

Formation and Evolution of Beliefs: Famine Experience and Trust in Neighbors*

Da Gong[†] Zhian Hu[‡] Chuanchuan Zhang[§]

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Abstract

This paper examines how a traumatic experience across differential cultural configurations, can shed light on norms of risk sharing and community cultural persistence, in the context of Great Chinese Famine (1959-1961). We use cross mortality-clan-cohort variations and a difference-in-difference-in-differences method to study the evolution of clan culture values in the wake of the Famine. Our finding documents that the famine exposed cohort that live in a stronger clan county report higher level of trust in their clan members, relative to the people who didn't perceive a severe famine. Our findings are robust to a set of placebo tests and robustness check. The results remain stable for dynamic effects models. This paper contributes to literature on the effects on traumatic experience by focusing on a particular aspect, i.e., the formation and evolution of personal belief.

Keywords: cultural configurations, evolution of belief, clan, Chinese Great Famine

JEL Codes: key1, key2, key3

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[†]University of California, Riverside, Department of Economics, E-mail: dgong005@ucr.edu

[‡]Central University of Finance and Economics, China, Department of Economics, E-mail: cufe_huzhian@163.com

[§]Zhejiang University, China, E-mail: ccz.zhang@gmail.com

1 Introduction

Social capital and trustworthiness importantly contribute to economic growth¹. Meanwhile, a growing body of literature investigates the origin of trust from the historical experience (Giuliano and Nunn (2021); Bai and Wu (2020); Buggle and Durante (2021); Guiso et al. (2016)). However, few studies discuss the role of initial cultural configuration (in particular, Chinese clan culture) in the evolution of social cooperation and trust².

The existing research on the origins and evolution of social trust is built on a reasoning: the initial cultural environment cannot offer enough mutual insurance or trust connection within lineage or village. As a consequence, economic risk or traumatic experience facilitates inter-community cooperation and lower levels of trust in relatives or neighbors³. In societies organized by nuclear families and corporations, where family network cannot offer a sufficient social safety net or tradition cannot provide experience for changing agricultural environment, this reasoning may make sense. But for some other societies, like rural China, that rely more on informal enforcement and are organized by kinship-based risk sharing institution, the underlying assumption fails and the story may be different^{4 5}.

This paper studies how a traumatic experience across differential cultural configurations, can shed light on norms of risk sharing and community cultural persistence. In particular, we examine

¹see Arrow (2014); Tabellini (2010); Algan and Cahuc (2010); Alesina and Giuliano (2015); Ponzetto and Troiano (2018); Putnam et al. (2000)

²Different from Acemoglu and Robinson (2021), we define cultural configuration as “ the approved rules or sentiments, existing at a covert level, which motivate the overt behavior of individuals and which integrate it into meaningful patterns.” (Sirjamaki, 1948). An example of cultural configuration is kinship network in China (Fei, 1992) (p.23)

³Buggle and Durante (2021) document that economic risk facilitate an extended radius of cooperation with members outside family, for risk sharing purpose. Giuliano and Nunn (2021) use a logic that traditions evolved in past generations are less likely to be helpful for the current generation, in a climate variable environment. In another study, Nunn and Wantchekon (2011) find that the traumatic experience — slave trade negatively impact on level of trust in their family members and neighbors. The explanation is that it was common for individuals to be sold by their relatives or neighbors.

⁴Greif (2006); Greif and Tabellini (2010); Greif and Tabellini (2012); Greif and Tabellini (2017) provide a comprehensive comparison of different cooperation structure between China and Europe. Cooperation within Chinese clan is sustained by moral obligations based on kinship. In contrast, formal enforcement motivate intra-city, inter-lineage cooperation in Europe. As a consequence, generalized trust are mostly focused by European and US study, with a pre-assumed European social setting. The limited trust and lineage based social institution is poorly discussed.

⁵General trust is defined as ‘promote good conduct outside the small family / kin network, offering the possibility to identify oneself with a society of abstract individuals or abstract institutions’. Limited trust is defined as trust within small circles of related persons (family, kin or friends). ((Algan and Cahuc, 2014) and (Buggle and Durante, 2021)).

the evolution of trust among the kinship members, in the context of Great Chinese Famine (1959-1961), depending on the historical level of Chinese clan culture.

In China’s rural society, the Confucian clan functioned as a risk sharing and resource pooling institution for thousand years (Chen and Ma, 2021). As Greif and Tabellini (2017) point out, kin-based organization “sustained cooperation among members, regulated interactions with non-members, provided local public or club goods, and coordinated interactions with the market and with the state”. Trust within family members and reciprocal moral obligations are the key points to maintain cooperation inside a clan, whereas generalized trust functions little between clan members .

The Great Chinese Famine (which we will refer to as “the Famine”) is a unique natural experiment to test the function of clan. The Famine was a man-made disaster due to the systematic mis-allocation of food. A series of inflexible and progressive government procurement policies were implemented during Great leap Forward era (1958–1961) (Meng et al., 2015). As many as 30 million people are estimated to have died and 85 percent of Chinese counties are affected. However, the mortality rate is heterogeneous across the historical clan density. According to Cao et al. (2020), one standard deviation increase in the clan strength is associated with a reduction of 1.45 to 1.61 deaths per thousand people during the Famine years. During the Famine, the targeted county level grain procurement quota is decided by higher level government⁶, the clan culture enabled villagers to resist excessive grain procurement and engaged in intra-clan borrowing and lending, which requires collective cooperation and strong trust among clan members.

We propose a straightforward prediction, based on the the argument that historical experience could shape people’s value and belief ⁷. The experience of people who were saved by their clan, through food support or foster parenting, will enforce their trust in clan members and foster belief in clan culture. In other words, the strong kinship connected village will offer risk sharing channels for clan members, such survival experience will strengthen the trust within clan. In contrast, families live in a weak clan culture county would not strengthen such connection through

⁶During the Famine, People’s commune became the most powerful basic unit of rural organization. Each commune was a combination of several production teams (communities)

⁷The formation of beliefs could be updated from personal traumatic experiences or transmitted by parents. (see Bisin and Verdier (2000); Piketty (1995); Roland and Yang (2017))

kinship⁸.

To examine our prediction empirically, we combined county-level historical data on clan strength, following a more recent literature⁹. Particularly, we use the pre-Famine genealogy books¹⁰ per capita before the Famine as the measure of clan strength. For the mortality variable, we collected data on death per one thousand people from China Gazetteer Project and local government reports. Comparing to the *cohort loss* used in the previous study¹¹, our measure directly captures the famine severity and is less vulnerable to survival bias. For the main dependent variable, we utilize different measures of trust from a contemporary survey data, China Family Panel Survey (CFPS). This include trust in members with different connections to the respondent: parents, neighbor and strangers. We could take advantage of different types of trust for robustness check for our discussion.

With these unique data sets, we generate cross mortality-clan-cohort variations and use a difference-in-difference-in-differences method to study the evolution of clan culture values in the wake of the Famine. In particular, we compare the trust in clan members and corresponding behavior in the regions with stronger or weaker historical clan strength and more or less famine intensity, across the cohorts who born before and after the Famine. Specially, the end year of the Famine (1962) is used as cutoff for famine experience cohorts, with cohorts born before 1962 as the exposed cohorts and those born after serving as comparison, control cohorts. Furthermore, only the famine experienced cohorts from a high mortality and high clan county are expected to experience the clan as a risk sharing institution and favor more in their clan culture. By controlling community fixed effects and using interaction terms between province and cohorts, our strategy is able to account for cohort-invariant community characteristics and region-specific cohorts trend, given a post famine parallel cohort trend assumption between counties in dimensions of famine severity and clan strength.

We find that the famine experienced cohort that live in a stronger clan county averagely increase trust score in their neighbors (clan members) by 0.38 points, relative to the people who didn't

⁸e.g. in a weak clan culture county, parents with extra food may only share with their children, but not with their starving nephews and nieces during the Famine

⁹see Greif and Tabellini (2017); (Zhang, 2020) ; (Wang, 2020)

¹⁰Genealogies are "books that record family history and trace their lineages (Cao et al., 2020)

¹¹see Kung and Chen (2011); Meng et al. (2015); Chen and Yang (2015)

perceive a severe famine. The point estimate is non-trivial, given the average trust score in neighbor is 6.5. Our findings remain stable to individual level controls, different levels of fixed effects, alternative famine measurements and alternative clan measurements.

Our finding contributes to several strands of literature. First, it contributes to the burgeoning trust formation and cultural persistence study. The existing studies document that contemporary difference in cultural norms of behaviors and social trust are explained by historical shocks or environmental factors ((Nunn and Wantchekon, 2011); (Bugle and Durante, 2021); (Guiso et al., 2016);(Giuliano and Nunn, 2021)). Our study complements these previous researches by exploring the historical role of initial configuration in shaping contemporary trust and culture persistence. Our study also complements Tabellini (2008)’s study which explains the influence of social norms on individual’s choices. Our finding further endorses Kosse et al. (2020)’s study which documents the role of social environment in the formation of value.

Second, our research speaks to the existing study on the interplay between traumatic experience and belief update. Recent studies have documented traumatic experience and political movements’ impact on trust formation and value update ((Wang, 2021); (Alesina et al., 2020); (Falk and Kosse, 2016); (Gong and Huihua, 2015); (Roland and Yang, 2017)). A recent finding by Bai and Wu (2020) documents the effects of political movements on generalized trust formation and another related literature examines the famine’s impact on political trust (Chen and Yang, 2015), our research further complements this view by examining the traumatic impact on trust within kin based network, which is the base stone of Chinese society.

Third, our work adds to the literature on the functions of clan culture. Cao et al. (2020) document that clan, as a risk sharing institution, mitigated the famine intensity through the channel of informal lending and collective resistance. We expand their argument by documenting that trust in the clan were enforced by surviving experience. Our finding can also complement the studies on the role of clans ((Zhang, 2020); (Dincecco and Wang, 2021); (Zhang and Liu, 2010); (Chen and Ma, 2021))) and studies on cultural bifurcation ((Greif and Tabellini, 2010); (Greif and Tabellini, 2017); (Alesina and Giuliano, 2015); (Enke, 2019)).

2 Clan as a Risk Sharing Institution

In this section, we provide a brief introduction to the historical roles of clan and its interaction with the Famine.

2.1 The Confucian Clan

Clan is a kin-based organization that includes descendants of one common male ancestor. Similar to the corporation, a voluntary organization between unrelated individuals, clan sustains cooperation among members and provides club goods (Greif and Tabellini, 2017). However, cooperation inside a clan relies on reciprocal moral obligations, communal moral value and is regulated through kinship network, whereas cooperation inside a corporation relies on generalized moral obligations ((Greif and Tabellini, 2017); (Enke, 2019)).

The most famous metaphor of clan, is argued by Fei (1992) “ kinship - is similar to concentric circles formed when a stone is thrown into a lake...every family regards its own household as the center and draws a circle around it. This circle is the neighborhood, which is established to facilitate reciprocation in daily life...This pattern of organization in Chinese traditional society has the special quality of elasticity” (p63-64). This “egocentric” network shown by Fei, is defined as *differential mode of association* (chaxugeju). This kin based network has no explicit boundaries, membership in these groups are ambiguous ¹². Shown by the upper panel in Figure A7, in a society with stronger clan culture, the neighbors and relatives locate at a more central circle to individual. However, in a society with weaker clan culture (lower panel), neighbors and relatives locate at a circle closer to strangers — lower level trust in them.

Within these circles of related people, clan members tend to “promote codes of good conduct” (Alesina and Giuliano, 2015) and supply communal goods. Clan provides local militias during turbulence (Rowe, 2007), provides charity and mutual insurance as risk mitigation functions ((Chen and Ma, 2021) ; (Chen et al., 2021)) and attenuated survival risk during famines.

¹²For a Western-style organization, individuals might sign up for memberships

2.2 Clan during the Famine

The unprecedented and national-wide famine, during the Great Leap Forward movement, caused 30 million death during 1959 to 1961. The extreme excessive procurement from upper level government and the misallocation of food were considered as the main causes of the Famine (Meng et al., 2015).

Although provincial Communist Party officialshad strong incentives to over-report grain output in order to advance their careers (Kung and Chen, 2011), village leaders from regions of high clan strength were more likely to resist excessive procurement or concealed grain from the upper level government (Cao et al., 2020). Meanwhile, Inter household borrowing also functioned as a channel to mitigate the Famine intensity. As a result, “the rise in mortality rate during the Famine years is significantly smaller in counties with a higher level” clan strength.

3 Data

Our empirical strategy make use of three main data sources: various outcomes from *China Family Panel Study* (CFPS), famine intensity from county gazetteers and genealogy from historical collection.

3.1 Individual Level Trust

We use the second wave of CFPS survey (CFPS 2012) to measure main outcome of interest, trust in neighbors and obtain individual characteristics from the baseline survey (CFPS 2010). China Family Panel Survey is “a nationally representative, annual longitudinal survey of Chinese communities, families, and individuals launched in 2010 by the Institute of Social Science Survey (ISSS) of Peking University, China. ” It’s consider as a counterpart of PSID data in US.

The main outcome of interest comes from the question:

To what extent do you trust your neighbors?

(where 0 means that you have complete distrust and 10 means that you have complete trust.)

Shown by Table A1, the average trust in neighbor is 6.5 out of 10 points. In contrast, trust in parents with average score of 8.9 and trust in stranger with average score of 2. This pattern consist to common sense well. In terms of generalized trust, which is widely-used as a measure of social capital (e.g. World Value Survey and General Social Survey), half respondents in our sample agree that "most people can be trusted". For purpose of robustness, we also generate dummy indicators that if the continuous trust measures are above or below 6 points.

For our baseline estimation, we limit the sample individuals who born between 1941 to 1970, resided in rural area and live in the same counties since their birth. We use the urban counterparts as falsification test.

3.2 County Level Famine Intensity

We calculate county level famine intensity base on statistics from county gazetteers, government reports and compilation of population statistics. Our main data source is from *China Gazetteer Project*, a large scale project to digitize local gazetteers at Harvard's Yenching Library. County gazetteers are local encyclopedia covering major events since 1949 to 1990s, including democratic information, economic development, political movements, agricultural production and so on ¹³.

Specially, we collect annual death counts per thousand people for each county and match with CFPS sample counties. Then define death rate in famine years as average death rate during 1959 to 1961 and define death rate in normal years as average death rate during 1954 to 1957 ¹⁴. Finally, we define county level famine intensity (*mortality* in the regression model) as the ratio between death rate during famine years and normal years minus 1.

Figure A3 shows a fat-tailed distribution of famine intensity, for CFPS sample counties. The sample mean is 0.89 and sample median is 0.43. We use a dummy indicator that if mortality level is above or below sample median in our baseline regression.

¹³A growing number of literature in Chinese study use this data source, see Chen et al. (2020), Chen and Lan (2017), Cao et al. (2020)...

¹⁴We exclude year 1949 to 1953 from normal years. During this period, there were on-going regional civil war and land reform. 1953 is considered as the first year for large scale economic construction. We also exclude year 1958 from normal year, according to historical evidence, the Famine has already begun in some counties in this year.

3.3 County Level Clan Strength

We use the density of genealogies ¹⁵ as our main measure of clan strength, a similar method used by Cao et al. (2020) and Dincecco and Wang (2021). Specially, *The General Catalog of Chinese Genealogy*, consist of 52401 Chinese genealogies compiled before early 2000, provides geographic information of genealogy books and year in which it was compiled. This data set is considered as the “most comprehensive registry of Chinese clan genealogies to date ((Greif and Tabellini, 2017); (Dincecco and Wang, 2021)) ¹⁶.

we firstly logarithmize the count of county level genealogies (compiled before 1950) normalized by population in 1953 census. Then, generate a dummy indicator that if the log term is above or below sample mean ¹⁷. The compilation and maintenance of genealogies requires high economic cost and high level cooperation within clan, therefore we believe that the density of genealogies provide a systematic proxy for strength of clan culture. Figure A1 displays a geographic distribution of genealogies, shows that the clan culture are concentrated at the East South of China.

4 Identification Strategy

Identifying causal effect of the Famine on trust across differential clan culture configurations has one main challenge: The famine intensity depends on the level of historical clan culture — counties with stronger clan strength are associated with lower mortality. Therefore, a traditional difference in differences (DD) design may not give us an unbiased estimates even if there’s indeed causality. To be specific, a DD strategy with cohort and clan interaction, does not include the intensity of traumatic experience ever. To address this problem, we firstly employ a DD strategy with a combination of clan and cohort variation, by high and low famine intensity regions, in

¹⁵Genealogies are written records of a clan’s history, following the male line of descent, providing names and additional information of groups of people (Shiue, 2016).

¹⁶This data set is digitized by Wang (2020) and public available now.

¹⁷the sample mean of log (normalized_genealogies) is 0.13, median is 0.025.

equation (1).

$$T_{ict} = \beta_1 * Cohort_t * Clan_c + X_{ict} + \gamma_v + \gamma_{p,t} + error_{ict} \quad (1)$$

where T_{ict} is individual level of trust in neighbors. $Cohort_t$ is an indicator function that individual born before 1962 as the exposed cohort and those born after serving as control group. As discussed above, $Clan_c$ is a proxy for county-level clan strength, measured by dummy variable equals 1 if the historical genealogy books per capita is above national mean. X_{ict} is vector of individual controls including gender, education and ethnicity. γ_v are the community (village) level fixed effects, and capture time invariant characteristics across villages. $\gamma_{p,t}$ are province by cohorts fixed effects, which absorbs cohort trends to differ across provinces. $error_{ict}$ is idiosyncratic errors.

For the high famine intensity counties, we ask whether β_1 is significantly positive in the DD specification. The low mortality model, serves as a control group, the interaction term between clan and cohort indicate the trust evolution between strong clan region and weak clan region when the traumatic experience is absent across all cohorts. We should not observe the magnitude of β_1 differs from 0, given the assumption that there was no unobserved heterogeneous shock on different level of clan culture during the Famine.

Nevertheless, there were some traumatic shocks could affect the relative trust between exposed group and control group. The Cultural Revolution (1966-1976), involved tremendous conflicts and moral dilemmas, impact negatively on social trust, especially for the teenagers between age 8 and 22, overlap with the exposed cohorts in our setting (Bai and Wu, 2020). If the clan culture is not orthogonal to contemporaneous political movements, our DD estimates from the high famine intensity samples would be biased ¹⁸.

To address challenge to our DD setting, we combine the variations in three dimensions: stronger or weaker historical clan strength, more or less famine intensity and pre or post Famine cohorts and use a difference-in-difference-in-differences strategy for casual identification. With this framework, we can get a causality inference if the correlation between contemporaneous political movements

¹⁸according to Su (2011), Guangxi and Guangdong province, with highest level clan culture, also experienced most brutal collective killing in rural areas during Cultural Revolution.

intensity and clan strength is not heterogeneous on the Famine intensity. In another words, the key challenge to our DDD setting is the cohort-varying county (or lower level) factors that simultaneously correlate with trust and famine-clan interaction. We provide more details about threats to identification in Appendix 2.

We use several methods to mitigate such concerns or present evidence supporting underlying assumption for our DDD setting ¹⁹. (1) As discussed above, we control province by cohorts fixed effects to capture cohort trends which differ across provinces. (2) We use generalized trust and trust in strangers as falsification test — if effects from contemporaneous political movements are not absorbed by our setting, we should observe a negative coefficient from the regression, suggested by Bai and Wu (2020). (3) we regress revolutionary intensity on interaction terms between famine intensity and clan strength, to solid evidence for method (2) (not done yet). (4) To rule out the key challenge to our DDD setting, we examine the post famine parallel cohort trend assumption between counties in dimensions of famine severity and clan strength ²⁰, we construct a dynamic model as following:

$$\begin{aligned}
T_{ict} = & \sum_{t=1}^{12} \beta_t * Cohort_t * Clan_c * mortality_c + \sum_{t=1}^{12} \beta_2 * Cohort_t * mortality_c \\
& + \sum_{t=1}^{12} \beta_3 * Cohort_t * Clan_c + X_{ict} + \gamma_v + \gamma_{p,t} + error_{ict}
\end{aligned} \tag{2}$$

in which $Cohort_t$ is indicator function that the individual belongs to 3-year window cohort from 1941 to 1977. Cohort 1962-1964 is set as reference group. $mortality_c$ is the indicator if county level famine intensity larger than sample median (0.43). County level famine intensity is defined as the ratio between death population per thousand people during famine years and normal years minus 1. We defined death rate in famine years as average death rate during 1959 to 1961, death rate in normal years as average death rate during 1954 to 1957. We excluded year 1949 to 1953 and 1958 for the civil war or the potential famine prologue. β_1 is the coefficient of interest, capturing the

¹⁹Actually, Bai and Wu (2020) has already found that experience of Culture Revolution does not have affected trust in parents or strangers

²⁰similar to the pre-period parallel assumption, the average trust of individuals in either high/low famine intensity areas or strong / weak clan areas, who were born after the Famine should not differ systematically

differential impacts of the famine experience on trust in neighbor by clan strength.

For all main result regressions, robust standard errors clustered at county level. Samples are limited to individuals who born between year 1941-1970, are rural residence and don't ever migrate to other counties before.

5 Effect of Famine Experience on Contemporary Trust

In this section, we discuss our empirical findings. We begin with the results from DD regression, after which we proceed to the main results from DDD strategy and corresponding dynamic effects. We then carry out results from falsification test, extended implication and robustness check.

5.1 Warm Up Results (DD Strategy)

We first present the raw data of our main outcome variable — *trust in neighbor*, in Figure A4. We divide our sample into two groups based on high / low famine intensity level and then plot the raw score of outcome variable by levels of clan strength. Shown by the graph at upper panel, post famine cohorts, from 1962 to 1967, have very close raw trust score between counties with high level of clan strength and low level counterparts. This could give us some confidence in the post famine parallel trends assumption. However, either the upper or lower panel graph shows a noisy pattern of trends for other cohorts. For low mortality areas, which are supposed to be influenced mildly by the Famine, individuals from counties with strong clan strength (solid line) have consist lower level of trust than the weak clan strength (dash line) counterpart, across cohort 1947 to 1976. A similar pattern could be observed from high mortality areas, from cohort 47 to 52. These patterns are against our intuition: clan culture should enforce trust in the neighbors. There are several plausible explaining: (1) there is not the trust and clan association we expected, which is shown in Table A2, discussed in Section 3. (2) There are too much noise. (3) There are post famine shocks (e.g. political or economic) disproportionately hit regions with different clan level ²¹.

Then, we discuss results from the difference in differences (DD) setting in Equation (1). All

²¹Zhang (2020) finds that “clan is positively associated with the share of economy in the private sector.” Consequences derived from economic growth might impact on trust in neighbors.

the samples are restricted to cohort 1941 to 1970, who live in the rural area and didn't move to other counties since their birth year. Robust standard errors clustered at county level.

In Table 1, we reports the effect of the famine experience on different types of trust by famine intensity. we include individual controls, community fixed effect and province by cohort fixed effect are controlled. Column (3) and (7) show that in regions hit heavily by the Famine, the famine exposed cohort indeed enforced their trust in other clan members after they were saved by clan. At the same time, Column (3) and (7) report the estimates from low famine intensity counterparts, and the effects are close to and statistically indistinguishable from zero. This is consistent with a pattern that when the traumatic shock was not intense enough, people would not update their beliefs. Furthermore, as falsification test, we observe insignificant and close to zero effects from Column (1) (2) (5) (6), on trust in parents and strangers. This is consistent with the theory, *differential mode of association* (chaxugeju), introduced in Section 2. The Famine only affected trust at the middle cycle of egocentric network, which are trust in neighbors. In contrast, trust in parents or strangers would not be affected by such famine experience — clan as a risk sharing institution mainly functions through relatives (neighbors). Our findings (shown in Table A3) also hold for another measure for famine intensity: dummy indicator that if mortality level is above or below sample mean (0.89).

Dynamic Effects ((DD Strategy))

Figure 1 examines if our regression results are robust to the post-trends analysis. Cohort 1962 - 1964 is the reference group. For high famine intensity areas, we find that the interaction between cohort indicator and clan strength are significant positive for cohorts 50 to 58, who were age 3 to 9 years old during the Famine. The coefficients are close to and statistically indistinguishable from zero for the post famine cohorts, indicating a parallel post famine trending of trust scores between regions with different level of clan culture. This pattern consist with the raw data trending in Figure A4.

5.2 Main Results (DDD Strategy)

In this section, we present the results from the baseline difference in difference in differences (DDD) specification.

In Table 2, we reports the effect of the trauma experience interacted with clan strength on contemporary trust in neighbors. Panel A and B use different measure of famine intensity, a binary indicator for whether the excess Famine mortality in a county is above or below the sample mean (or median). Column 1 Panel A reports the basic regression result with community and cohort fixed effects, the coefficient of the triple interaction between famine exposed cohort, clan strength and famine intensity is 0.69, respectively significant at 1% confidence. In panel B, we show that the exposed cohorts living in counties with strong clan culture experience an average increase of 0.379 trust score in their neighbors (relatives), compared to the cohorts didn't experience a severe famine. The point estimate magnitude is non-trivial, given the average trust score in neighbor is 6.5. This holds with the addition of individual controls such as education level, gender and ethnicity (column(2)).

The results remain consistent after we control the community fixed effects and province by cohort fixed effects (column (3)), which control for time invariant community factors and allow for different cohort trends across provinces. The point estimates are stable, or if anything, become larger, in both Panels. In column (4), we generate a binary indicator if the trust score is larger or equal to 6, for the purpose of robustness and interpretation. People who experience the traumatic event and saved by their clan are 21 percent more likely to trust in their neighbors (relatives), comparing to the their counterpart, statistically significant at 1%. However, the impact in Panel B is only one third of the magnitude in Panel A, and non significant, with t value equals 1.08. Figure A3 could give us be a good explanation for the different patterns shown in Panel A and B. The significant results from Panel A are most likely driven by the outlier counties distributing at the fat tail, which experienced double mortality rates during the Famine. In contrast, when we use sample median as the threshold for mortality dummy, which give us even sample size between treated and control groups, the results become unstable. A plausible explanation is that the trust formation procedure works only when the traumatic experience is extremely severe, but it hurt

the universality of our theory.

Dynamic Effects (DDD Strategy)

Now, we estimate the dynamic treatment effects by using Equation (2). Figure 2 plots the estimates of β_1 for each cohort group, cohort 1962 to 1964 serves as reference. The cohort fixed effect and community fixed effect are included, robust standard error clustered at county level ²². The coefficients fluctuate around zero for cohorts after 1962, who were not exposed to famine, indicating that post-famine trends are not critical challenge to our setting. For the cohorts exposed to famine, only the cohort 1953 to 1955 (4 to 9 years old during the Famine) shows a positive and significant effect at 95 % level. The magnitudes are close to zero for other cohorts.

Figure A6 presents the results by using mortality sample mean, as opposed to median, define famine intensity. The coefficients on post famine cohorts don't show a consistent pattern with Figure 2, counties different at joint dimensions by famine and clan are still different after the Famine. For the famine exposed cohorts, the magnitude of effects are positive for cohort 1953 to 1961, but the coefficient bounces back to positive for the transitional age youth, who were 16 to 20 during the famine. This result suggests a different age window of clan trust formation, comparing to generalized trust formation (8-22). It might be explained as following: The trust in relatives and family members is easier to be shaped for young teens or kids, most likely through the channel of accompany or foster parenting. In contrast, social or political trust formation window is around transitional age ²³.

5.3 Exclusionary Channel

As we discussed above, egocentric network is the foundation for belief update from the soil (rural China) (Fei, 1992). Base on this theory, we should not observe the impacts of the

²²For the limited sample size, we cannot include the province by cohort fixed effects. To be specified, the event study already cut the data very thin, leaves the variation little. Furthermore, for some geographic concentrated provinces with low mortality and high clan rate, the variation will be small and no effect at all, even if there's really an effect.

²³Chen and Yang (2015) and Bai and Wu (2020) relatively document that ages between 16 to 25 and ages between 8 to 22 are critical window for formation of political trust and generalized trust.

famine experience on trust in neighbor from urban sample. Similarly, we also should not observe any effects on the trust in parents or strangers — people at the center or absolutely outside the *differential mode of association* (chaxugeju).

We report the regression results on different types of trusts, separately by rural sample and urban sample based on their *residence* status. Table 3 column 5 shows the same result discussed in the last section, a positive and significant effect on the trust in neighbors for the rural sample. In contrast, shown by column 3 and 7, the effect is trivial and not significant on trust in parents or neighbors. The logic behind this phenomena is straightforward, parents are the closest people and will always help their children out during the famine, the strangers are in the quit opposite. To further explore the impacts on social capital (Column 1), we use a binary variable, generalized trust as a proxy ²⁴, equals 1 if the respondent believes that "Generally speaking, most people can be trusted." The result is significantly positive. However, the robustness result from Table A4 shows a insignificant and close to 0 estimates, consists with the trust in stranger case.

Column 2, 6 and 8 present none significant results using the urban sample, consist with our story that clan as a risk sharing institution only affected trust formation for rural population. Furthermore, only the connection between the central point (self) and the middle circle (neighbors and relatives) are affected by this mechanism, neither the intra-nuclear family trust or social trust are affected.

5.4 Trust Level Difference Between Circles

One possible concern to our measurement of trust is some unobserved factors might affect the reported raw score of trust. For example, respondent A might reports 9 points out of 10 for trust in parents and respondent B reports 8. But in reality, B could has more trust in his parents than A does. To address this concern, We take paired difference between three trust variables: *trust in parents*, *trust in neighbors*, *trust in strangers* and therefore to differentiate out the idiosyncratic benchmark error. These newly generated outcomes are graphically demonstrated by the distance between circles, in Figure A7. Table 4 shows the regression results for outcomes of trust dis-

²⁴This variable is a standard proxy used by social capital literature such as (Putnam, 1995), (Campante and Yanagizawa-Drott, 2015) and (Ponzetto and Troiano, 2018)

tance between parents and neighbors, between neighbors and strangers and between parents and strangers. Consist with the previous result, The only significant effect is on the trust difference between parents and neighbors (column 5), for the rural sample. The circle of neighbors get closer to the concentric point — trust in clan network is strengthened for the famine exposed cohort who were saved by their clan.

5.5 Robustness Checks

We employ three robustness checks for our main findings. We use a different measure of clan strength from CFPS survey data, trim counties with extreme low famine intensity out of sample, and use an alternative measure of rural residence.

Alternative Measure of Clan Strength

We use the individual survey question “Is your household access to a genealogy book?” as an alternative measure of clan strength. As shown in Table A6, only the effect on rural sample’s trust in neighbors is positively significant. The effects remain insignificant and close to 0 for other types of trust and urban sample. However, the caveat of this measure is obvious: household genealogy information in 2010 is not a historical variable before the Famine.

Trimmed Sample (negative outliers removed)

Shown by Figure A3, there are 9 counties with negative mortality during the Famine. The minimum value of mortality is -0.4, implying that the death ratio during famine years is 40 percent less than normal years. We manually re-calculated the mortality from raw data and did not find any calculation mistakes for these 9 counties. To mitigate concerns that our results are driven by negative outliers, we dropped counties with mortality smaller than -0.1. As shown in Table A7, the results reveals that across Panel A and B, our baseline estimates are robust.

Alternative Measure of Rural Residence)

In CFPS survey, there are different questions to define the urban or rural samples. In the baseline regression, We use *type of community* as rural sample indicator. In Table A8, we use *Hukou*²⁵, household registration type, as an alternative measure of rural residence, our main results still holds.

6 Conclusions

This paper examines the evolution of trust among clan members, in the context of Great Chinese Famine (1959-1961), depending on the historical level of Chinese clan culture. We collect data from genealogies books on clan strength and collect data from county gazetteers on famine intensity. Combing with individual level trust measures, we are able to identify causal inference cross mortality-clan-cohort variations.

Our analysis shows that the famine exposed cohort that live in a stronger clan county report higher level of trust in their clan members, relative to the people who didn't perceive a sever famine. The magnitudes of effects are non-trivial and consistent to a series of falsification tests and robustness checks.

²⁵This measure is popularly used by previous literature, e.g. Chen et al. (2020)

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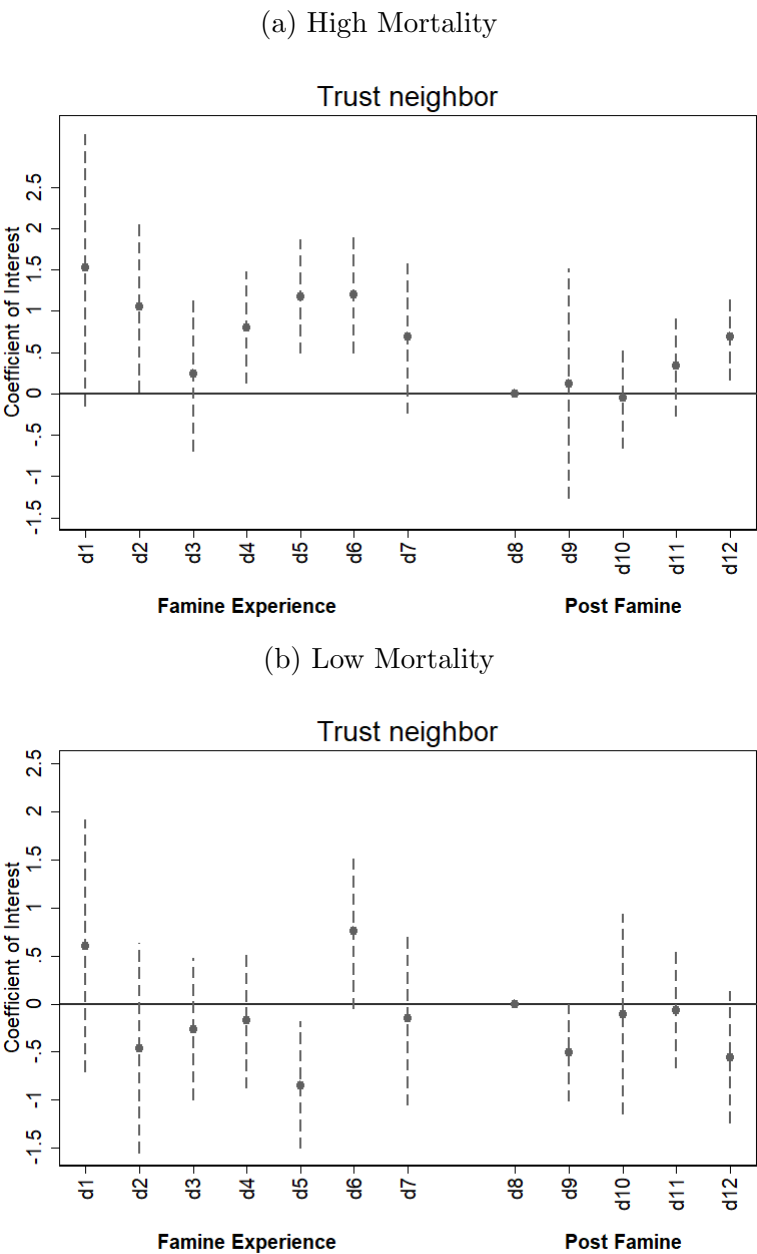
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8 Result

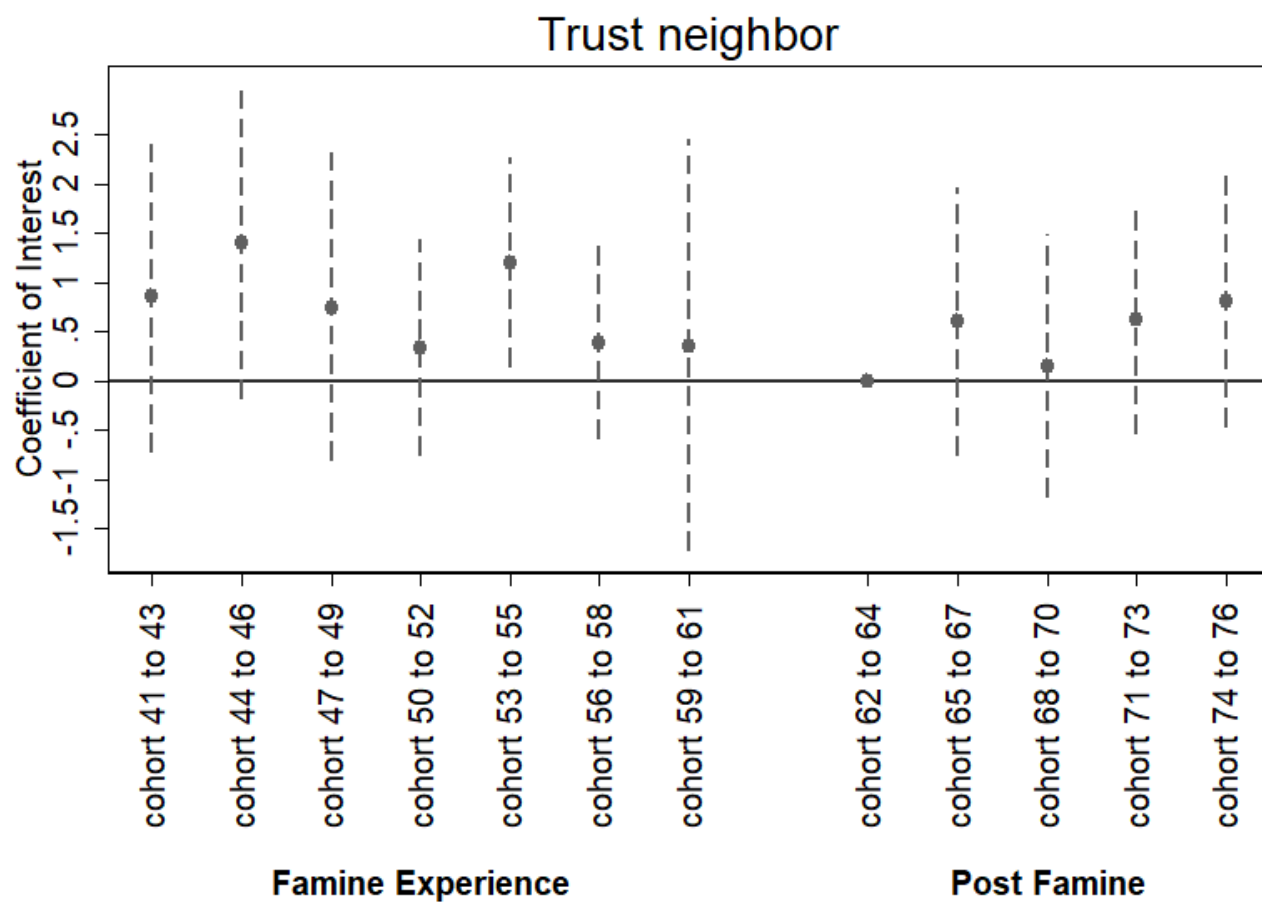
8.1 Figures

Figure 1: Dynamic DID Effects by mortality level (in Sample Median)



Note: .

Figure 2: Dynamic Effects of Mortality Dummy (in Sample Median) on Contemporary Trust



8.2 Tables

Table 1: Difference in Differences by Mortality Level (in Sample Median)

	Trust in Parents		Trust in Neighbors		Trust in Stranger		Trust in Neighbors Dummy	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	High Mortality	Low Mortality	High Mortality	Low Mortality	High Mortality	Low Mortality	High Mortality	Low Mortality
prefamine_clan	0.294 (0.195)	0.165 (0.206)	0.933*** (0.276)	0.0317 (0.152)	0.315 (0.255)	-0.405 (0.427)	0.151** (0.0635)	0.00832 (0.0288)
R-squared	0.186	0.0641	0.126	0.0907	0.147	0.149	0.118	0.0947
Observations	4299	3633	4302	3637	4302	3636	4302	3637
Mean of Outcome	8.704	9.024	6.418	6.566	2.188	1.896	0.598	0.628
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Famine Experience, Clan Density and Trust in the Neighbors (Mortality Dummy)

	(1)	(2)	(3)	(4)
	trust_neighbor	trust_neighbor	trust_neighbor	trust_neighbor_dummy
Panel A: Mortality Dummy Mean (in Sample)				
mortality_prefamine_clan	0.690*** (0.246)	0.666*** (0.246)	1.034*** (0.310)	0.213** (0.0845)
mortality_prefamine	-0.268** (0.131)	-0.261* (0.136)	-0.604*** (0.143)	-0.135*** (0.0302)
prefamine_clan	-0.234* (0.129)	-0.226* (0.127)	0.00718 (0.156)	-0.0258 (0.0293)
R-squared	0.0914	0.0939	0.105	0.102
Panel B: Mortality Dummy Median (in Sample)				
mortality_prefamine_clan	0.379* (0.224)	0.382* (0.221)	0.517* (0.302)	0.0785 (0.0729)
mortality_prefamine	-0.184 (0.123)	-0.185 (0.126)	-0.339** (0.164)	-0.0698* (0.0418)
prefamine_clan	-0.241 (0.147)	-0.240 (0.149)	0.0652 (0.170)	0.00147 (0.0428)
R-squared	0.0909	0.0934	0.104	0.101
Observations	8050	8045	7993	7993
Mean of Outcome	6.475	6.475	6.475	6.606
Individual Controls	✗	✓	✓	✓
Community FE	✓	✓	✓	✓
Cohort FE	✓	✓	✗	✗
Province-Cohort FE	✗	✗	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: The Effects of Famine Experience and Clan Density by Residence (Mortality Dummy in Sample Median)

	Trust General		Trust in Parents		Trust in Neighbors		Trust in Stranger	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
mortality_prefamine_clan	0.124*	-0.413	-0.104	-2.328**	0.517*	1.451	0.780	-0.738
	(0.0737)	(0.388)	(0.279)	(0.925)	(0.302)	(1.503)	(0.484)	(0.980)
mortality_prefamine	-0.0382	0.246	-0.222*	0.592	-0.339**	-0.526	-0.278*	0.190
	(0.0312)	(0.280)	(0.125)	(0.522)	(0.164)	(0.938)	(0.164)	(0.509)
prefamine_clan	-0.0281	-0.0196	-0.00672	1.277***	0.0652	-0.752	-0.387	0.195
	(0.0545)	(0.248)	(0.190)	(0.409)	(0.170)	(0.925)	(0.385)	(0.900)
R-squared	0.140	0.141	0.131	0.178	0.104	0.178	0.151	0.203
Observations	7992	984	7988	983	7993	984	7992	984
Mean of Outcome	0.488	0.559	8.867	9.273	6.475	6.428	2.024	2.077
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Famine Experience, Clan Density and Trust Score Difference

	trust score between parents & stranger		trust score between neighbor & stranger		trust score between parents & neighbor	
	(1)	(2)	(3)	(4)	(5)	(6)
	Rural	Urban	Rural	Urban	Rural	Urban
mortality_prefamine_clan	-0.406 (0.386)	-0.401 (0.959)	0.00565 (0.332)	-0.0176 (0.663)	-0.413* (0.232)	-0.384 (0.826)
mortality_prefamine	-0.00316 (0.167)	-0.155 (0.591)	-0.0368 (0.151)	-0.228 (0.392)	0.0353 (0.140)	0.0726 (0.540)
prefamine_clan	0.347 (0.312)	-0.553 (0.634)	0.175 (0.287)	-1.163** (0.528)	0.173 (0.123)	0.610 (0.373)
R-squared	0.140	0.122	0.121	0.120	0.0814	0.0753
Observations	8037	973	8043	973	8038	973
Mean of Outcome	6.820	6.955	4.451	4.487	2.368	2.468
Individual Controls	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓
Standard errors in parentheses						

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Effects on Intra-Clan Relationships

	(1)	(2)	(3)	(4)	(5)
	Visits Relatives	Visits Friends	Visits Relatives/Friends	Neighbor Will Help	Contact Frequency
mortality_prefamine_clan	0.0438 (0.122)	-0.0190 (0.138)	0.0766 (0.165)	0.0532 (0.0364)	2.115*** (0.595)
mortality_prefamine	-0.0893 (0.0608)	0.0207 (0.0664)	-0.113 (0.0724)	-0.0151 (0.0186)	-0.983** (0.389)
prefamine_clan	-0.0273 (0.100)	0.151*** (0.0517)	-0.197* (0.115)	-0.0416** (0.0190)	-0.218 (0.395)
R-squared	0.360	0.276	0.292	0.0653	0.166
Observations	8189	8176	8157	6656	7671
Mean of Outcome	1.684	0.914	0.770	0.924	8.192
Individual Controls	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓
Cohort FE	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

9 Appendix

9.1 Identification Challenge with Graphic Demonstration

Cohort			
Trust Score	1	0	
Clan	1	8	7
	0	5.5	5

(a) High Mortality Areas

Cohort			
Trust Score	1	0	
Clan	1	7	6.5
	0	6	5.5

(b) Low Mortality Areas

Table : clan strength is orthogonal to contemporaneous political movement

If clan strength is orthogonal to contemporaneous political movement (e.g. Cultural Revolution), the DD estimate from high famine intensity areas is unbiased. Shown in the left table above, The effect from left table equals $(8-7) - (5.5-5) = 0.5$. The effect from right table equals $(7-6.5) - (6-5.5)=0$. The total magnitude will be $0.5-0=0.5$

However, if high clan strength induces high revolutionary intensity (harm trust disproportionately) and impacts cohorts overlapping with our exposed cohorts, the DD estimates is biased. Shown in the table below, the estimate of samples from High mortality areas is 0.3, downward bias from the real effect. Nevertheless, If we adjust the estimate with samples from low mortality areas, Our DDD strategy will give us an unbiased estimate : $\{(7.6-6.8) - (5.5-5)\} - \{(6.6-6.3) - (6-5.5)\}=0.5$.

Cohort			
Trust Score	1	0	
Clan	1	7.6	6.8
	0	5.5	5

(a) High Mortality Areas

Cohort			
Trust Score	1	0	
Clan	1	6.6	6.3
	0	6	5.5

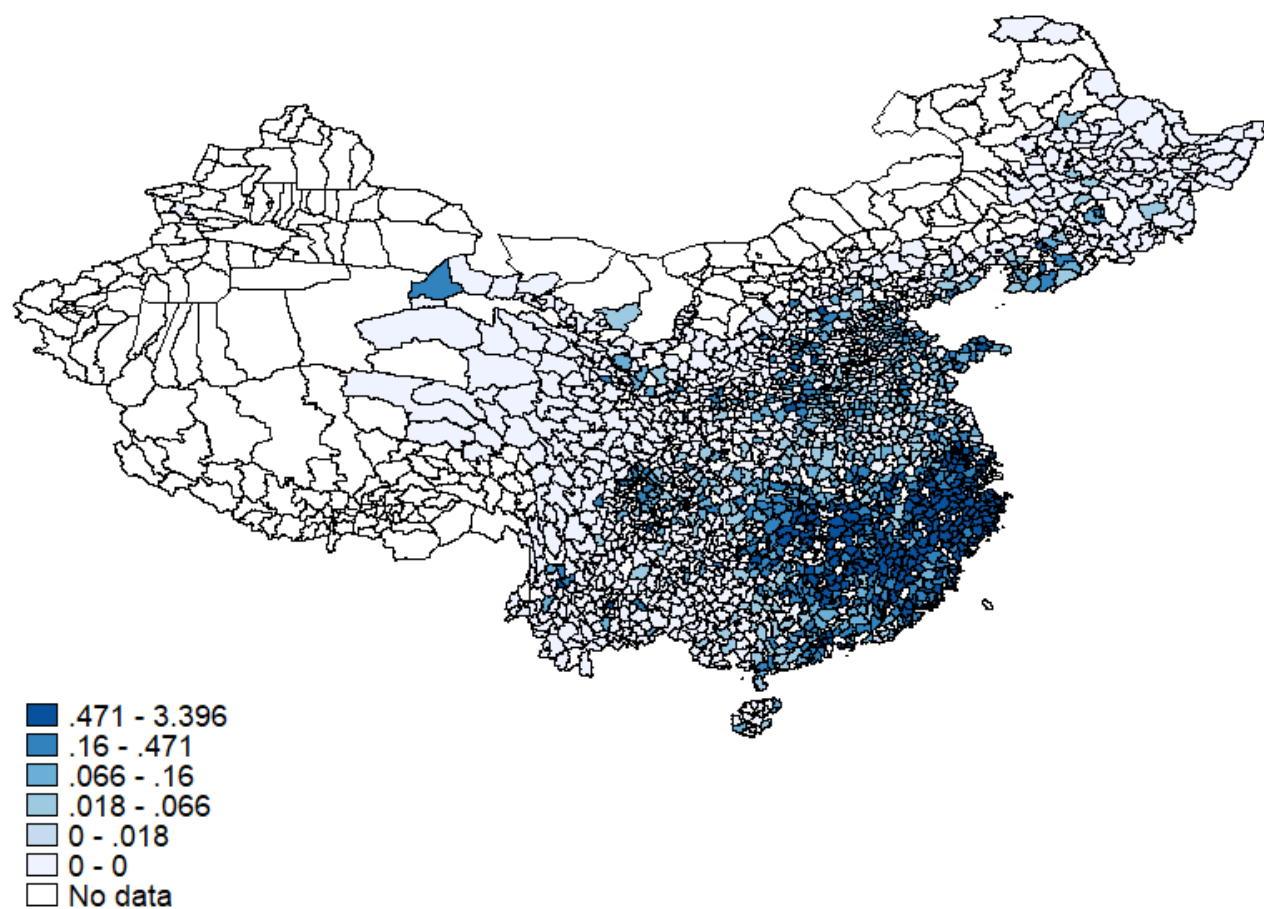
(b) Low Mortality Areas

Table : clan strength is not orthogonal to contemporaneous political movement

The main challenge to our DDD strategy is cohort-varying county (or lower level) factors that simultaneously affect trust and famine - clan interaction. For example, $\{(7.6-6.8) - (5.5-5)\} - \{(6.2-6.1) - (6-5.5)\}= 0.7$, which is biased.

9.2 Appendix Figures and Tables

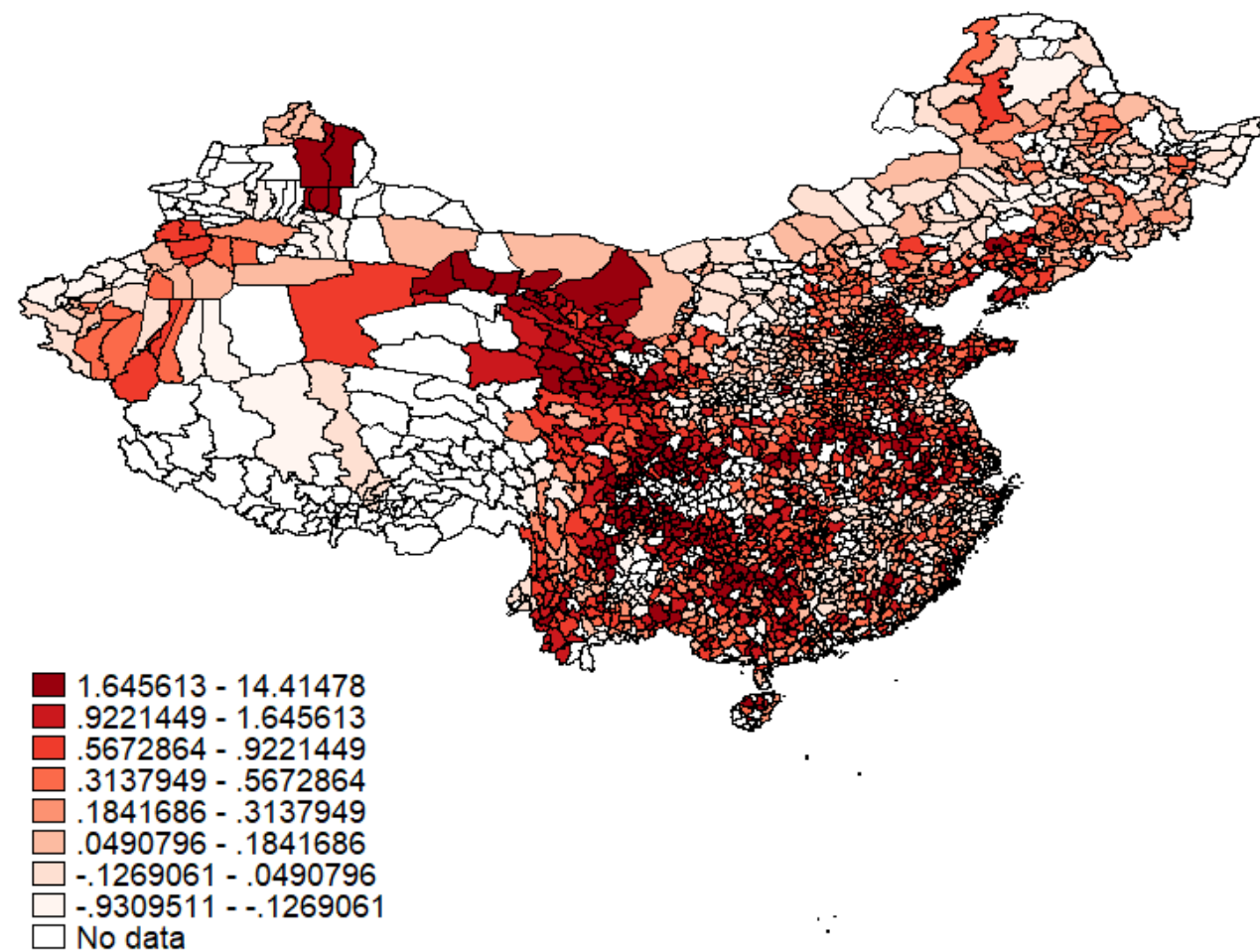
Figure A1: Distribution of Genealogy Books normalized by Population



Log Genealogy Books per 10000

Note: The county-level clans are measured by the number of genealogy books before 1950 divided by population in 1953, in log form.

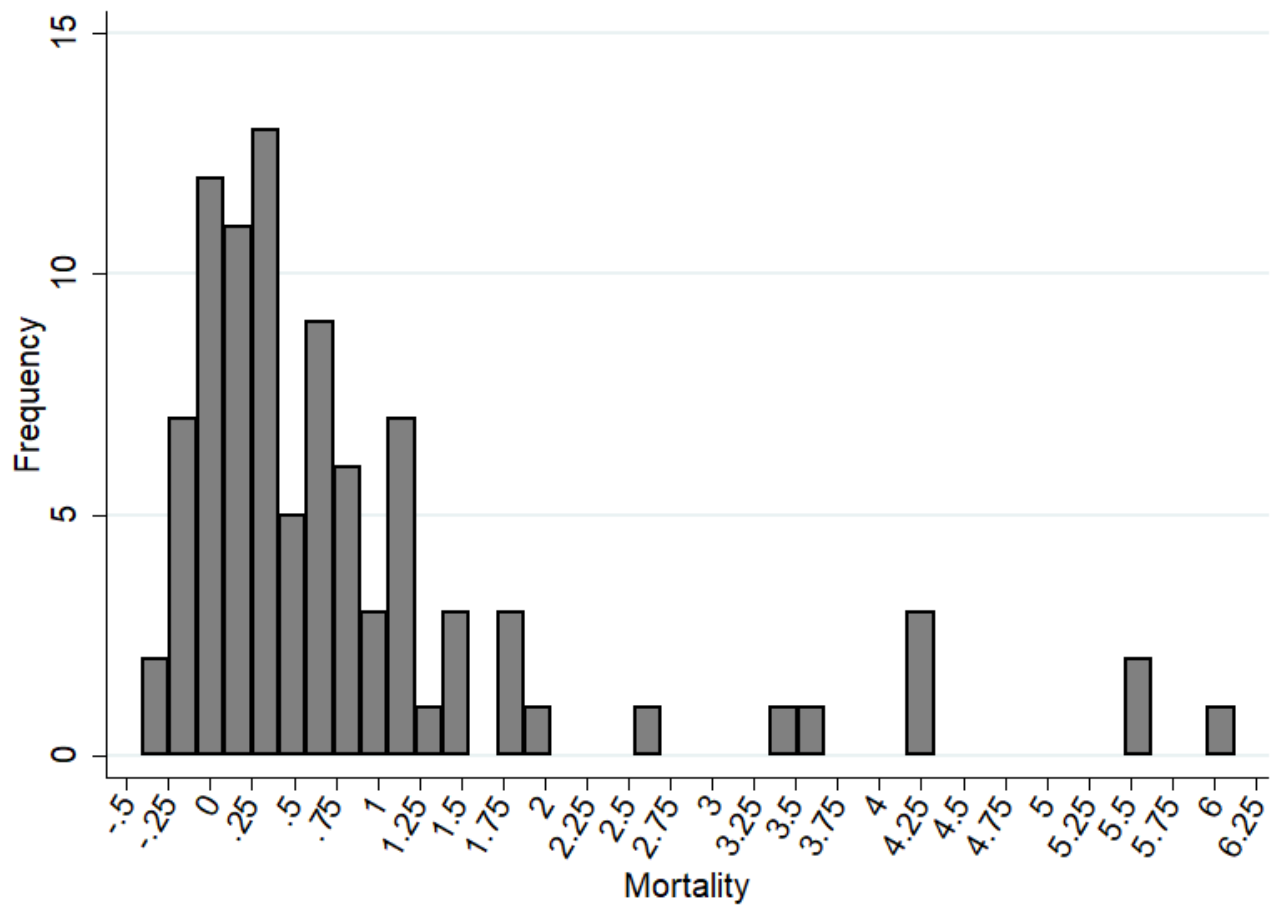
Figure A2: Distribution of County-Level Excess Mortality During the Great Chinese Famine



Excess Mortality than Normal Year

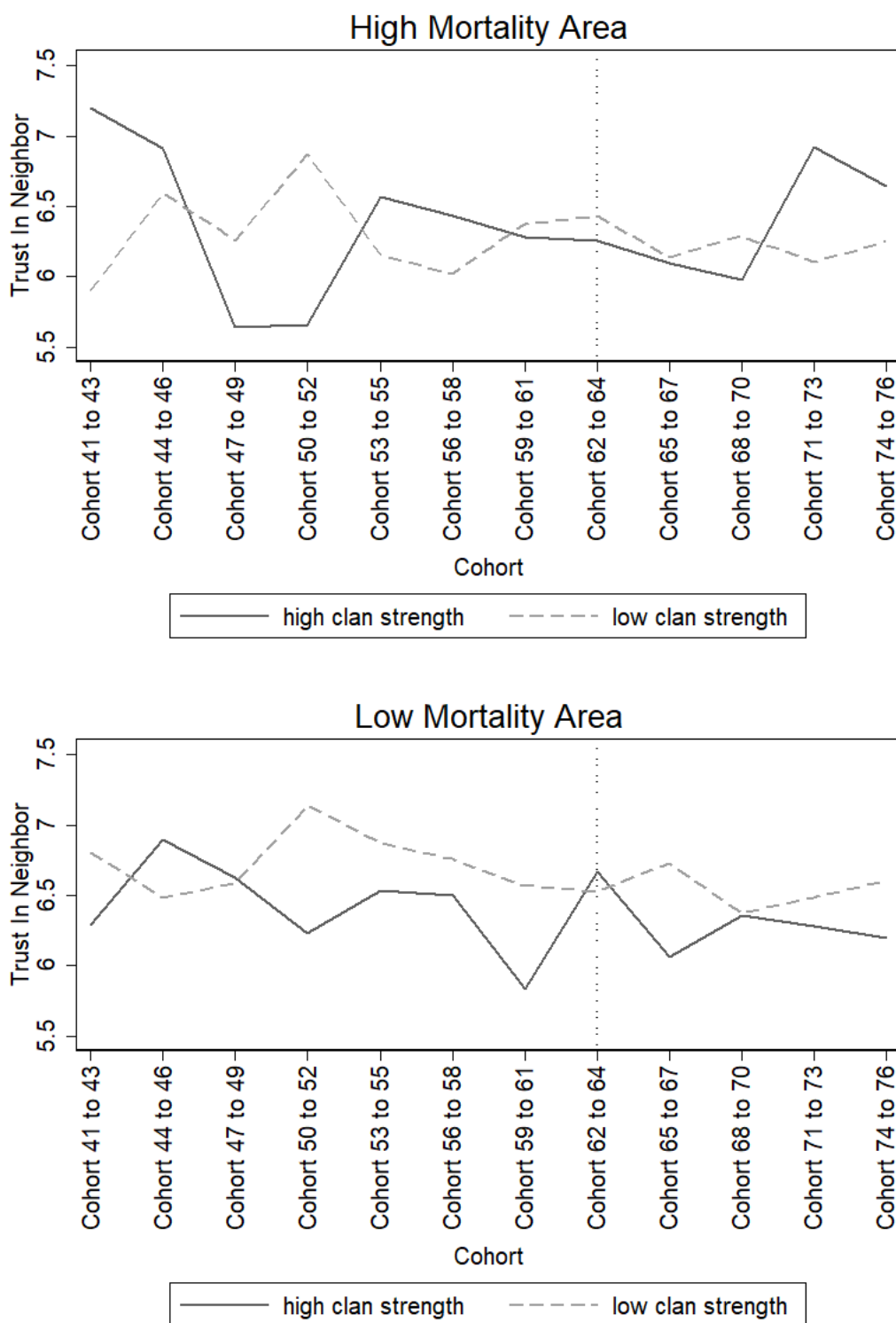
Note: .

Figure A3: In Sample (CFPS) Mortality Fat Tail



Note: National mean is 0.808, national median is 0.34, in sample mean is 0.89, in sample median is 0.43.

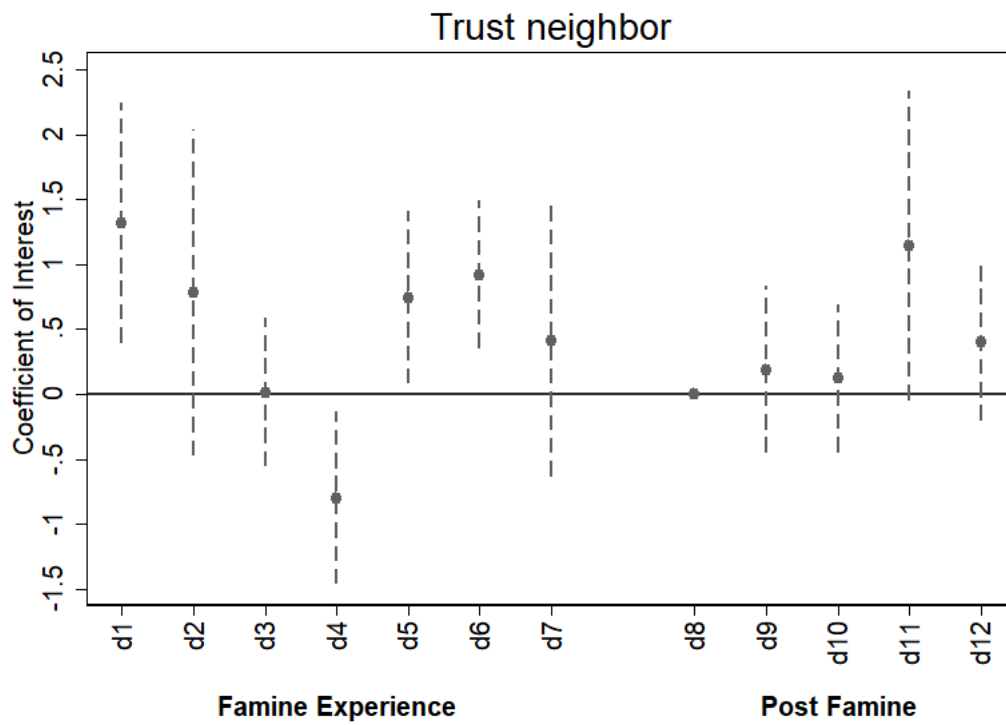
Figure A4: Raw Trust Score across Mortality Levels



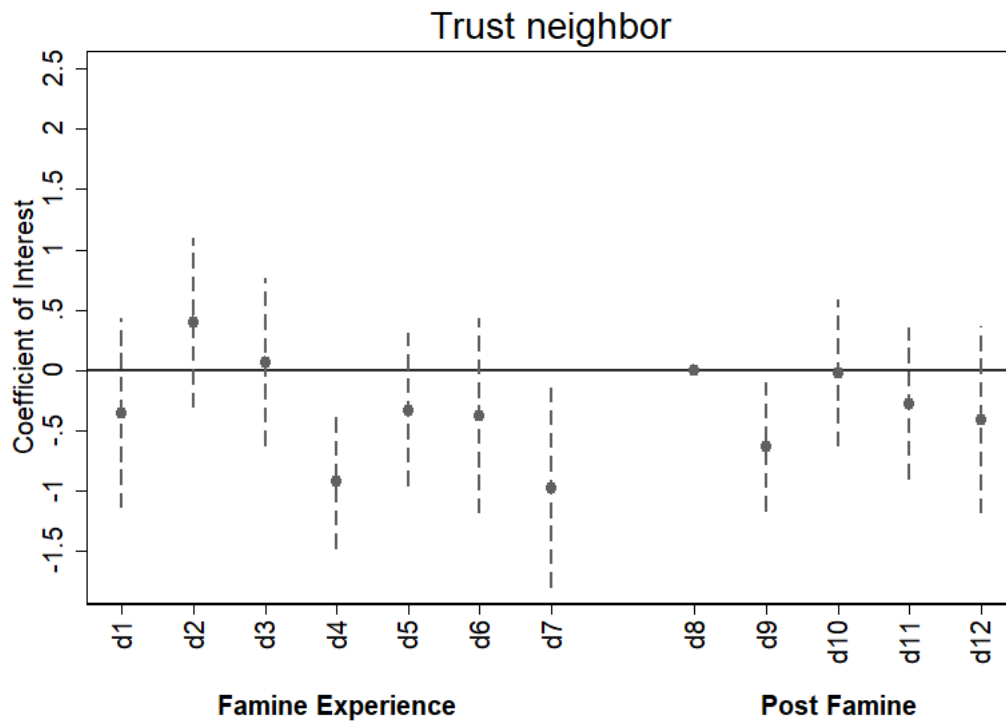
Note: The raw score of trust in neighbors by counties of high clan strength and low clan strength for birth cohorts 1941 to 1976, across different mortality levels. Results are based on rural respondents who stay in the origin places.

Figure A5: Dynamic DID Effects by mortality level (in Sample Mean)

(a) High Mortality



(b) Low Mortality



Note: .

Figure A6: Dynamic Effects of Mortality Dummy (in Sample Mean) on Contemporary Trust

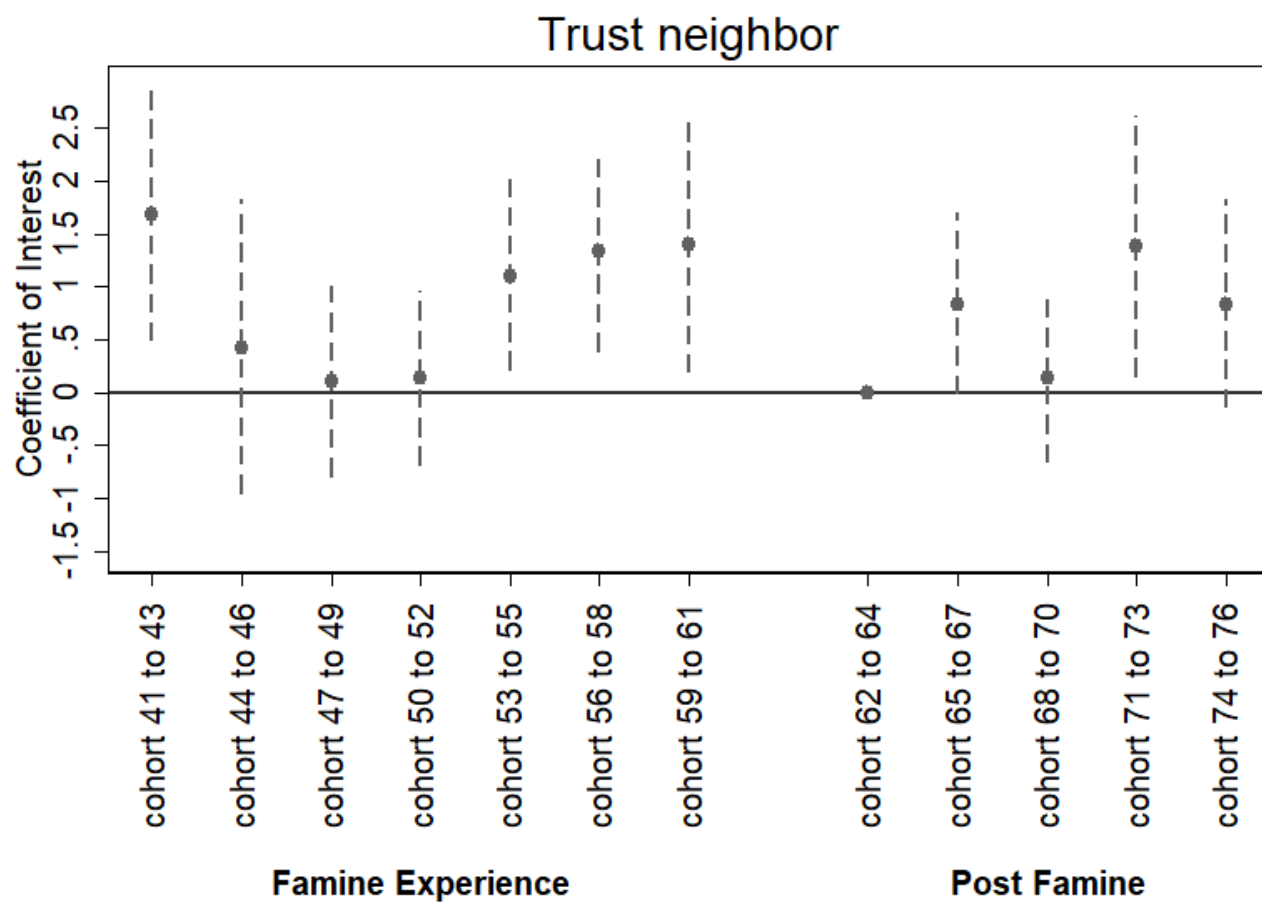


Figure A7: Trust Circles

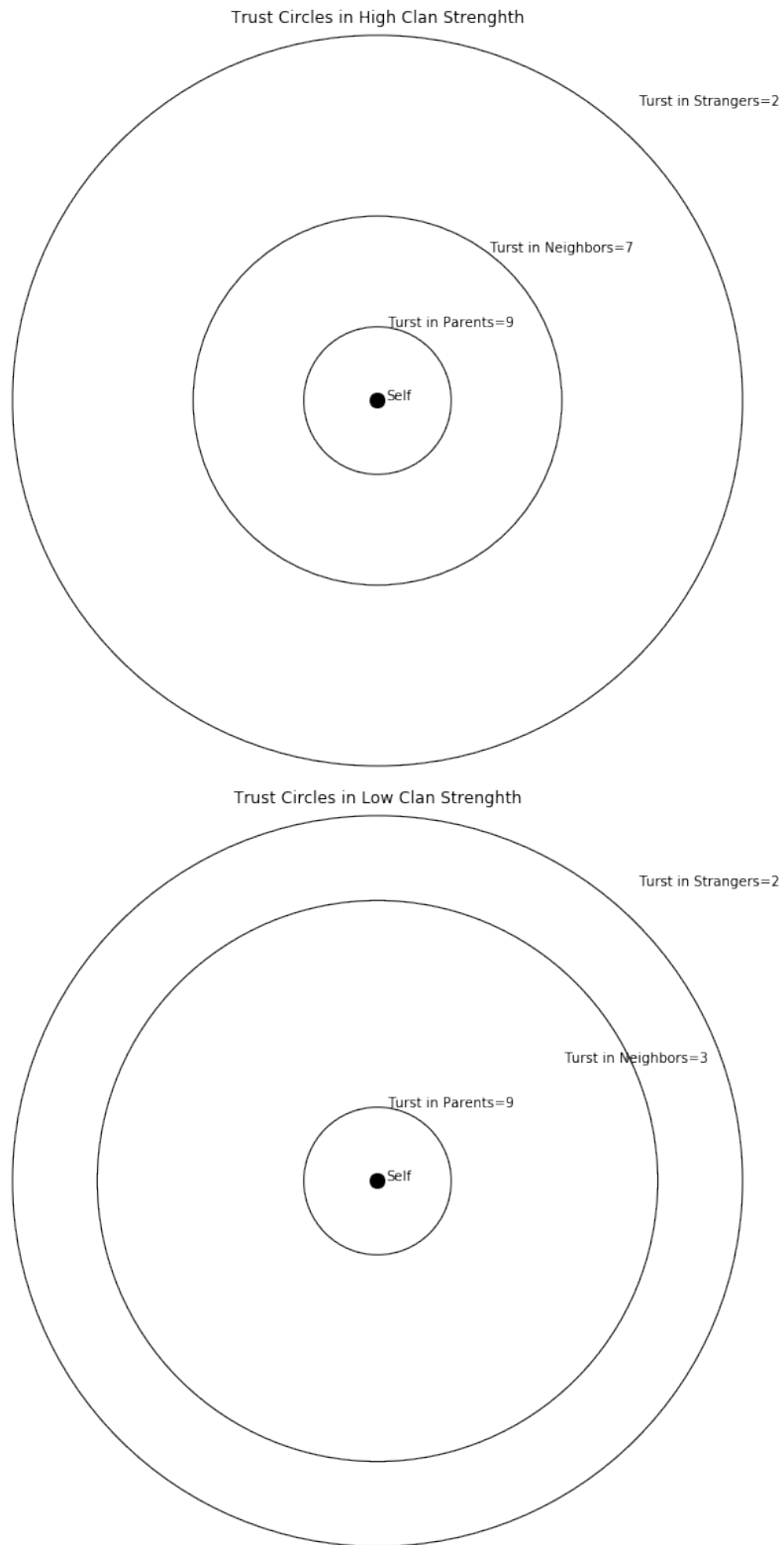


Table A1: Statistic Summary

	Obs	Mean	Std.Dev	Min	Max
Individual D.V.					
trust in parent	8047	8.866	1.814	0.000	10.000
trust in neighbor	8053	6.496	2.244	0.000	10.000
trust in stranger	8052	2.047	2.122	0.000	10.000
Generalized Trust	8052	0.494	0.500	0.000	1.000
log number of relatives visit during spring festival	8197	1.684	0.897	0.000	4.615
Would Neighbor Help	6664	0.924	0.265	0.000	1.000
trust_parent_dummy	8047	0.902	0.297	0.000	1.000
trust_neighbor_dummy	8053	0.614	0.487	0.000	1.000
trust_stranger_dummy	8052	0.051	0.220	0.000	1.000
Individual Controls					
Gender	8263	0.540	0.498	0.000	1.000
Birth Year	8263	1957.962	8.366	1941.000	1970.000
Minor	8258	0.135	0.342	0.000	1.000
No Migration	8263	1.000	0.000	1.000	1.000
Urban Community	8263	0.000	0.000	0.000	0.000
County Level					
(mean) mortality	92	0.885	1.317	-0.402	6.125
mortality in sample median	92	0.500	0.503	0.000	1.000
Log (Genealogies per 10000 people)	92	0.130	0.341	0.000	2.408
High Genealogy Share	92	0.228	0.422	0.000	1.000

Table A2: Correlation Between Trust in Neighbor and Clan Culture

	Trust in Neighbors				Trust in Neighbors Dummy				Visits Relatives			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Genealogy 1950	Genealogy 2010	Genealogy 2010	Genealogy 2010	Genealogy 1950	Genealogy 1950	Genealogy 2010	Genealogy 2010	Genealogy 1950	Genealogy 2010	Genealogy 2010	Genealogy 2010
lgen_book.mean	0.0520 (0.0863)				0.00493 (0.0195)				0.103*** (0.0314)			
genealogy_hh		0.0391 (0.0701)	0.0644 (0.0819)	0.0907 (0.0860)		0.0176 (0.0161)	0.0187 (0.0189)	0.0281 (0.0193)		0.0925*** (0.0281)	0.113*** (0.0298)	0.120*** (0.0295)
R-squared	0.0382	0.0377	0.0899	0.1101	0.0287	0.0286	0.0759	0.0963	0.156	0.157	0.359	0.382
Observations	8053	8006	8003	7951	8053	8006	8003	7951	8197	8168	8165	8116
Mean of Outcome	6.496	6.496	.	.	0.614	0.614	.	.	1.684	1.684	.	.
Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Province FE	✓	✓			✓	✓			✓	✓		
Community FE			✓				✓				✓	
Province-Cohort FE				✓				✓				✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Difference in Differences by Mortality Level (in Sample Mean)

	Trust in Parents		Trust in Neighbors		Trust in Stranger		Trust in Neighbors Dummy	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
High Mortality	Low Mortality	Low Mortality	High Mortality	Low Mortality	High Mortality	Low Mortality	High Mortality	Low Mortality
prefamine_clan	0.317 (0.380)	-0.0724 (0.166)	1.284*** (0.441)	-0.0305 (0.168)	0.0191 (0.342)	-0.135 (0.296)	0.227* (0.120)	-0.0246 (0.0282)
R-squared	0.162	0.0910	0.105	0.0996	0.142	0.133	0.112	0.0963
Observations	2542	5408	2545	5412	2545	5411	2545	5412
Mean of Outcome	8.540	9.008	6.271	6.590	2.404	1.881	0.580	0.627
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: The Effects of Famine Experience and Clan Density by Residence (Mortality Dummy in Sample Mean)

	Trust General		Trust in Parents		Trust in Neighbors		Trust in Stranger	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
mortality_prefamine_clan	-0.0293 (0.0704)	-0.0408 (0.402)	0.167 (0.316)	-1.985* (1.017)	1.034*** (0.310)	2.409 (1.465)	0.539 (0.344)	-0.757 (0.910)
mortality_prefamine	-0.0178 (0.0354)	-0.165 (0.294)	-0.311*** (0.103)	0.234 (0.828)	-0.604*** (0.143)	-1.644 (1.010)	-0.540*** (0.142)	0.222 (0.490)
prefamine_clan	0.0366 (0.0490)	-0.0459 (0.257)	-0.151 (0.154)	1.223*** (0.423)	0.00718 (0.156)	-0.728 (0.902)	-0.181 (0.281)	0.181 (0.891)
R-squared	0.139	0.139	0.131	0.178	0.105	0.180	0.152	0.203
Observations	7992	984	7988	983	7993	984	7992	984
Mean of Outcome	0.488	0.559	8.867	9.273	6.475	6.428	2.024	2.077
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Effects on Intra-Clan Relationships (Mortality Dummy in Sample Mean)

	(1)	(2)	(3)	(4)	(5)
	Visits Relatives	Visits Friends	Visits Relatives/Friends	Neighbor Will Help	Contact Frequency
mortality_prefamine_clan	0.144 (0.0897)	-0.0518 (0.258)	0.209 (0.243)	0.0858 (0.0689)	2.429*** (0.629)
mortality_prefamine	-0.251*** (0.0452)	-0.121* (0.0686)	-0.129 (0.0806)	-0.0149 (0.0223)	-1.208*** (0.399)
prefamine_clan	-0.0722 (0.0743)	0.137*** (0.0495)	-0.224** (0.0854)	-0.0335** (0.0151)	0.160 (0.367)
R-squared	0.363	0.277	0.292	0.0656	0.167
Observations	8189	8176	8157	6656	7671
Mean of Outcome	1.669	0.903	0.766	0.921	8.124
Individual Controls	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓
Cohort FE	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: Household Genealogy Book in 2010 as Clan Measure

	Trust General		Trust in Parents		Trust in Neighbors		Trust in Stranger	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
mortality_prefamine_clan	0.0128 (0.0568)	0.171 (0.275)	-0.100 (0.268)	1.739 (1.389)	0.443* (0.256)	1.769 (1.064)	-0.0523 (0.262)	0.145 (1.204)
mortality_prefamine	-0.0208 (0.0372)	0.0807 (0.210)	-0.308** (0.141)	-1.233 (0.999)	-0.381** (0.184)	0.847 (0.738)	-0.0801 (0.202)	-0.294 (0.879)
prefamine_clan	-0.0193 (0.0324)	-0.00200 (0.135)	-0.105 (0.163)	-0.645 (0.858)	-0.277 (0.198)	-0.332 (0.714)	-0.0746 (0.156)	0.971 (0.774)
R-squared	0.139	0.207	0.130	0.235	0.101	0.169	0.148	0.219
Observations	8371	904	8368	904	8373	904	8372	904
Mean of Outcome	0.492	0.556	8.864	9.138	6.496	6.662	2.042	2.141
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Trimmed Sample (super negative counties removed)

	(1)	(2)	(3)	(4)
	trust_neighbor	trust_neighbor	trust_neighbor	trust_neighbor_dummy
Panel A: Mortality_Dummy Mean (in Sample)				
mortality_prefamine_clan	0.674*** (0.249)	0.650** (0.249)	0.968*** (0.318)	0.202** (0.0852)
mortality_prefamine	-0.235* (0.133)	-0.229 (0.139)	-0.561*** (0.148)	-0.124*** (0.0317)
prefamine_clan	-0.226* (0.132)	-0.218* (0.130)	0.0522 (0.164)	-0.0201 (0.0302)
R-squared	0.0921	0.0945	0.104	0.101
Panel B: Mortality_Dummy Median (in Sample)				
mortality_prefamine_clan	0.384* (0.229)	0.389* (0.225)	0.465 (0.312)	0.0689 (0.0746)
mortality_prefamine	-0.177 (0.127)	-0.181 (0.129)	-0.329* (0.169)	-0.0639 (0.0428)
prefamine_clan	-0.245 (0.152)	-0.245 (0.154)	0.116 (0.183)	0.00793 (0.0448)
R-squared	0.0916	0.0941	0.103	0.100
Observations	7614	7609	7563	7563
Mean of Outcome	6.489	6.489	6.489	6.608
Individual Controls	✗	✓	✓	✓
Community FE	✓	✓	✓	✓
Cohort FE	✓	✓	✗	✗
Province-Cohort FE	✗	✗	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: Hukou as Rural Residence Measure

	Trust General		Trust in Parents		Trust in Neighbors		Trust in Stranger	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
mortality_prefamine_clan	0.0940 (0.0694)	-0.515 (0.435)	-0.178 (0.281)	-0.623 (1.377)	0.671** (0.321)	2.581 (1.654)	0.816* (0.451)	1.696 (2.185)
mortality_prefamine	-0.0414 (0.0293)	-0.0994 (0.239)	-0.224* (0.129)	1.570*** (0.413)	-0.326* (0.191)	-0.933 (0.860)	-0.320** (0.149)	-0.163 (1.168)
prefamine_clan	-0.00879 (0.0507)	0.0266 (0.246)	0.00875 (0.166)	-0.112 (0.469)	-0.0860 (0.185)	-0.700 (1.412)	-0.314 (0.352)	0.525 (1.341)
R-squared	0.135	0.106	0.128	0.135	0.0949	0.204	0.141	0.151
Observations	8639	655	8634	655	8640	655	8639	655
Mean of Outcome	0.491	0.597	8.906	9.153	6.525	6.585	2.030	2.155
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
Community FE	✓	✓	✓	✓	✓	✓	✓	✓
Province-Cohort FE	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$