

The Economics of the Pinochet Dictatorship

Felipe González

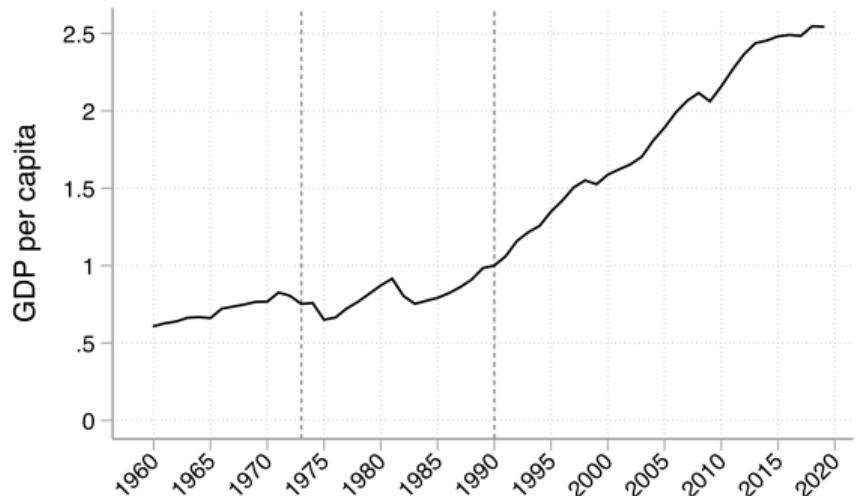
December 2023

Why?

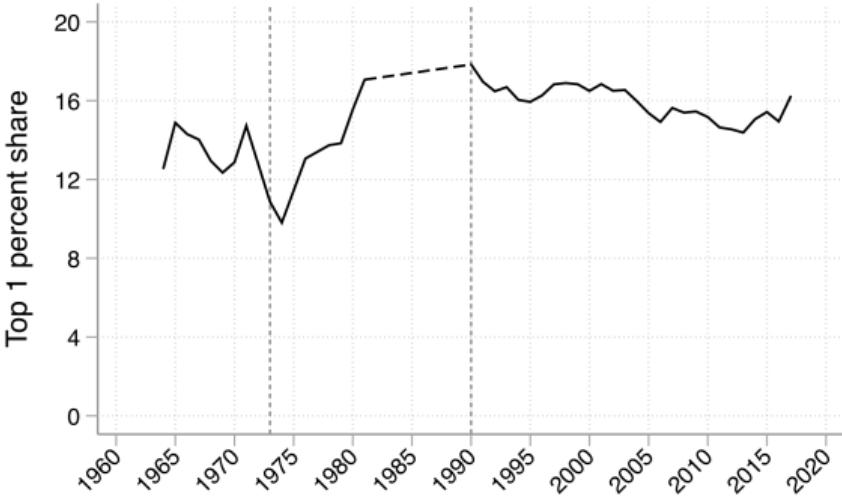
- ▶ Institutions change in systematic ways.
Dictatorship are prime examples
- ▶ Need of a social economic history of Latin American dictatorships grounded in the experiences of ordinary people
- ▶ Access to new data, standarization of methods, lack of conflict of interest



Economic indicators



(a) GDP per capita



(b) Top 1 percent share

Dictators

- ▶ Dictators aim to control the population:

- subordination
- shape distribution of resources
- maintain political power

- ▶ How do they do it?

- repression of dissidents
- censorship to control and spread ideology
- building stable coalition of supporters



Contents

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- ▶ State-led repression
- ▶ Higher education
- ▶ Constitution

► Lecture 2: Economics and politics

- ▶ Local governments
- ▶ Privatization and politics
- ▶ Repression of politicians

► Lecture 3: Life under dictatorship

- ▶ Pop culture censorship
- ▶ Slum clearance
- ▶ Women centers



Lecture 1: Installation

- State-led repression
- Higher education
- Constitution

Repression and opposition to autocracy

Bautista, González, Martínez, Muñoz, Prem (2023)

- ▶ Autocrats use repression to stay in power, but little systematic investigation of this proposition (Davenport 2017)
- ▶ The Pinochet dictatorship murdered more than 3,000 people and tortured +30,000
- ▶ What was the political impact of this repression on the 1988 plebiscite?



The military coup

- ▶ Salvador Allende won the 1970 election with 36% of the vote as leader of the UP left coalition
- ▶ He was overthrown on September 11, 1973 by a military coup led by General Augusto Pinochet
- ▶ A junta presided by Pinochet declared itself the supreme executive and legislative body of the country



The repression

- ▶ From September 1973 the junta's goal was to extirpate the "Marxist cancer" which they claimed was terrorizing the country
- ▶ The first weeks were characterized by mass raids in factories, shantytowns, mining camps, and universities
- ▶ October 1973: creation of the National Intelligence Directorate (DINA) under the direction of Coronel Manuel Contreras



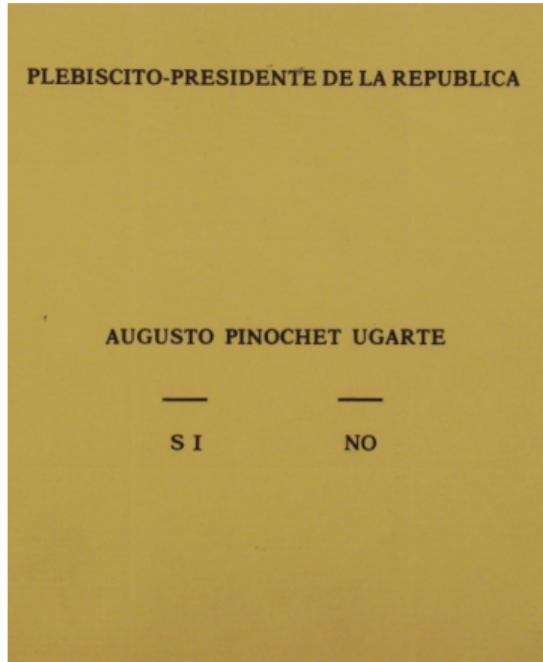
The repression

- ▶ 1974-1977: Secret detention centers with “ideal characteristics for its functions, such as its proximity to a military base”
- ▶ People in centers were tortured and often “disappeared.” 1976: DINA replaced by the National Center of Information (CNI)
- ▶ 1977-1990: CNI was in charge of repression. Economic crisis in 1982-83, protests spread, repression returned



The 1988 plebiscite

- ▶ YES: Pinochet remains in power. NO: Presidential Election in 1989
- ▶ The “No” option won with 56% of the vote and Chile’s transition to democracy began
 - >7 million people registered to vote
 - nonexistence of regulatory institution
 - televised political campaigns
 - perceived uncertainty of results



Theoretical background

1. Proximity to bases and political behavior
 - exposure to repression: fear or hostility
 - but also more state presence
2. Repression and political behavior
 - information under censorship
 - indirect experience of repression
3. Legacy of repression?
 - repression targeted against left-wing
 - Pinochet dictatorship remained salient



Data construction

- ▶ Data for 276 counties:
 - repression
 - military bases before 1973
 - elections before and after 1973
 - other economic variables

- ▶ These counties were located within 25 provinces and 13 regions



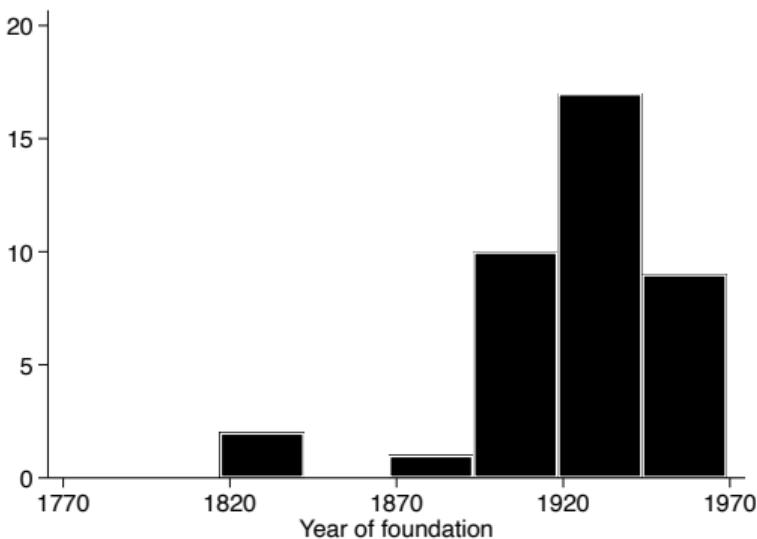
Fig. Foto de Alvaro Hoppe

Military bases



- ▶ New data with all military bases operating in 1970 constructed from González Salinas (1987), the military library, and requests using transparency laws
- ▶ Important to collect the exact dates of construction of military bases. We primarily use an indicator that takes the value of one in counties with at least one military base
- ▶ But we also use a measure of geographic exposure to military bases in *nearby* counties

Military bases



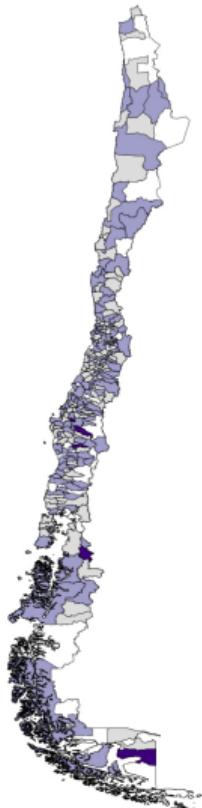
- ▶ 31% were constructed during war time. 80% during civil war and 20% during international wars
- ▶ During peace periods:
 - center-left presidents: 49%
 - center-right presidents: 27%
 - center-independent presidents: 49%

Electoral outcomes

- ▶ Total number of people who registered to vote in the 1988 plebiscite over 1970 census population
- ▶ Total number of “NO” votes over total number of valid votes
- ▶ Electoral outcomes in all presidential elections after 1988

REGION PROVINCIA COMUNA CIRCUNSCRIPCION	YARDINES			REGIMENES			TOTAL		
	RESIDENTES OCUPADOS	Nº DE MEZAS RECEPTORAS	TOTAL ELEC- TORES HABI- TANTES	RESIDENTES OCUPADOS	Nº DE MEZAS RECEPTORAS	TOTAL ELEC- TORES HABI- TANTES	RESIDENTES OCUPADOS	Nº DE MEZAS RECEPTORAS	TOTAL ELEC- TORES HABI- TANTES
Quintero	15	14	4,777	15	14	4,988	20	20	5,725
(*) Quintero	15	14	4,777	15	14	4,988	20	20	5,725
Puchuncaví	10	9	3,089	9	8	2,766	10	9	5,855
(*) Puchuncaví	10	9	3,089	9	8	2,766	10	9	5,855
Quilpué	83	83	27,437	95	95	32,783	178	178	50,188
Quilpué	83	83	27,437	95	95	32,783	178	178	50,188
Villa Alemana	92	93	17,501	82	82	21,012	116	115	38,513
Villa Alemana	92	93	17,501	82	82	21,012	115	115	38,513
Casablanca	15	15	5,000	14	14	4,871	20	20	9,781
Casablanca	15	15	5,000	14	14	4,871	20	20	9,781
Juan Fernández	1	-	157	1	-	131	0	-	288
(*) Juan Fernández	1	-	157	1	-	131	0	-	288
SAN ANTONIO	97	94	31,177	98	95	32,328	195	193	63,505
San Antonio	94	93	21,074	97	98	22,541	131	130	43,515
San Antonio	97	97	20,615	95	95	21,165	127	127	42,780
(*) Concepción	2	1	459	2	1	376	4	3	825
Cartagena	11	10	3,400	11	10	3,593	22	21	6,993
(*) Cartagena	11	10	3,400	11	10	3,593	22	21	6,993
El Tabo	4	4	1,225	4	4	1,157	8	8	2,382
El Tabo	4	4	1,225	4	4	1,157	8	8	2,382
El Quisco	5	5	1,848	5	5	1,593	10	10	3,281
El Quisco	5	5	1,848	5	5	1,593	10	10	3,281

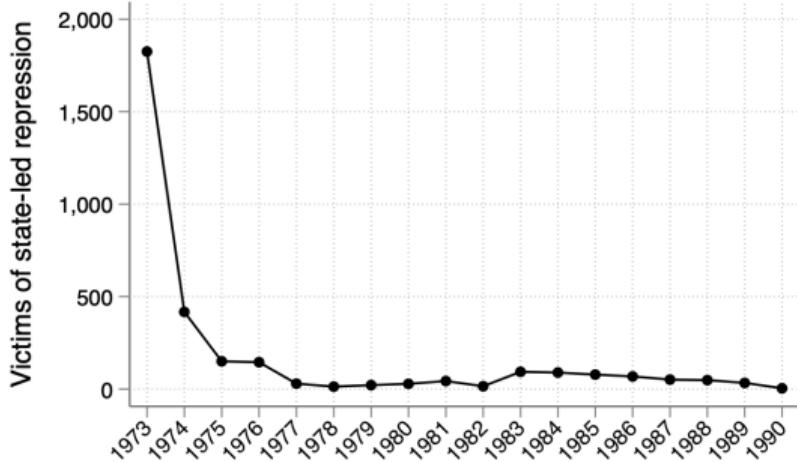
Repression



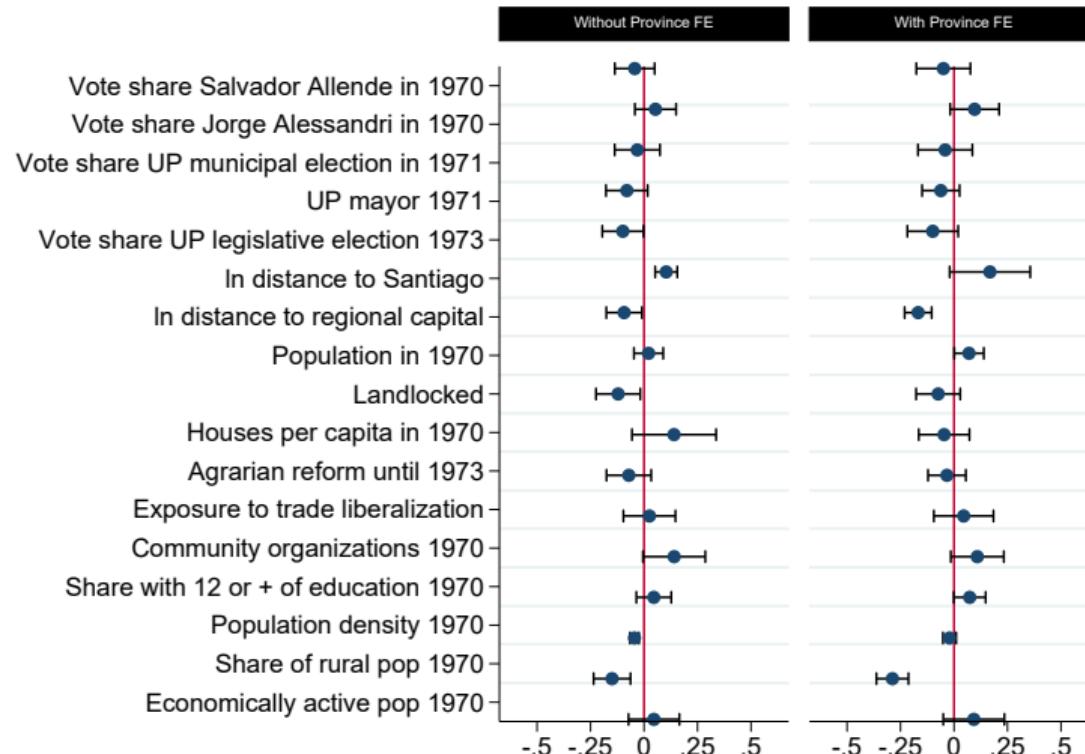
- ▶ Data from the National Commission for Truth and Reconciliation Report (aka Rettig report)
- ▶ Commission created in 1991 to clarify and document human rights violations committed in 1973-1990
- ▶ 3,216 people were murdered or “disappeared” due to state-led repression and +30,000 people were tortured

Descriptive statistics

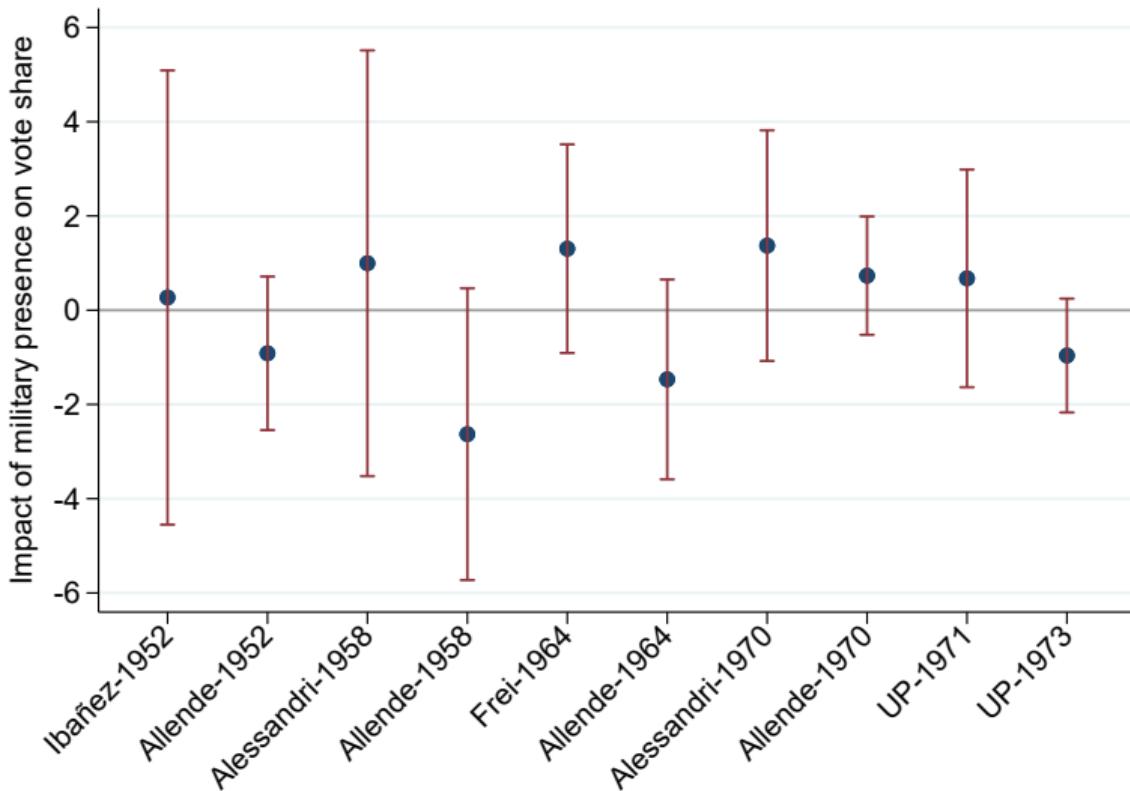
	Mean	
	Weighted	Unweighted
	(1)	(2)
Victims per 10,000 inhab.	2.31	1.38
Vote share NO in 1988	54.82	48.44
Registration in 1988	71.16	72.50
Indicator military base	0.30	0.12
Log distance to closest base	3.10	3.55
Counties	276	



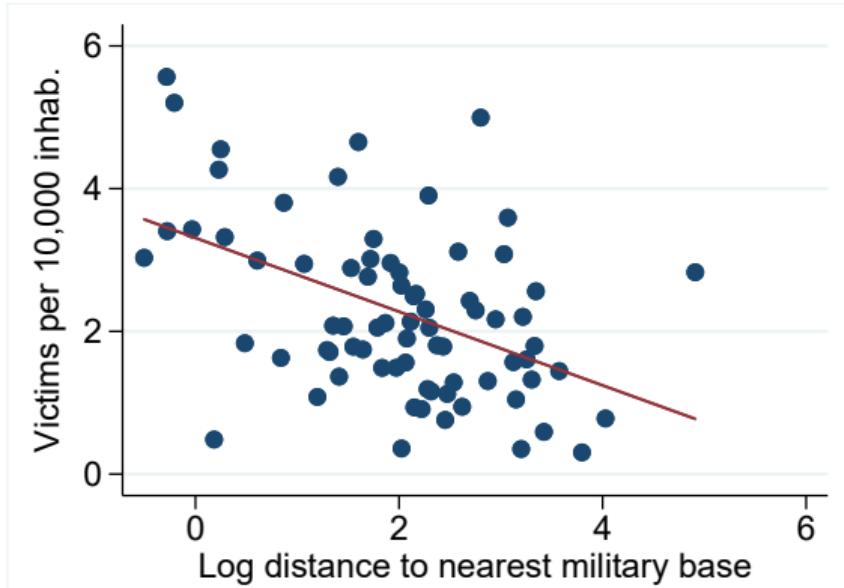
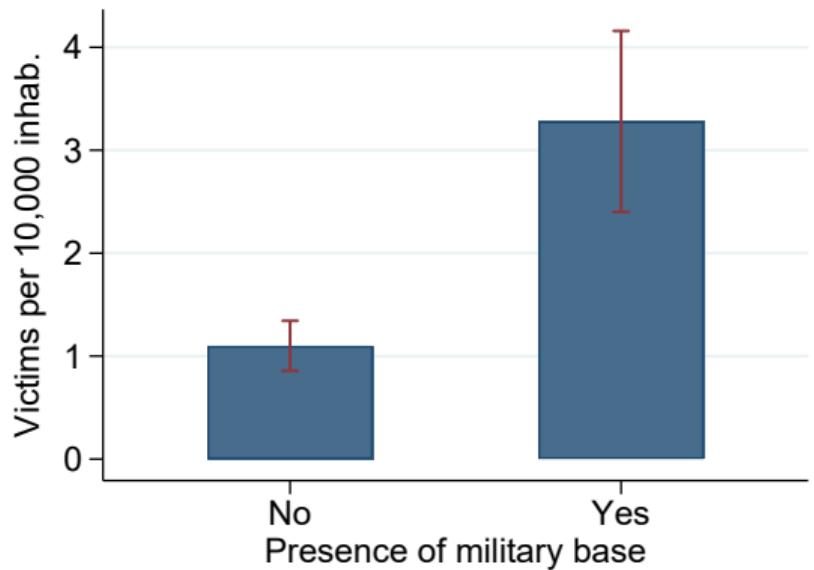
Pre-existing differences by military exposure



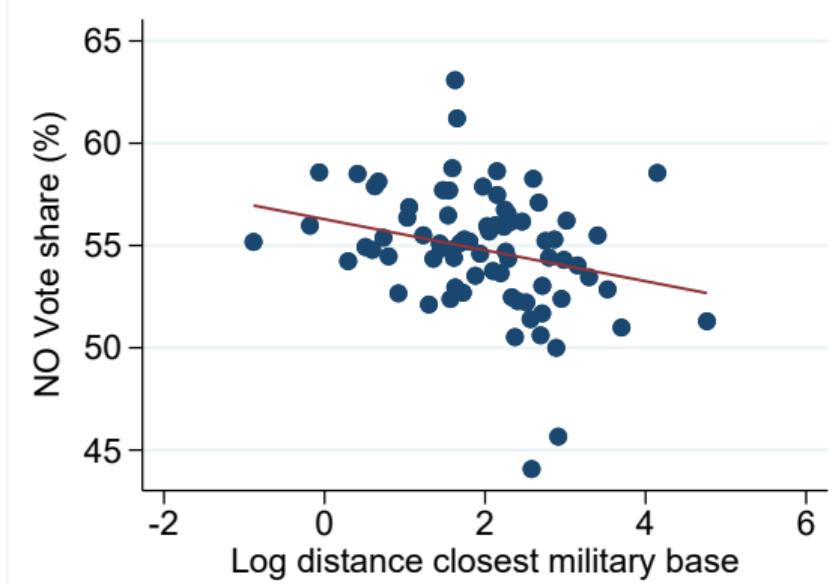
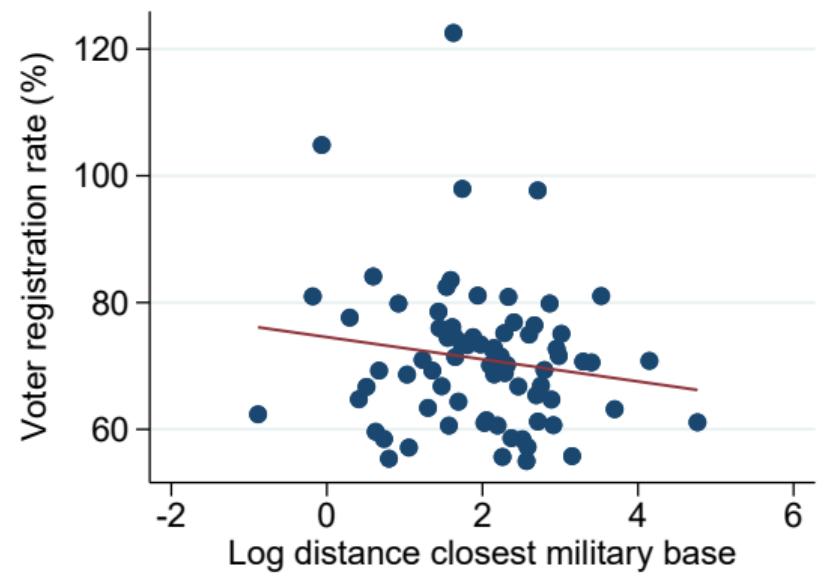
Military presence and national election before coup



Military bases increase repression



Distance to military bases and the 1988 plebiscite



Lecture 1: Installation

- State-led repression
- Higher education
- Constitution

Dictatorship and higher education

González, Martínez, Muñoz, Prem (2023)

- ▶ Education has crucial role as ‘the great equalizer’ and higher education is particularly important for social mobility
- ▶ Higher education represents a trade-off from the point of view of dictators: productivity and political threat
- ▶ The dictator can expand or contract the higher education system to obtain payoff:

$$\Pi(c) \equiv p(c) \cdot \tau Y(c)$$



Higher education before 1973

- ▶ Eight universities (two public)
 - gov. transfers 77% of revenue in 1972
 - students: 40% female, 67% public
 - faculty: 33% full-time, 86% BA degree
- ▶ Large expansion in 1960-1973:
 - 25,000 students in 1960
 - 77,000 in 1970 and 146,000 in 1973
- ▶ 1967 reform: admissions exam (PAA) and matching algorithm to allocate seats using preferences and test scores



Higher education after the 1973 coup

- ▶ “[S]everal campuses and universities have become centers for Marxist indoctrination and propaganda... A large part of the extremist agitation and hate preaching that almost drove Chile down a tragic abyss, originated in these universities”
- ▶ Military rectors appointed in all universities two weeks after the coup
- ▶ Disruption of higher education: dismissals, arrests, torture, forced disappearances, unit shut-downs, censorship

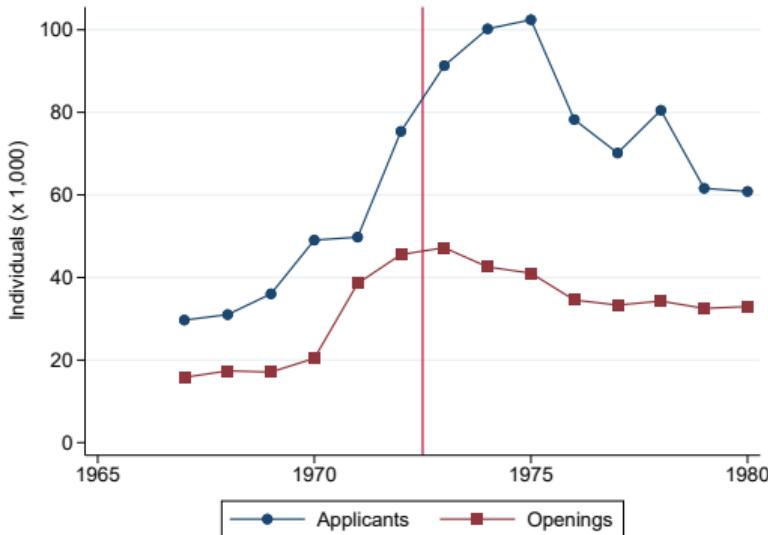
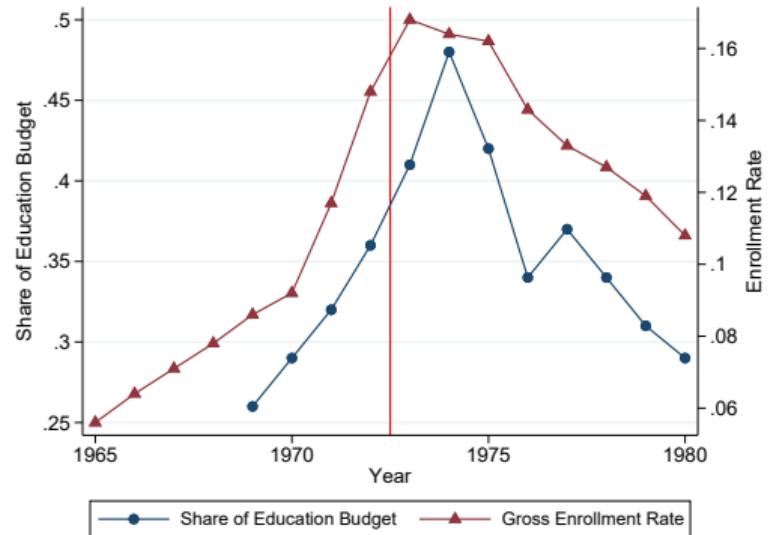


Market-friendly technocracy

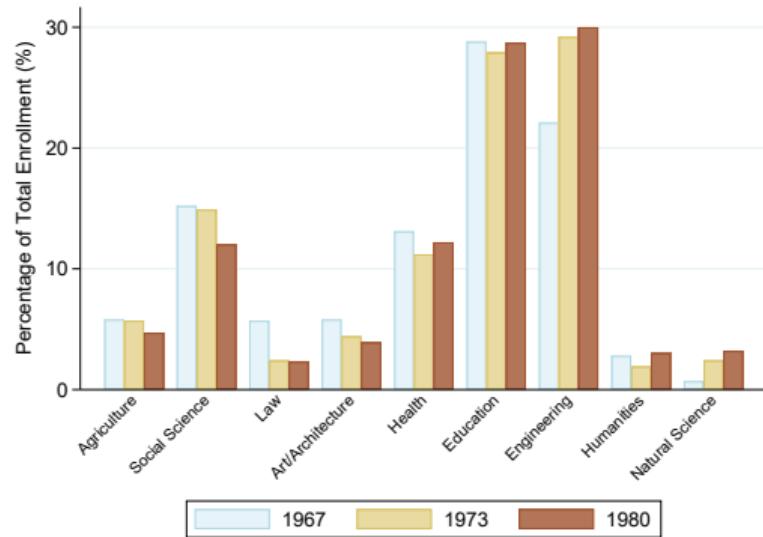
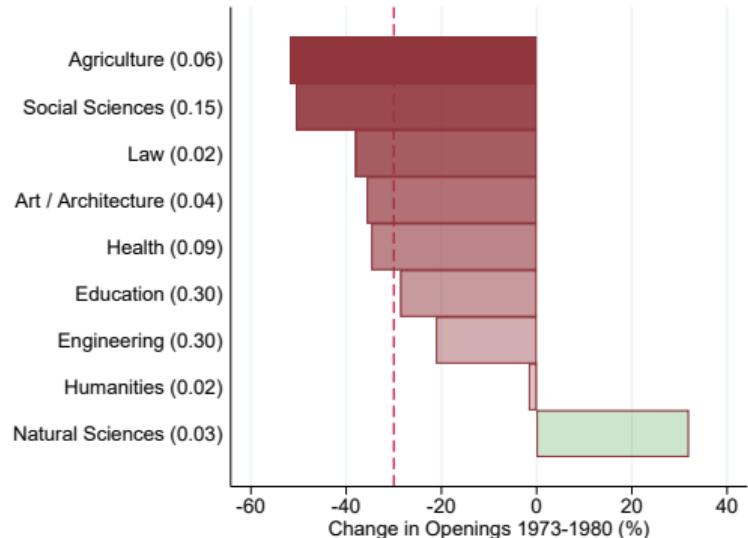
- ▶ The *Chicago Boys* gain growing influence over policy after 1974:
 - subsidies fail to incentivize effort
 - public funds → lower levels of education
 - higher ed: selective and based on merit
- ▶ “the mediocrity that prevails in higher education... [is] a source of frustration for students, who become a breeding ground for political agitation”
- ▶ “the regime’s penchant for political control meshed conveniently with its penchant for economic conservatism”



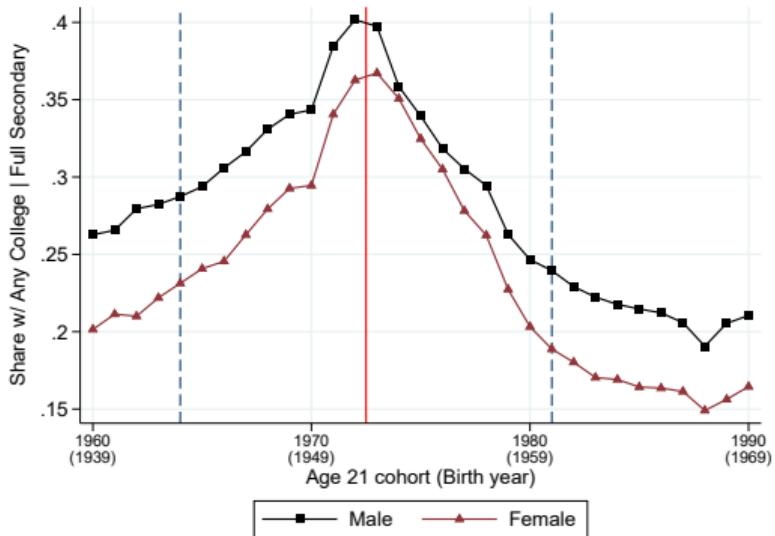
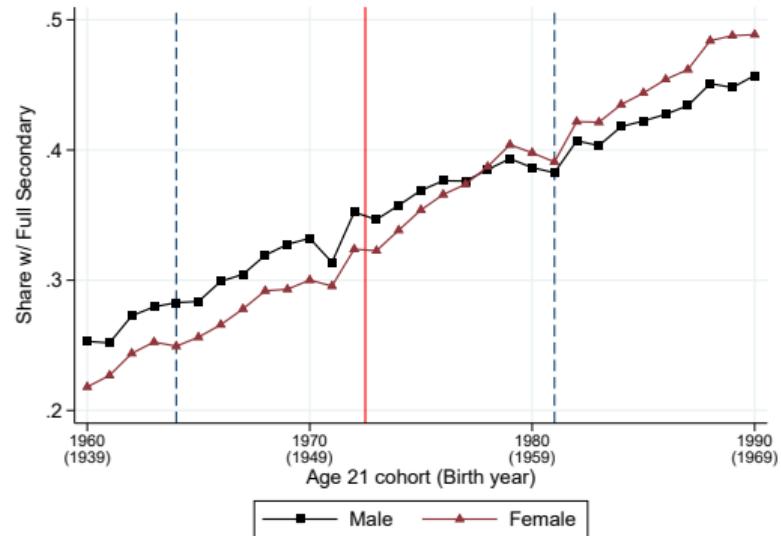
Universities downscale



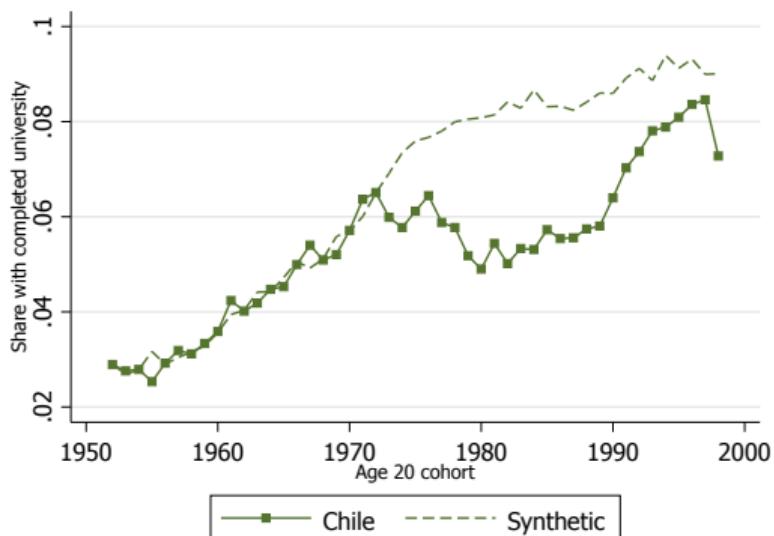
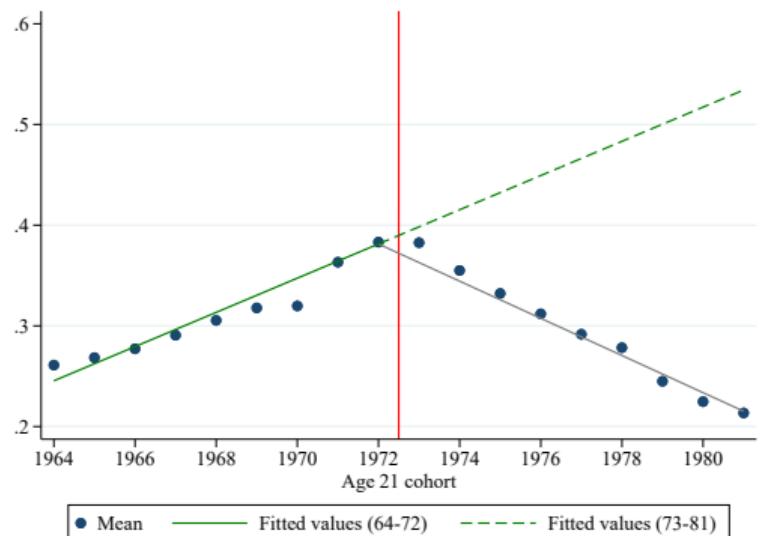
Changes by field



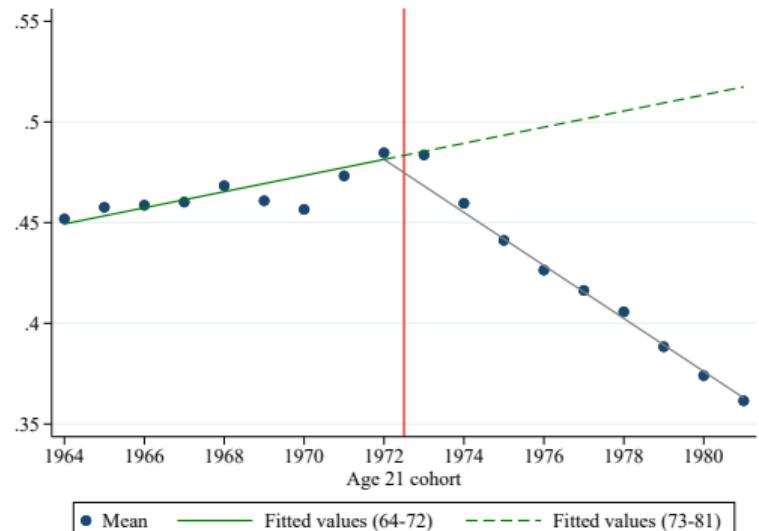
Education in the 1992 census



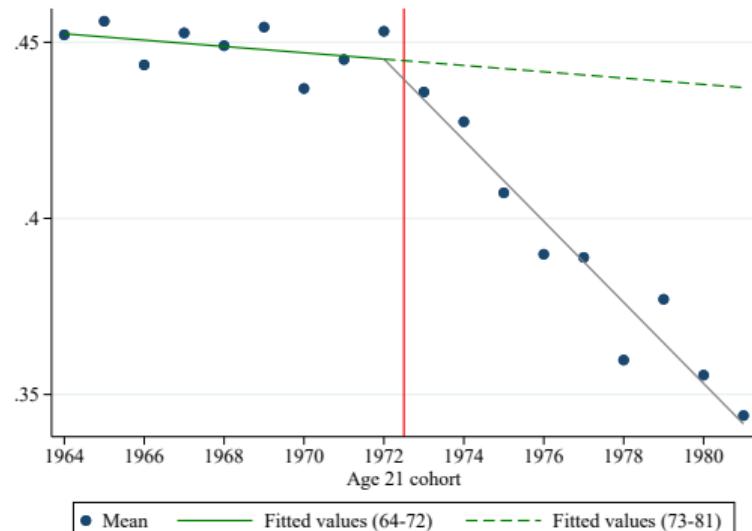
Changes in college enrollment



Share of professional occupations

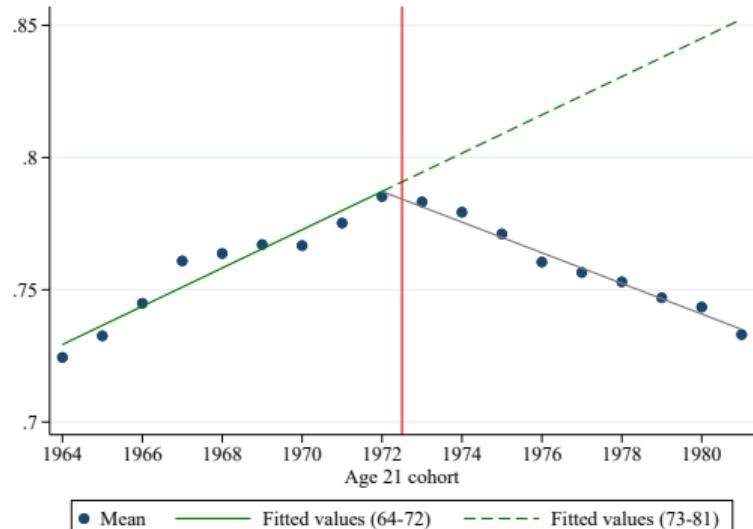


(a) Census

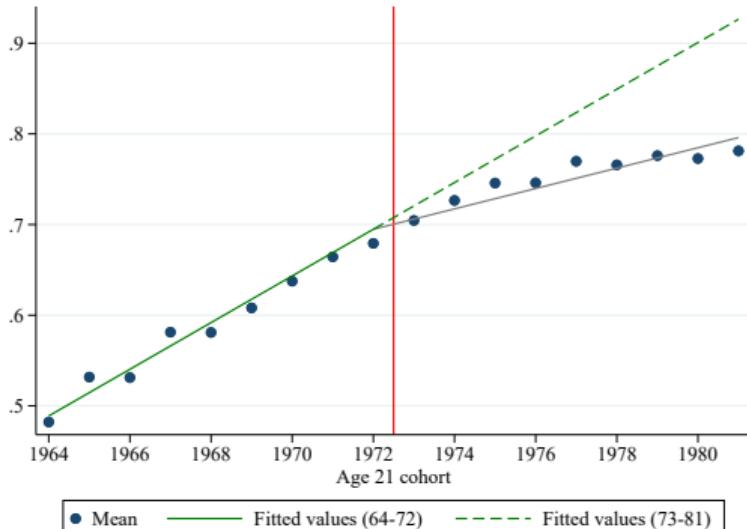


(b) CASEN

Labor force participation

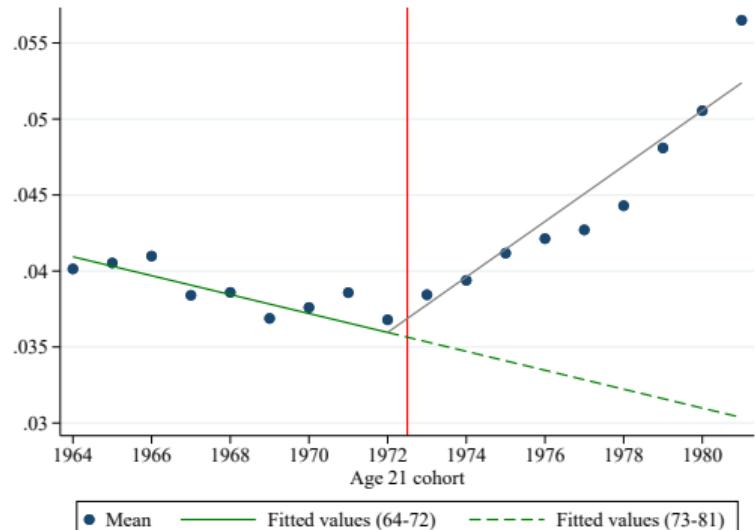


(a) Census

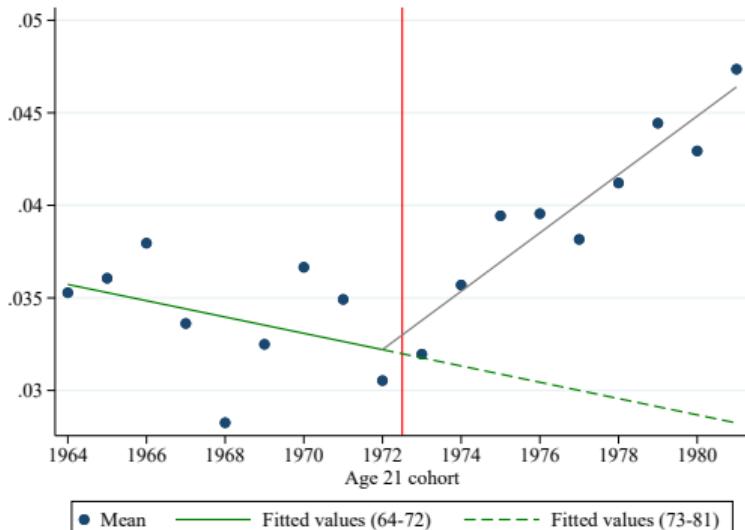


(b) CASEN

Unemployment

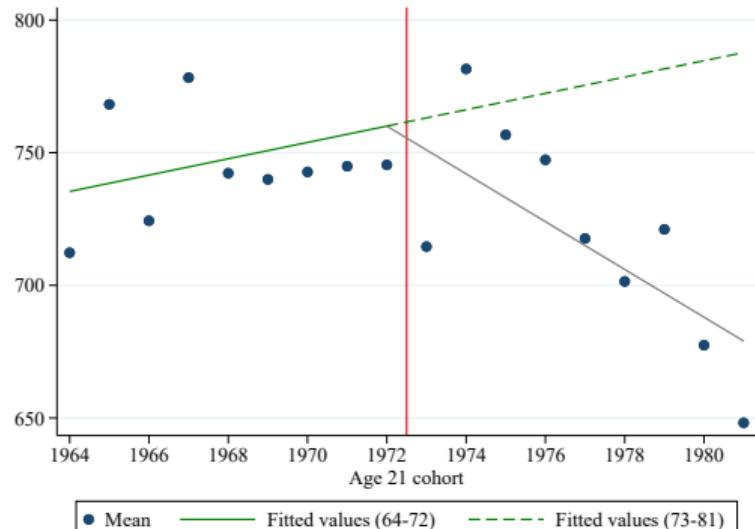


(a) Census

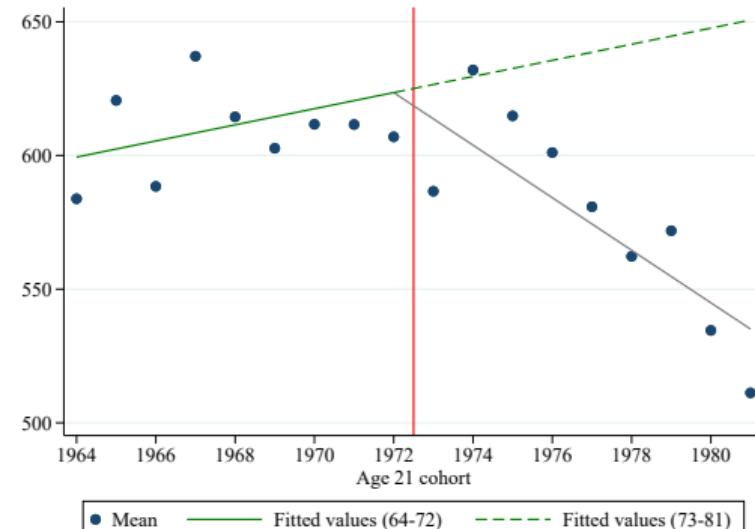


(b) CASEN

Self-reported income

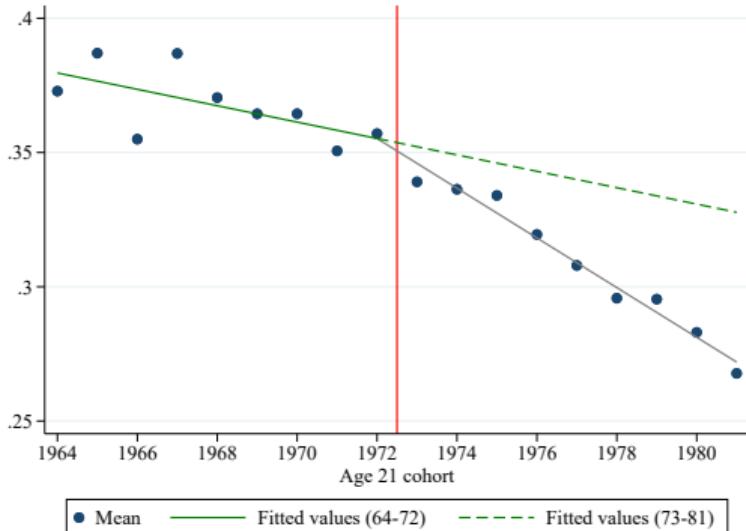


(a) Self-generated

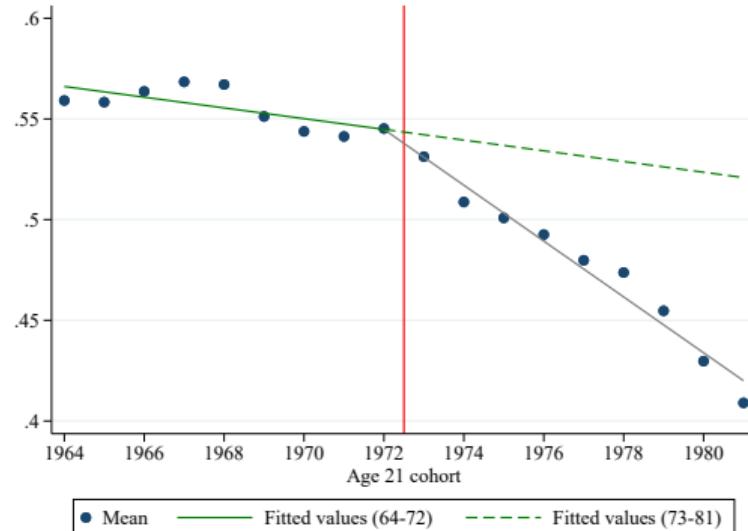


(b) Total

Top quintile

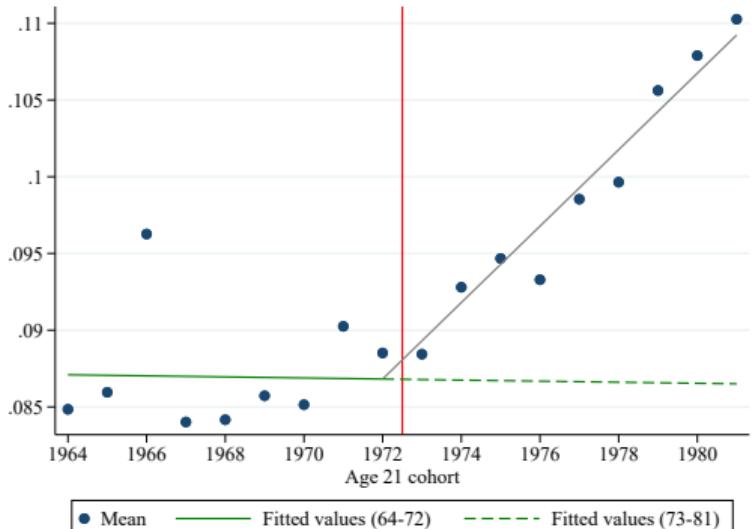


(a) CASEN

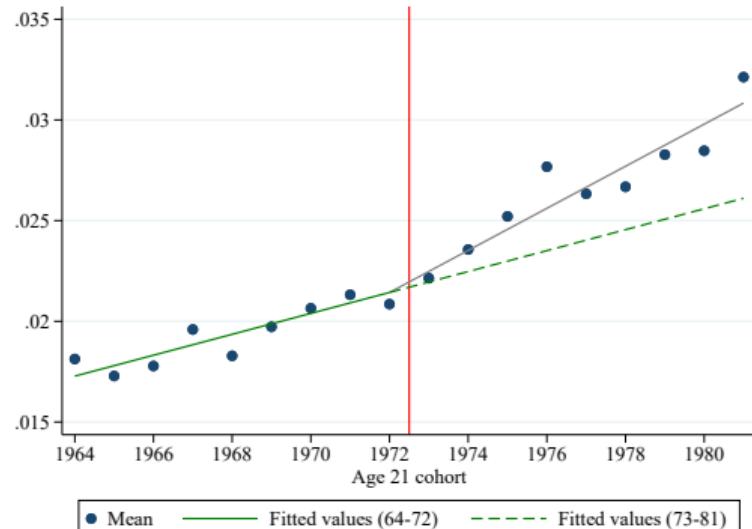


(b) Census

Bottom quintile

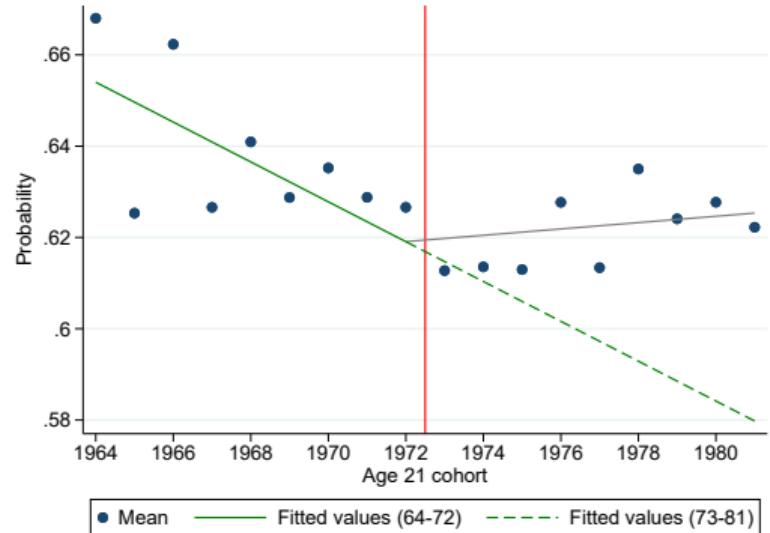


(a) CASEN

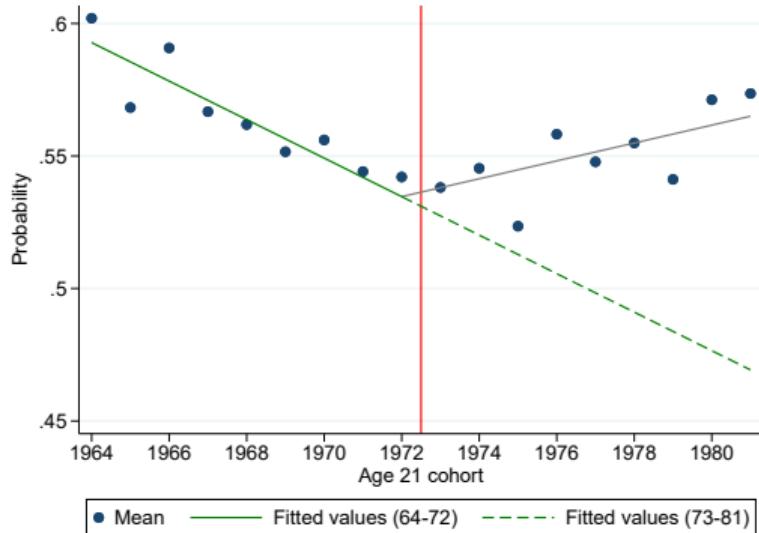


(b) Census

Public health insurance

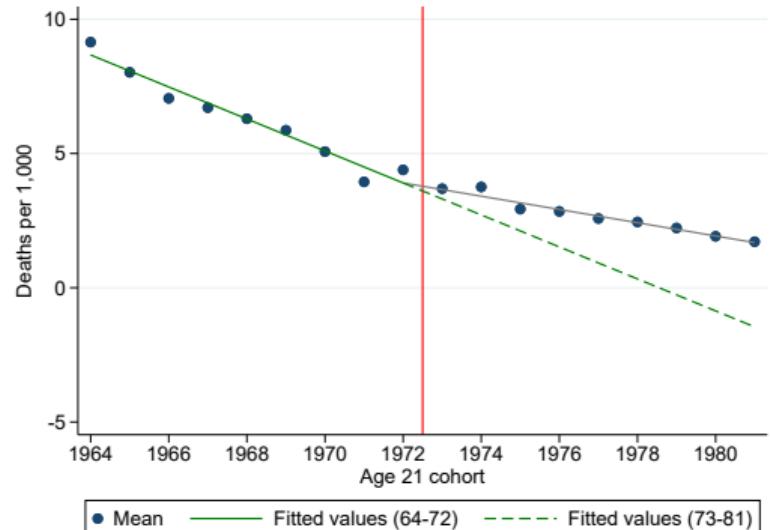


(a) Women

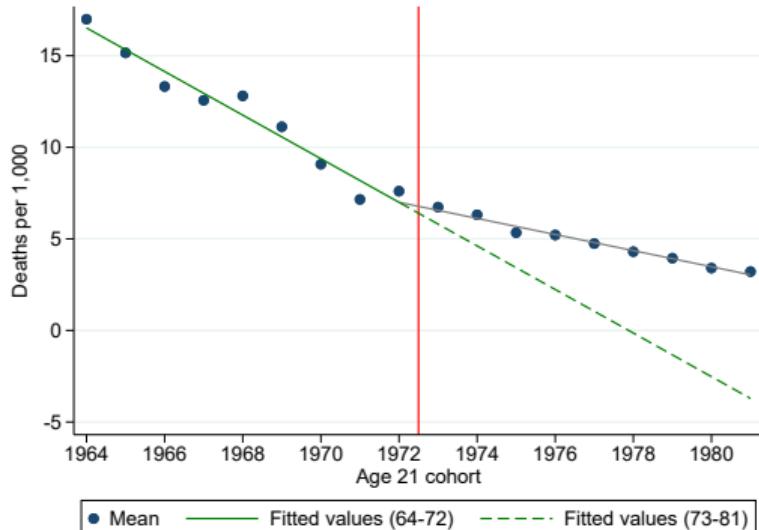


(b) Men

Long-run mortality effects



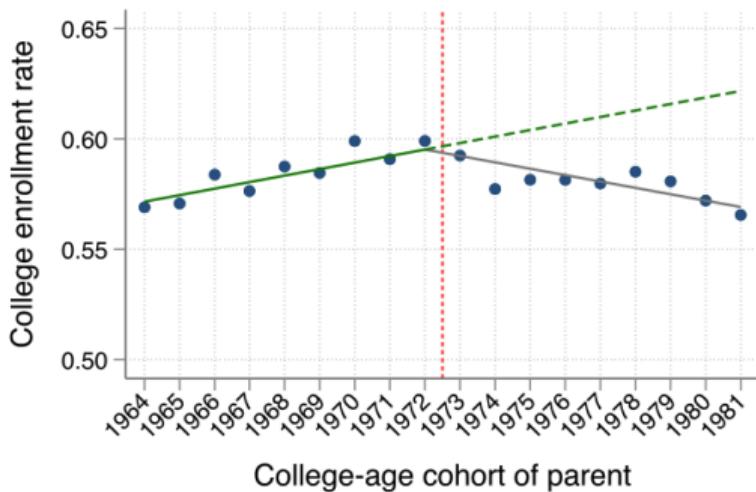
(a) Women



(b) Men

Intergenerational effects

- ▶ Focus on 57-74 individuals in the 2017 census (sample selection)
- ▶ Detect parent-child pairs where the child is 25-40 years old
- ▶ Evidence for explanations:
 - income effects on parents
 - assortative matching
 - fertility



Lecture 1: Installation

- State-led repression
- Higher education
- Constitution

Constitution

Cordero, Mascareño, Henríquez, Ruz (2022)

- ▶ The 1980 Constitution is one of the most politically contentious and socially pervasive objects in Chilean history
- ▶ After 1990, elites obstructed substantive constitutional modifications: supermajority quorum required (3/5 of Parliament)
- ▶ New democracy grounded upon the value of authority, the protection of personal freedom, and autonomy of markets and private property



Comisión Ortúzar

- ▶ Comisión Ortúzar appointed by the Military Junta right after the coup with the task of drafting the new Constitution
- ▶ Eight prominent legal scholars and politicians who met for the first time on 24 September 1973 (Catholic, anti-Marxist)
- ▶ The process of drafting the new Constitution extended during 417 sessions until 5 October 1978



Four moments of the writing process

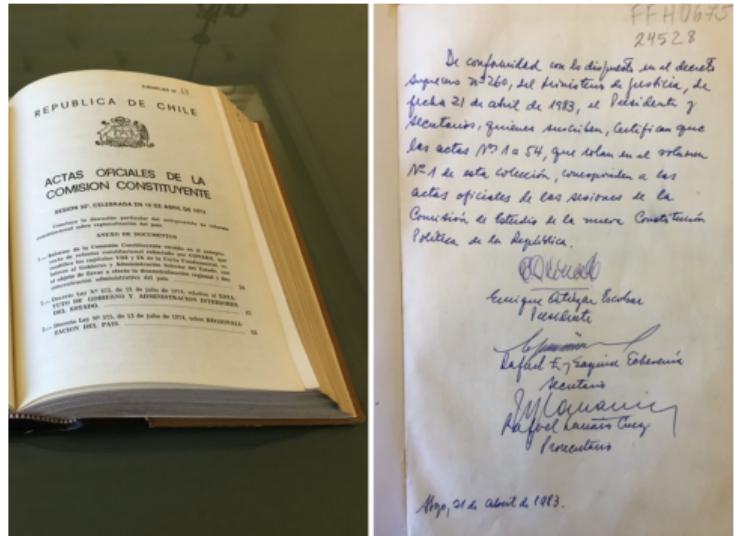
1. Initial planning and conceptual elaboration
(Sept 1973 - April 1974): 36 meetings
2. Discussion and drafting of initial chapters
(May 1974 - August 1976): 209 meetings
3. Limited progress and resignations
(September 1976 - May 1977): 50 meetings
4. Consolidation and completion of final draft
(June 1977 - October 5): 122 meetings



memoriachilena.cl

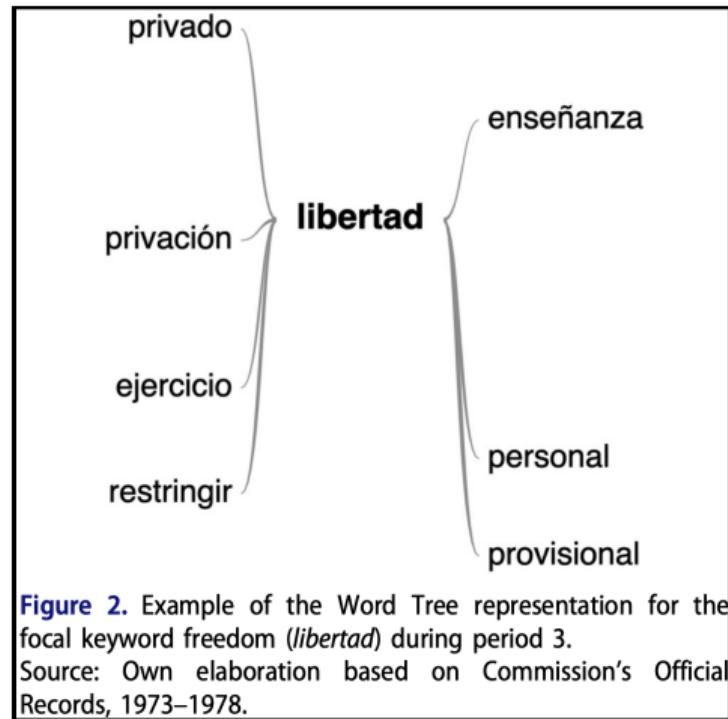
Data

- ▶ Constitution making: socially embedded practice of drawing conceptual boundaries
 - word patterns and spatial location
- ▶ Official records of the *Comisión Ortúzar* (1973-1978)
 - 11 volumes with 10,915 pages
- ▶ NLP for association of words:
 - spectral clustering
 - semantic bigram analysis.



Digital text analysis

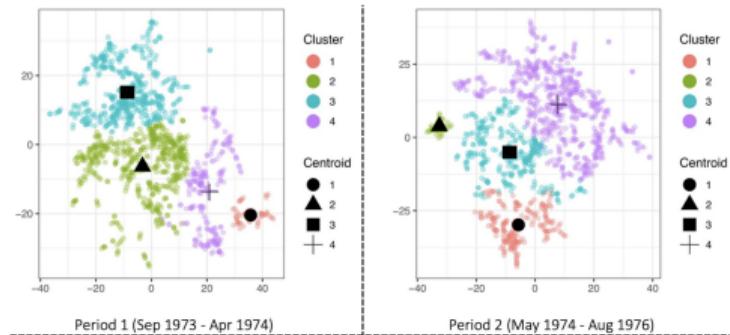
- ▶ Corpus (11 volumes, 417 meetings):
text file analyzed with R after cleaning
 - 80,005 words
 - divide corpus in four periods
 - rows: sentences; columns: words
- ▶ Spectral clustering
 - graph theory
 - groups of words
- ▶ Bigram
 - six key meaningful words
 - most frequent words before/after



Clustering

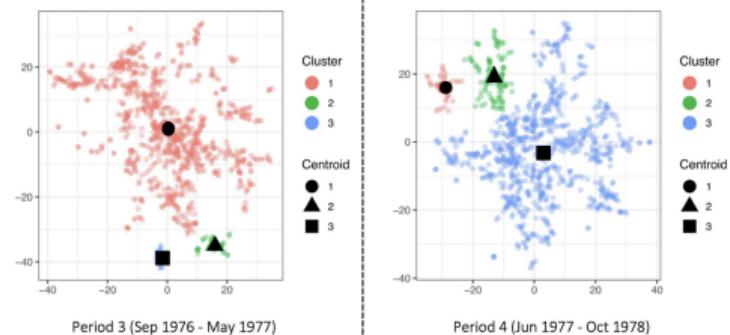
► Periods 1- 2: various topics

- examples: marxism, freedom, property rights



► Periods 3-4: final draft

- red: institutional design
- blue: constitutional interpretation and reform



Bigram analysis

Table 8. Most frequent words that occur before and after keyword “democracy” by period, 1973–1978.

Period 1 (Sep 1973–Apr 1974)		Period 2 (May 1974–Aug 1976)		Period 3 (Sep 1976–May 1977)		Period 4 (Jun 1977–Oct 1978)	
Before	After	Before	After	Before	After	Before	After
principios (14)	constitucional (27)	concepto (15)	representativa (23)	nueva (14)		nueva (29)	protegida (26)
concepto (9)	participación (9)	libertad (14)	libertad (15)				autoritaria (19)
	social (8)	derecho (12)	protegida (13)				
			liberal (11)				

Table 9. Most frequent words that occur before and after keyword “property” by period, 1973–1978.

Period 1 (Sep 1973–Apr 1974)		Period 2 (May 1974–Aug 1976)		Period 3 (Sep 1976–May 1977)		Period 4 (Jun 1977–Oct 1978)	
Before	After	Before	After	Before	After	Before	After
derecho (98)	agrícola (9)	derecho (1756)	minera (225)	derecho (464)	urbana (119)	derecho (115)	minera (24)
social (9)	medios (6)	social (99)	privada (142)	pequeña (184)	rústica (56)	social (8)	privada (8)
inmuebles (6)	minería (6)	privado (88)	derecho (124)	avalúo (8)	contesta (15)		
régimen (6)		distribución (60)	diversas (69)		agrícola (15)		
sistema (6)		disponer (49)	intelectual (69)		minera (13)		
		pequeña (42)	industrial (64)		problema (9)		
		constitución (39)	constitución (37)		concuerda (9)		
		accesible (35)	derechos (33)		proyecto (8)		
		acceso (34)	creaciones (33)				
			número (32)				
			familiar (31)				
			limitaciones (31)				