

The Legacy of Cultural Revolution on Occupational Choice

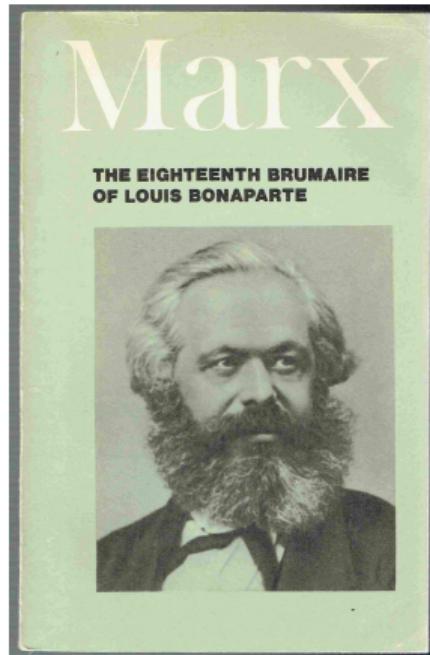
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*“Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances... **The tradition of all dead generations** weighs like a nightmare on the brains of the living.”*

— Karl Marx



Motivation

- Histories may remain influential on modern-day behavior
 - e.g., property rights (Acemoglu et al., 2001), trust (Nunn and Wantchekon, 2011), human capital (T. Chen et al., 2020), ...
- Occupational choice is one of the most important individual decisions
 - **Economic development** (Baumol, 1990; Eeckhout and Jovanovic, 2012; Murphy et al., 1991; Banerjee and Newman, 1993): economic conditions influence occupational choice, which in turn affects development
 - **Social mobility** (Doepke and Zilibotti, 2008): profession-specific spirits made the middle classes become industrial capitalists and replace landed elites in British Industrial Revolution
- Occupational choice may have its historical roots, which can be important for understanding a society's evolution

This Paper

- The long-run occupational effects of Cultural Revolution (1966–1976, CR) in China
- The Revolution was an ideological campaign against the bourgeoisie, featuring intensive violence
- The bourgeoisie associated with professional occupations
- Traumatic memories from the Revolution might generate distaste of these occupations, and it can be persistent across generations

This Paper

- **How does parental revolutionary experience influence their children?**
- A DiD strategy exploits *cohort-level* variations in revolutionary exposure and *prefecture-level* variations in violence intensities
- Results show that children are less likely to be a professional if their parents were exposed to the Revolution
 - Besides persistent destructive impacts on human capital, distaste of professional jobs plays some role
 - Suggestive evidence is found that the distaste may be further transmitted to the third generation

Literature

① Occupational choice

- Jointly determined by **preferences** and **feasible alternatives**. Most research focuses on the latter (Heckman et al., 2006; Nicolaou and Shane, 2010; Jia et al., 2021)
- Some recent papers start to focus on the role of preferences/norms (Fehr and Hoff, 2011; Campante and Yanagizawa-Drott, 2015; Bertrand, 2020)

② Long-run effect of historical events

- “Depression babies”: recession’s effects on risk, redistribution, and job preferences (Malmendier and Nagel, 2011; Cotofan et al., 2020; Giuliano and Spilimbergo, 2014)
- Legacy of violence, e.g., on political preferences (Rozenas et al., 2017; Lupu and Peisakhin, 2017; Leon, 2012)
- Cultural Revolution’s effects on trust (Bai and Wu, 2020; Yuhua Wang, 2021)

③ Parenting

- Parents may pass on their worldviews to children (Doepke and Zilibotti, 2008; Doepke, Sorrenti, et al., 2019; Doepke and Zilibotti, 2017; Bisin and Verdier, 2001)
- Most are theoretical. Recent papers provide empirical evidence (Alesina et al., 2021; Campante and Yanagizawa-Drott, 2015)

Roadmap

① Context and Data

- Sample construction
- Treatment = prefecture-level intensity \times cohort-level exposure

② Empirical Strategy

③ Results

④ Mechanisms

⑤ Preference Transmission

⑥ Conclusions

Outline

① Context and Data

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④ Mechanisms

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⑥ Conclusions

Cultural Revolution: 1966–1976

- “Mao’s Last Revolution”
- He thought although a socialist state was founded, bourgeois culture was still prevalent and penetrated into all aspects of society
- Cultural Revolution (CR) was “needed” to crack down bourgeois culture: stated by official documents
- Massive mobilization and indoctrination:
 - Students were encouraged to participate in revolutionary activities; curriculum featured communist classic readings when schools reopened (Y. Chen et al., 2020; Deng and Treiman, 1997; Meng and R. G. Gregory, 2002; Meng and R. Gregory, 2007)
 - Media disseminated anti-bourgeoisie ideologies (Ou and Xiong, 2021)

Mass Violence in CR

- CR stigmatized the bourgeoisie, targeting at both capitalists and **intellectuals**. Many were “struggled” and suffered from violence
 - Unlike Marxism and Leninism, Maoism classified intellectuals as the bourgeoisie
 - This targeting may lead to potentially broader impacts
- The bourgeoisie associated with professional occupations, e.g., entrepreneurs, teachers, scientists, etc.
(Bai and Wu, 2020; Su, 2011; Youqin Wang, 2001)
 - Well known student attacks on teachers (“reactionary intellectuals”): in Red August 1966, 1,772 people were killed in Beijing, including many teachers and principals (an official stat in 1985 showed total deaths in Red August were 10,275)
 - The Revolution even spread to scientists working in the nuclear project
- By experiencing violence, anti-bourgeoisie attitudes might be developed

Mass Violence in CR

- Data source: (Walder, 2014)
- About 1.1–1.6 million perished in the violence
- Most occurred in 1966–1971

Data Compilation

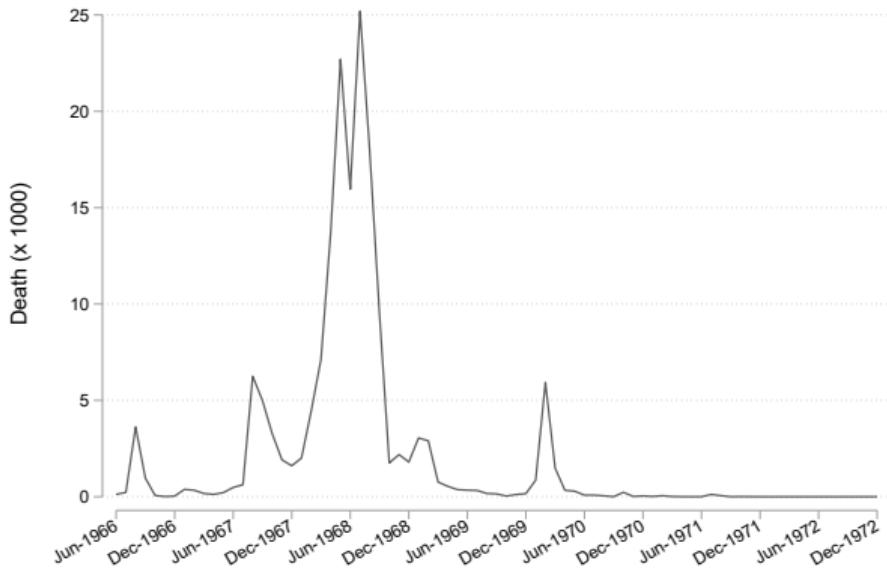


Figure: Temporal Distribution of Deaths in Dated Events

Data Source: (Walder, 2014)

Mass Violence in CR

- There are large geographical variations in violence ($R = \frac{\text{Deaths}}{\text{Population}} \times 100\%$)
- $\text{Mean}(R) = 0.041\%$, $\text{SE}(R) = 0.070\%$
- R is used to measure revolutionary intensities and potential ideological impacts

Toll Deaths

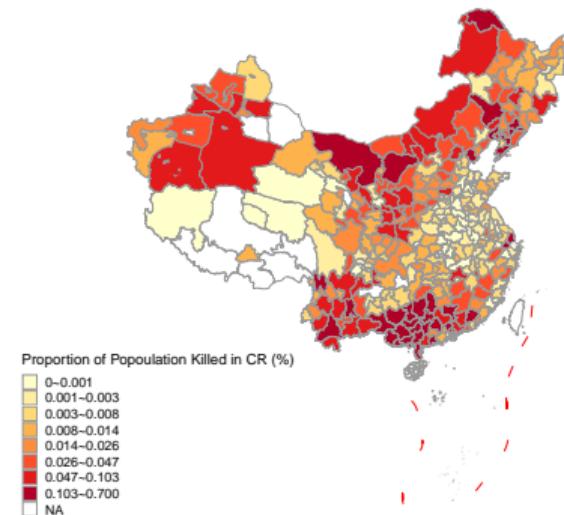


Figure: Spatial Distribution of $\frac{\text{Deaths}}{\text{Population}} \times 100\%$

Data Source: (Walder, 2014)

Census Data

- Chinese censuses: 2000 & 2005: most recent available censuses
- Focus on children's occupational choice
 - Parents might not be able to respond to CR in a planned economy (before 1978)
 - But they could pass their attitudes to children and influence choice
- Restricted to children born after 1960 and ≥ 25 yo at the time of survey
 - Born after 1960: long enough after CR when making occupational choice
 - ≥ 25 yo: most should have finished schooling by then
- Professional occupation = entrepreneurs, teachers, scientists, engineers, technicians, health professionals, legal professionals, financial professionals, culture professionals, etc. (Bai and Wu, 2018)
- Identify parent-child relations by "*relation to household head*"

Exposure to CR

- Who were most vulnerable to CR's ideological impacts?
- **Impressionable years hypothesis (IYH, Krosnick and Alwin 1989)**: people form beliefs in late adolescence and early adulthood, and change little afterwards
- Critical ages are 18–25 (Cotofan et al., 2020; Giuliano and Spilimbergo, 2014)
- Following IYH, exposure to CR is defined as:

$$D = \mathbb{1}\{18\text{--}25 \text{ y/o during } 1966\text{--}1971\} \quad (1)$$

- Many young people were engaged in the Revolution
- The time when violence was most rampant in 1966–1971

Exposure to CR

- All children in the sample (born after 1960) were not exposed. But their parents might be exposed

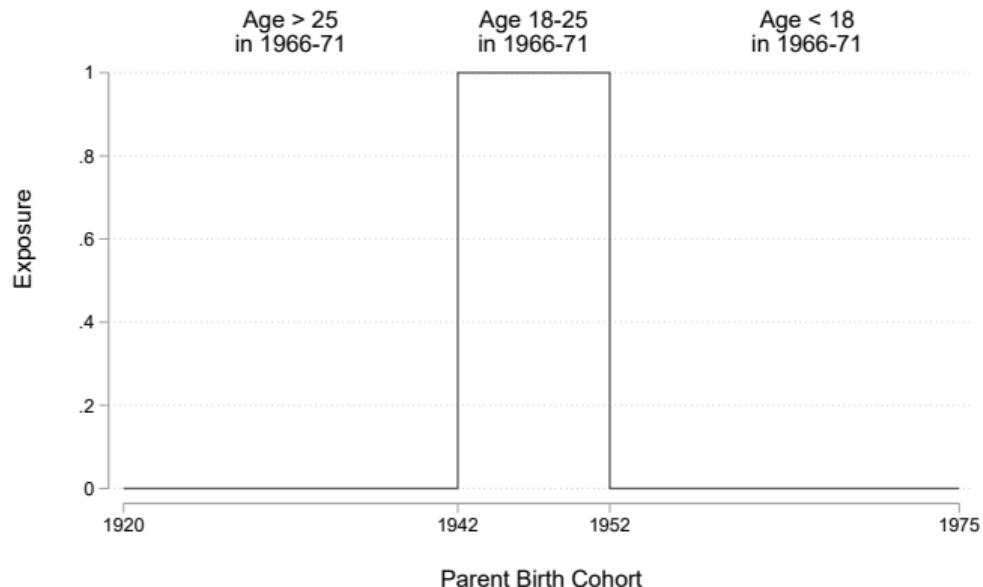


Figure: Cultural Revolution Exposure (D)

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Empirical Strategy: Diff in Diff

- Geographical variations in intensity R + cohort-level variations in exposure D :

$$y_{icb} = \alpha + \beta(R_c \times D_i^f) + \pi D_i^f + X_i' \delta + (X_i \times D_i^f)' \theta + \lambda_c + \gamma_{p(c)} \times \mu_b + \varepsilon_{icb} \quad (2)$$

- y_{icb} : = 1 if i (born in prefecture c and year b) is a professional
- R_c : $\frac{\text{Deaths}}{\text{Population}}$ (in %) of prefecture c
- D_i^f : = 1 if i 's father was 18–25 (impressionable years) during 1966–1971
- X_i : gender, *hukou*, ethnicity, marital status, parental occupation
- λ_c : prefecture FE; $\gamma_{p(c)} \times \mu_b$: province \times cohort FE
- Identifying assumption:** if there were no CR, high and low intensity regions have the same path of occupational choice $\Rightarrow \beta$ identifies ATE of a marginal increase in R_c (Callaway et al., 2021; Chaisemartin et al., 2022)

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② Empirical Strategy

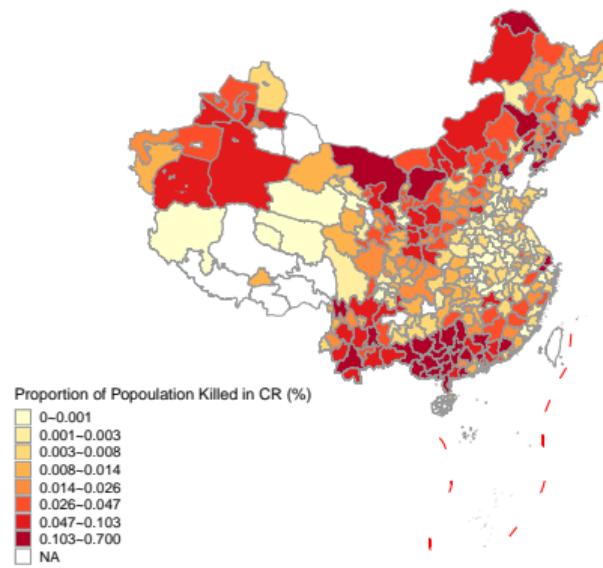
③ Results

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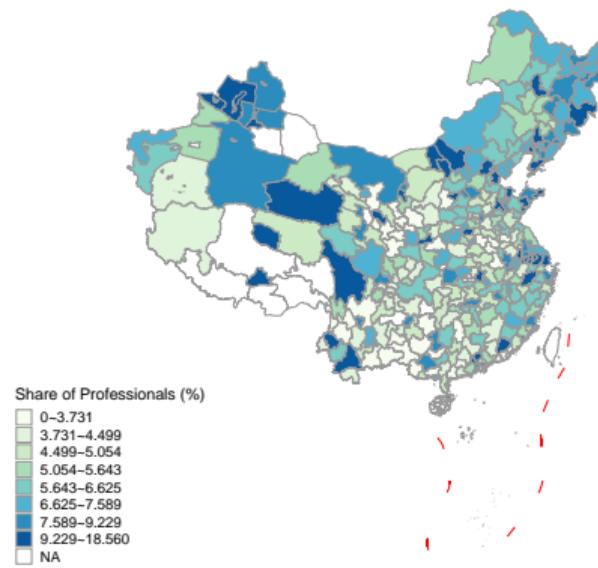
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Revolution & Occupation



(a) Proportion of Population Killed



(b) Share of Professionals

Summary Statistics

Table: Summary Statistics for Census Data

	High Intensity (> Median)			Low Intensity (\leq Median)			DiD (3)-(6) (7)
	D = 1 (1)	D = 0 (1)	Diff. (1)-(2) (3)	D = 1 (4)	D = 0 (5)	Diff. (4)-(5) (6)	
(A) Outcomes							
Professional	0.076 (0.265)	0.084 (0.278)	-0.008 (0.004)	0.069 (0.254)	0.067 (0.250)	0.003 (0.002)	-0.011 ** (0.005)
Years of schooling	9.427 (2.739)	9.370 (2.963)	0.057 (0.064)	9.302 (2.615)	9.049 (2.869)	0.253 (0.032)	-0.196 *** (0.072)
College	0.093 (0.290)	0.099 (0.299)	-0.006 (0.006)	0.074 (0.262)	0.071 (0.257)	0.003 (0.002)	-0.010 (0.006)
(B) Individual Covariates							
Age	27.859 (2.741)	30.829 (4.364)	-2.970 (0.135)	27.705 (2.643)	30.538 (4.141)	-2.833 (0.065)	-0.137 (0.150)
Han ethnicity	0.888 (0.315)	0.885 (0.319)	0.003 (0.005)	0.949 (0.219)	0.943 (0.231)	0.006 (0.002)	-0.003 (0.005)
Female	0.222 (0.416)	0.203 (0.402)	0.019 (0.003)	0.210 (0.407)	0.177 (0.381)	0.033 (0.003)	-0.014 *** (0.005)
Married	0.617 (0.486)	0.640 (0.480)	-0.023 (0.007)	0.644 (0.479)	0.656 (0.475)	-0.012 (0.006)	-0.011 (0.009)
Urban <i>hukou</i>	0.284 (0.451)	0.355 (0.478)	-0.071 (0.013)	0.251 (0.434)	0.296 (0.457)	-0.045 (0.007)	-0.026 * (0.015)
Professional father	0.063 (0.243)	0.024 (0.152)	0.039 (0.002)	0.062 (0.242)	0.022 (0.145)	0.041 (0.002)	-0.001 (0.003)
Obs.	90956	97251		97436	93466		

Mean in cells, and SDs/SEs in parentheses. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Main Table

- 1SD increase in R , i.e., **0.07% more** population killed \Rightarrow **0.28% decrease** in $\text{Pr}(\text{professional})$
- Only fathers' experiences are impactful

Table: Effect of Parental CR Experience on Children

	D.V.: $100 \times \mathbb{1}\{\text{in professional occupation}\}$			
	(1)	(2)	(3)	(4)
$R \times D^f$	-4.264** (1.853)	-4.469** (1.883)	-4.076*** (1.483)	-4.999*** (1.768)
$R \times D^m$				1.597 (1.578)
D.V. mean	7.425	7.425	7.425	7.425
R mean	0.041	0.041	0.041	0.041
Prefecture FE	Y	Y	Y	Y
Province \times cohort FE	Y	Y	Y	Y
Parents cohort FE		Y	Y	Y
Covariates			Y	Y
Obs.	379109	379109	379109	379109
R^2	0.032	0.034	0.095	0.106

Covariates: han ethnicity, female, married, urban *hukou*, professional parents.

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Event Study

- Exposure **after** impressionable years had no impact

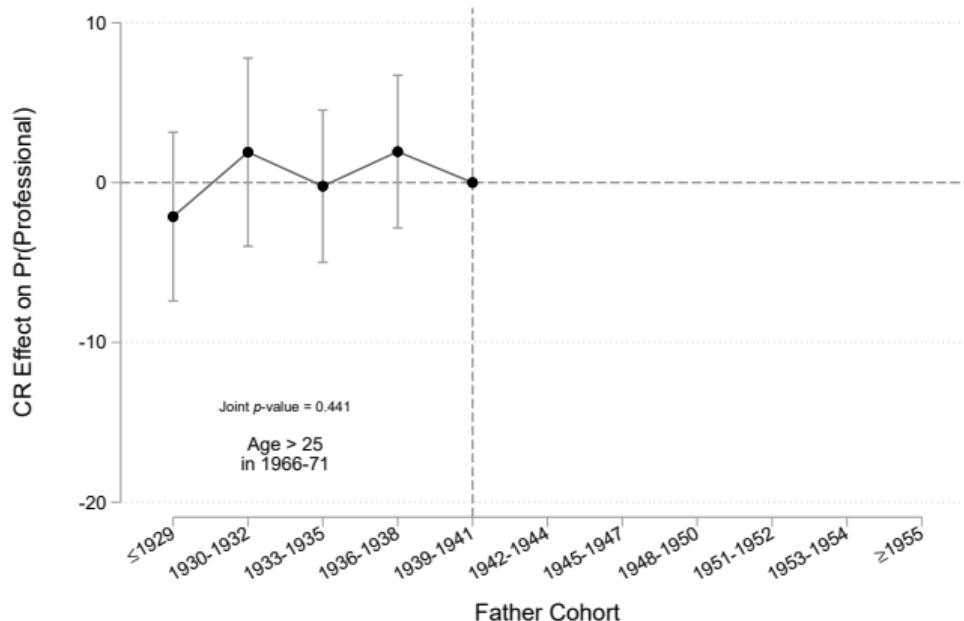


Figure: Effect of Father CR Experience on Children by Cohort

Event Study

- CR had effects on children whose fathers experienced it **during** impressionable years

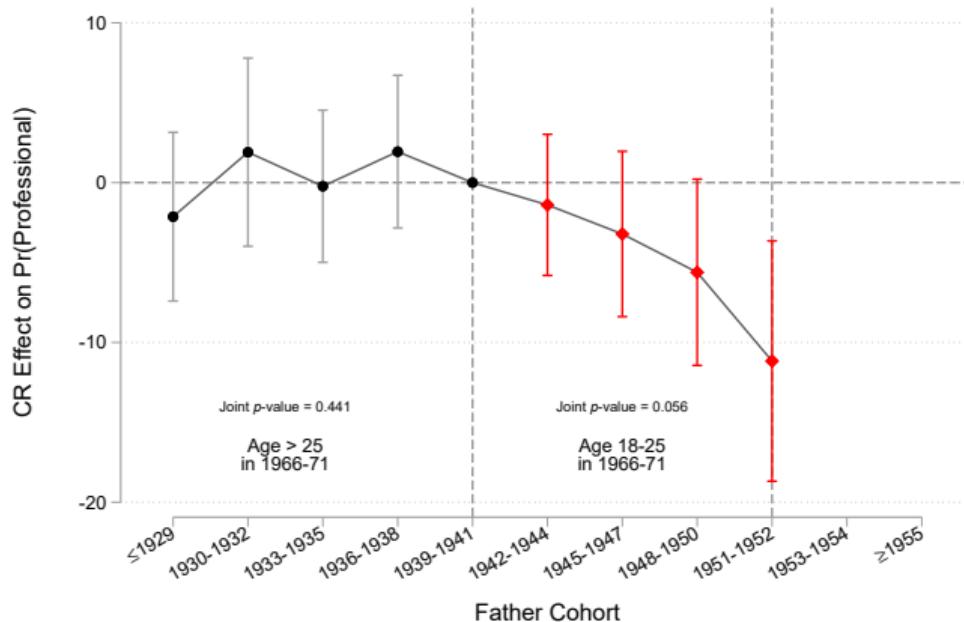


Figure: Effect of Father CR Experience on Children by Cohort

Event Study

- Exposure **before** impressionable years also had no impact

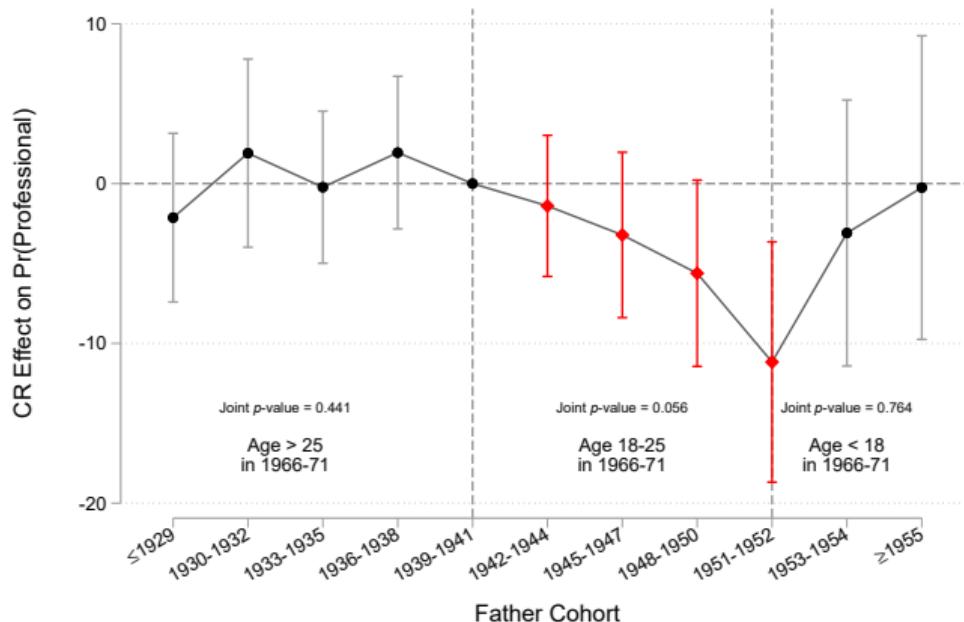


Figure: Effect of Father CR Experience on Children by Cohort

Robustness Checks

- ① Controlling correlates of CR intensities CR Correlates Add CR Correlates
- ② Selection on migration Migration
- ③ Selection on coresidence Coresidence
- ④ Timing and spatial placebo tests Time Placebo Spatial Placebo
- ⑤ Alternative specification of R and D Alternative R Alternative D
- ⑥ Estimation issues of DiD with continuous treatment (Callaway et al., 2021; Chaisemartin et al., 2022) Heterogeneity

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Underlying Mechanisms

- Both **job availability** and **preferences** can affect occupational choice
- Hard to examine preference changes directly. First assess how much effect can be explained by availability
 - **Economic conditions:** CR might have been destructive to the local economy (Bai and Wu, 2018), making professional jobs under supplied
 - **Social capital:** CR might affect parents' choice in the first place, making children lacking in connections to some occupations
 - **Human capital:** schools (colleges in particular) were shut down in CR \Rightarrow persistent damages of human capital. Children lack skills to enter a professional occupation (Y. Chen et al., 2020; Meng and R. G. Gregory, 2002; Meng and R. Gregory, 2007)
- Add mediator Z to the baseline regression (Baron and Kenny, 1986; Imai et al., 2011): how does it change $\hat{\beta}$

Job Availability 1: Economic Conditions

- Use FDI, GDP per capita, and #firms as proxies for local economic prosperity

Table: Mechanism: Economic Conditions

	D.V.: $100 \times \mathbb{1}\{\text{in professional occupation}\}$			
	(1)	(2)	(3)	(4)
$R \times D^f$	-4.225*** (1.601)	-4.240*** (1.598)	-4.264*** (1.600)	-4.201*** (1.601)
In(FDI)		0.648*** (0.206)		
In(GDP per capita)			1.577*** (0.536)	
In(Firms)				0.641 (0.401)
Prefecture FE	Y	Y	Y	Y
Province*cohort FE	Y	Y	Y	Y
Parent cohort FE	Y	Y	Y	Y
Covariates	Y	Y	Y	Y
Obs.	349663	349663	349663	349663
R^2	0.095	0.095	0.095	0.095

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Job Availability 2: Social Capital

- Despite direct experiences, parental occupations were not influenced by CR
- Parental occupation is already controlled \Rightarrow can't explain CR's effect on children

Table: Mechanism: Parents' Occupation

	D.V.: $100 \times \mathbb{1}\{\text{in professional occupation}\}$		
	(1) Both	(2) Father	(3) Mother
$R \times D$	-1.199 (1.125)	-3.045 (2.285)	0.222 (0.908)
D.V. mean	2.897	4.267	1.527
Prefecture FE	Y	Y	Y
Province \times cohort FE	Y	Y	Y
Covariates	Y	Y	Y
Obs.	656528	328264	328264
R^2	0.083	0.088	0.065

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Job Availability 3: Human Capital

- Educational attainment as a proxy for human capital. CR did have an adverse impact on educational attainment, but only explains about 45% of CR's effect
- Considerable room for other channels, e.g., occupational preferences

Table: Mechanism: Educational Attainment

	(1)	(2)	(3)	(4)
	Schooling	College	Professional	Professional
$R \times D^f$	-0.564 *** (0.166)	-0.052 ** (0.021)	-2.386 ** (1.165)	-2.241 ** (0.994)
Schooling			2.997 *** (0.109)	
College				35.116 *** (0.423)
D.V. mean	9.287	0.084	7.425	7.425
%Effect explained			0.415	0.450
95% CI			[-0.018, 0.848]	[0.078, 0.822]
Prefecture FE	Y	Y	Y	Y
Province*cohort FE	Y	Y	Y	Y
Parent cohort FE	Y	Y	Y	Y
Covariates	Y	Y	Y	Y
Obs.	379109	379109	379109	379109
R^2	0.281	0.162	0.169	0.211

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

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Evidence for Preference Transmission

- Preference transmission is rendered by parenting, which is hardly observable
- **Heterogeneity of effects:** how much efforts parents make to instill values to children may vary by specific conditions
 - I build a model of preference transmission following Bisin and Verdier (2001) and Campante and Yanagizawa-Drott (2015), and test its implications
- **Attitudes:** children may exhibit attitudes against professional occupations if some values have been transmitted

A Simple Model of Preference Transmission

- 2 occupations to choose from: 0 = non-professional, 1 = professional
- 2 types of preferences: type-0 and type-1, in favor of occupation w/same index
- Two ways to influence a child's preferences
 - ① **Parenting:** parents invest in a costly activity (e.g., time with children), which makes a child type-0 w/prob τ . Convex cost function $c(\tau)$
 - ② **Socialization:** the societal environment influences children — if parenting fails, then a child has a prob q to become type-0
- Thus, children's preferences follow the rules:

$$\Pr(\text{type-0 child}) = \tau + (1 - \tau)q \quad (3)$$

$$\Pr(\text{type-1 child}) = (1 - \tau)(1 - q) \quad (4)$$

A Simple Model

- Parents internalize children's utility from career with a factor $\lambda > 0$. They evaluate occupation i at v_i
- Parents' utility function:

$$\underbrace{-c(\tau)}_{\text{parenting costs}} + \underbrace{\lambda \{ [\tau + (1 - \tau)q]v_0 + (1 - \tau)(1 - q)v_1 \}}_{\text{expected child utility internalized}}. \quad (5)$$

- Parents choose efforts of parenting, τ , to maximize utility

$$FOC : \quad c'(\tau) = \lambda(1 - q)(v_0 - v_1). \quad (6)$$

Predictions

$$FOC : \quad c'(\tau) = \lambda(1 - q)(v_0 - v_1). \quad (7)$$

$$\frac{\partial \tau}{\partial(v_0 - v_1)} = \frac{1}{c''(\tau)} \lambda(1 - q) \quad (8)$$

$(v_0 - v_1)$ = utility premium of non-professionals; λ = how much child utility is internalized; $(1 - q)$ = prob of children socialized into a professional

- ① $\frac{\partial \tau}{\partial(v_0 - v_1)} > 0$: CR experience ($v_0 - v_1 \uparrow$, greater stigma of professionals) motivates parenting towards non-professional jobs
 - In line with previous findings
- ② $\frac{\partial^2 \tau}{\partial(v_0 - v_1) \partial \lambda} > 0$: more parenting efforts if parents care more about children's choice ($\lambda \uparrow$)
- ③ $\frac{\partial^2 \tau}{\partial(v_0 - v_1) \partial(1-q)} > 0$: more parenting efforts if more worried about children being "misled" by external factors ($1 - q \uparrow$)

Evidence for Predictions 2 & 3

- P2: $\lambda = \text{son}$, parents care more about sons due to son preferences (Col 1–2)
- P3: $1 - q = \text{share of professionals/professional wage rate} — \text{stronger external pull towards professional occupations}$ (Col 3–6)

Table: Mechanism: Preference Transmission

	(1)	(2)	(3)	(4)	(5)	(6)
$R \times D^f$	1.354 (2.603)	1.626 (2.095)	-4.083*** (1.439)	-2.356** (1.016)	-5.243*** (1.777)	-2.950** (1.157)
$R \times D^f \times \text{Son}$	-6.866* (3.834)	-4.889* (2.820)				
$R \times D^f \times \% \text{Professionals (std.)}$			-7.047*** (2.441)	-2.679** (1.248)		
$R \times D^f \times \text{Professional wage (std.)}$					-5.731* (2.990)	-3.130** (1.228)
College		35.114*** (0.422)		35.137*** (0.434)		35.119*** (0.431)
Prefecture FE	Y	Y	Y	Y	Y	Y
Province*cohort FE	Y	Y	Y	Y	Y	Y
Parent cohort FE	Y	Y	Y	Y	Y	Y
Covariates	Y	Y	Y	Y	Y	Y
Obs.	379109	379109	349663	349663	359315	359315
R^2	0.095	0.211	0.095	0.212	0.095	0.212

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

CR Effects on Specific Attitudes

- Use individual survey (China Family Panel Study). Regressions control for han ethnicity, *hukou*, marital status, education, communist partisanship
- Cols 1–2: replicate main findings using survey data
- Cols 3–8: risk aversion, attitudes toward wealth, beliefs in efforts

Table: Effects on Preferences and Attitudes

	Professional Job		Certainty Equivalent		Wealth = Success		Efforts Rewarded	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
R × D	-5.469*	-10.149***	-13.409*	-14.032*	-0.291**	-0.279**	-0.032	-0.008
	(3.251)	(2.953)	(7.596)	(8.276)	(0.116)	(0.122)	(0.063)	(0.064)
D.V. mean	5.561	5.698	70.088	70.088	0.766	0.766	0.880	0.880
Prefecture FE	Y	Y	Y	Y	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y	Y	Y	Y	Y
Parents cohort FE		Y		Y		Y		Y
Covariates		Y		Y		Y		Y
Obs.	10897	10636	10430	10430	10636	10636	10636	10636
R ²	0.043	0.212	0.046	0.060	0.095	0.105	0.034	0.050

* p < 0.1 ** p < 0.05 *** p < 0.01

On the Third Generation

- Previous: parent → child
- Now: parent → child → **grandchild**, how does a child educate grandchild?
- Lower expectations on third generation's occupation and educational attainment

Table: Effects on Expectations for on Children

	Professional Job Expected (0/1)		Schooling Expected (Cont.)		College Expected (0/1)	
	(1)	(2)	(3)	(4)	(5)	(6)
$R \times D^T$	-0.390 (0.295)	-0.388 (0.234)	-2.349*** (0.815)	-2.007*** (0.641)	-0.192* (0.102)	-0.149 (0.125)
D.V. mean	0.619	0.620	15.647	15.647	0.851	0.851
Prefecture FE	Y	Y	Y	Y	Y	Y
Cohort FE	Y	Y	Y	Y	Y	Y
Father cohort FE		Y		Y		Y
Grand parents cohort FE		Y		Y		Y
Covariates		Y		Y		Y
Obs.	2357	2357	2754	2754	2754	2754
R^2	0.075	0.190	0.111	0.170	0.109	0.164

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

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Conclusions

- CR has long-run effects on occupational choice. Children are less likely to be a professional if their fathers were exposed to rampant violence at the time
- Some of the effect is rendered by stigma associated with professionals during CR
- The distaste has been transmitted across generations and influence attitudes

Appendix

Data Compilation

- Stanford sociologist Andrew Walder complied the data, based on local annals
 - Local annals are published by governments to document local histories, which have contents about political events and causalities in CR
- These data inevitably contain measurement errors. If they were random, then they just attenuate estimates. Two possibilities are concerning:
 - ① **State capacity:** lower death tolls may mean that less resources can be used in compilation
 - ② **Censoring:** the govt may be incentivized to deliberately underreport
- If true, two concerns are in favor of finding a **positive** relationship b/t being a professionals and the Revolution: low death tolls represent worse economic conditions and/or a leadership caring more about political control than development
- Taken into account in empirics: (1) DiD relies on exposure variations for identification; (2) flexible controls; (3) robustness of including correlates of reported death tolls

Back

Spatial Distribution of Toll Deaths

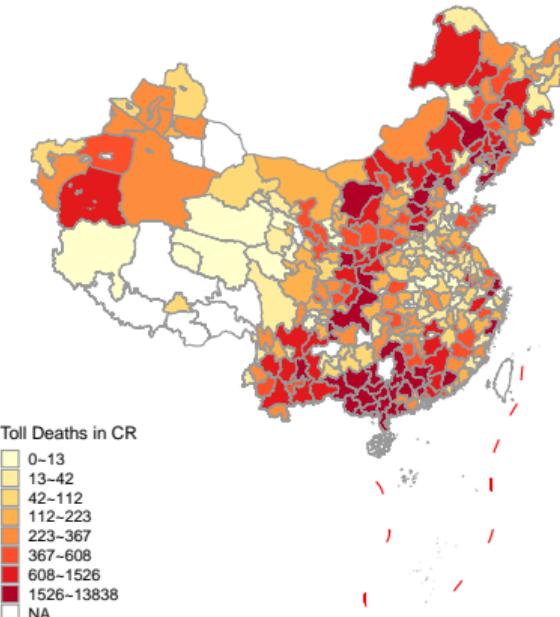


Figure: Spatial Distribution of Toll Deaths

Historical Variables

Table: Summary Statistics for Historical Variables [Back](#)

	(1) High Intensity	(2) Low Intensity	(3) Diff. (1)-(2)
%CPC members, 1960s (ppt.)	2.387 (0.721)	2.153 (0.599)	0.233 (0.153)
Sex ratio, 1964 (std.)	-0.176 (0.623)	-0.055 (0.958)	-0.121 (0.188)
%Juren, 1971-1904 (log)	1.981 (0.724)	2.249 (1.092)	-0.268 (0.216)
Primary and secondary schools, 1900 (log)	3.932 (1.639)	4.423 (1.393)	-0.491 (0.350)
Colleges, 1947 (log)	2.168 (1.785)	3.128 (1.948)	-0.961* (0.433)
Population density, 1953 (log)	2.777 (1.013)	3.419 (0.855)	-0.642** (0.216)
Agricultural suitability	2.938 (0.650)	3.138 (0.716)	-0.200 (0.158)
Urban population, 1920 (log)	-4.539 (1.472)	-4.143 (1.156)	-0.396 (0.304)
Colony in late Qing (std.)	-0.210 (0.000)	0.172 (1.340)	-0.382 (0.223)
Longitude	112.322 (5.579)	114.760 (4.429)	-2.438* (1.159)
Latitude	31.325 (6.196)	31.540 (3.937)	-0.215 (1.189)
Mass revolts in Qing (std.)	-0.273 (0.513)	0.209 (0.978)	-0.481* (0.183)
Social organizations, 1935 (log)	3.359 (0.331)	3.449 (0.374)	-0.090 (0.082)
Clan density in Ming-Qing (log)	0.054 (0.471)	0.121 (1.619)	-0.068 (0.280)
Obs.	110	125	

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

CR Correlates

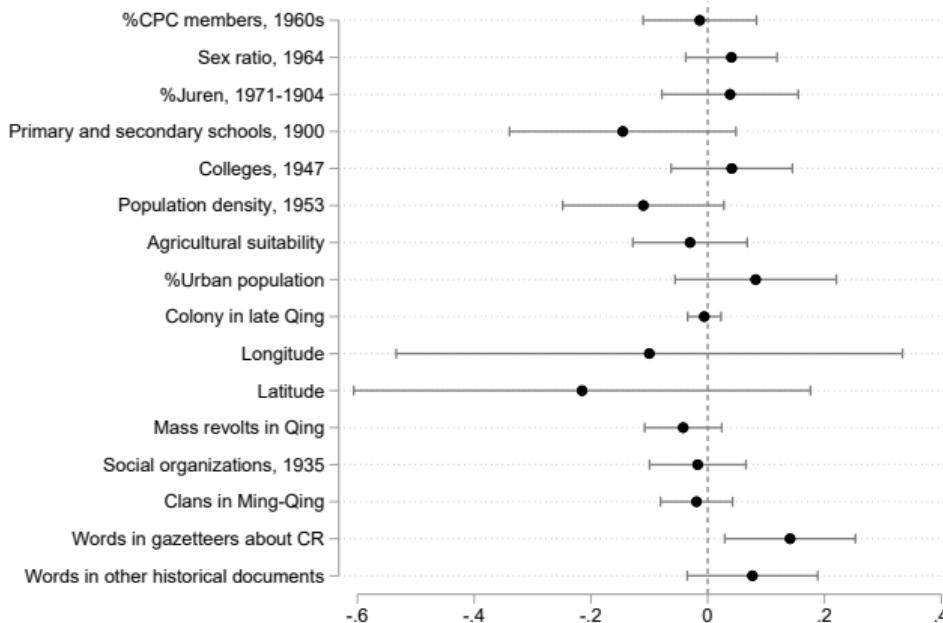


Figure: Correlations of *R* with Historical Variables

Add CR Correlates

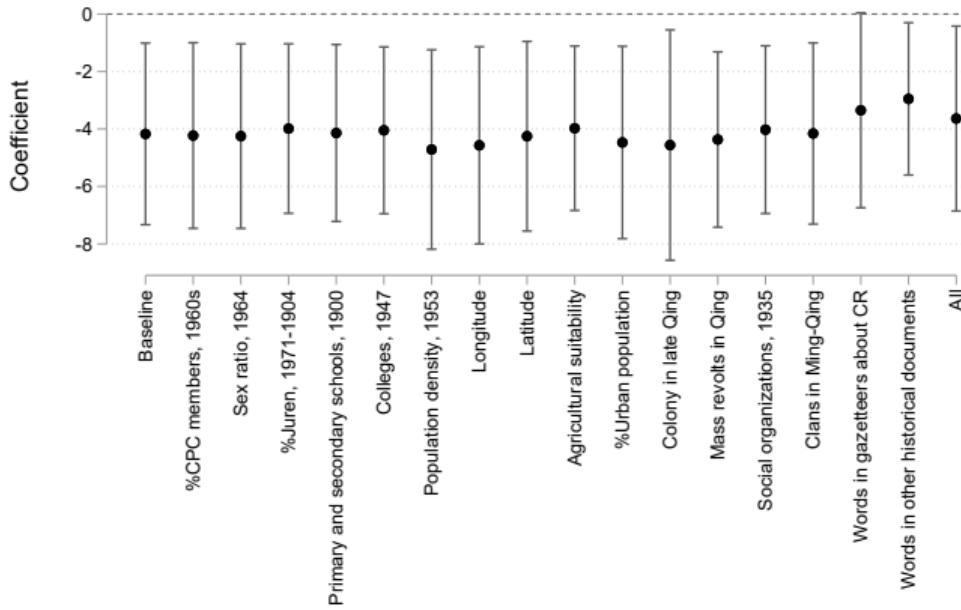


Figure: Estimate After Including CR Correlates

Selection on Migration

Table: Robustness Check: Selective Migration

	(1)	(2)
	All 2000	Stayers 2000
$R \times D^f$	-3.979** (1.604)	-2.996*** (1.056)
D.V. mean	7.082	4.828
R mean	0.039	0.038
Prefecture FE	Y	Y
Province \times cohort FE	Y	Y
Parent cohort FE	Y	Y
Covariates	Y	Y
Obs.	325491	241805
R^2	0.088	0.060

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Back

Selection on Coresidence

Table: Robustness Check: Selective Co-Residence

	D.V.: 100 × Child Co-residence Dummy	
	(1)	(2)
$R \times D$	1.102 (4.649)	
$R \times D^f$		-4.315 (4.769)
$R \times D^m$		7.137 (4.924)
D.V. mean	19.878	19.878
Prefecture FE	Y	Y
Province × cohort FE	Y	Y
Parent cohort FE	Y	Y
Covariates	Y	Y
Obs.	2956028	2956028
R^2	0.183	0.183

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Back

Timing Placebo

- Falsify violence time from 1966–1971 to 1956–1960 or 1960–1965

Table: Robustness Check: CR Time Placebo

	(1) Falsified to 1954–1959	(2) Falsified to 1960–1965
$R \times D^f$	3.217 (2.299)	-2.167 (2.266)
D.V. mean	7.314	7.314
Prefecture FE	Y	Y
Province \times cohort FE	Y	Y
Parent cohort FE	Y	Y
Covariates	Y	Y
Obs.	127520	127520
R^2	0.048	0.048

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Back

Spatial Placebo

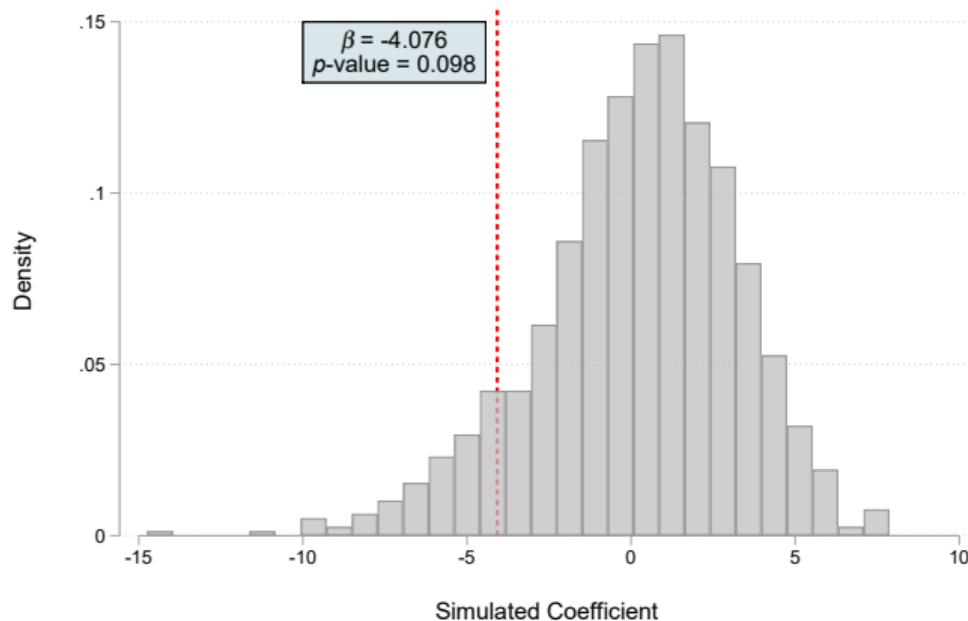


Figure: Robustness Check: CR Intensity Placebo Test

Alternative Definition of R

Table: Robustness Check: Alternative Measurement of CR Intensity

	(1) $\tilde{R} = \ln(1+\%CR\ deaths)$	(2) $\tilde{R} = \%CR\ victims$	(3) $\tilde{R} = \ln(1+\%CR\ victims)$	(4) $\tilde{R} = Toll\ Deaths\ (std.)$	(5) $\tilde{R} = Toll\ Victims\ (std.)$
$\tilde{R} \times D^f$	-8.962** (4.358)	-0.303 (0.190)	-1.534** (0.671)	-1.523*** (0.516)	-1.886*** (0.459)
D.V. mean	7.425	7.425	7.425	7.422	7.422
\tilde{R} mean	0.038	1.970	0.896	0.000	0.000
Prefecture FE	Y	Y	Y	Y	Y
Province \times cohort FE	Y	Y	Y	Y	Y
Parent cohort FE	Y	Y	Y	Y	Y
Covariates	Y	Y	Y	Y	Y
Obs.	379109	379109	379109	379294	379294
R^2	0.065	0.065	0.065	0.065	0.066

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Back

Alternative Definition of D

Table: Robustness Check: Alternative Measurement of CR Exposure

	(1) Cont. Exposure, 1966–71	(2) Binary Exposure, 1966–76	(3) Cont. Exposure, 1966–76
$R \times \tilde{D}^f$	-7.145* (4.245)	-6.990* (3.634)	-10.066* (5.228)
D.V. mean	7.425	7.425	7.425
Prefecture FE	Y	Y	Y
Province \times cohort FE	Y	Y	Y
Parent cohort FE	Y	Y	Y
Covariates	Y	Y	Y
Obs.	379109	379109	379109
R^2	0.065	0.065	0.065

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Back

Heterogeneity-Robust Estimates

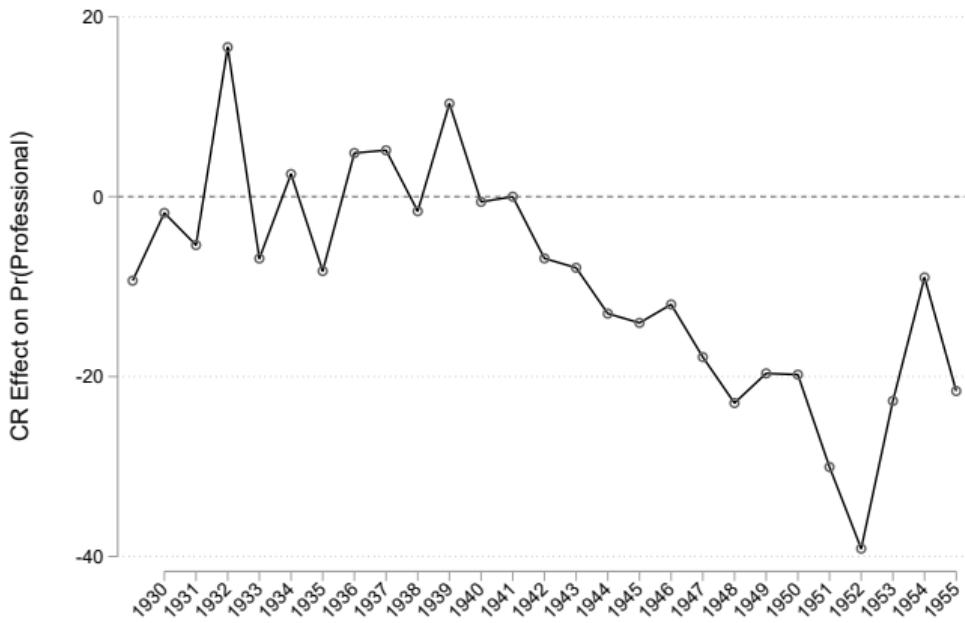


Figure: Heterogeneity-Robust Estimates

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