

# Dictatorship, Higher Education and Social Mobility

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## Political regimes and redistribution: The role of higher education

- Prominent theories of regime change focus on inequality and redistribution (Boix, 2003; Acemoglu and Robinson, 2006)
  - But the empirical evidence remains inconclusive (Acemoglu et al., 2015)
- **Universities** are important contributors to social mobility (*the great equalizer*), but also a major source of political mobilization
- Dictatorship  $\Rightarrow$   $\downarrow$  higher education  $\Rightarrow$   $\downarrow$  social mobility?
  - Trade-off between economic loss and political threat (Bourguignon and Verdier, 2000; Cantoni and Yuchtman, 2013)
  - Reduced educational opportunities could cause a political backlash

## We study higher education policy in Chile's Pinochet dictatorship

- Did Chilean universities change after the 1973 coup that overthrew Salvador Allende? How?
- What were the socioeconomic (distributional) consequences of changes to higher education under Pinochet? Persistence?
- Did educational policy affect political behavior in the pivotal 1988 plebiscite that triggered the democratic transition?

## Higher education was expanding rapidly before the military coup

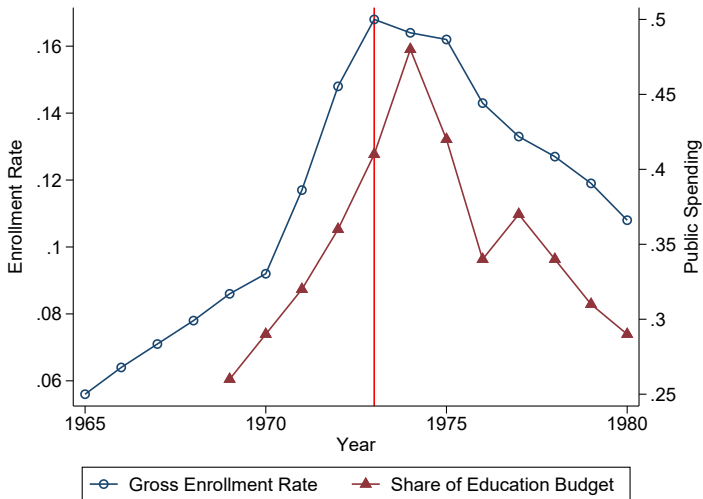
- Eight universities in the country, two are public, but all are largely reliant on public funding (77% of total revenue in 1972)
- Large expansion in enrollment under Frei (Christian Democrat, 1964-1970) and Allende (Socialist, 1970-1973) governments:
  - 25,000 students in 1960, 77,000 in 1970, 146,000 in 1973
- A matching algorithm for admissions, based on students' preferences and a new admissions exam (PAA), is introduced in 1967

## Policy goals under Pinochet: political control and fiscal conservatism

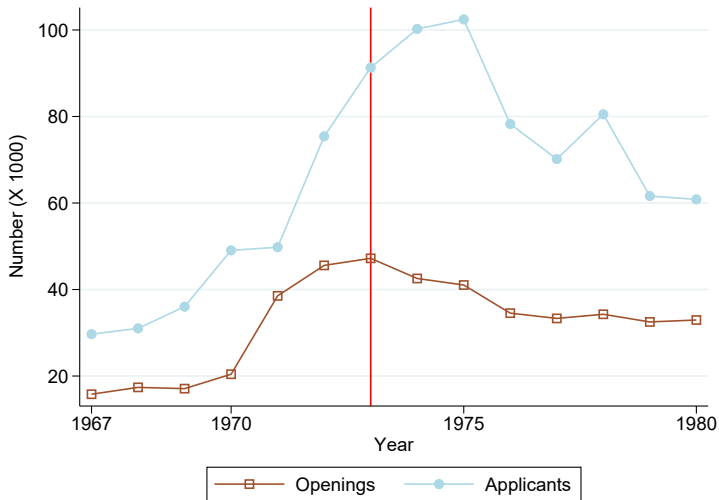
- A military junta presided by Augusto Pinochet assumes control of government following 1973 coup against Salvador Allende
- Military rectors immediately appointed to all universities ( “centers for Marxist indoctrination” ), leading to an initial wave of repression
- But policy soon begins to be influenced by the *Chicago Boys* and their technocratic concern over the size of government

*“the regime’s penchant for political control meshed conveniently with its penchant for economic conservatism”* (Levy, 1986, p.105)

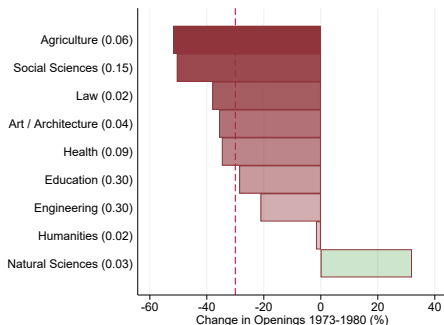
## Fall in transfers (w/o higher tuition) forces universities to downscale



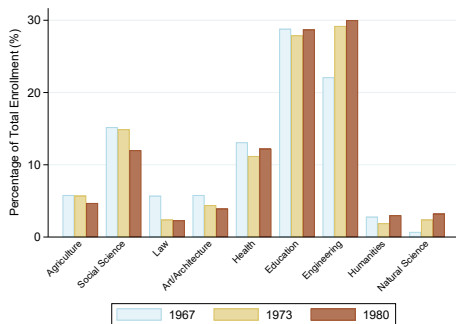
## Fall in enrollment driven by fewer openings (i.e. supply-driven)



## Despite targeting, distribution of students by field largely unchanged



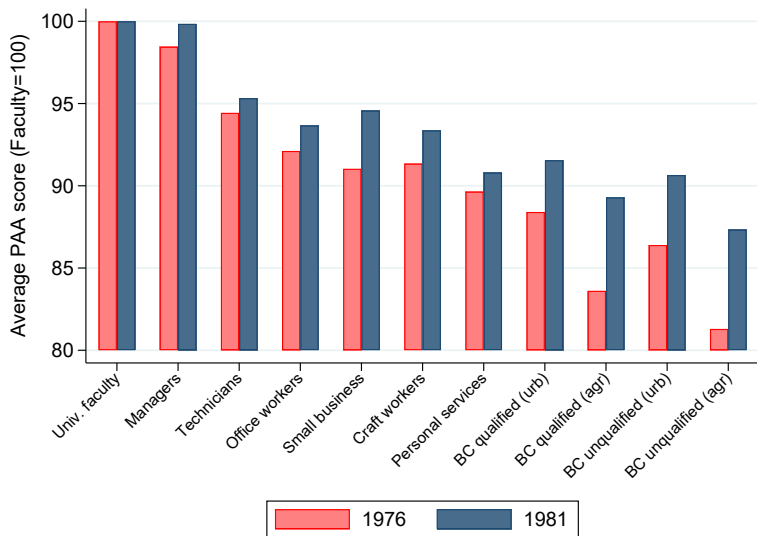
(a) Change in openings



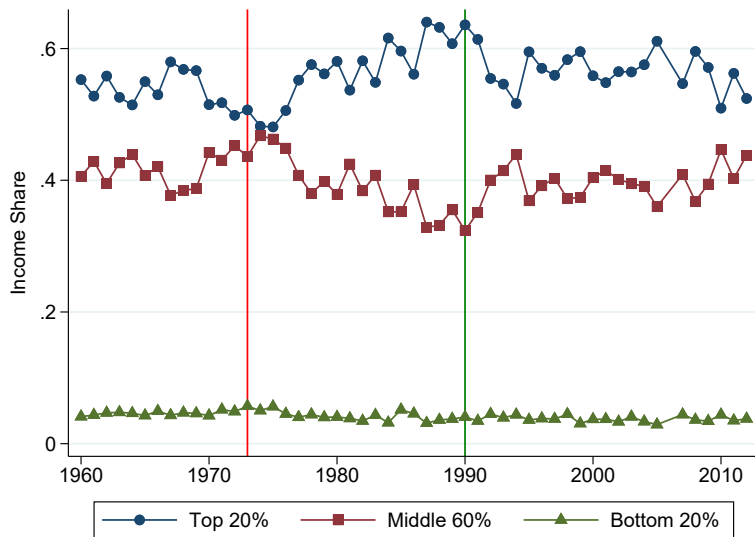
(b) Enrollment by field



## Applicants from less privileged backgrounds disproportionately affected



## Strong correlation between Pinochet dictatorship and inequality

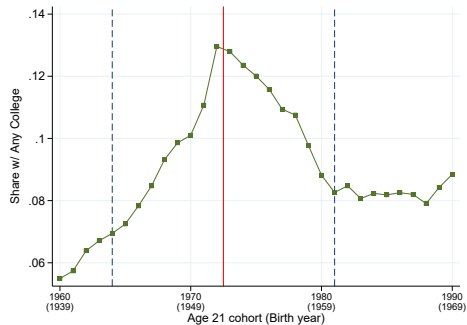


- Sample: EOD survey for Santiago metropolitan area

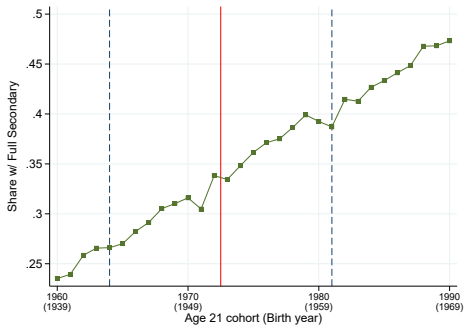
## Did the contraction of higher education hinder social mobility?

- We look for changes in cohort-levels trends based on exposure to diminished access to college, in the spirit of Regression Kink Design
  - Age of college enrollment not easily manipulated
- We use individual-level data from censuses ('92, '02, '17) and 13 waves of a large household survey (CASEN) between 1990 and 2017
- CASEN survey allows us to address potential non-linear age effects:
  - Observe cohorts repeatedly over time
  - Estimate stringent specification with age FE

## Cohorts reaching college age after coup show sharp kink in enrollment



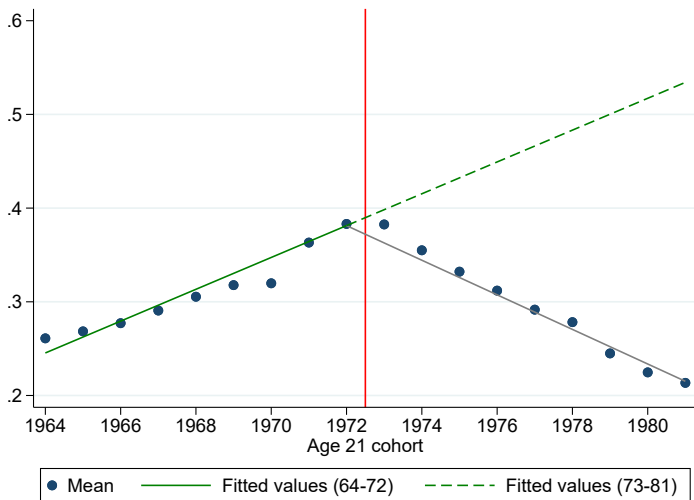
(a) College enrollment



(b) 4+ years of secondary

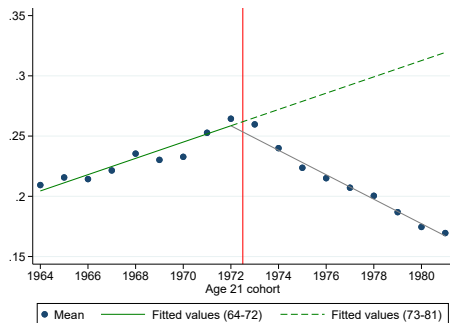
- Source: 1992 census

## Parsimonious linear model captures well the kink in college enrollment

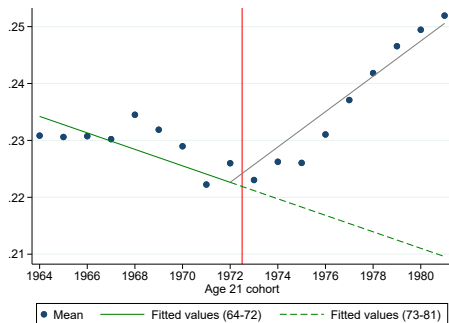


- Sample: 1992 census respondents with 4+ years of secondary

# Occupations reveal a dramatic change in life circumstances



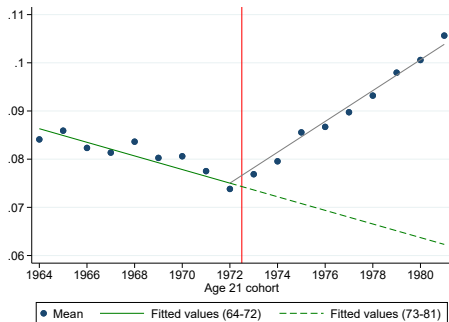
(a) Professionals



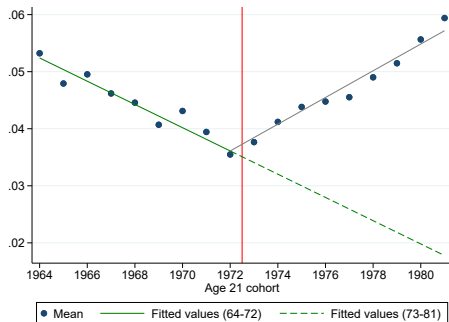
(b) Clerks

- Sample: 1992 census

# Occupations reveal a dramatic change in life circumstances



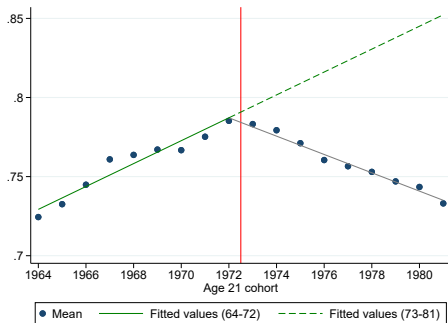
(a) Service workers/sales



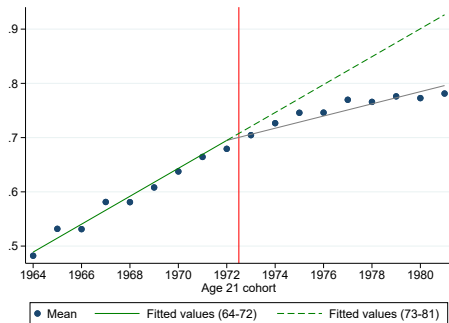
(b) Elementary occupations

- Sample: 1992 census

# Labor force participation kinks downwards for affected cohorts



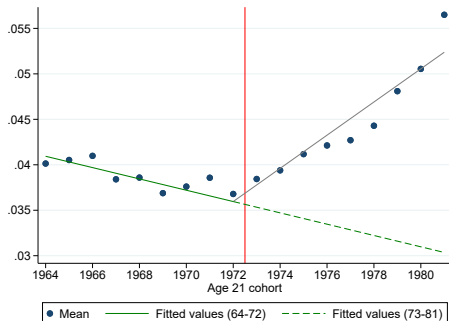
(a) 1992 census



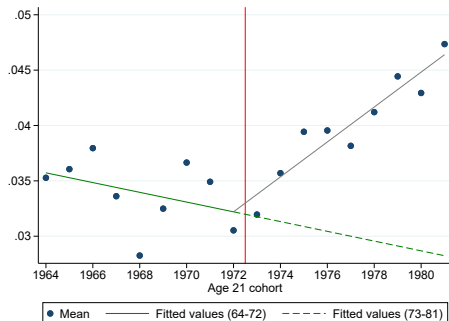
(b) CASEN 1990-2017



## Unemployment rate exhibits upward kink for the affected cohorts

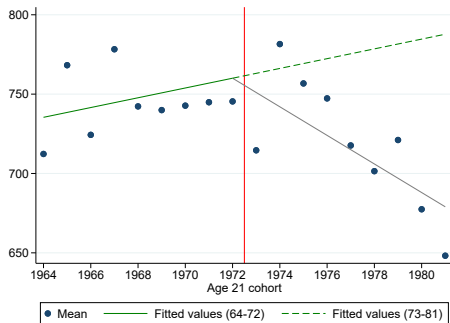


(a) 1992 census

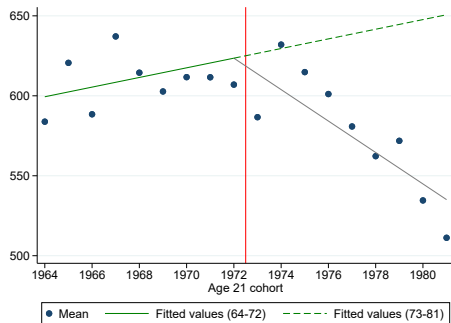


(b) CASEN 1990-2017

## Reported income kinks downwards for affected cohorts (CAsEN)

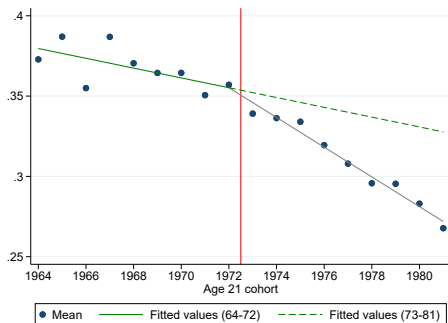


(a) Self-generated

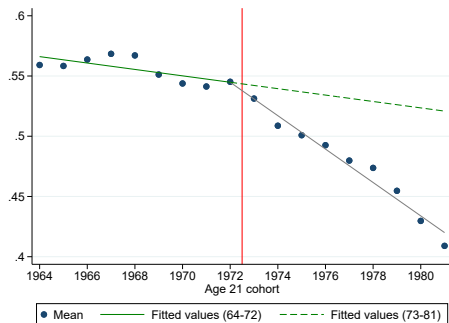


(b) Total

## ↓ Kinks in probability of being in top quintile of wealth or income

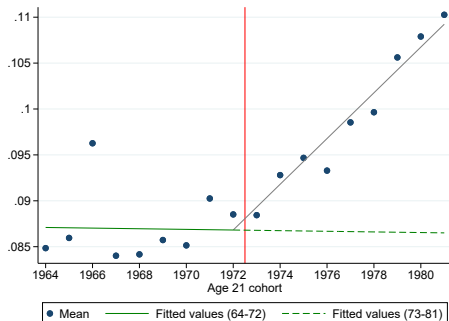


(a) Income (CASEN)

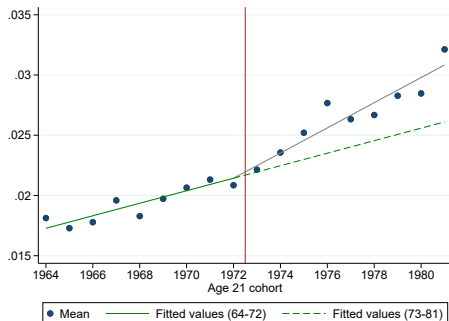


(b) Wealth ('92 Census)

## ↑ Kinks in probability of being in bottom quintile of wealth or income



(a) Income (CASEN)

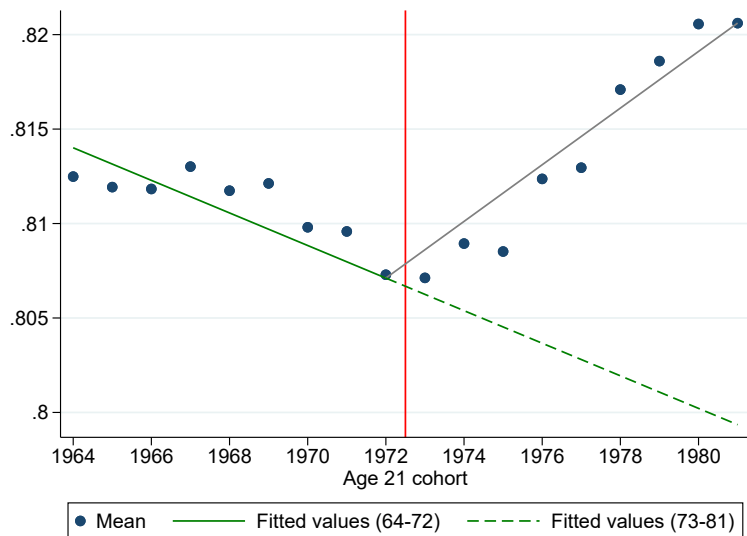


(b) Wealth ('92 Census)

## Did Educational contraction affect the outcome of the 1988 plebiscite?

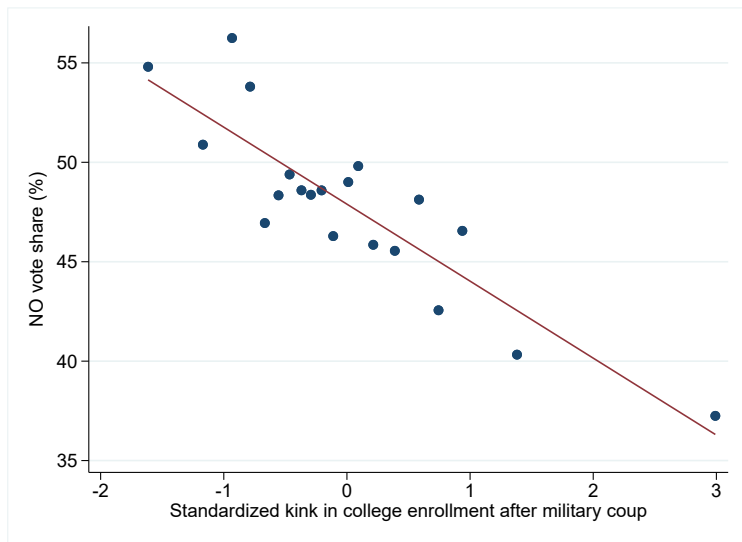
- Voters decide whether to grant Pinochet eight more years in power (SI) or to have open presidential elections (NO), latter wins with 55%
- We use individual-level data on registration date for the universe of voters in 2017 to study political mobilization before the plebiscite
- We combine county-level plebiscite results with county-specific estimates of the kink in college enrollment

## Affected cohorts register for plebiscite at relatively higher rates



- Sample: Electoral records (SERVEL)

Larger ↓ kink in college enrollment associated with higher NO vote

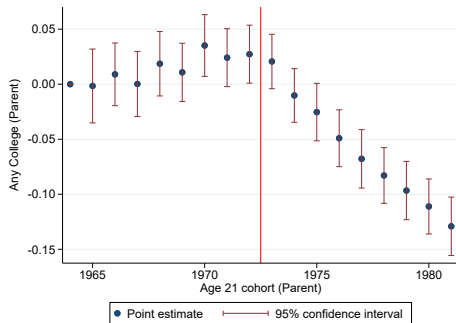


## Is the drop in college enrollment transmitted to the next generation?

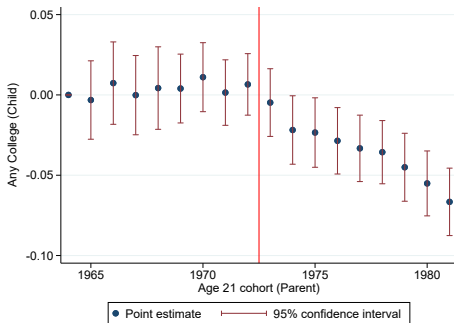
- 2017 census provides the best chance of observing college enrollment of children with parents in the affected cohorts (ages 57-74)
- We know relationship to household head for each individual
- Parent-child links: head + children (90%), parent + head (5%)
- We can only connect children to one parent except in very few cases
- Baseline sample includes children with ages 25-40 (robust to others)



## Downward kink in college enrollment for children w/ affected parent



(a) College enrollment of linked parents



(b) College enrollment of children

- Sample: 2017 census

## Regime change affects educational policy and distributional outcomes

- Military regime had a large impact on the functioning and size of the higher education system in Chile
- These changes had sizable and long-lasting socioeconomic effects and they hindered social mobility for an entire generation
- Diminished educational opportunities negatively affected support for the regime when a democratic window of opportunity arose