"Bowling Alone": The Legacy of Communist Collective Commune and the Fall of Rural Election in China

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Abstract

This study examines how early exposure to local cooperation affects citizens' political participation after decades, focusing on rural collective communes in communist China. Despite severe inefficiency in agricultural production, commune members worked together to meet government quotas in grain procurement and build local public goods. Exploiting the fall of communes as a natural experiment, we show that exposure to commune collapse before early adulthood is associated with lower turnout in rural elections after decades. In terms of mechanisms, we argue that the lack of teenage experience in local cooperation impeded the formation of social trust, thus creating generations less enthusiastic about local politics after Mao's era. The effect of decollectivization is smaller for the female group, and in villages with tighter informal social interaction or stronger communist propaganda. These findings shed light on the persistent impact of early-life experience on political behavior and provide a vote-side explanation for the fall of China's rural elections.

Keywords: local cooperation experience, political participation, decollectivization, social trust
JEL Classification: A13, D72, P32

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1. Introduction

The relationship between the central state and civil society is one of the most important and controversial questions in political economy. A lot of influential works claim that strong states crowd out civil society and citizens' public spirits, as the central government tends to take control over local public affairs and weaken any social or political engagement that could threaten the regime (Putnam, 1993; Fukuyama, 1996). In opposition to this view, some scholars argue that the government and civil society can complement each other, especially when the central states promote local cooperation through institutionalized village governance (Dell et al., 2018).

In this paper, we study the role of the state in fostering social ties and promoting public participation by investigating the long-run effect of Chinese socialist rural collective communities (the People's Commune, *Renmin Gongshe*) collapse on rural election turnout after several decades. These collective rural communities were established by the Chinese Communist Party (CCP) in 1958. The Chinese central government integrated them into the system of planning economy and set quotas for agricultural products procurement. The members of collective communities worked together to conduct agricultural production plans, allocate surplus, and provide public goods. Although they had to comply with tight political control from the government and suffered material shortages due to a lack of individual incentives, villagers gained local cooperation experience and formed close relationships with each other[1]. In the late 1970s, the collective communities were gradually abolished around the country, and then rural households turned to make decisions and earn a living by themselves.

Our paper borrows the idea from the literature that environments in early adulthood have a persistent impact on people's beliefs and political behavior (Giuliano & Spilimbergo, 2023), and hypothesizes that witnessing decollectivization at a young age and lacking local cooperation experience during impressionable years lead to lower public engagement. Specifically, we collect the timing of collective commune abolishment from gazetteers to construct teenager exposure to decollectivization for different age cohorts across counties. For public participation, we focus on villagers' turnout in rural elections in the early 2010s, which

[1] See details in section 2.1.

can be acquired from the Chinese General Social Survey (CGSS). The Chinese government formally introduced elections in villages in 1987, and almost all villages had adopted elections to choose their village chiefs (VCs, *Cun Zhuren*) by the late 1990s. Despite political intervention from local government and CCP branches in villages, rural elections in China were found to be competitive to a large extent (Shi, 1999; Manion, 2006) and improved local accountability and governance significantly (Zhang et al., 2004; Shen and Yao, 2008). Figure 1 displays rural election turnout across different age cohorts from 2005 to 2018. It can be seen that generations born before 1960 maintained a relatively high turnout rate of over 60% during this time period, but younger generations showed much less enthusiasm for voting. For example, the election turnout rate of villagers born around 1975 is nearly 15 percentage points lower than those born around 1960, and this intergenerational turnout gap is quite persistent from 2005 to 2018.

[Figure 1 about Here]

Exploiting a difference-in-difference (DID) strategy, we study how different villager cohorts change local election turnout in the long run due to their teenage exposure to collective community abolishment several decades ago. The effect is substantial: rural citizens who witnessed decollectivization before 16 years old were 8.8 percentage points less likely to vote in rural elections. This effect size corresponds to 13.2 percent of election turnout rate in generations with some experience in the collective community after 16 years old (66.7%) and 67 percent of rural election turnout decline from 2005 to 2018 (63.8% to 50.6%). This result is robust to alternative definitions for rural respondents, additional controls for HRS reform adoption determinants, alternative proxy for voting eligibility, DID estimators robust to heterogeneous treatment effects, and voter turnout from surveys other than CGSS. Moreover, we find no pre-trend with event study specifications and null effect in placebo test using urban respondents, largely alleviating concerns on endogeneity problems.

We hypothesize that the experiencing decollectivization reform before 16 led to a lack of local cooperation experience in early adulthood, when people's social and political beliefs are formed, and this weakens villagers' social bonds with the local community and reduces their

enthusiasm for local public affairs. We offer three sets of evidence consistent with this argument. First, we find that exposure to HRS reform in adolescence leads to a fall of social trust in local community members, namely relatives and neighbors. Secondly, we show that the long-term effect of teenage exposure to HRS is larger in counties with less rural collective industry or weaker clans, which could still play a role in maintaining local social bonds and provide chances for cooperation. We also document a stronger effect in counties with weaker access to communist radio propaganda, as teenagers short of actual collective cooperation experience could still form a larger affinity for the collective community through day-by-day radio listening. The male group witnessed a greater election turnout decrease when exposed to HRS reform in adolescence, since even in collective villages of Mao's era, women were relatively less likely to engage in local public activities and gain cooperation experience. Finally, we discuss other alternative explanations for the relationship between teenage exposure to decollectivization and the decline of rural election turnout, including migration, non-agricultural employment, information on election procedure, and the legacy of the Cultural Revolution. We show that they are not likely to drive our main findings.

Our study connects several branches of literatures. Firstly, it relates to research on the role of the central state in shaping civil society and citizens' political participation. As mentioned above, one view holds that strong states impede the prosperity of civil society (Putnam, 1993; Fukuyama, 1996), since authoritarian states tend to repress or co-opt civil social organizations (Acemoglu et al., 2014) and thus weaken general trust (Lichter et al., 2021; Nikolova et al., 2022) and constrain cooperation within the family (Tabellini, 2008). Contrary to this perspective, other studies show that central state and civil society can complement each other (Dell et al., 2018), if specific institutional features or policies promote social interactions and local cooperation behavior (Ostrom, 1990; Borisova et al., 2024). By analyzing the legacy of the collective commune established by socialist China, one of the most famous central states combining vertical political control and planned economy, we add to this discussion by showing that local cooperation experience created by the state can still foster the seeds of public spirits and political engagement. Different from the norm and culture persistence mechanism in this body of literature, our study highlights the key role of public spirit formation in the early adulthood of citizens.

Secondly, we complement studies that discuss how personal experiences in early life may affect belief and political behavior. We are mostly related to research pioneered by the seminal work *Bowling Alone*. Putnam (2000) indicates that the fall of American voter turnout and civic engagement in the late 20th century is mainly driven by the aging of generations with strong public spirits and attributes their enthusiasm for public engagement to social cooperation experience in World War II. Alesina and Fuchs-Schundeln (2007) show that people having collective experiences under communist Eastern Germany tend to hold stronger preferences for redistribution, and this effect is smaller in those who spent their early adulthood before or after the communist regime. Baques and Roth (2023) use the random assignment of male conscripts in early adulthood to different locations throughout Spain as exogenous shock and find that contact and cooperation with people from other regions strengthen the nation's identification with Spain. In this study, by using the collapse of socialist rural communes in China, we provide causal evidence that collective cooperation experience in early adulthood can indeed create generations with stronger public spirits, echoing the idea in Putnam (2000).

Thirdly, as we illuminate the role of post-collectivization generations in the rural election turnout decline, we contribute to the literature on rural elections in China. Many studies focus on the positive impacts of rural elections, including improving public investment (Zhang et al., 2004) and reducing inequality (Shen and Yao, 2008). After decades of rapid economic growth, the Chinese government has developed stronger fiscal capacity and strengthened its control over the elected village committee (Martinez-Bravo et al., 2022). Besides the above discussion, a long-neglected topic is villagers' engagement in these elections, which is extremely important as well-functioning democracies need citizens' participation. Recent works document the impacts of better governance provided by the upper-level government on the decreasing demand for rural elections (Marie et al., 2024; Hu et al., 2025). However, the most significant change in Chinese rural election participation is the descending turnout of younger generations of adults after Mao's era. Lai (2024) shows that improvement in education resulted in part of it by raising the opportunity cost of voting. Our study complements this literature by linking the fall of rural election turnout with the fading of local public spirit in age cohorts entering adulthood after decollectivization.

Finally, we speak to the literature on the impacts of China's agricultural decollectivization

on various aspects. Early works examined the effects of this reform in improving agricultural production (Lin, 1988; Fan, 1991). It is shown that rural households faced stronger incentives for working (Lin, 1992) and adopted technology more suitable to local factor endowments (Chen and Lan, 2020). Recent literature explores how HRS reform affects broader socio-economic outcomes, including health (Xu, 2021), fertility (Almond et al., 2019; Chen et al., 2025), and education (Hu et al., 2024), and still highlights the change of economic incentive as the key mechanism. Different from previous discussions, we focus on the long-run political consequence of the reform and document a substantial drop in election turnout led by it. We argue that rural social capital gradually diminished after the abolition of the People's Commune system, since collective community created local cooperation experience and promoted social ties.

The remainder of the paper is organized as follows: In Section 2, we provide background information on the agricultural decollectivization reform and rural elections in China. Section 3 introduces the data sources, main variables, and identification strategy. Section 4 presents the impact of teenage exposure to decollectivization on election turnout after decades and examines its robustness. In Section 5, we explore the underlying mechanisms. Section 6 concludes the paper.

2. Background

2.1 The People's Commune System

The Chinese Communist Party (CCP) established the People's Commune System in 1958, during the peak of China's agricultural collectivization. Organized at the township level, each commune functioned as both an economic and political entity[2]. Chairman Mao named the system with the hope of creating a communist utopia, explaining, "They're called people's communes, first, because they're big and, second, because they're public" (Cheek, 2002). In practice, each commune includes thousands of farmers. Individuals aged 16 or older were supposed to join this large-scale collective[3]. Every commune is divided into brigades at the

[2] For a thorough introduction to the history of the People's Commune, see Zhang (1998).

[3] For more details about the arrangements in People's Commune, see *Draft on the Arrangements of the Chaya Mountain Satellite People's Commune [Chayashan Weixing Renmingongshe Shixingjianzhang]*. Chaya Mountain was the first Commune in China. This draft was highly appreciated by Mao. Mao soon instructed that every commune in the country should follow this draft. See https://news.sina.com.cn/c/sd/2009-08-

village level. Each brigade consists of several small production teams with about 20–30 households (Perkins, 1988). Under collective ownership, resources such as land and production tools were pooled, and distribution often followed egalitarian principles (Chen and Xie, 2025). Although this large-scale collectivization aimed to consolidate labor and inputs, it eroded individual incentives and caused the stagnation of agricultural productivity (Lin, 1990).

Despite economic inefficiency and lack of individual freedom, the People's Commune fostered collective awareness among villagers in several ways. First, beyond collective farming, brigades and production teams frequently gather villagers at meetings, sometimes focusing on daily production plans and other times serving as political study groups. (Zhang, 1998). Furthermore, villagers often engaged in public projects. One example was the "Learn from Dazhai in Agriculture" (*Nongye Xue Dazhai*) movement, which mobilized villagers in large-scale infrastructure projects such as dam building and irrigation construction (Meisner, 1978). In addition, communes conducted intensive indoctrination among villagers. One attempt was to build broadcasting stations in the village. The content of broadcasting includes newscasts, weather forecasts, agricultural programming, and entertainment, which usually emphasizes socialist communal values (Jan, 1967; Liu, 1975). These contents, such as revolutionary songs, serve as collective memories among villagers even in contemporary China (Bryant, 2005). As a result, the People's Commune has successfully unified farmers who were once decentralized. As Zhang (1998, Chapter 12) comments, under the collective lives of communes,

> "The once selfish peasants have become selfless, the formerly undisciplined peasants have become organized, and those who were once indifferent to politics are now filled with political enthusiasm."

Due to the lack of efficiency, the collective community was gradually dismantled in the late 1970s (Perkins, 1988). Almost all counties abandoned the collective communes and conducted the HRS reform by the end of 1984. Households retained much more control over their own land and production decisions, and experienced less economic or political activities organized by village and township government.

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2.2 Rural Elections in China

After the dissolution of the People's Commune system, the Chinese Communist Party (CCP) introduced self-governance in villages. In this framework, each village has two main governing bodies: a village committee chaired by the village chief (VC), and a village party branch headed by the party secretary (Oi and Rozelle, 2000). The village committee oversees local public affairs, provides public goods, and implements tasks assigned by the township government.

Due to the limited bureaucratic capacity, the CCP initiated rural elections to improve the accountability of village officials and strengthen local governance (O'Brien and Li, 1999; Martinez-Bravo et al., 2022). Under the Organizational Law of Village Committees (OLVC), VCs are elected every three years without term limits. Despite many constraints on the autonomy and *de facto* power of the elected VCs from government and village CCP branch, by aligning officials' incentives with those of villagers, rural elections boosted public goods provision (Zhang et al., 2004; Wong et al., 2017), reduced inequalities (Shen and Yao, 2008), curbed rent-seeking (Brandt and Turner, 2007), and fostered popular support for the regime (Manion, 2006).

The voting cost for rural citizens is not negligible. Firstly, villagers need to leave their jobs on election day and thus bear the economic loss. Secondly, candidates in rural elections are not allowed to organize political parties or hold election campaigns, except for giving a short speech at the start of election day. In this case, rural voters are compelled to undertake proactive efforts to acquaint themselves with candidates and their policy positions. To mobilize community members to vote, many villages have to rely on social capital, including kinship clans (Su et al., 2011). Figure 1 illustrates rural voting turnout rates across different age cohorts from year 2005 to 2018. It shows that voting turnouts experienced a decline during 2005-2018. Also, although pre-1965 cohorts maintain higher turnout levels, younger generations exhibit consistently lower motivation to vote.

3. Methodology

3.1 Data

The Rollout of HRS. We manually collect the rollout of HRS from county gazetteers. These gazetteers were compiled by local historians to archive historical events and statistics. Thus,

the content is unlikely to be misreported due to political incentives (Almond et al., 2019). In this analysis, we define the timing of the fall of socialist communities by the year when any production team in the county began to contract with production groups and distribute collective lands among the groups. We identified the timing of HRS in 1,976 counties in total, and Appendix Figures A1 and A2 visualize the rollout across Chinese counties[4].

Chinese General Social Survey. The analysis of voter turnout relies on data from the CGSS (The Chinese General Social Survey), which is conducted by the China Survey and Data Center at Renmin University of China. As part of the global General Social Survey family, CGSS is one of the earliest nationally representative survey projects in China. Since its inception in 2003, the CGSS has been collecting cross-sectional data annually, covering about 10,000 respondents from more than one hundred counties across mainland China[5]. We use data from the 2011, 2012, 2013, and 2015 survey waves, which are conducted with the same sampling process and include the voting behavior of rural respondents in village elections.

Specifically, we exploit several variables in CGSS. Our primary outcome variable is an indicator of whether a respondent had voted in the last election. The average turnout rate in the sample is 0.61, while the standard deviation is 0.46. Second, we proxy the social bonds among villagers by the trust level towards various groups, including their relatives, neighbors, and general people. The data is from CGSS waves 2012 and 2015. The trust variables range from zero (no trust) to 4 (highest trust). Thirdly, we construct an indicator of whether respondent takes non-agricultural work based on their employment status. Finally, to examine whether respondents have different knowledge of rural elections, we exploit an indicator in Wave 2013, which asks whether the respondent knows how the village committee is elected.

China Family Panel Studies. We supplement the analysis with the China Family Panel Studies (CFPS), a nationally representative longitudinal survey conducted by the Institute of Social Science Survey at Peking University. The survey covers 162 counties across 25 provinces in mainland China. The first wave of the survey was carried out in 2010, followed by

4 Appendix Figure A3 compares the distribution of our reform timing with that of Almond et al. (2019). The overall distribution is similar, although the timing in our dataset is slightly earlier. This is because we document the timing of the group contract, which is the stage of HRS before the household contract.
5 The CGSS sample counties are fixed across wave 2011-2015. For more details about the CGSS, see http://cgss.ruc.edu.cn/English/Home.htm.

subsequent waves every two years[6]. We used the wave 2014, which also asks about respondents' turnout in rural elections, to verify the baseline analysis. Besides, CFPS measures citizens' attitudes and behaviors related to public governance, such as the frequency of learning about political information through watching TV, the membership of CCP, and concerns about various social problems, which facilitate understanding whether decollectivization influences political attitudes above the community level.

We restrict our analysis sample to respondents with rural hukou who were born between 1949 and 1982[7]. The CGSS sample includes 12,192 respondents, while the CFPS sample includes 12,415 respondents. Appendix Table A1 provides the summary statistics of primary variables.

3.2 Estimation Strategy

We apply a cohort difference-in-difference approach to estimate the impact of teenage exposure to decollectivization on long-run rural voter turnout. For each respondent, their exposure is jointly determined by their birth cohort and the timing of reform in the county where they lived. Formally, the specification is as follows

$$Y_{i(bpct)} = \alpha + \beta HRS_{bc} + \zeta X_{it} + \delta_{ct} + \theta_{bt} + \kappa_{pb} + \epsilon_{i(bpct)} \quad (1)$$

Here, $Y_{i(bpct)}$ stands for the turnout indicator in the rural election of the respondent i in the survey wave t, who was born in year cohort b, province p, and county c. The primary explanatory variable HRS_{bc} is a dummy indicating whether the birth cohort b was below 16 years old when HRS took place in county c. As emphasized in Section 2.2, only village members older than 16 can formally join the People's Commune. Thus, we compare respondents who have ever participated in the communist community with those who have never had a chance. We control for individual demographic characteristics X_{it}, including gender, education level, and family income per capita. Standard errors are clustered at the county level. We add county-wave year fixed effects δ_{ct}, birth-wave year fixed effects θ_{bt}, and cohort-province fixed effects κ_{pb} in the specification. $\epsilon_{i(bpct)}$ is the error term. We cluster

6 For more details about the CFPS, see https://www.isss.pku.edu.cn/cfps/en/index.htm.

7 We drop cohorts born before 1949 since they could be affected by the governance of the Republic of China. As for cohorts born after 1982, we exclude them because the latest year of county-level conduction of HRS is 1982 in our sample, which means none of these cohorts in any county have exposure to collective community and can contribute variation to our estimation in the context of staggered rollout of HRS.

standard errors at the county level. The parameter of interest, β, captures the average effect of ever participating in People's Commune on voter turnout rate.

In addition, we estimate the dynamic effect of decollectivization on voter turnout with the following event-study design.

$$Y_{i(bpct)} = \alpha + \sum_{j \neq 16} \beta_j T_{bc}^{j} + \zeta X_{it} + \delta_{ct} + \theta_{bt} + \kappa_{pb} + \epsilon_{i(bpct)} \quad (2)$$

Where $T_{i(bpc)}^{j}$ is a dummy variable indicating whether the cohort born in b was j years old at the time of HRS. The reference group is those aged 16, the last cohort eligible to join the People's Commune.

3.3 Identification assumption and its validity

The validity of our identification strategy relies on a key assumption that the timing of HRS reform conduction is orthogonal to underlying cohort trends of the rural voting turnout. We argue that the assumption is likely to be satisfied due to the following three reasons. First, the county-wave year and cohort-wave year fixed effects δ_{ct} absorb all unobservable time trends that are variant at the county or cohort level, such as the overall decline of rural elections (Martinez-Bravo et al., 2022), and the restriction on village committees' power on land redistribution after the land titling reform (Hu et al., 2025). Second, the cohort-province fixed effects κ_{pb} allow us to make estimation based on within-province comparison, thus isolating the influence of other confounding historical events that occurred at the province level and had different impacts across cohorts, such as the implementation of the Compulsory Schooling Law (Lai, 2024).

Third, we carefully discuss the rollout timing determinants of the decollectivization reform. As previous literature has documented, the adoption timing of HRS is associated with several regional characteristics. For instance, counties with severe exposure to the Great Famine between 1959 and 1961 conducted the reform before others, especially when shocked by adverse weather (Yang, 1996; Bai and Kung, 2014). Also, those regions far away from the political center faced less pressure for reversal of the reform (Yang, 1996). We explore how these county-level characteristics determine whether a county conducted HRS reform before 1979 with all counties that we know accurate reform timing around the country. We use population loss of cohorts between 1959 and 1961 to measure famine severity (Meng et al.,

2015). Since both central and provincial governments could exert political pressure on the reform adoption, we consider both distances to Beijing and provincial capitals to proxy potential opposition from the upper-level government. As for weather shock, we measure it by the average temperature and precipitation in the year of the HRS implementation. The result is reported in Appendix Table A5, and we find that HRS tent to start earlier in regions with higher famine severity and more extreme weather conditions. Despite the lack of statistical significance, counties further away from Beijing were more likely to adopt HRS in earlier years.

With the effects of these characteristics on reform in mind, in section 4, we offer a series of evidence to validate our identification strategy, including tests for parallel pre-trends in various event study specifications and placebo tests with urban citizens. Besides, we examine whether our findings are robust when allowing these regional determinants to have flexible effects on the voting turnout behavior of different cohorts in section 4.3.

4. Results

4.1 The effect of decollectivization on rural voter turnout

Table 1 reports the effects of HRS on the turnout behavior of rural voters. Column (1) controls for county fixed effects and province-cohort fixed effects. We find that HRS led to a decline in rural voter turnout rate, and the coefficient is significant at the 1% level. Column (2) controls for a series of individual characteristics, including gender, education level, the logarithm of family income per capita, and especially, the age of the respondent. The coefficient of HRS is almost the same as in column (1). Notably, voters' age has no impact on their turnout in elections, showing that our main finding across generation cohorts is not driven by age itself. As we exploit several waves of CFPS data surveyed in different years, column (3) adds wave year fixed effects, and column (4) further employs county-wave year and cohort-wave year fixed effects. In both columns, we still find significant negative effects of decollectivization on rural voter turnout.

To understand the economic size of our findings, we choose column (4) as our preferred estimate. The HRS resulted in an 8.8 percentage points decrease on rural election turnout, which is equal to a 13.2 percent decline relative to the sample mean of all cohorts whose ages

are over 16 years old in the year of HRS conduction (66.7%). This magnitude is comparable to the impact of Compulsory Schooling Law in the context of rural China (Lai, 2024).

[Table 1 about Here]

4.2 Dynamic effects across generation cohorts

We then exploit an event study specification following equation (2) to study the impacts of HRS on electoral turnout of each rural voter cohort separately. We use those who were 16 years old in the year of HRS conduction as the reference group. Figure 2 presents the estimates of the coefficient for each relative cohort and their 95% confidence interval, and we obtain two findings from it. Firstly, there is no significant pre-trend in cohorts that had been over 16 years old and engaged in activities of the collective community, showing that the identification assumption of our DID estimation is satisfied. Secondly, the effect of HRS becomes larger in cohorts that were younger at the HRS year. We interpret this result as older teenagers' attitude towards community had been influenced by the ordinary collective environment to some extent (Putnam, 2000; Almond et al., 2018), even though they did not have the right to take part in collective affairs.

Besides equation (2), we employ event study specification following the recent econometric literatures on multiple time DID. We use event study specification from stack DID (Cengiz et al., 2019; Wing et al., 2024) and DID imputation (Borusyak et al., 2024) and plot the results in the left and right part in Appendix Figure A5, respectively. We also directly compute voting rates of each birth cohort relative to the HRS reform year using original survey data and plot the cohort trend in Appendix Figure A3. The dynamic patterns of the HRS effects on rural voter turnout are similar in all these settings.

[Figure 2 about Here]

4.3 Robustness checks

We conduct a series of robustness checks. Firstly, since China had little rural migration

around 1980, the ideal approach is using birth county to define teenage exposure to HRS. As we do not have information on it, in baseline regression, we use rural respondents' living county and thus bring in a measurement error problem. We argue that even in the baseline setting, this problem is not that serious because 83% of the rural respondents always live in the same county in our sample. Still, we provide two sets of evidence to test the robustness of our main finding. We first restrict our sample to those who always live in the same county, and replicate baseline Table 1 in Appendix Table A2 with this new sample. Results in all four columns remain almost unchanged, showing that this measurement error problem has very little threat to our findings. We also test whether our measure of exposure to HRS is systematically correlated with respondents' migration status (whether always live in the same county) in Appendix Table A3. None of the HRS coefficients in any column is significant, suggesting that the estimation bias brought by the measurement error problem would be very likely to follow the form of *bias to zero* and make our baseline estimates lower the bounds of the true effect.

Secondly, although we present evidence for the validity of parallel pre-trends with various specifications in section 4.2, one might still be concerned about the potential endogeneity problem caused by the non-random rollout of HRS reform. To alleviate this concern, we add the interaction of these determinants and cohort fixed effects into our baseline specification and show the results in Appendix Table A6. All results remain robust after controlling for this selection.

Thirdly, although voter eligibility is primarily determined by hukou status, individuals without local hukou may still vote in village elections if they have lived in the village for at least one year and have been approved by the village assembly[8]. To examine whether our results are sensitive to respondents' eligibility, Appendix Table A7 restricts the sample to rural residents, regardless of their *hukou* status. The coefficients remain robust under this alternative analysis sample.

Fourthly, since counties adopted HRS reform in different years, our baseline specification might suffer from estimation bias due to the negative weight problem documented by recent

[8] See details in the Organizational Law of Village Committees (2010 Amendment).

econometric literature (De Chaisemartin and d'Haultfoeuille, 2020). To check the robustness of our findings, we use stack DID and DID imputation estimators recommended by Wing et al. (2024) and Borusyak et al. (2024) and present the results in columns (2) and (3) of Appendix Table A8. The estimated treatment effects of these two methods are similar to our baseline findings.

Finally, although CGSS is representative across the nation, one might doubt that our findings are driven by the specific sampling process. To alleviate this concern, we use CFPS, which is also representative of the nation's population but has a different sampling process to CGSS. We exploit CFPS wave 2014, which also contains rural voting information, to test whether our main finding is robust. The results are shown in Appendix Table A9. Despite a slight decrease in the magnitude of the coefficients, the results are very similar to our baseline estimates in Table 1. We also present dynamic effects with this CFPS sample in Appendix Figure A6, and the parallel trend assumption is still satisfied.

4.4 Placebo test: urban voter turnout

Despite of the above discussions on identification, one might concern that our findings could be contaminated by some unobservable factors that are variant at county-cohort level other than the HRS reform. To further alleviate this concern, we conduct a placebo test by studying the voter turnout behavior of urban citizens. In China, urban citizens also vote to elect the leader of their residential committee. If our results are mainly driven by such unobservable trends, we should also obtain statistically significant relationship between HRS reform and turnout of urban election. Appendix Table A4 reports the results using urban respondents, and we do not detect any significant result, showing that our findings of decline in rural election turnout are indeed the result of HRS reform. We also use an event study exploiting equation (2) with this urban sample. The result is shown in Appendix Figure A4 and is consistent with the none effect above.

5. Mechanism: Breaking Bonds among Villagers

In this section, we seek to understand why decollectivization results in a rural voter turnout in the long run. We hypothesize that the break-up of a collective community makes it

harder for teenagers to build up social bonds with other members in their village, which weakens their willingness to engage in democratic elections, as established by Putnam (1993; 2000) and many other works (Alesina and Giuliano, 2011; Nannicini et al., 2013) in the context of the US and Europe. We provide evidence from three aspects. Firstly, we directly examine the impact of HRS reform on villagers' social trust in neighborhoods, which is also one of the most important mechanisms in explaining democracy decline in Putnam (1993; 2000). Secondly, we explore heterogeneities of decollectivization's effect in people with different characteristics and check whether the patterns are consistent with the prediction of our social bond hypothesis. Lastly, we discuss several alternative explanations.

5.1 Declining trust toward other village members

In this section, we study how teenage exposure to HRS reform impacts their trust in other community members after reaching adulthood. We use CGSS waves 2012 and 2015, as they document detailed information about respondents' trust in different groups of people. Table 2 presents our findings. Columns (1) and (2) study trust in relatives and neighbors, and both of them document significant negative effects of teenage exposure to HRS reform. Also, since decollectivization should only impact social bonds within the community, we expect that the negative effects concentrate on trust in community members while do not exist in general trust in other people. Indeed, column (3) uses the extent of agreement on *Most People Are Trustworthy* as the dependent variable and finds little evidence of teenage exposure to HRS reform. These results are consistent with our argument that decollectivization led to a decline in rural voter turnout through weakening social trust in community members.

[Table 2 about Here]

5.2 Heterogeneities

We conduct four sets of heterogenous analyses to further shed light on how HRS affected rural voting turnout in the long run. The results are plotted in Figure 3, and corresponding regression results can be found in Appendix Table A10.

Rural collective industry. Although the *de facto* use right of farming land was allocated

to every single household after the HRS reform, many Chinese rural communities still controlled some small industrial firms (namely *Shedui Qiye* in Chinese), whose property rights belong to the community (Weitzman and Xu, 1994; Jin and Qian, 1998). These firms offered jobs for many villagers, and their profits were often used to improve public goods or household welfare for the community (Rozelle, 1994). In many villages, key enterprise issues, such as whether to establish a factory and how to distribute dividends, are brought to the villager's representative assembly for a wide range of discussion or votes (Oi and Rozelle, 2000). Thus, the existence of collective industrial firms maintained the social connection between villagers after the decollectivization and yielded a higher turnout (Wong et al., 2020). According to this historical background, we predict that the decrease in voter turnout caused by HRS shall be smaller in regions with stronger collective industries. Following Hu et al. (2024), we collect the total number of rural labor and labor in rural industrial sectors from the *Overview of Rural Economic Statistics by County in China (Zhongguo Fenxian Nongcun Jingji Tongji Gaiyao)*, and use the share of rural industrial labor in 1989 (the earliest year available) to measure the scale of the collective industry. We categorize all respondents into two groups by the median of collective industry scale in their counties. The heterogenous effects are presented in the top of Figure 3. We find that long-term rural voter turnout remains almost unchanged in counties with more rural collective industry but decreases significantly where little collective industry exists.

Clan in the village. As established by the literature (Xu and Yao, 2015; Cao et al., 2022), clan plays an important role in collective mobilization and public goods provision in rural China. If the decrease in voter turnout is driven by broken social trust in community members, we should expect regions where stronger clans exist to be less affected by the reform, as clans could still maintain social bonds to some extent after the reform. In order to test this prediction, we collect the genealogy information from the General Catalog of Chinese Genealogy (*Zhongguo Jiapu Zongmu*)(Chen et al., 2020; Cao et al., 2022). We calculate each county's number of genealogies per capita as the measure of clan intensity, and divide the sample into two groups (*high* and *low*) by the median of it. In Figure 3, we find a sizable negative effect in rural citizens living in counties with high genealogy intensity, while the impact in those from low genealogy intensity counties is very small and insignificant.

Access to radio propaganda. Apart from collective community, Radio propaganda was another key instrument to spread collectivism ideology. As documented by Ou and Xiong (2021), adolescents who were exposed to stronger radio signals during the Cultural Revolution tend to hold beliefs more closely to communism. Following this idea, we hypothesize that exposure to radio propaganda could offset the negative impact of HRS reform on rural voter turnout in the long run. To test this prediction, we borrow the county-level radio signal data from Ou and Xiong (2021) and separate the sample into two parts by county radio signal median. The results are plotted in the middle-lower region of Figure 3. It shows that teenage exposure to HRS reform led to a smaller decrease in long-run voter turnout where the radio signal was stronger, consistent with our hypothesis.

Gender. Although women have greatly expanded their public participation since the establishment of the People's Republic of China, men still played a major role in most political and social domains of rural China until recently (Jennings, 1998; Guo et al., 2009). If HRS reform did weaken voter turnout through the break-up of social bonds, we shall expect the effect to be larger in the male group, as they would have more chance to engage in community affairs and form social ties with other villagers without the reform. As shown in the bottom of Figure 3, we find that the effect of teenage exposure to HRS is slightly larger in males than in females, which is consistent with our understanding.

[Figure 3 about Here]

5.3 Alternative explanations

In this subsection, we discuss several alternative understandings about the mechanisms behind the effect of adolescent exposure to decollectivization on the fall of rural voting turnout.

Migration. One might argue that exposure to HRS makes teenagers more likely to live outside their village and thus have a higher cost of voting. We provide two pieces of evidence to mitigate this concern. Firstly, we check whether our main finding remains robust in people who have not migrated, and the results are reported in Appendix Table A11. Column (1) is our baseline result for reference. In column (2), we restrict to a sample who always live in the same county. In columns (3) and (4), we further focus on people who live in *hukou* township and in

rural areas on the base of column (2). All estimates in columns (2)-(4) are very similar to the baseline result, no matter in statistical significance or magnitude.

Secondly, we explore the impact of adolescent exposure to decollectivization on villagers' migration status in the long run. Appendix Table A12 reports the results. As CGSS does not have complete cross-county migration documentation, we first focus on respondents who have rural *hukou* and have never lived outside their birth county in this survey. In this sample, we exploit two definitions of migration: one is *Living in an urban area,* and the other is *Living in a different township from the hukou place*. We construct two dummies of migration according to them, which take the value 1 if the respondent is defined as *migrated*. Columns (1) and (2) use the two dummies as dependent variables, respectively, and neither coefficient of HRS is significant. Besides, to take those who migrate across counties into consideration, we use individual data from the population census 2000 to further examine whether decollectivization affects migration. We also construct two dummies indicating the status of migration, and the value of them takes 1 if the respondent is defined as *migrated*. The first criterion is whether the respondent lives in a different township from the birthplace, and the second one is whether he lives in a different county from the birthplace. The results are shown in columns (3) and (4), and we still do not detect any significant evidence.

General interest in politics. As HRS reform introduces a strong incentive for individuals to focus on their private economic activities, it is possible that exposure to decollectivization makes people pay less attention to public governance and thus reduces any kind of political engagement, including but not limited to local election turnout. To rule out this competitive hypothesis, we exploit several questions about general interest in politics in CFPS wave 2014. The results are shown in Panel A of Appendix Table A14. In column (1), we use *the number of days in a week when learning about political information through watching TV* as the dependent variable to capture people's attention to public affairs. In column (2), we employ *whether becoming a member of CCP* to measure general political participation under the regime. Besides, as CFPS documents respondents' concern level on eight social problems[9], which ranges from 0-10, we define those who choose value five as *indifferent* in the corresponding

[9] Corruption, Education, Employment, Environment, Health, Housing, Inequality, Social Security.

problem. We then construct eight dummies that take the value of one if the respondent is indifferent to that social problem and report results in columns (3)-(10). In all regressions above, we do not obtain any significant result, indicating no change in general interest in public governance under exposure to decollectivization.

Panel B further examines whether worries about social problems discourage the younger generation from voting. We use the original *value* of these concerns as dependent variables. The coefficient is non-distinguishable from zero. The only exception is the concern for health issues in column (5), which reveals a slightly negative gap. However, the coefficient is only marginally significant. Taken together, we do not find consistent patterns in the eight dimensions.

Contemporary Employment in the Non-agricultural Sector. Decollectivization could have encouraged non-agricultural employment among school-age cohorts during the reform (Hu et al., 2024). If these patterns persisted, younger generations might be more likely to work in higher-paying, non-agricultural sectors. Such employment could reduce voting participation both directly (if respondents live outside their home village) and indirectly (due to the opportunity cost of forgone salary). To test this mechanism, we use *the indicator for non-agricultural employment* in CGSS as the outcome variable. Column (1) of Appendix Table A13 reports no significant effect. Thus, differences in contemporary employment are unlikely to explain our results.

Information. Another alternative explanation for decline in voter turnout led by teenage exposure to HRS is that the young generation is less informed about rural elections instead of less motivated to vote. To alleviate the concern on this issue, we exploit CGSS wave 2013, which asks respondent their knowledge level about rural elections. We use it as the dependent variable in column (2) of Appendix Table A13, and do not find any significant result.

Cultural revolution. As documented by several works (Bai and Wu, 2020; Wang, 2021), exposure to violence in the Culture Revolution can weaken citizen's social trust in other people and political trust in the regime. One might argue that our HRS reform not only captures decollectivization but also measures the end of exposure to the Cultural Revolution. To rule out this issue, we collect data on deaths due to violence in the Cultural Revolution from Walder (2014) and control for the interaction between cohort FE and deaths per 1,000 population in

column (1) of Appendix Table A13. We can see that the coefficient of HRS has little change in both statistical and economic significance.

6. Conclusion

This study uses a DID strategy to document that generations exposed to a collective community organized by the central state in their early adulthood had higher enthusiasm for political participation after decades. After the collapse of the collective commune, young generations had few chances to cooperate with local people in their impressionable years and became less interested in public engagement. We document that these young generations had lower social trust in members of the community.

As indicated by Putnam (2000), social cooperation led by the state, for example, social mobilization in war, can create generations growing up with social ties and public spirits and support a well-functioning society for decades. In the context of this study, the legacy of the communist collective commune supported the operation of local democracy even after decades of its abolishment. Of course, this does not imply that Mao's rural communism utopia laid a foundation for democracy development in contemporary China. Instead, we emphasize the key role of collective cooperation experience in fostering civic capital in a social environment relatively lacking horizontal connection.

Declaration of Conflicting Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Figures

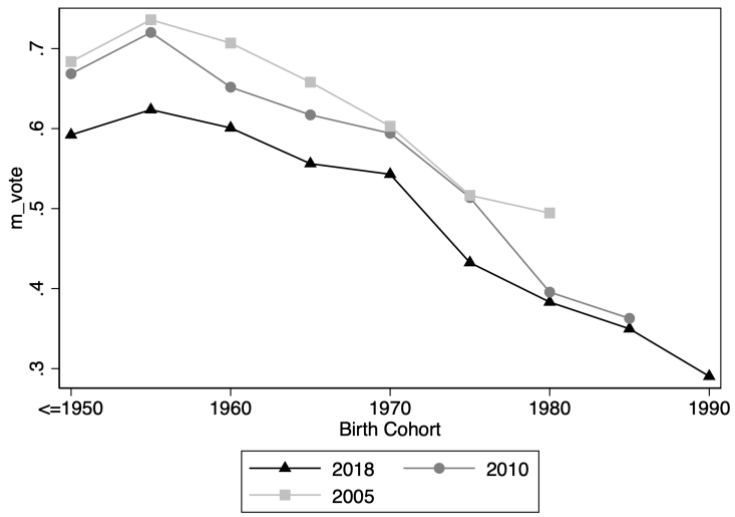


Figure 1: The Decomposition of Trend in Rural Election Turnout

Notes: the figures display the turnout rate of respondents with a rural hukou. We plot the average turnout rate every five years. For example, the dot of "1960" stands for cohorts born between 1956 and 1960.

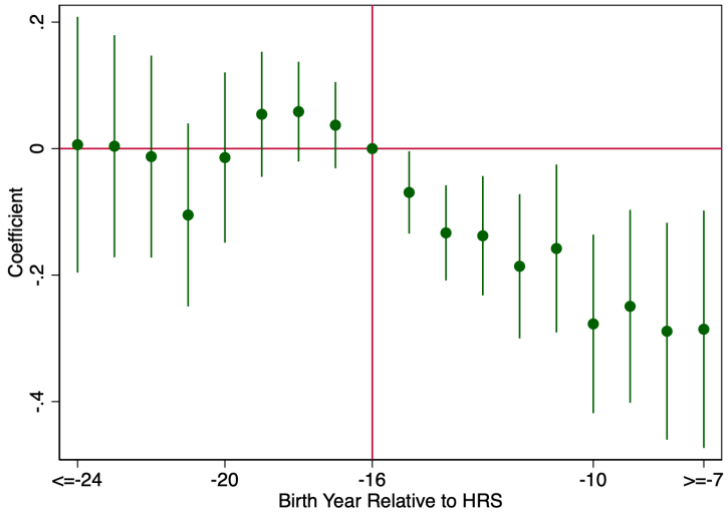
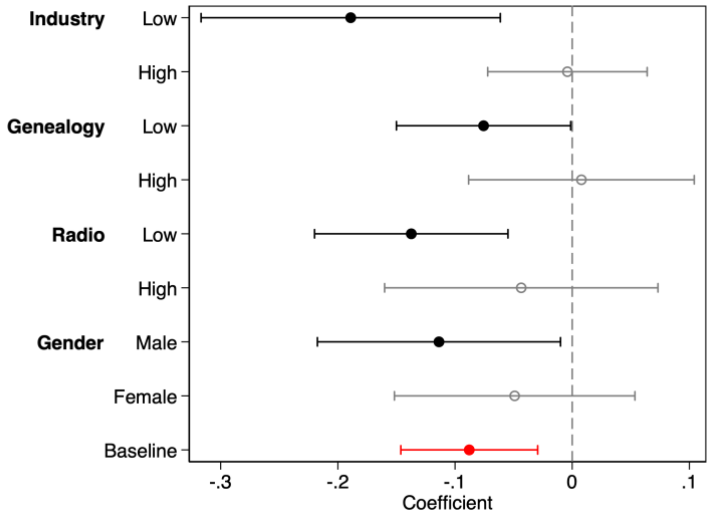


Figure 2 Event Study Plots

Notes: The reference group is the cohort born 16 years before the reform. We control for county-year, cohort-year, and province-cohort fixed effects, as well as respondent characteristics (gender, education and family income per capita). Standard errors are clustered at the county level.

Figure 3 Heterogeneous Effects



Notes: the figure presents the point estimates and 95% confidence intervals of treatment effects on CGSS voter turnout in different subgroups. CGSS regressions include data from waves 2012 and 2015. All regressions have controlled for county-year, cohort-year and province-cohort fixed effects, as well as respondent characteristics (the dummies of gender and education level, and the logarithm of family income per capita). For heterogeneity in Industry, Genealogy and Radio, we categorize the sample according to the medians of the variables among all Chinese counties. Standard errors are clustered at the county level.

Tables

Table 1 The Impact of Decollectivization on Voter Turnout

Outcomes	Voted in the Latest Election			
Subsample	Rural Hukou			
	(1)	(2)	(3)	(4)
HRS	-0.090***	-0.091***	-0.089***	-0.088***
	(0.029)	(0.028)	(0.029)	(0.030)
Age		-0.001		
		(0.005)		
Observations	12,192	12,192	12,192	12,192
R-squared	0.196	0.202	0.204	0.242
Pre-treatment Cohort Mean	0.667	0.667	0.667	0.667
County FE	yes	yes	yes	no
Year FE	no	no	yes	no
County-Year FE	no	no	no	yes
Cohort-Year FE	no	no	no	yes
Province-Cohort FE	yes	yes	yes	yes
Controls	no	Respondent	Respondent	Respondent

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from 2011 to 2015. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita.

Table 2 Decollectivization and the Decline of Local Trust

Outcomes	Trust: Relatives	Trust: Neighbors	Trust: Strangers	Most People Are Trustworthy
	(1)	(2)	(3)	(4)
HRS	-0.188**	-0.227**	-0.218**	0.002
	(0.080)	(0.088)	(0.107)	(0.099)
Observations	5,081	5,081	5,081	5,081
R-squared	0.308	0.287	0.288	0.269
Pre-treatment Cohort Mean	3.343	3.075	0.909	2.651

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from waves 2012 and 2015. All regressions have controlled for county-year, cohort-year and province-cohort fixed effects, as well as respondent characteristics (the dummies of gender and education level, and the logarithm of family income per capita).

Appendix Figures

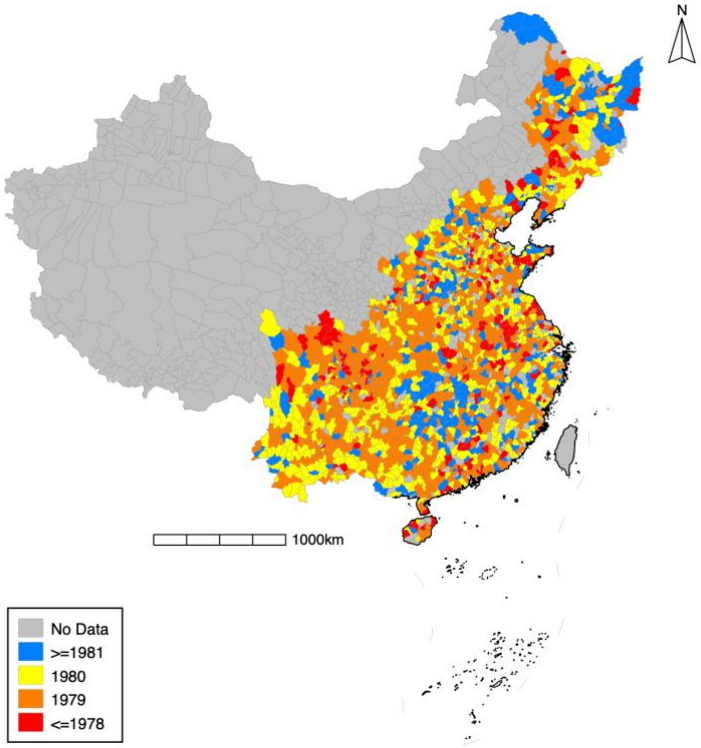


Figure A1 The Rollout of the Household Responsibility System across Counties

Notes: This figure presents the HRS reform timing of counties in mainland China.

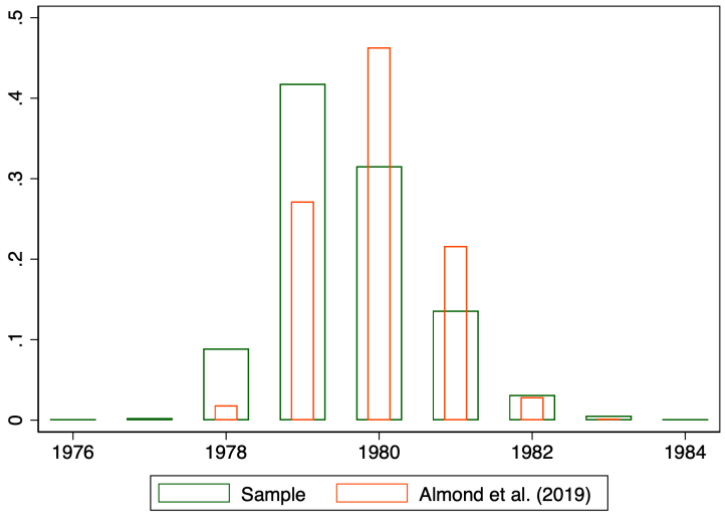


Figure A2 Share of Counties Adopting the HRS across Years

Notes: Data are from county gazettes and Almond et al. (2019). The green and red columns indicate the rollout of the HRS across the counties in the sample and Almond et al. (2019), respectively.

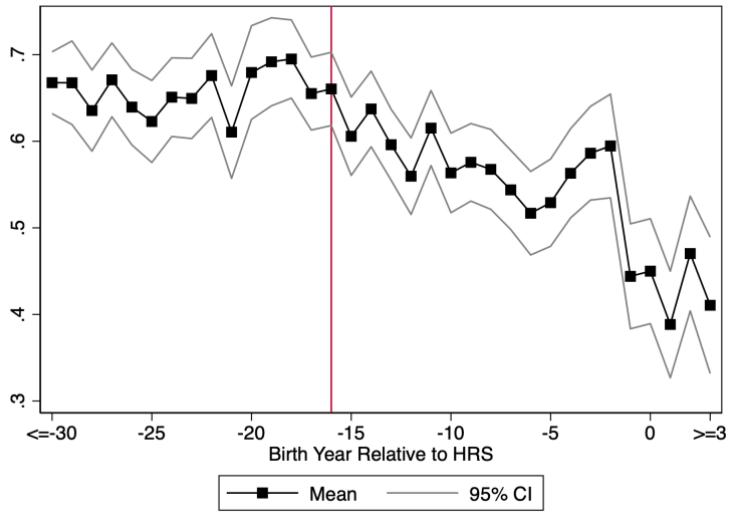


Figure A3 Descriptive Pattern of Voter Turnout

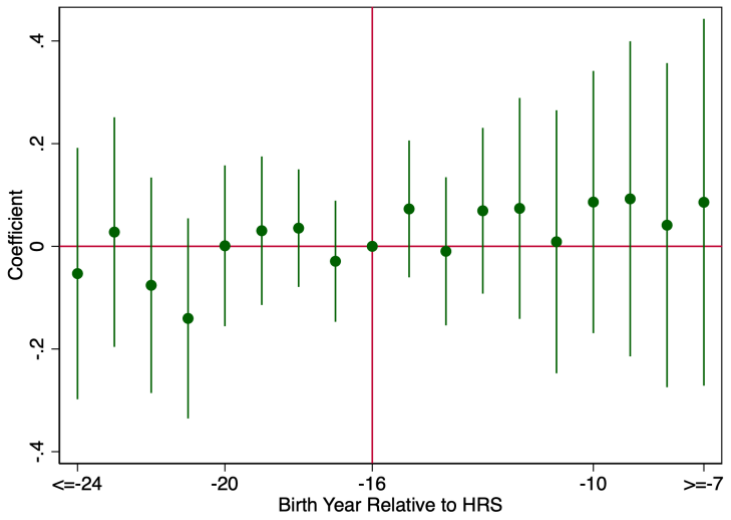
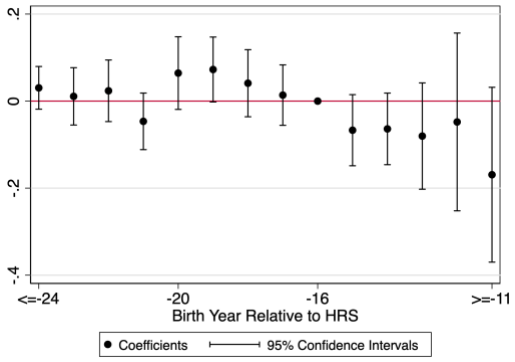
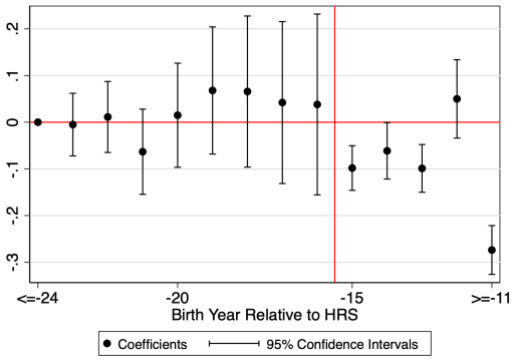


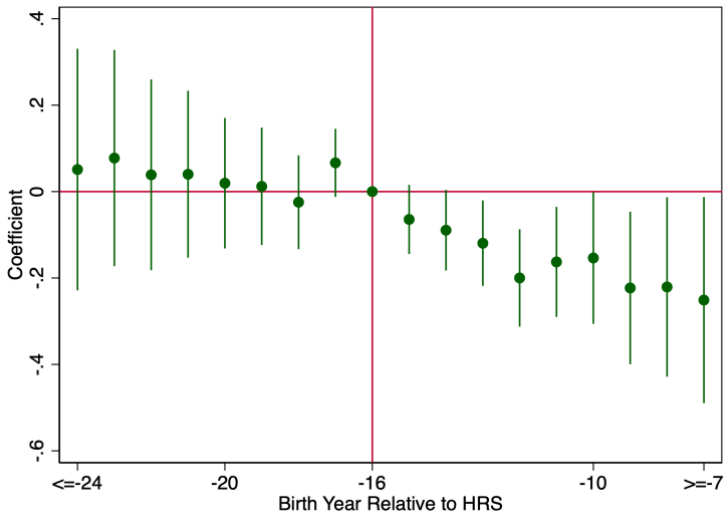
Figure A4 Event Study (Urban Hukou)





A. Stack DID B. Borusyak et al. (2024)

Figure A5 The Event Study of Alternative DID Estimators



Notes: The reference group is the cohort born 16 years before the reform. We control for county, cohort, and province-cohort fixed effects, as well as respondent characteristics (gender, education and family income per capita). Standard errors are clustered at the county level.

Figure A6 Event Study: CFPS Voting

Appendix Tables

Table A1 Summary Statistics

Variables	Obs.	Mean	Std. Dev	Min	Max
Panel A. CGSS					
Voted in the latest election	12,192	0.61	0.49	0	1
Trust: relatives	5,081	3.32	0.78	0	4
Trust: neighbors	5,081	3.04	0.85	0	4
Trust: strangers	5,081	0.87	0.91	0	4
Most people are trustworthy	5,081	2.55	0.95	0	4
Non-agricultural Work	12,190	0.30	0.46	0	1
Know how village committees are elected	3,419	0.31	0.46	0	1
Always live in same county	12,192	0.81	0.39	0	1
Live in urban area	12,192	0.26	0.44	0	1
Live in different township from hukou place	12,192	0.14	0.34	0	1
Panel B. CFPS					
Voted in the latest election	12,415	0.56	0.50	0	1
- Voted - voluntary	12,415	0.38	0.49	0	1
- Voted - required	12,415	0.18	0.38	0	1
Weekly frequency of acquiring political information from tv	11,567	2.70	3.00	0	7
Join CCP	11,567	0.05	0.21	0	1
Indifferent in social problems					
- Corruption	11,567	0.17	0.37	0	1
- Education	11,567	0.22	0.42	0	1
- Employment	11,567	0.24	0.43	0	1
- Environment	11,567	0.22	0.42	0	1
- Health	11,567	0.23	0.42	0	1
- Housing	11,567	0.24	0.43	0	1
- Inequality	11,567	0.21	0.41	0	1
- Social security	11,567	0.25	0.43	0	10
Concern for social problems					
- Corruption	11,567	6.93	2.76	0	10
- Education	11,567	5.96	2.70	0	10
- Employment	11,567	6.26	2.44	0	10
- Environment	11,567	6.44	2.73	0	10
- Health	11,567	5.98	2.65	0	10
- Housing	11,567	5.82	2.69	0	10
- Inequality	11,567	6.88	2.47	0	10
- Social security	11,567	5.73	2.63	0	1

Notes: Most outcome variables in CGSS cover waves 2011, 2012, 2013 and 2015, except for trust and

knowledge about elections. Trust variables are only available in waves 2012 and 2015, and knowledge about elections is only available in wave 2013.

Table A2 The Impact of Decollectivization on Voter Turnout (Always Local Sample)

Outcomes	Voted in the Latest Election			
Subsample	Rural Hukou + Always live in same county			
	(1)	(2)	(3)	(4)
HRS	-0.092***	-0.096***	-0.095***	-0.101***
	(0.034)	(0.034)	(0.034)	(0.035)
Age		-0.001		
		(0.005)		
Observations	9,858	9,858	9,858	9,858
R-squared	0.208	0.214	0.216	0.255
Pre-treatment Cohort Mean	0.681	0.681	0.681	0.681
County FE	yes	yes	yes	no
Year FE	no	no	yes	no
County-Year FE	no	no	no	yes
Cohort-Year FE	no	no	no	yes
Province-Cohort FE	yes	yes	yes	yes
Controls	no	Respondent	Respondent	Respondent

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from 2011 to 2015. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita. Always live in the same county means that the respondents have been living in the current county since their birth.

Table A3 Correlation between Decollectivization and Prevalence of Always Local Respondent

Outcomes	Always live in same county			
Subsample	Rural Hukou			
	(1)	(2)	(3)	(4)
HRS	0.027	0.020	0.017	0.007
	(0.027)	(0.027)	(0.027)	(0.028)
Observations	12,192	12,192	12,192	12,192
R-squared	0.194	0.226	0.228	0.273
Pre-treatment Cohort Mean	0.827	0.827	0.827	0.827
County FE	yes	yes	yes	no
Year FE	no	no	yes	no
County-Year FE	no	no	no	yes
Cohort-Year FE	no	no	no	yes
Province-Cohort FE	yes	yes	yes	yes
Controls	no	Respondent	Respondent	Respondent

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses.

CGSS regressions include data from 2011 to 2015. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita.

Table A4 Placebo: Urban Respondents

Outcomes	Voted in the Latest Election			
Subsample	Urban Hukou			
	(1)	(2)	(3)	(4)
HRS	0.049	0.051	0.054	0.066
	(0.049)	(0.048)	(0.047)	(0.052)
Observations	6,885	6,885	6,885	6,885
R-squared	0.263	0.265	0.268	0.331
Pre-treatment Cohort Mean	0.455	0.455	0.455	0.455
County FE	yes	yes	yes	no
Year FE	no	no	yes	no
County-Year FE	no	no	no	yes
Cohort-Year FE	no	no	no	yes
Province-Cohort FE	yes	yes	yes	yes
Controls	no	Respondent	Respondent	Respondent

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from 2011 to 2015. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita.

Table A5 Determinants of the adoption of the HRS.

Outcomes	1(Treatment Year <=1979)
	(1)
Famine severity	0.176***
	(0.063)
Distance to Beijing	0.017
	(0.016)
Distance to provincial capital	-0.006
	(0.006)
Average temperature	0.024***
	(0.003)
Average precipitation	-1.061***
	(0.141)
Observations	1,928
R-squared	0.040
Mean	.51

Notes: *** p < 0.01, ** p < 0.05, * p < 0.1. Robust standard errors are reported in parentheses. The dependent variable is a dummy variable that indicates whether the county adopted the HRS in 1979 or before. Following

Meng et al. (2015), we measure famine severity at the county level by cohort loss during 1959–1961.

Table A6 Robustness: Control for Reform Determinants

Outcomes	Voted in the Latest Election		
Subsample	Rural Hukou		
	(1)	(2)	(3)
HRS	-0.087***	-0.085***	-0.084***
	(0.029)	(0.030)	(0.031)
Observations	12,192	12,192	12,192
R-squared	0.214	0.216	0.252
Pre-treatment Cohort Mean	0.667	0.667	0.667
County FE	yes	yes	no
Year FE	no	yes	no
County-Year FE	no	no	yes
Cohort-Year FE	no	no	yes
Province-Cohort FE	yes	yes	yes
Controls	Respondent + Determinents	Respondent + Determinents	Respondent + Determinents

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from 2011 to 2015. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita. Determinants of HRS include famine severity at the county-level, distances to political centers and the average temperature and precipitation in the year of the HRS implementation. We interact the determinants with birth year FE.

Table A7 Robustness: Alternative Definition of Rural Respondent

Outcomes	Voted in the Latest Election			
Subsample	Surveyed in a Village Community			
	(1)	(2)	(3)	(4)
HRS	-0.107***	-0.107***	-0.104***	-0.103***
	(0.033)	(0.032)	(0.033)	(0.034)
Observations	9,528	9,528	9,528	9,528
R-squared	0.200	0.207	0.209	0.253
Pre-treatment Cohort Mean	0.707	0.707	0.707	0.707
County FE	yes	yes	yes	no
Year FE	no	no	yes	no
County-Year FE	no	no	no	yes
Cohort-Year FE	no	no	no	yes
Province-Cohort FE	yes	yes	yes	yes
Controls	no	Respondent	Respondent	Respondent

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses.

CGSS regressions include data from 2011 to 2015. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita.

Table A8 Robustness: Other DID Estimators

Outcomes	Voted in the Latest Election		
Estimator	TWFE (Baseline)	Stack DID	Borusyak et al. (2024)
	(1)	(2)	(3)
HRS	-0.088***	-0.090***	-0.070***
	(0.030)	(0.032)	(0.019)
Observations	12,192	27,126	7073
R-squared	0.241	0.237	
Pre-treatment Cohort Mean	0.667	0.663	0.667

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from 2011 to 2015. Column 2 reports the coefficients using the stacked difference in difference method. Column 3 reports the results using the imputation method proposed by Borusyak et al. (2024).

Table A9 Alternative Dataset - CFPS 2014

Outcomes	Voted in the Latest Election	
Subsample	Rural Hukou	
	(1)	(2)
HRS	-0.075**	-0.075**
	(0.036)	(0.036)
Observations	12,415	12,415
R-squared	0.291	0.297
Pre-treatment Cohort Mean	0.431	0.431
Controls	no	Respondent

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. All regressions have controlled for county and province-cohort fixed effects. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita.

Table A10 Heterogeneous Effects

Outcomes	Voted in the Latest Election								
Subsample	Baseline	Female	Male	High Radio Intensity	Low Radio Intensity	High GE number per capita	Low GE number per capita	High Rural Industrial Output Per Capita	Low Rural Industrial Output Per Capita
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
TreatPost	-0.088***	-0.049	-0.114**	-0.043	-0.139***	0.007	-0.077**	-0.004	-0.190***
	(0.030)	(0.052)	(0.052)	(0.058)	(0.041)	(0.046)	(0.038)	(0.034)	(0.062)
Observations	12,192	5,885	6,307	5,845	5,295	2,843	9,349	6,070	4,822
R-squared	0.242	0.322	0.331	0.296	0.268	0.317	0.267	0.275	0.277
Pre-treatment Cohort Mean	0.667	0.703	0.631	0.642	0.686	0.690	0.660	0.691	0.634

Notes: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from waves 2012 and 2015. All regressions have controlled for county-year, cohort-year and province-cohort fixed effects, as well as respondent characteristics (the dummies of gender and education level, and the logarithm of family income per capita). For columns (3) to (9), we categorize the sample according to the medians of the variables among all Chinese counties.

Table A11 The Impact of Decollectivization on Voter Turnout, by Migration Status

Outcomes	Voted in the Latest Election			
Subsample	Rural Hukou			
		Always Live in the Same County		
			Live in Hukou Township	Live in Rural Areas
	(1)	(2)	(3)	(4)
HRS	-0.088***	-0.100***	-0.110***	-0.091**
	(0.029)	(0.035)	(0.036)	(0.040)
Observations	12,192	9,858	9,017	7,612
R-squared	0.241	0.254	0.264	0.278
Pre-treatment Cohort Mean	0.667	0.681	0.698	0.715

Notes: Significance: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. CGSS regressions include data from 2011 to 2015. All regressions have controlled for county-year, cohort-year and province-cohort fixed effects, as well as respondent characteristics (the dummies of gender and education level, and the logarithm of family income per capita).

Table A12 The Impact of Decollectivization on Migration Status

Subsample	CGSS: Rural Hukou –Always Live in Same County		Population Census 2000	
Outcomes	Live in Urban Area	Live in different township from hukou place	Live in different township rom birthplace	Live in different county from birthplace
	(1)	(2)	(3)	(4)
HRS	0.016	-0.032	0.004	0.005
	(0.027)	(0.020)	(0.004)	(0.004)
Observations	9,858	9,858	3,806,764	3,806,764
R-squared	0.357	0.250	0.211	0.358
Pre-treatment Cohort Mean	0.172	0.058	0.249	0.039

Notes: Significance: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. Columns (1) and (2) use CGSS waves from 2011 to 2015. Data in columns (4) and (5) are from the 2000 population census. In columns (2) and (5), we assume that inter-county migrants began to be affected by land reform in the year when the largest number of counties in their province of birth adopted the HRS. Regressions in the CGSS sample have controlled for county-year, cohort-year and province-cohort fixed effects, as well as respondent characteristics (the dummies of gender and education level, and the logarithm of family income per capita). Regressions in the census sample have controlled for county cohort and province-cohort fixed effects, as well as respondent characteristics (the dummies of gender, education level, and ethnic minorities).

Table A13: Alternative Explanations

Explanations to Test	Non-agricultural Employment	Information	Cultural Revolution
Outcomes	Non-agricultural Work	Know How Village Committees Are Elected	Voted in the Latest Election
	(1)	(2)	(3)
HRS	0.007	0.025	-0.085***
	(0.034)	(0.060)	(0.029)
Observations	12,548	3,524	11,649
R-squared	0.380	0.363	0.239
Pre-treatment Cohort Mean	0.182	0.357	0.666
County FE	yes	yes	no
Cohort FE	yes	yes	no
County-Year FE	no	no	yes
Cohort-Year FE	no	no	yes
Province-Cohort FE	yes	yes	yes
Controls	Respondent	Respondent	Respondent + Cultural Revolution

Notes: Significance: * p<0.1; ** p<0.05; *** p<0.01. Standard errors clustered at the county level are reported in parentheses. Regressions in columns (1) and (3) include data from 2011 to 2015, and column (2) uses data from wave 2013. Respondent-level control variables include the dummies of gender and education level, and the logarithm of family income per capita. Cultural revolution controls include county-level deaths per 1,000 population, interacted with cohort fixed effects.

Table A14 Decollectivization and General Interest in Politics

Panel A: General Interest in Politics										
Outcomes	Weekly Frequency of Acquiring Political Information from TV	Join CCP	Indifferent in Social Problems							
			Corruption	Education	Employment	Environment	Health	Housing	Inequality	Social Security
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
HRS	-0.210	0.011	-0.007	-0.025	0.023	-0.014	-0.032	0.035	0.043	-0.011
	(0.216)	(0.017)	(0.030)	(0.036)	(0.033)	(0.037)	(0.034)	(0.030)	(0.029)	(0.029)
Observations	11,567	11,567	11,567	11,567	11,567	11,567	11,567	11,567	11,567	11,567
R-squared	0.226	0.147	0.101	0.098	0.095	0.104	0.100	0.096	0.101	0.094
Pre-treatment Cohort Mean	2.855	0.058	0.182	0.245	0.261	0.247	0.246	0.255	0.229	0.256

Panel B: Concern for Social Problems								
Outcomes	Corruption	Education	Employment	Environment	Health	Housing	Inequality	Social Security
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
HRS	0.005	0.186	0.183	-0.022	-0.323*	-0.236	0.126	0.015
	(0.175)	(0.203)	(0.176)	(0.186)	(0.188)	(0.217)	(0.211)	(0.202)
Observations	11,567	11,567	11,567	11,567	11,567	11,567	11,567	11,567
R-squared	0.154	0.121	0.140	0.151	0.119	0.133	0.143	0.118
Pre-treatment Cohort Mean	6.795	5.690	6.049	6.144	5.804	5.617	6.752	5.502

Notes: * p<0.1; ** p<0.05; *** p<0.01. The regressions sample includes respondents with a rural hukou in CFPS 2014 wave. Standard errors clustered at the county level are reported in parentheses. All regressions have controlled for county and province-cohort fixed effects, as well as respondent characteristics (gender, education level, family income per capita).