



# **ECONOMICS ELITE, POLITICAL REPRESENTATION AND TAXATION LEVEL: THE CASE OF CHILE**



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# THE CASE OF CHILE

- Chile is the 7<sup>th</sup> most unequal country in the world (World Bank, 2016).
- The Chilean government collects only 21% of GDP on taxes. Second lowest in the OECD.
- Wealth is concentrated: the wealthiest 1% of the population owns 33% of the income. Wealthiest 5% owns 51.5% of the income. (Martinez-Aguilar, Fuchs, Ortiz-Juarez, & Del Carmen, 2017; PNUD, 2017).



# THE CASE OF CHILE

- Chile has a conflicting history of political instability
- Every forty year the country has a major crisis (1851, 1891, 1931, 1973)
- And history is repeating...

Chile is today in a major crisis



# CHILE TODAY

The New York Times



A protest in Santiago, Chile, on Monday after a weekend of riots and clashes with soldiers and police that left 11 dead. Cristobal Olivares/Bloomberg, via Getty Images





# CHILE TODAY



# CHILE TODAY



- Main cities were militarized
- Demands for social services (retirement, education and health).
- Biggest protest in the history of the country (1.2m in Santiago + 1m in other cities)





# CHILE TODAY

- Protests are against benefits of the elite
- Collusion of private companies (supermarkets, pharmacies, and others)
- Corruption
- Transport prices



# CHILE TODAY



- General unrest in the Population
- 100+ Buses, 12 Subway stations Burned
- $\frac{1}{4}$  of all Supermarkets burned or sacked
- 20+ deaths, thousands injured
- 1000+ in detained or in jail



The New York Times

# Chile Learns the Price of Economic Inequality

Protesters are demanding a larger share of the nation's prosperity — a reality check for its celebrated economic model.

## By The Editorial Board

The editorial board is a group of opinion journalists whose views are informed by expertise, research, debate and certain longstanding values. It is separate from the newsroom.

Oct. 22, 2019





# THE CASE OF CHILE

- Economic Elite Capture in the context of highly unequal country
- Influence of Economic Elite on Taxes
  - The main source of State revenue
  - Vital for State building and provision of services
  - One of the most effective way to reduce economic inequality (OECD 2016)



# INTRODUCTION

- Political Elite Capture: the process of wealthy elites taking steps to influence regulatory and fiscal policies.
- Elite capture is linked to:
  - Monopolies
  - Import quotas
  - Rents extracted from mining profits
  - Reductions and restrictions on welfare programs
  - Privatization of State companies
  - Haiti, Ghana, Indonesia, and Russia (Alatas et al., 2019; Appel, 2004; Singh & Barton-Dock, 2015; Standing & Hilson, 2013).



# INTRODUCTION

- The political dominance of landed or rural elites is related to:
  - rural labor oppression,
  - voter suppression,
  - slow emergence of democracy,
  - The return to authoritarian governments in Latin American countries (Acemoglu & Robinson, 2005, 2008; Albertus, 2017; Baland & Robinson, 2008).
- Intra-elite conflict has been associated with changes in taxation policy (Beramendi et al., 2018; Mares & Queralt, 2015)



# EMPIRICAL CHALLENGES OF CAPTURE

- Capture is hard to detect (Carpenter, 2004)
- Capture is intangible (Dutta, 2009),
  - corruption, lobby, or direct influence
- Mares & Queralt (2015) and Fresh (2016) use the direct identification of politicians.
- “Politicians whose interests were tied to owners of fixed assets were more willing to support their policies”. Mares & Queralt (2015)



# TWO THEORETICAL MODELS:

I will test/review two complementary theoretical models.

- Intra-elite competition: Beramendi et al. (2018)
- De Facto Power of the Elites: Acemoglu & Robinson (2006)





# TWO THEORETICAL MODELS: INTRA-ELITE CONFLICT

- Landowner elites and Industrials elites historically in conflict.
- In late industrializing countries the economic elites will unite and foster incentives to reduce, or control the taxation. Beramendi et al. (2018)
- Beramendi and company argue that indirect taxes are the reason of coordination..
- Use proxy of political exclusion and participation variables to detect economic elites.
- This paper will review this theory using a direct identification of wealthy firm and landowners and associate their representation in congress to the tax level.



# TWO THEORETICAL MODELS: *DE FACTO* POWER AND INSTITUTIONS

- Elites with power will affect institutions. Acemoglu & Robinson (2006),
- The income distribution and resources define the allocation of *de facto* power (money, influence, armed forces, or others).
- Groups with *de facto* power have incentives to change or modify institutions to maintain or increase their power.
- This generates new institutions, that define future economic distribution



## TWO THEORETICAL MODELS

- If a group of the population has sufficient *de facto* power, they will invest in political and economic institutions favorable for them. Acemoglu and Robinson (2006)
- This paper tests if shock in *de facto* power affects the influence elites: Price shocks and institutional shocks.
- This will be used to re-test the theory of Beramendi et al.



## DATA: THE POLITICAL ELITE

Can we identify the Economic Elite in a country?

- The book *Chilean Rural Society* showed that between 1854 and 1918, around 50% of all Chilean legislators were large landowners (Bauer, 1975).
- In the mid-1960s, over 60% of the landowning class in Chile was related to the business elite in the mid-1960s (Zeitlin & Ratcliff, 1988a).
- Strategy: Direct identification of Economic Elite members in Congress and Government.



# DATA: THE POLITICAL ELITE

- Data: Biographies National Congress, Biographic Dictionaries etc. Congress and Secretaries of state between (1891-1973).
- (2500+ Bio, 4000 seats, 98%)
- Methodology: Two RAs code the biography, a third double checks differences.

Biblioteca del Congreso Nacional de Chile / BCN | Historia Política

BCN - Ley Chile - Observatorio - Información Territorial - Historia Política - Formación Cívica - Q - E

Portada / Reseñas biográficas parlamentarias / Reseña Biográfica Jorge Alessandri Rodríguez



## Jorge Alessandri Rodríguez

### Reseñas Biográficas

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Jorge Alessandri (Santiago, 19 de mayo de 1896 – Santiago, 31 de agosto de 1986). Ingeniero, dirigente empresarial y político. Presidente de la República entre el 4 de noviembre de 1958 y el 4 de noviembre de 1964. Senador en el período 1957-1965 por la Cuarta Agrupación Provincial "Santiago", y diputado en el período 1926-1930 por la Séptima Circunscripción Departamental "Santiago". Fue ministro de Estado durante la presidencia de Gabriel González Videla.

### Reseña biográfica

#### Familia y Juventud

Nació el 19 de mayo de 1896 en Santiago. Fue el segundo hijo del matrimonio conformado por Arturo Alessandri Palma, dos veces presidente de Chile y Rosa Ester Rodríguez Velasco.

#### Estudios y Vida Laboral

Cursó su enseñanza en el Instituto Nacional. Terminada su educación secundaria, ingresó a la Escuela de Ingeniería de la Universidad de Chile, desde donde egresó en 1919 como ingeniero civil.

Colabore con fotografías o documentos - Envíenos sus correcciones - Políticas de elaboración de reseñas

Trayectoria Parlamentaria
Senador 1957-1965
Cuarta Agrupación Provincial "Santiago" Independiente
Elaborado: 1976, 1978





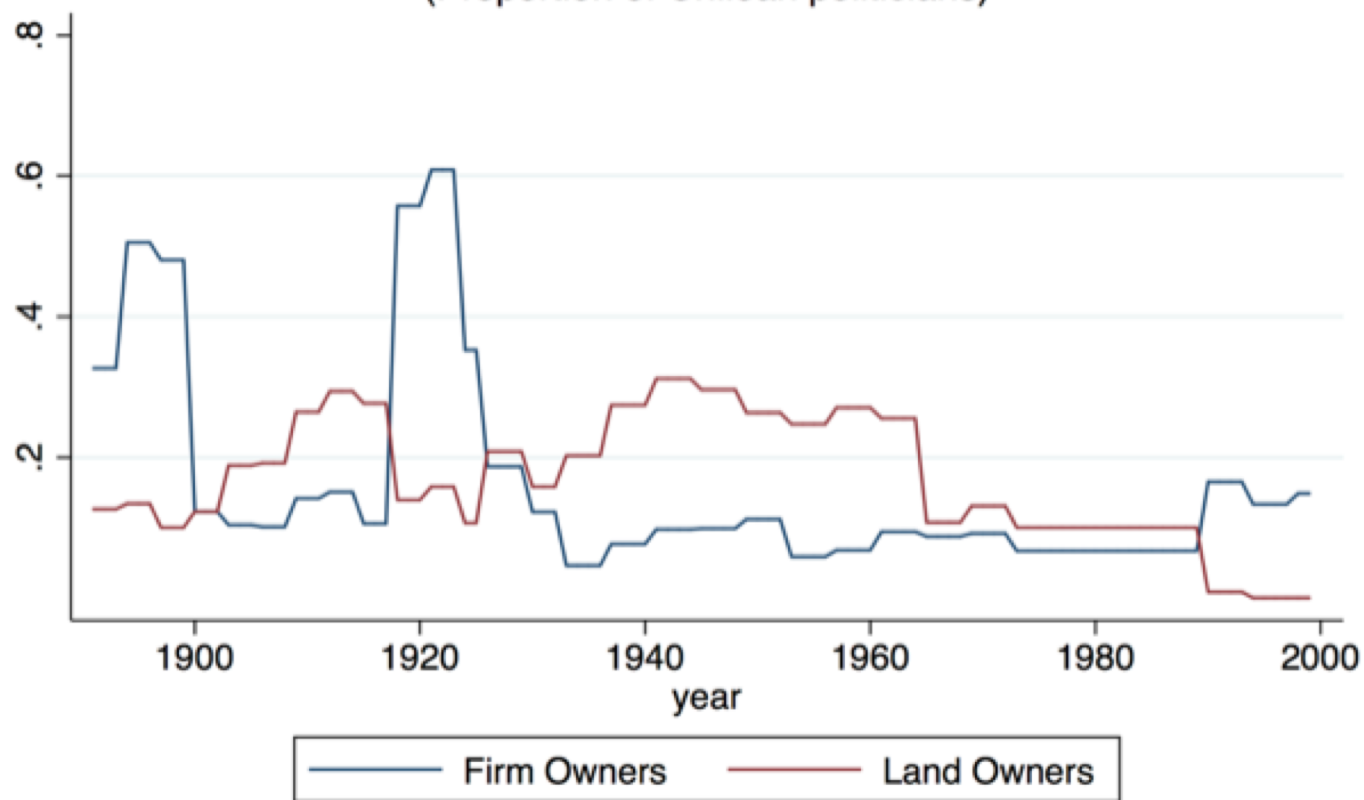
## DATA: THE POLITICAL ELITE

- Data: Biographies National Congress, Biographic Dictionaries etc. Congress and secretaries of state between (1891-1973).
- (2500+ Bio, 4000 seats, 98%)
- Methodology: Two RAs code the biography, a third double checks differences.
- Land-owners: owners of big farms (over 500 hectares)
- Firm owners: owners of mines, newspapers, factories, industries, etc.



# DESCRIPTIVE RESULTS

Firm and Land Owners - Congressmen  
(Proportion of Chilean politicians)



Author's own work



# DESCRIPTIVE RESULTS

A proxy for upper-class: Private Education

- In many countries the economic elite attends private high schools and Universities.

“the school, rather than the upper-class family – is the most important agency for transmitting the tradition of the upper classes, regulating the admission of new wealth and talent”

(Mills, 1956).

- Similar to England and USA, upper classes in Chile tend to attend private high schools and elite Universities.

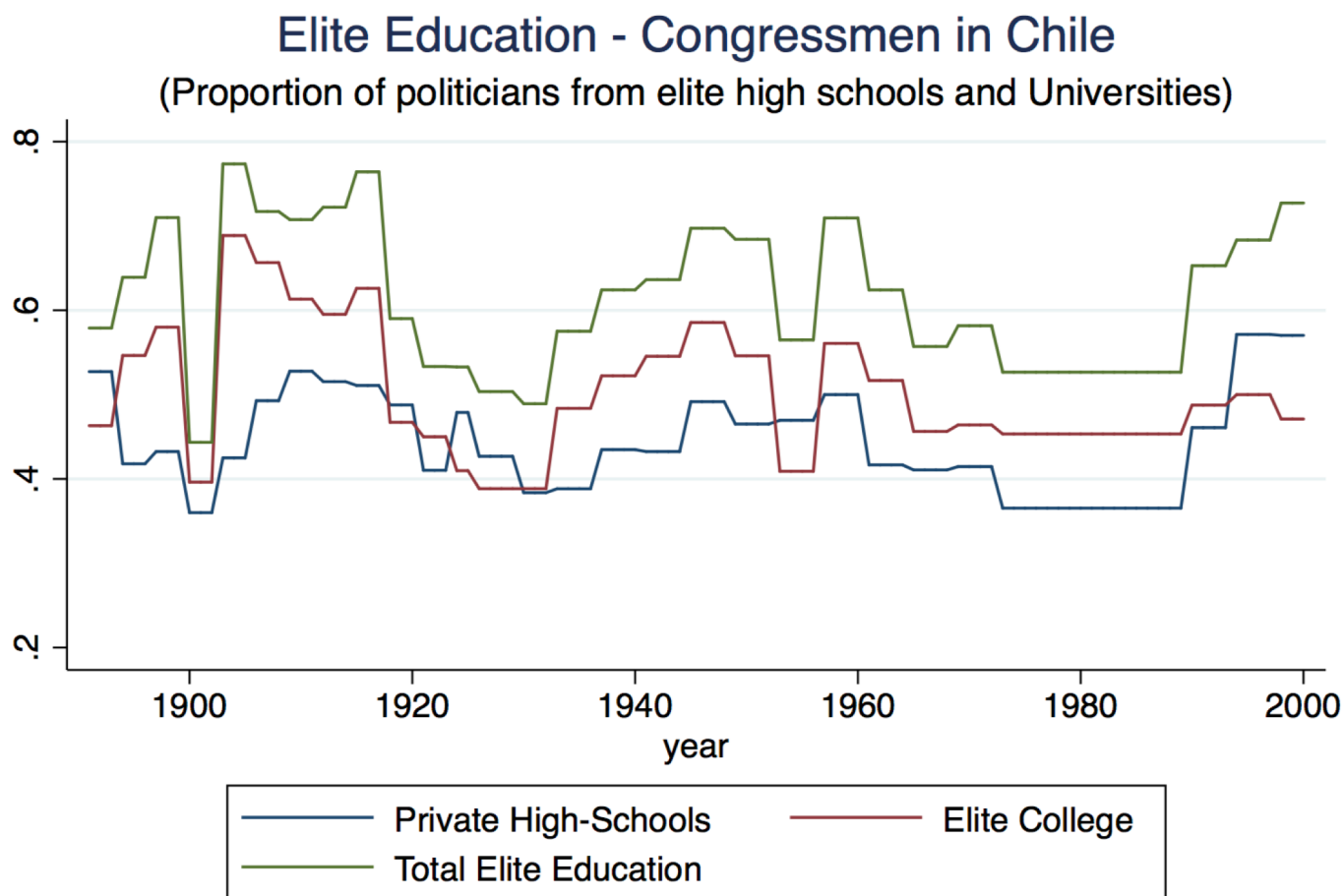


# ELITE SCHOOLS IN BUSINESS AND POLITICS

- In 1954, in the first cabinet of President Jorge Alessandri, 81% of his secretaries of state attended private high schools; of these, one half came from just three private high schools.
- Using data from Zeitlin & Ratcliff. analyze bank CEOs in 1960; of these, 54% attended private school and 23% went to the same three high schools.
- In 2010, 86 %of the secretaries of state of President Sebastian Piñera. 50% attended the four private schools.
- An analysis of the top 100 Chilean companies by market capitalization, reported by a Chilean newspaper, revealed that 86% of their CEOs attended private schools; and 50% of them attended the same high schools (La Tercera 2012)



# DESCRIPTIVE RESULTS



Author's own work: Elite College: University of Chile and Catholic University





## DATA: THE POLITICAL ELITE

- Coded Biographies: Congress and secretaries of state (1891-1973).
- Taxation level and Direct Tax Share: Beramendi et al. (2018)
- GDP, Industrial production and other controls from World Bank.
- International Commodity Prices (Source EH Clio Lab PUC)



# METHODOLOGY

## **Coordinated Elite**

- Methodology: OLS: explain Taxes using the proportion of wealthy landowners and firm owners in congress, following Beramendi et al., (2018)

## ***De Facto Power***

- Methodology: IV.

International Prices of commodities that disproportionately affect landowners and firms owners

- Methodology: Structural Shock

The 1958 electoral reform introduced secret ballot, reducing the patronage in rural areas (Baland & Robison 2008)



# METHODOLOGY

- Methodology: OLS

$$\begin{aligned} \text{Tax to GDP}_t &= \beta_0 + \beta_1 \text{Land Owners}_t + \beta_2 \text{Firm Owners}_t + \beta_3 \text{GDP}_t \\ &+ \beta_4 \text{Tax to GDP}_{t-1} + \text{others} + \epsilon_t \end{aligned}$$

$$\begin{aligned} \text{Tax to GDP}_t &= \beta_0 + \beta_1 [\text{Land Owners}_t + \text{Firm Owners}_t] + \beta_2 \text{GDP}_t \\ &+ \beta_3 \text{Tax to GDP}_{t-1} + \text{others} + \epsilon_t \end{aligned}$$



# METHODOLOGY

- Methodology: IV
  - Use of external price shocks that disproportionately affect the economic elite, but should have a smaller impact on the Economy.
  - International Prices of Wheat, Copper & Salpeter



# METHODOLOGY

- Methodology: IV

- Stage I:

$$\begin{aligned} \text{Land Owners}_t = & \beta_0 + \beta_1 \text{Land Owners}_{t-1} + \beta_2 \text{Wheat Prices}_t + \beta_3 \text{GDP}_t \\ & + \text{others} + \epsilon_t \end{aligned}$$

- Stage II:

$$\begin{aligned} \text{Tax to GDP}_t = & \beta_0 + \beta_1 \widehat{\text{Land Owners}}_t + \beta_3 \text{GDP}_t \\ & + \beta_4 \text{Tax to GDP}_{t-1} + \text{others} + \epsilon_t \end{aligned}$$



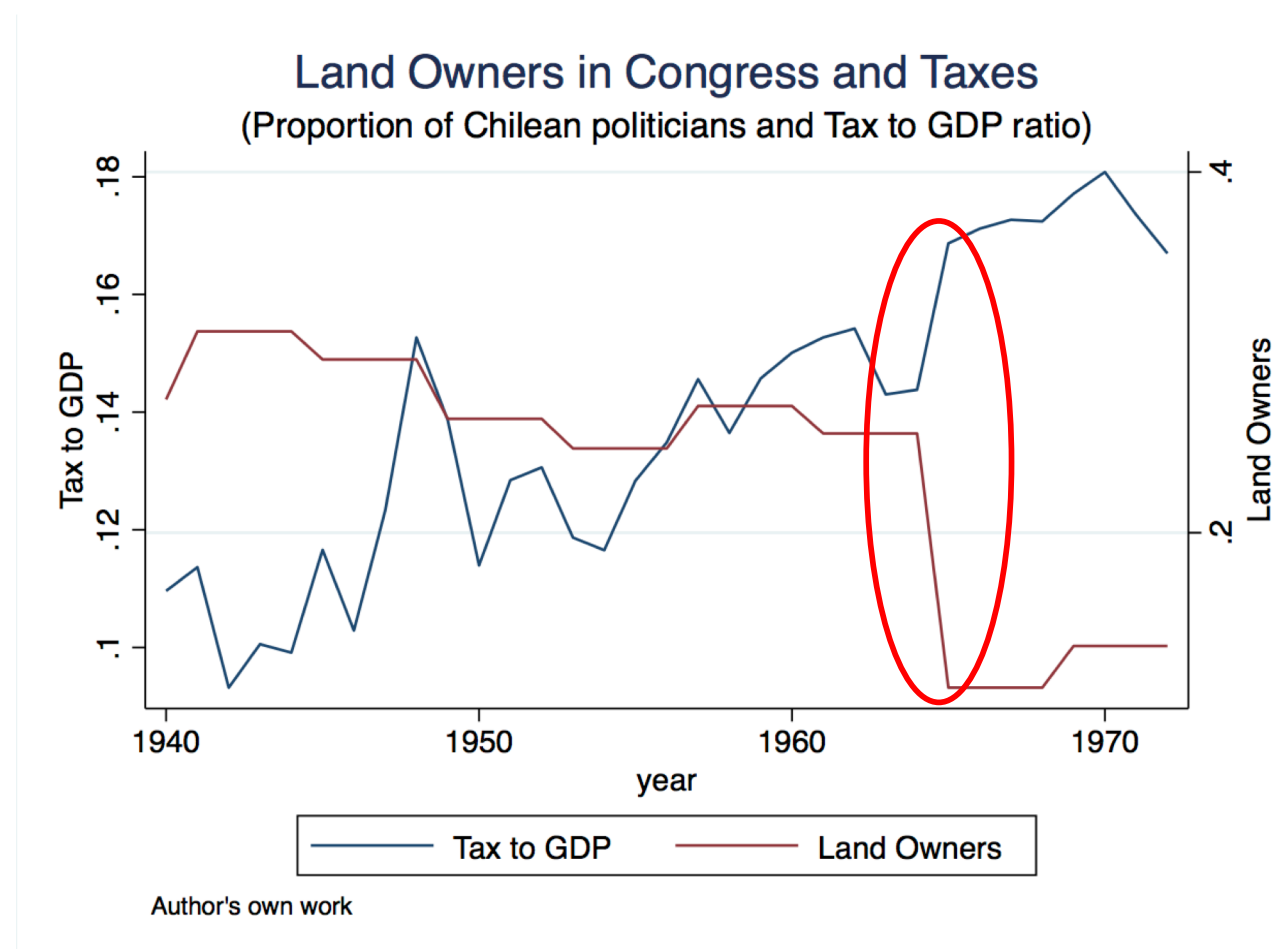
# METHODOLOGY

- Methodology: Policy Shock
- 1958 Electoral reform that implemented the secret ballot.
- This policy significantly reduced electoral patronage.
- Reduced votes in rural areas for right wing parties, traditionally associated with the landed oligarchy (Baland & Robinson, 2008)



# METHODOLOGY

- Methodology: Policy Shock



$$Tax\ to\ GDP_t = \beta_0 + \beta_1 SHOCK\ 1965 + \beta_3 GDP_t + \beta_4 Tax\ to\ GDP_{t-1} + others + \epsilon_t$$

# RESULTS: OLS TAX TO GDP

TABLE 1  
OLS REGRESSIONS(1890-1973)

	taxgdp	taxgdp	taxgdp	taxgdp	taxgdp	taxgdp
Elite School Secretaries	-0.00220 (0.00638)					
Ingdppc_lag	0.0353*** (0.0117)	0.0370*** (0.0113)	0.0354*** (0.0109)	0.0402** (0.0176)	0.0407*** (0.0112)	0.0383*** (0.0111)
leftgov_lag	-0.00488 (0.00391)	-0.00356 (0.00354)	-0.00495 (0.00348)	-0.00237 (0.00319)	-0.00264 (0.00350)	-0.00431 (0.00349)
directtaxshare_lag	0.0425** (0.0198)	0.0378* (0.0199)	0.0540*** (0.0197)	0.0374* (0.0220)	0.0368* (0.0188)	0.0403** (0.0195)
taxgdp_lag	0.593*** (0.0946)	0.580*** (0.0943)	0.577*** (0.0930)	0.497*** (0.131)	0.495*** (0.104)	0.520*** (0.0967)
Elite School MPs		-0.0339 (0.0331)				-0.104** (0.0467)
Elite College MPs			0.0267 (0.0179)			
Landowners MPs				-0.0435* (0.0251)		
Firm MPs				-0.0344 (0.0210)		
Land + Firm					-0.0377** (0.0184)	
Elite School and College						0.0978** (0.0469)
Constant	-0.243*** (0.0844)	-0.240*** (0.0796)	-0.258*** (0.0805)	-0.258** (0.126)	-0.262*** (0.0790)	(0.0469)
Observations	82	82	82	82	82	82
R-squared	0.877	0.878	0.880	0.883	0.883	0.885





# RESULTS: OLS DIRECT TAX SHARE

- No significant results.



# RESULTS: IV



# RESULTS: IV: FIRST STAGE

TABLE 2						
FIRST STAGE REGRESSIONS						
VARIABLES	Elite Secretaries	Elite School MPs	Elite College MPs	Firm MPs	Land MPs	Land +Firm MPs
Elite School MPs Lag		0.327*** (0.0685)				
Agriculture GDP		0.0416*** (0.0133)	0.0545*** (0.0186)	-0.0208 (0.0143)	0.00763 (0.00954)	-0.0141 (0.0178)
Manufacture GDP	0.0145 (0.0404)	7.39e-05 (0.0110)	0.00915 (0.0165)	0.0200* (0.0116)	0.00601 (0.00793)	0.0257* (0.0144)
Wheat price	0.0133* (0.00691)	0.00673*** (0.00180)	0.00469* (0.00266)	0.00536*** (0.00199)	0.00246* (0.00137)	0.00907*** (0.00266)
Copper price	3.81e-06 (3.71e-06)	-7.02e-07 (8.93e-07)	3.81e-07 (1.33e-06)	-9.94e-07 (9.46e-07)	-2.58e-06*** (7.22e-07)	-3.96e-06*** (1.27e-06)
Elite Secretaries Lag	0.791*** (0.0667)					
Elite Colle MPs Lag			0.585*** (0.0659)			
Firm MPs Lag				0.800*** (0.0598)		
Land MPs Lag					0.765*** (0.0652)	
Land+Firm Lag						0.721*** (0.0662)
Constant	-0.112 (0.0848)	0.206*** (0.0403)	0.0998** (0.0450)	-0.00905 (0.0271)	0.0505** (0.0226)	0.0572 (0.0385)
Observations	82	83	83	82	82	82
R-squared	0.724	0.395	0.575	0.759	0.798	0.775



# RESULTS: IV: SECOND STAGE

TABLE 3						
Second Stage Regressions						
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	taxgdp	taxgdp	taxgdp	taxgdp	taxgdp	Taxgdp
Elite Secretaries	-0.00146 (0.00886)					
execrecruit_lag	-0.0228 (0.0432)	-0.000288 (0.0446)	-0.0429 (0.0498)	-0.0458 (0.0435)	0.0277 (0.0537)	-0.00940 (0.0410)
polcontest_lag	0.254 (0.461)	0.0128 (0.482)	0.478 (0.526)	0.505 (0.462)	-0.309 (0.579)	0.101 (0.434)
lngdppc_lag	0.0254 (0.0176)	0.0354 (0.0223)	0.0272 (0.0175)	0.0281 (0.0173)	0.0366*** (0.0193)	0.0365*** (0.0180)
leftgov_lag	-0.00419 (0.00424)	-0.00341 (0.00381)	-0.00474 (0.00353)	-0.00361 (0.00345)	-0.00144 (0.00390)	-0.00184 (0.00358)
directtaxshare_lag	0.0449 (0.0348)	0.0322 (0.0344)	0.0616 (0.0387)	0.0411 (0.0326)	0.0402 (0.0335)	0.0363 (0.0328)
taxgdp_lag	0.644*** (0.104)	0.573*** (0.110)	0.600*** (0.0991)	0.576*** (0.109)	0.556*** (0.120)	0.509*** (0.122)
Elite School MPs		-0.0428 (0.0679)				
Elite College MPs			0.0338 (0.0292)			
Firm MPs				-0.0476 (0.0295)		
Land MPs					-0.0636 (0.0443)	
Land + Firm MPs						-0.0474*** (0.0238)
Constat	-0.162 (0.130)	-0.224 (0.150)	-0.186 (0.130)	-0.163 (0.128)	-0.244*** (0.142)	-0.223*** (0.131)
Observations	81	82	82	81	81	81
R-squared	0.880	0.878	0.882	0.885	0.879	0.885



# RESULTS: POLICY SHOCK

## ○ Results: Shock

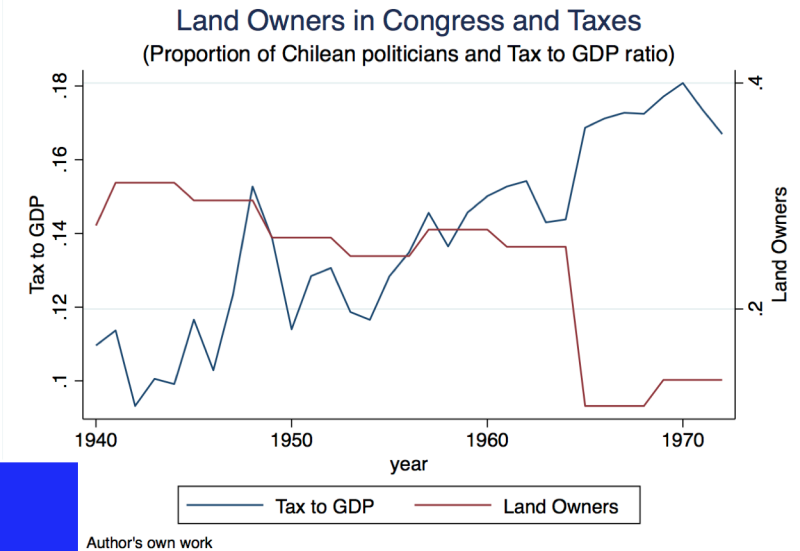


TABLE 4			
OLS REGRESSIONS- STRUCTURAL CHANGE( 1940-1973)			
	Tax to GDP	Direct Tax Share	
<b>tendency</b>	0.00330**	0.00210	
	(0.00128)	(0.00376)	
<b>dummy1965</b>	0.0124**	0.0611***	
	(0.00476)	(0.0218)	
<b>lngdppc_lag</b>	-0.112	-0.241	
	(0.0776)	(0.181)	
<b>taxgdp_lag</b>	0.262	0.322	
	(0.202)	(0.633)	
<b>Constant</b>	-5.425***	-1.911	
	(1.941)	(6.043)	
<b>Observations</b>	32	32	
<b>R-squared</b>	0.875	0.283	



## CONCLUSIONS

- Aligned with theory: Proportion of wealthy landowners and firm owners in congress is related to taxation level.
- Economic shocks that disproportionately affect the Economic Elite, have an effect in their hold on power, and later taxation level.
- Political shocks that reduce patronage reduce hold on political power, and later influence of the Economic Elite.



## FUTURE WORK

- Improve IV Regressions
- Look for details of debate of Tax discussions and votes in congress.
- Add recent time period, with a focus on indirect taxation



THANK YOU

