and non-base couriers, including altruism, risk preference, work attitudes, economic commitments, and courier hometown characteristics.

Altruism. To examine whether altruism was also activated during lockdowns, we created prefectural-level altruism indexes using data from our survey, following the approach detailed in Section 5. The survey included two measures of altruism. The first is a standard measure that asks respondents how much they would donate to charity if they unexpectedly received 100 yuan. The second is a scenario-based question to gauge altruistic behavior in their work environment. Appendix A.2 provides details of this measure. Subsequently, we assigned the corresponding altruism values to couriers with the same hometowns in the main sample. We first use the subsample of couriers with non-missing altruism measures from our survey to estimate Equation (1) as a benchmark. Then, we estimate a horserace regression and replace $Trust_i$ with the altruism indexes. Table A15 presents the results in columns (1) to (3). The interaction terms of both altruism indexes are not significant.

Table A15. Horserace: Other Traits

	Baseline	Altruism		Risk Aversion	Work Attitudes		Economic Commitments		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Soviet-Home × LD	-0.234***	-0.265***	-0.245***	-0.231***	-0.236***	-0.234***	-0.246***	-0.199**	-0.227***
	(0.081)	(0.085)	(0.091)	(0.083)	(0.081)	(0.081)	(0.082)	(0.086)	(0.084)
Donation × LD		-0.075							
		(0.064)							
Help × LD			-0.021						
			(0.061)						
Risk × LD				0.031					
				(0.058)					
Resilience × LD					-0.010				
					(0.059)				
Fulfillment × LD						-0.002			
						(0.059)			
Family Support × LD							-0.003		
							(0.003)		
Dependents × LD								0.120	
								(0.088)	
Debt × LD									0.033
									(0.073)
LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Daily FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	154,289	154,289	154,289	154,289	154,289	154,289	154,289	154,289	154,289
N-courier	341	341	341	341	341	341	341	341	341

Notes: This table summarizes results for the horserace regressions of alternative traits. We only include couriers with non-missing demographics in our sample. In all regressions we control for individual fixed effects, calendar day fixed effects, and the effect of working location environment and courier demographics. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Risk preference. We construct standardized risk aversion indexes using the survey responses and apply a similar approach as described above to assign them to couriers in the main sample. Column (4) of Table A15 shows that the coefficient on the interaction term is not significant and the magnitude of the Soviet base effect does not change.

Work attitudes. Our survey includes questions related to work attitudes. Couriers were asked to rate their ability to handle pressure on a scale from 1 ("Completely Disagree") to 5 ("Completely Agree"). We defined couriers who responded with a rating of 5 or 4 as resilient, and those who rated themselves lower as not resilient. Couriers were also asked to indicate the extent to which they experience a strong sense of fulfillment when performing their job well using a similar scale. Those who rated themselves 5 or 4 were defined as fulfilled with their work. The correlation between work attitudes and hometown identity is presented in columns (1) and (2) of Table A16. These results yield no significant differences between base and non-base couriers. We conducted horserace regressions using the same methodology discussed above. The results, presented in columns (5) and (6) of Table A15, suggest that accounting for the impact of work attitudes during lockdowns does not alter the significance or magnitude of the Soviet base effect.

Economic commitments. Our survey includes three measures of economic commitments. First, we asked couriers what proportion of their income they spend on family members as a direct measure. Second, we inquire about the presence of dependents in their family, such as children under 12 or elders over 60, to assess their responsibility to provide for them. Finally, we ask if the courier's family has any outstanding debt exceeding 50,000 yuan. We first examine the correlation between couriers' economic commitments and their hometown identity. Columns (3)–(5) of Table A16 report the results. Our findings indicate that couriers from former Soviet base areas have fewer economic responsibilities in their families than their non-base counterparts. These couriers allocate a lower percentage of their income to their family members, and are marginally less likely to have dependents such as children or elderly relatives in their households.

To investigate whether economic commitments could be underlying our findings, we construct region-level indexes of economic commitments using our survey data following the same approach as in the previous sections. Using similar specifications, we display the respective results in columns (7)–(9) of Table A15. Our findings indicate that neither the significance level nor the magnitude of the coefficient on Soviet-Home$_i$ × LD$_{it}$ changed much compared to the baseline estimation.

Hometown characteristics: economy and geography. To test whether hometown economic development could explain courier behavior during the lockdowns, we apply a horser-

Table A16. Correlation between Other Individual Characteristics and Hometown Identity

	Work Attitudes		Economic Commitments		
	Resilience (1)	Fulfillment (2)	Family Support (3)	Dependents (4)	Debt (5)
Soviet-Home	-0.007 (0.022)	-0.030 (0.023)	-4.226*** (1.370)	-0.033* (0.018)	-0.046 (0.038)
log GDP per capita	Yes	Yes	Yes	Yes	Yes
Poverty-stricken	Yes	Yes	Yes	Yes	Yes
Agricultural sector share	Yes	Yes	Yes	Yes	Yes
Population growth	Yes	Yes	Yes	Yes	Yes
log Fiscal expenditure per capita	Yes	Yes	Yes	Yes	Yes
Demographics	Yes	Yes	Yes	Yes	Yes
Outcome mean	0.740	0.824	49.459	0.833	0.630
N	1,423	1,423	1,423	1,423	1,423

Notes: This table summarizes the correlation between base area identity and couriers' work attitudes and economic commitments, using data from the conducted large-scale survey on couriers from the logistics company. Basic demographic controls include gender, age and educational attainment. Regional controls include county-level GDP per capita in logs and primary sector share, whether the county is poverty-stricken, and city-level population growth rate and log fiscal expenditure per capita in 2018. Only coefficients of interest are presented. Standard errors are clustered at courier home prefecture level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

ace strategy: we add an interaction term between the economic characteristics of courier i's hometown and his lockdown experience to Equation (1). Table A17 summarizes the results from the horserace regressions; columns (1)–(6) present the results when each observable is added individually, and column (7) presents the estimates when all observables are added simultaneously. The Soviet base effect indeed remains significant and of a similar magnitude across all horserace tests, while the effect of all economic characteristics is small and insignificant.

We follow the same horserace strategy and test whether the geographic characteristics of couriers' hometowns can account for the Soviet base effect. Table A18 summarizes the results. We find that the Soviet base effect does not change when geographic features are added to the regressions. Distance to the coast is the only geographic characteristic that has some effect on courier labor supply. However, it does not change the significance or magnitude of the coefficient on Soviet-Home $\times$ LD whether added alone or in combination with other geographic characteristics.

We further investigate the robustness of the political trust activation mechanism by controlling for the economic and geographic characteristics of courier hometowns. Table A19 summarizes the results of our investigation. Both the effect of trust in local government on its own and the fraction of the Soviet base effect it accounts for remain stable.

Table A17. *Horserace: Economic Characteristics of Courier Hometowns*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Dependent Variables: log Delivery Volume			
Soviet-Home × LD	-0.266***	-0.266***	-0.267***	-0.270***	-0.272***	-0.266***	-0.269***
	(0.086)	(0.086)	(0.085)	(0.086)	(0.086)	(0.085)	(0.088)
GDP pc × LD		-0.070					-0.039
		(0.072)					(0.208)
Poverty × LD			0.020				0.003
			(0.079)				(0.086)
Agri × LD				0.290			-0.199
				(0.438)			(0.665)
PopGrow × LD					-0.011		-0.011
					(0.013)		(0.012)
FisExpen × LD						-0.064	-0.049
						(0.068)	(0.164)
LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographic × LD	Yes	Yes	Yes		Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Daily FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2,997,778	2,997,778	2,997,778	2,997,778	2,997,778	2,997,778	2,997,778
N-courier	6,587	6,587	6,587	6,587	6,587	6,587	6,587

Notes: This table summarizes results for the horserace regressions of courier hometown economic characteristics. For comparability, we only use couriers with non-missing hometown characteristics in the regressions. In all regressions we control for individual fixed effects, calendar day fixed effects, and the effects of working location environment and courier demographics. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A18. *Horserace: Geographical Charateristics of Courier Hometowns*

	(1)	(2)	(3)	(4)	(5)	(6)
			Dependent Variables: log Delivery Volume			
Soviet-Home × LD	-0.270***	-0.275***	-0.274***	-0.258***	-0.268***	-0.265***
	(0.083)	(0.081)	(0.085)	(0.085)	(0.083)	(0.085)
CoastDis × LD		0.071*				0.074**
		(0.042)				(0.037)
RiverDis × LD			-0.010			0.003
			(0.029)			(0.028)
TRI × LD				0.275		0.242
				(0.304)		(0.302)
CSI × LD					0.000	-0.000
					(0.000)	(0.000)
LD	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes	Yes
N	3,082,221	3,082,221	3,082,221	3,082,221	3,082,221	3,082,221
N-courier	6,789	6,789	6,789	6,789	6,789	6,789

Notes: This table summarizes results for the horserace regressions of courier hometown geographic characteristics. For comparability, we only use couriers with non-missing hometown characteristics in the regressions. In all regressions we control for individual fixed effects, calendar day fixed effects, and the effect of working location environment and courier demographics. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A19. *Robustness for Trust and Courier Delivery Volume*

	Denepdent Variable: log Delivery Volume								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Soviet-Home × LD	-0.376***		-0.249**		-0.265**		-0.239**		-0.295**
	(0.097)		(0.107)		(0.109)		(0.109)		(0.124)
Local Gov × LD		0.237***	0.144**	0.225***	0.120**	0.213***	0.133**	0.225***	0.130**
		(0.053)	(0.057)	(0.054)	(0.056)	(0.065)	(0.064)	(0.067)	(0.063)
Econ × LD				Yes	Yes			Yes	Yes
Geo × LD						Yes	Yes	Yes	Yes
LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soviet-Work × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics × LD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calendar Day FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1,170,105	1,170,105	1,170,105	1,170,105	1,170,105	1,170,105	1,170,105	1,170,105	1,170,105
N-courier	2,537	2,537	2,537	2,537	2,537	2,537	2,537	2,537	2,537

Notes: This table tests the robustness of results in column (1) to (3) in Table 2 when controlling for the effect of courier hometown characteristics. For comparability, we only use couriers with non-missing hometown characteristics in the regressions. Econ × LD denotes the set of courier hometown economic characteristics (including log GDP per capita, whether the county is reckoned as poverty-stricken, agricultural sector share, population growth rate and log fiscal expenditure per capita) interacted with the lockdown dummy. Geo × LD denotes the set of courier hometown geographic characteristics (including log distance to coast, log distance to river, TRI and CSI) interacted with the lockdown dummy. In all regressions we control for individual fixed effects, calendar day fixed effects, and the effect of working location environment and courier demographics. Only coefficients of interests are presented. Standard errors are clustered at the outlet level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.7. The Soviet Republic Regime in the 1930s and Political Trust

The analysis in Section 3 and Appendix A.2 documents that people tend to trust the local government less in former Soviet base regions. In this section, we provide supplementary evidence indicating that the establishment of early Soviet regime may contribute to the diminished level of political trust. The main issue is the possibility that regions with lower levels of political trust were more likely to become Soviet bases. To address this concern, we employ an IV approach and use each county's geographic distance from the locations of military mutinies led by the CCP after the CCP–KMT fallout as an instrument.

To construct our IV, we draw upon the historical backdrop of the Chinese Soviet Republic's establishment, which stemmed from a sequence of CCP mutiny attempts from 1927 to 1931. Following the rupture of the KMT–CCP cooperation, the top CCP leadership decided to form independent armed forces against the KMT troops and established its own regime. The party adopted a strategy to persuade officials and soldiers with left-wing ideas in the KMT army to incite military mutinies in urban areas.[18] Starting with the Nanchang Uprising, dozens of mutinies were launched across the country. Despite some initial triumphs, the rebels soon started retreating due to the stark difference in military strength. Eventually, all the remaining rebel forces had to disperse into rural areas, where they rebuilt their strengths and established the Soviet base areas.

The distance from mutiny sites emerged as a critical factor in determining whether a county would become a Soviet base. On the one hand, the emergence of Soviet regions was an indirect outcome of the CCP's mutiny attempts. Thus, the distance to mutiny locations could serve as a pivotal determinant of a county's likelihood to receive retreating rebel forces and subsequently become part of a Soviet region. On the other hand, the occurrence of military mutinies and the destination for the retreating rebel army are inherently random, hinging heavily on military tactics and unpredictable natural factors.[19] In other words, both the mutinies and the distance to mutiny locations are exogenous to regional-level characteristics such as political trust.

Our instrumental variable satisfies the exclusion restriction for two main reasons.

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[18]In July 1927, the Standing Committee of the CCP Central Committee convened the first Lushan Conference in Jiujiang, Jiangxi Province. During this conference, a resolution was passed to politically oppose the Wuhan and Nanjing governments and to advocate the establishment of a new regime through an armed mutiny. Since the CCP did not have its own troops before the Nanchang Uprising of August 1927, it actively recruited left-wing officers and soldiers from the KMT army.

[19]For instance, during the Nanchang Uprising the forces retreated from Nanchang to Xunwu in Guangdong Province. They later returned to Ruijin in Jiangxi Province while being pursued by KMT forces. Subsequently, they relocated to Changting in Fujian Province before eventually entering Hunan Province to unite with other troops and establish a base in Jinggangshan. During this time the troop count dwindled from approximately 20,000 to fewer than 1,000.

First, the occurrence of military mutinies is inherently random, and relies more on political advocacy and KMT officers' military strategies than support from the general public in those locations. Thus, the military mutinies were not correlated with the level of political trust among the general population in affected locations. Second, the rebel army's marching and retreating routes after the mutinies were highly unpredictable. Pursued by the KMT army, their retreat route was heavily influenced by factors such as weather conditions, geographic obstacles, and the deployment of KMT forces. As a result, the ultimate destination was largely random and not determined by its political trust of local population.

By referencing the *History of the Chinese Communist Party*, we identify 15 significant mutinies that occurred from 1927 to 1931, predating the establishment of the central Soviet area. We use the records of the geographic coordinates of these mutinies to calculate each county's average distance from these mutiny locations.

Using a 2SLS strategy, we consider the following regression:

$$\text{Trust}_i = \beta_0 + \beta \text{Soviet-Home}_i + \alpha X_i + \varepsilon_i, \tag{A1}$$

where Trust_i is the level of trust in the local government, central government, or the general population. Soviet-Home_i is a dummy variable for whether individual i is from a former Soviet region. We instrument the hometown identity using the log average distance to the 15 mutiny locations. X_i represents the same set of control variables as in Section A.2, including individual demographics and regional economic characteristics.

We report the IV estimates in Table A20, panel A. The first-stage estimates in column (1) indicate that counties located closer to mutiny locations were significantly more likely to later become Soviet bases. The F-statistic is 12.2, which indicates that the average distance to mutinies is a robust predictor of the subsequent establishment of Soviet regions.

The 2SLS estimates are presented in columns (3), (5), and (7) of Table A20; columns (2), (4), and (6) reproduce the corresponding OLS estimation results for comparison. Column (2) confirms the negative correlation between Soviet base areas and trust in the local government. Column (3) shows that the 2SLS estimate remains significant and negative. Columns (5) and (7) provide the 2SLS estimates for trust in the central government and trust in the general population, respectively. Consistent with the OLS estimates presented in columns (4) and (6), the 2SLS estimates are still small and not statistically significant.

While mutinies were led by CCP and their supporters in the KMT army, they often

Table A20. *2SLS Estimates for Trust in the Former Soviet Base Areas*

	Soviet-Home	Trust in Local Gov		Trust in Central Gov		Trust in Gen Pop	
Panel A, All Mutinies	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Dis to Mutiny	-0.532***						
	(0.152)						
Soviet-Home		-0.107***	-0.233***	-0.021	-0.053	-0.045	-0.066
		(0.034)	(0.083)	(0.049)	(0.107)	(0.028)	(0.062)
Outcome Mean	0.238	0.259	0.259	0.613	0.613	0.162	0.162
N	5,488	5,469	5,469	5,474	5,474	5,484	5,484
F-statistics	12.2						
Panel B, Nationalist Army Mutinies	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Dis to Mutiny	-0.434***						
	(0.137)						
Soviet-Home		-0.107***	-0.267***	-0.021	-0.048	-0.045	-0.072
		(0.034)	(0.091)	(0.049)	(0.107)	(0.028)	(0.066)
Outcome Mean	0.238	0.259	0.259	0.613	0.613	0.162	0.162
N	5,488	5,469	5,469	5,474	5,474	5,484	5,484
F-statistics	10.1						
log GDP per capita	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Poverty-stricken	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Agricultural sector share	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Population growth	Yes	Yes	Yes	Yes	Yes	Yes	Yes
log Fiscal expenditure per capita	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table summarizes the 2SLS estimates for the effect of Soviet base areas on contemporary political trust. Column (1) presents results for the first stage regression. Column (3), (5), (7) present the 2SLS estimates, while column (2), (4), (6) present the respective OLS estimates for comparison. Basic demographic controls include gender, age, educational attainment, marital status, hukou status, ethnicity, religion, CCP membership, household income and unemployement status. Regional controls include county-level GDP in logs and primary sector share in 2018, whether the county is poverty-stricken, and city-level population growth rate and log fiscal expenditure per capita in 2018. Only coefficients of interest are presented. Standard errors are clustered at prefecture level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

involved collaboration between the CCP, the KMT army, and local peasants or guerrillas. Therefore, we check the robustness of these results by focusing on eight mutinies involving *only* KMT soldiers and use the distance to those mutiny locations as an alternative instrument. The results, presented in panel B of Table A20, demonstrate that the estimated coefficients remain consistent.