

ONLINE APPENDIX

Losing Your Dictator: Firms During Political Transition

List of Tables

A.1	Example of a firm with a direct link to Pinochet	xvi
A.2	Links by industry	xvii
A.3	Summary statistics by period	xviii
A.4	Stock returns after the 1988 plebiscite	xix
A.5	Other sources of funding	xx
A.6	Solow productivity	xxi
A.7	Synthetic controls	xxii
A.8	Bounding exercise using estimated trends under dictatorship	xxiii
A.9	Entry barriers	xxiv
A.10	Firm entry	xxv
A.11	The role of economic policy uncertainty	xxvi
A.12	Robustness to supply-side mechanism	xxvii
A.13	Extraordinary dividends	xxviii

List of Figures

A.1	Political transitions in the world 1900-2013	ix
A.2	Macroeconomic indicators 1980–2000	x
A.3	Stock returns around other important political events	xi
A.4	Dynamic coefficients for firms with direct links	xii
A.5	Dynamic coefficients for firms with indirect links	xiii
A.6	Firm entry	xiv
A.7	Firm investments during political transition	xv

A Theoretical Framework

How do firms react to an announced political transition? how does this reaction vary with links to the incumbent regime? This section presents a theoretical framework to answer these questions. There are two key assumptions in our model. First, firms close to the non-democratic regime enjoy differential access to finance, which disappears after a democratization. Second, there is an increase in firm entry during the democratic period. The main insight we obtain is that increasing productive capacity becomes a dominant strategy for firms with links to the dictatorship during political transition.

A.1 Environment

Let there be N_t incumbent firms and three different periods $t = 1, 2, 3$. In the first period, a dictator is in power and N_1 firms operate in the market. In the second period, all firms learn that a new democratic government will take office in the third period. Following our setting, we assume this is an unanticipated democratization announcement. As it is public knowledge that the dictator will leave office, we call this period “transition.” Potential entrants also learn about the political transition and update their entry decisions accordingly. We call the third period “democracy,” where a newly democratically elected government rules the country and new firms enter the market.

In periods 1 and 2, firms can have different links to the dictator. There are no links to the democratic government in period 3. Let link of firm i be represented by $\gamma_i \in [0, r]$, where $\gamma_i = 0$ represents no link, and $\gamma_i > 0$ some link between a firm and the dictatorship. In each period, firms compete à la Cournot by choosing their input subject to a given private demand $Q_t = a - bP_t$. Let the production technology be $q_t^i = K_t^i$, where K_t^i is the stock of capital of firm i in period t . The marginal cost of producing one extra unit is zero if production is below a firm’s capacity, and infinite otherwise.

The cost of capital for firms is $R_i \equiv r - \gamma_i$. We interpret this lower cost of capital as the combination of two factors: (1) firms with links have more access to credit, and (2) firms with links have relatively better information about investment opportunities. We will discuss how we can place bounds on these mechanisms exploiting the network analysis.

A.2 Timing

In period 1, there are N_1 firms competing in quantities. Private demand for the homogeneous product is fixed. Firm i chooses K_1^i to maximize the discounted present value of profits, and expect the dictator to be ruling indefinitely. Then, a firm’s problem is:

$$\max_{K_1^i} \Pi_1^i = \frac{1}{1 - \delta} \left[b^{-1} \left(a - \sum_j^{N_1} K_1^j \right) K_1^i - R_i K_1^i \right] \quad (10)$$

where $\delta \in (0, 1)$ represents the discount factor. Let the term in square brackets be denoted by $\Omega(K_1^i, N_1|\gamma_i)$ to facilitate exposition. For simplicity, let $\gamma_i \in \{0, \bar{\gamma}, r\}$, with $\bar{\gamma} \in (0, r)$. Then, there are three types of firms: direct link (C : $\gamma_i = r$), indirect link (I : $\gamma_i = \bar{\gamma}$), and without link (U : $\gamma_i = 0$). Thus, $i \in \{C, I, U\}$.²⁴ To find the Nash equilibrium under dictatorship, we obtain firms best response function. Then, we use these best response functions to solve for productive capacities. Equilibrium capacities are:

$$K_1^C = \frac{a + b(2r - \bar{\gamma})}{4}$$

$$K_1^I = \frac{a - b(2r - 3\bar{\gamma})}{4}$$

$$K_1^U = \frac{a - b(2r + \bar{\gamma})}{4}$$

Total quantity offered in the market is defined as $Q_1^* = \sum_{i \in \{C, I, U\}}^{N_1} K_1^i$. The equilibrium price is determined by the aggregate demand function, and profits are computed as in equation (1).

In period 2, firms learn that a democratization will take place with certainty. This means connected firms will lose their political links. Specifically, we assume:

Assumption 1. *There is an exogenous democratization announcement.*

Assumption 2. *It is common knowledge that firm entry is exogenously higher under democracy.*

Firms can adjust their productive capacity in the second period, when links are still in place. This could be a firm's optimal response in order to compete with new entrants. The new equilibrium is similar to the equilibrium of a Stackelberg game. In our case, incumbent firms are first movers and entrants are followers. Then, firms internalize future competition and solve the following problem:

$$\max_{K_2^i} \Pi_2^i = \Omega(K_2^i, N_2|\gamma_i) + \frac{\delta}{(1 - \delta)} \Omega(K_2^i, N_3|\gamma_i = 0) \quad (11)$$

where $N_2 = N_1$ and N_3 is the number of firms operating under democracy. Then, equilibrium

²⁴Note that firms do not expect a political transition to take place in the foreseeable future. Then, assuming that the free entry condition is binding, we can interpret this period as a steady state.

capacities for the period after the democratization announcement are:

$$\begin{aligned}
K_2^C &= \frac{1}{4} \left(a + b \left(r + \frac{2(1 + \psi)(r - \bar{\gamma}) + 2\psi r}{2 + \psi} \right) \right) \\
K_2^I &= \frac{1}{4} \left(a + b \left(r - \frac{6(1 + \psi)(r - \bar{\gamma}) - 2\psi r}{2 + \psi} \right) \right) \\
K_2^U &= \frac{1}{4} \left(a + b \left(-3r + \frac{2(1 + \psi)(r - \bar{\gamma}) - \psi r}{2 + \psi} \right) \right) \\
K_2^E &= \frac{1}{8} \left(a + b \left(-3r + \frac{2(1 + \psi)(r - \bar{\gamma}) - \psi r}{2 + \psi} \right) \right)
\end{aligned}$$

where $\psi \equiv \delta(1 - \delta)^{-1}$. Then, total quantity offered in the market during transition and democratic periods are defined respectively by $Q_2^* = \sum_{i \in \{C, I, U\}}^{N_2} K_2^i$ and $Q_3^* = \sum_{i \in \{C, I, U, E\}}^{N_3} K_3^i$, where note that there are $N_2 = N_1$ incumbent firms in the second period, and N_3 incumbent firms in the third period. Finally, the equilibrium price is determined by the aggregate demand function, and profits are computed as in equation (1).

In period 3, all links disappear (i.e., $\gamma_i = 0 \forall i$), and production and entry decisions are decided as a function of the actions taken by incumbent firms in period 2. Former incumbent firms face the same objective function.

A.3 Comparative statics

Let K_t^i —the solution of the game— denote the capital stock of firm i during period t . Then:

Proposition A.1. *Under assumptions 1 and 2 capital adjustment is a dominant strategy. Firms with different links adjust differently:*

$$K_2^C > K_1^C \quad ; \quad K_2^I \cong K_1^I \quad ; \quad K_2^U < K_1^U$$

Exists $\gamma^* \in (0, 1)$ s.t. if $\bar{\gamma} > \gamma^*$ then $K_2^I > K_1^I$, if $\bar{\gamma} < \gamma^*$ then $K_2^I < K_1^I$, and if $\bar{\gamma} = \gamma^*$ then $K_2^I = K_1^I$.

Proof: *Using the equilibrium capacities, we can compare how capacity changes between periods for firms with different types of links. In the case of firms with direct links:*

$$K_2^C - K_1^C = \frac{\psi b}{4(2 + \psi)}(3r - \bar{\gamma})$$

Note that if $\delta = 0$, we have that $\psi = 0$, then $K_2^C = K_1^C$. Therefore, if $\delta > 0$, and $\bar{\gamma} \leq r$, we have that $(3r - \bar{\gamma}) > 0$. This means that $K_2^C > K_1^C$. In the case of firms with indirect links, this inequality becomes ambiguous. To see this more clearly, let us subtract the equilibrium

capacities for these firms in the two periods of interest:

$$K_2^I - K_1^I = \frac{\psi b}{4(2 + \psi)}(9\bar{\gamma} - 7r)$$

Note that if $\delta = 0$, we have that $\psi = 0$, then $K_2^I = K_1^I$. Therefore, if $\delta > 0$, the difference of interest will be positive if and only if $(9\bar{\gamma} - 7r) > 0$. This means that if $\bar{\gamma} > \frac{7}{9}r$ we have that $K_2^I > K_1^I$, if $\bar{\gamma} = \frac{7}{9}r$ we have that $K_1^I = K_2^I$, and if $\bar{\gamma} < \frac{7}{9}r$ we have that $K_2^I < K_1^I$. Note that, $\gamma^* = \frac{7}{9}r$. Finally, firms without links decrease their productive capacity. To see this, let us again subtract the equilibrium capacities in the two periods of interest:

$$K_2^U - K_1^U = -\frac{\psi b}{4(2 + \psi)}(r + \bar{\gamma})$$

Note that if $\delta = 0$, we have that $\psi = 0$, then $K_2^U = K_1^U$. Therefore, if $\delta > 0$, we have that $(r + \bar{\gamma}) > 0$. This means that $K_2^U < K_1^U$. \square

Firms with links increase their capital stock in period 2 because of (i) the increase in firm entry in period 3 and (ii) the lower cost of capital they face. Firms without links adjust their capital stock downwards to keep prices high when new firms enter the market. A corollary of Proposition A.1 is:

$$\underbrace{K_2^C - K_1^C}_{> 0} > \underbrace{K_2^I - K_1^I}_{\cong 0} > \underbrace{K_2^U - K_1^U}_{< 0} \quad (12)$$

In addition, to give us insights about mechanisms behind the lower cost of capital, the network analysis is useful. The lower cost of capital can be decomposed as $R - r = \bar{\gamma} + (\gamma - \bar{\gamma})$. Recall that firms with direct and indirect links share board members, which implies that information flows freely among them. This means that their differential investment reaction places a bound to the role of information. Specifically, the higher the difference in investment between firms with direct and indirect links, the lower the role of information.

The following proposition summarizes the predictions for profits:

Proposition A.2. *Under assumptions 1 and 2, there exist $\bar{\gamma}$ such that profits are higher for firms with direct links during political transition:*

$$\Pi_2^C(\bar{\gamma}) > \Pi_1^C(\bar{\gamma}) \quad ; \quad \Pi_2^I(\bar{\gamma}) > \Pi_1^I(\bar{\gamma}).$$

Firms without links obtain decreasing profits $\forall \gamma$, $\Pi_3^U < \Pi_2^U < \Pi_1^U$.

Proof: *Profits for firms with different types of links can be easily calculated from equilibrium capacities and the equilibrium price we computed in each period. Let us start by calculating the change in profits for firms with direct links. To do this, we need to take the difference between Π_2^C and Π_1^C . Note that if $\delta = 0$, $\Pi_2^C = \Pi_1^C$. Now let us assume $\delta > 0$ and take the derivative of*

the difference in profits with respect to ψ :

$$\frac{d(\Pi_2^C - \Pi_1^C)}{d\psi} = \frac{1}{16b} \left(\frac{4b(a + br)}{(2 + \psi)^2} (r - \bar{\gamma}) + \frac{8b^2\psi}{(2 + \psi)^3} ((1 - \psi)r^2 + (1 + \psi)(r - \bar{\gamma})^2) \right)$$

where the last term in the big parenthesis is always positive because $\psi < 1$. Then, given that ψ is increasing in δ , we can use the chain rule to conclude that $\Pi_2^C - \Pi_1^C$ increases with δ . This means that as δ increases, Π_2^C becomes larger than Π_1^C . Intuitively, the more linked firms value the future the more they are going to invest during political transition in order to deter entry in period 3, this will lead to an increase in their profits. To facilitate the proof for firms with indirect links, let us now move to the analysis of firms without links. Note that if $\delta = 0$ we have that $K_2^U = K_1^U$ and $P_2 = P_1$. Therefore, $\Pi_2^U = \Pi_1^U$. Assume that $\delta > 0$. Then, it is easy to see that $P_2 < P_1$ and $K_2^U < K_1^U$. Therefore, it follows that $\Pi_2^U < \Pi_1^U$. Firms without links do not have access to preferential credit which leads them to reduce their capital, reducing their profits. Using previous results, we can conclude that for any given $\delta > 0$, if $\gamma \rightarrow 0$, the difference in profits converges to the one of firms without links, meaning that $\Pi_2^I < \Pi_1^I$. If $\gamma \rightarrow r$, on the other side, the difference in profits converges to the one of firms with direct links, which implies that $\Pi_2^I > \Pi_1^I$. Therefore, for any given δ , there must be a $\bar{\gamma}$, such that for $\gamma > \bar{\gamma}$ the difference in profits is positive and for $\gamma < \bar{\gamma}$ is negative. Finally, since $P_2 > P_3$, due to the entry of new firms, we conclude that $\Pi_2^C < \Pi_3^C$, $\Pi_2^I < \Pi_3^I$, $\Pi_2^U < \Pi_3^U$. \square

Two forces drive profits: prices and capacity. Prices decrease during periods 2 and 3. Proposition A.2 shows that for some $\bar{\gamma}$, profits increase during period 2. In particular, the higher $\bar{\gamma}$, the lower the profits for firms with direct links during period 2, because a higher $\bar{\gamma}$ implies firms with indirect links increase their capacity by more, which lowers prices. A corollary of this proposition is:

$$\Pi_2^C - \Pi_1^C > \Pi_2^I - \Pi_1^I > \Pi_2^U - \Pi_1^U. \quad (13)$$

The difference in profits between the transition and democratic period, on the other hand, depends on the number of firms that enter the market in period 3. The number of entrants could be driven by, for example, lower entry costs.

Some auxiliary predictions can be derived from the model. First, increases in capacity during political transition are associated with more profits during the democratic period. Second, capacity increases are a function of how capital intensive the industry is.

B Construction of links to the Pinochet regime

Section 2.1 of the paper presented our methodology to identify the network of firms with links to the Pinochet regime before the 1988 plebiscite. The outcomes of this methodology are direct (first degree) and indirect (second degree) links between publicly listed firms and Pinochet. Table A.1 presents an example of a firm with a direct link to the regime. As can be seen from this table, firms are linked because a subset of their board of directors worked for the Pinochet

dictatorship. To uncover this labor relations, we searched for the employment history of the universe of board members working in 1987 at firms listed in the Chilean stock market. This section presents more details about our identification of labor relations.

B.1 Employment history

Investigation of the employment history of board members before 1988 is possible due to the vast amount of information available online about individuals that worked for the Pinochet dictatorship. We gathered this information using Google as an oracle for standardized queries. We performed searches in *incognito* mode to avoid personalized searches and facilitate replication. More precisely, we look in the first page of results using two different queries:

1. Full name of board member
2. Full name of board member + Pinochet

Empirically, several reports document the name and specific job that people performed during the dictatorship (e.g., “Los 100 rostros de la dictadura”, “Memoria Viva,” among others). In addition, heads of government departments and army officers are extremely well known and, consequently, have an employment history that is easy to track.

B.2 Descriptive statistics

We found that 78 board members (approximately 10 percent) had a direct link to Pinochet in 1987. These board members had different jobs under dictatorship: 22 were army officers, 9 were close (economic or legal) advisors, 24 worked as head of government departments (ministers), 19 worked as politicians (e.g. local politicians), 2 were part of Pinochet’s family, and 2 collaborated with money and press.

C More alternative explanations

C.1 Targeting

Another explanation for our findings is that the Pinochet regime placed individuals as board members in firms that were expected to invest during political transition and perform well under democracy. Two pieces of evidence suggest that this “targeting of firms” is unlikely to be relevant in our context. Because our econometric strategy accounts for industry unobservable shocks during transition, our first piece of evidence against this interpretation comes from the difficulty of predicting future economic outcomes within industries. If the regime targeted firms, the regime should have been able to identify: (1) firms that would behave in a precise way in the future, and (2) if and when there would be a transition. Besides the observable variables for which we control for, it is hard to imagine what type of within-industry information the regime

could have had to target firms. In addition, the regime was expecting to remain in power until at least 1996 (see Section 2), making strategic targeting unlikely.

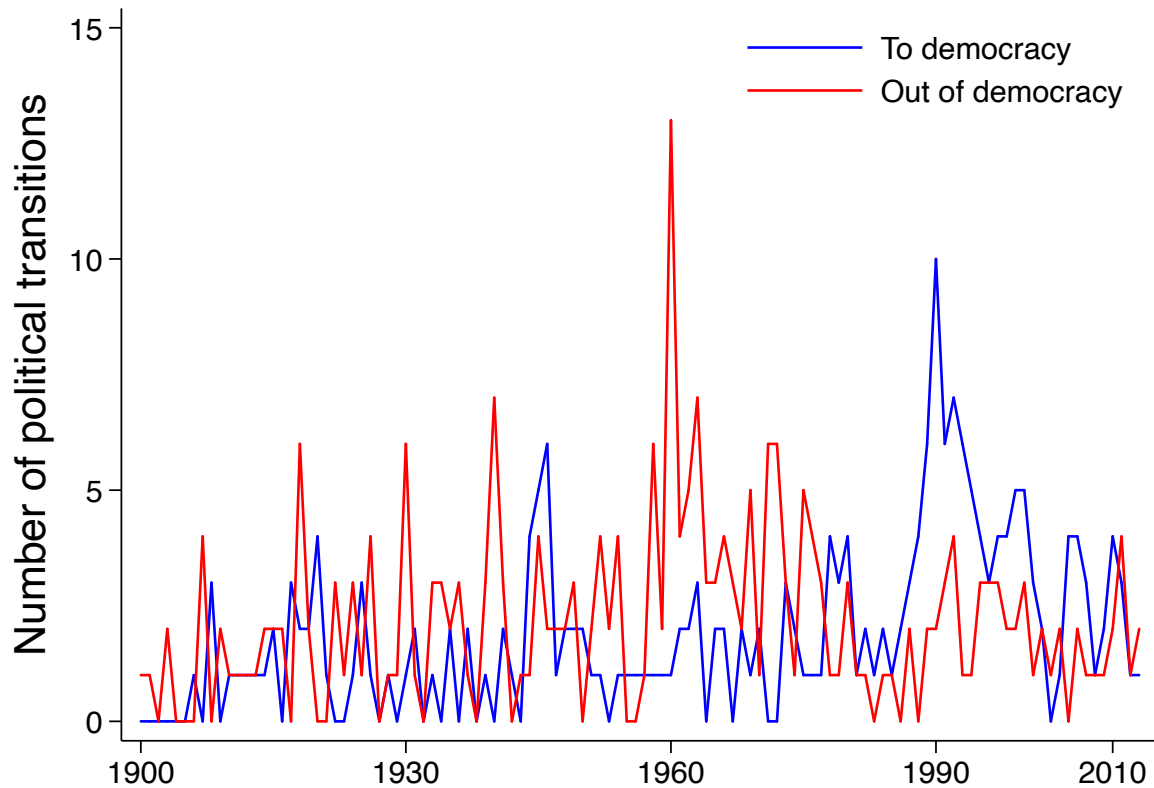
The second piece of evidence against this interpretation comes from the stock market. Recall that stock prices of firms with links to the regime *decreased* following the plebiscite. However, if these firms were expected to behave in a certain way during political transition, we should not observe a decrease in their stock value after the plebiscite. The reasoning behind this argument is that the plebiscite should not have revealed any new information if the regime expected the transition and the reaction of firms.

C.2 Wealth extraction

Another interpretation for our findings is that the Pinochet regime extracted wealth from state-owned banks and made transfers to firm owners before leaving power. This mechanism can explain the higher profits among firms with links during transition. Two pieces of evidence are, however, hard to reconcile with this interpretation. First, we observe higher profits among firms with links after the plebiscite, particularly among those with increases in productive capacity (Figure A.7). Because there is no *a priori* reason to expect wealth transfers should increase *future* profits, we think this interpretation cannot explain these results.

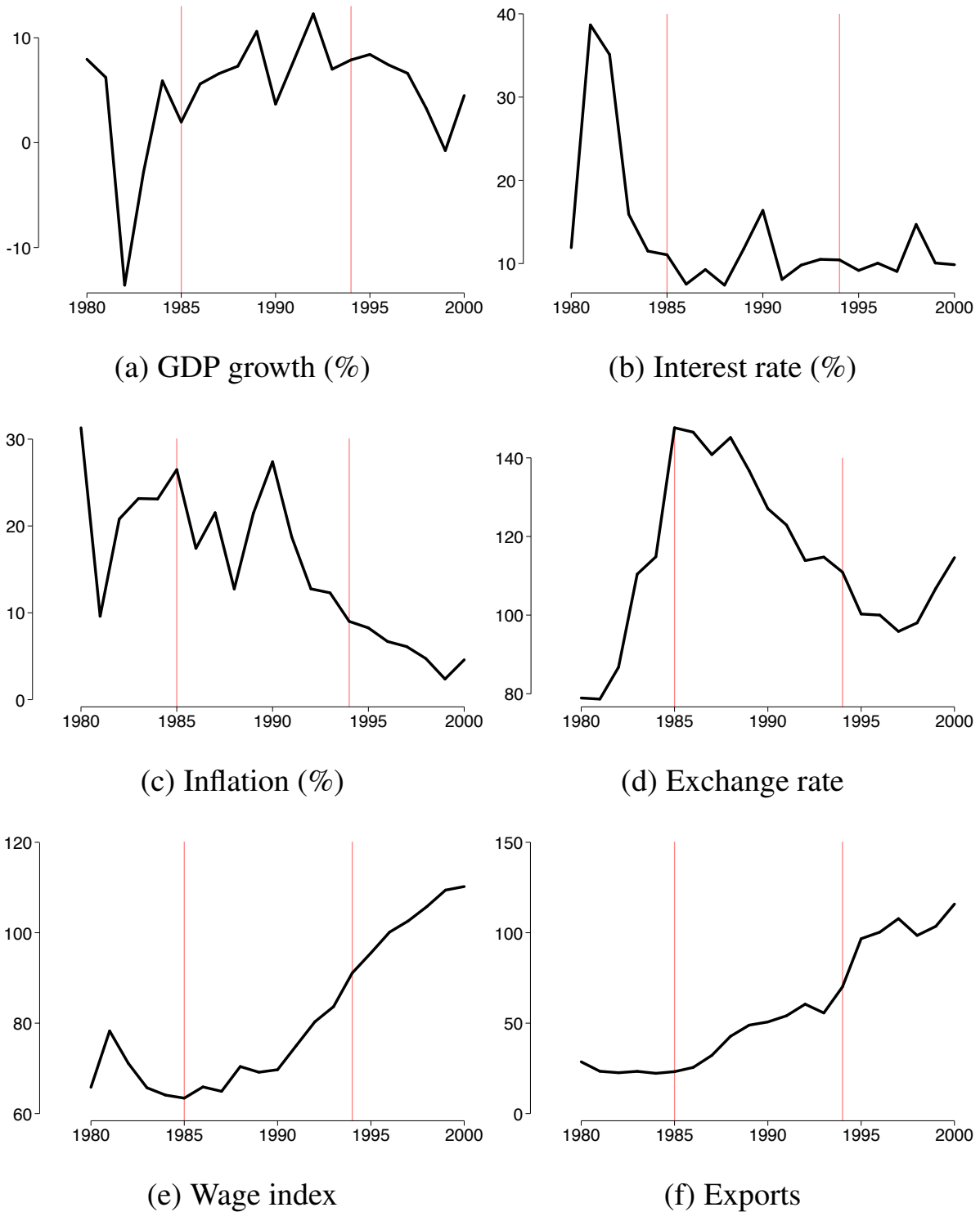
Second, if the regime transferred resources to firm owners, we should observe an increase in wealth extraction from firms by their owners, essentially the last step of the transfer process. This auxiliary prediction can be tested by studying changes in dividends after the plebiscite, which we would see in annual reports. Table A.13 shows that owners of linked firms did not extract more wealth after 1988. In fact, if anything, we observe fewer extraordinary dividends among these firms.

Figure A.1: Political transitions in the world 1900-2013



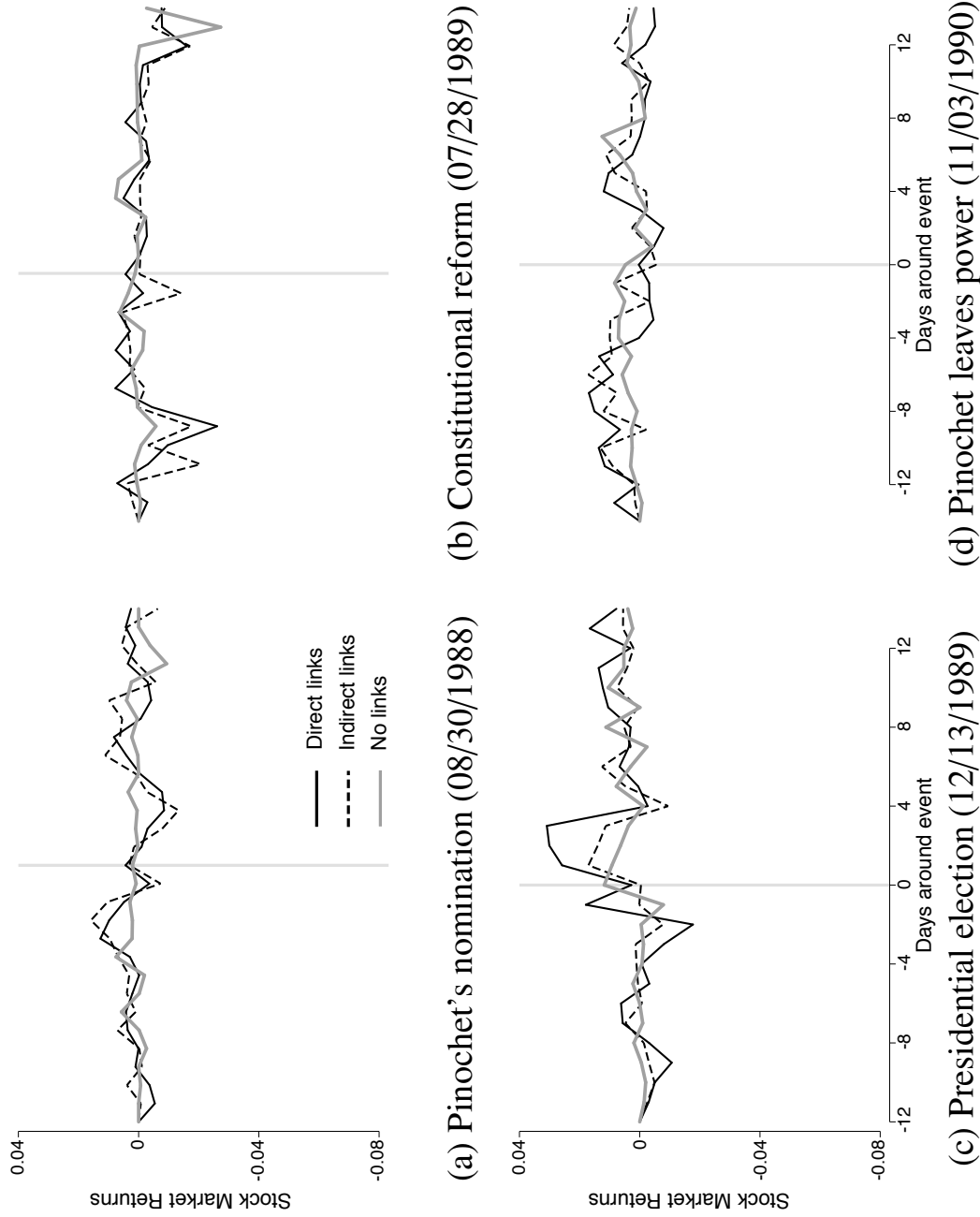
Notes: Own construction based on data from the Polity IV Project “Political Regime Characteristics and Transitions, 1800–2013.” We define the year of a *transition to democracy* as a positive value of the variable *democ* in year t and in the set $[-88, -77, -66, 0]$ in year $t - 1$, and the year of a *transition out of democracy* in the opposite way.

Figure A.2: Macroeconomic indicators 1980–2000



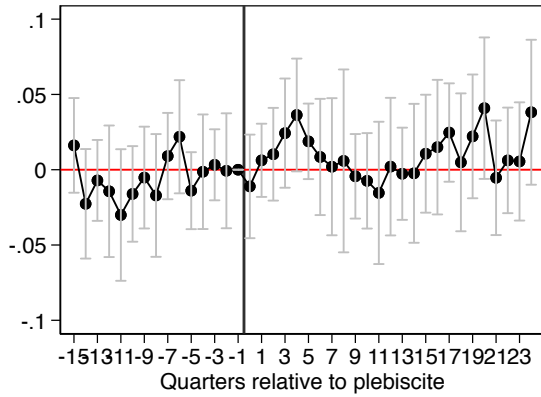
Notes: Own construction based on data by Díaz et al. (2016) “Chile 1810-2010: La República en Cifras. Historical Statistics” (Ediciones UC). Vertical red lines denote the first and last year in our firm-level data.

Figure A.3: Stock returns around other important political events

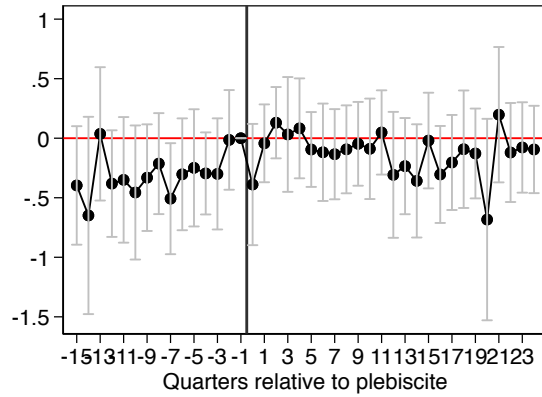


Notes: Own construction based on daily stock data from contemporary newspapers. We define stock returns as $R_{it} \equiv \ln S_{it} - \ln S_{it-1}$, where S_{it} is stock price i in day t . More details in section 2.2.

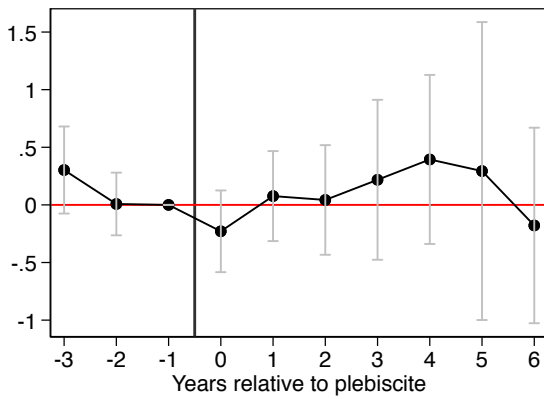
Figure A.4: Dynamic coefficients for firms with direct links



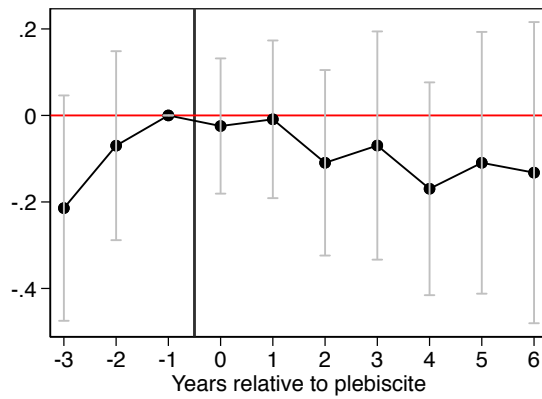
(a) Investment



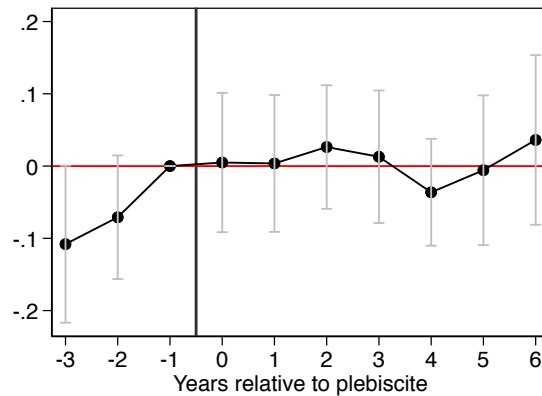
(b) Profits



(c) Productivity



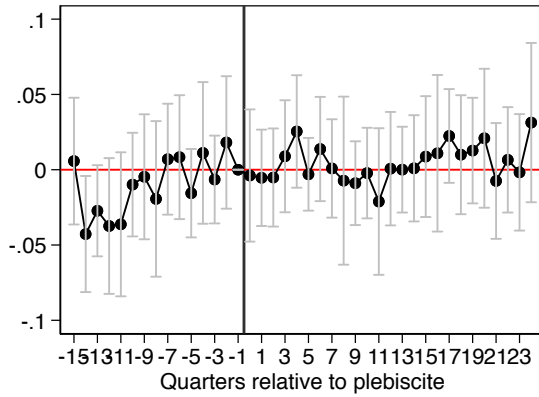
(d) Workers



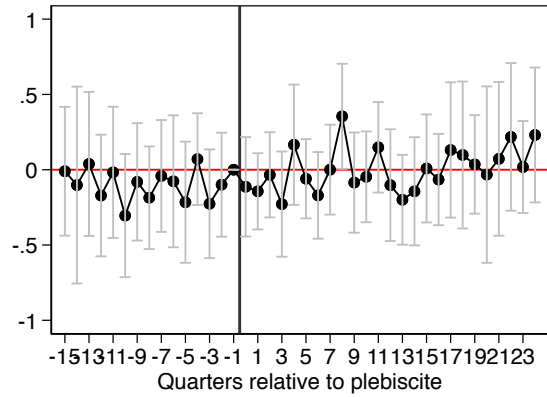
(e) Debt with state-owned bank

Notes: These figures show the estimated coefficients associated to firms with direct links using a dynamic version of equation (4). Vertical lines represent 95% confidence intervals. The p -values for the joint significance of coefficients before the plebiscite: 0.25, 0.36, 0.25, 0.28, 0.15.

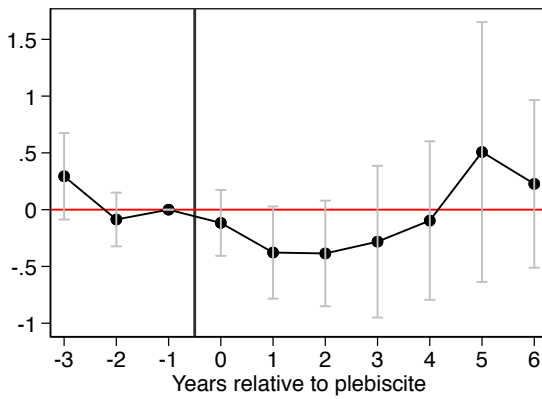
Figure A.5: Dynamic coefficients for firms with indirect links



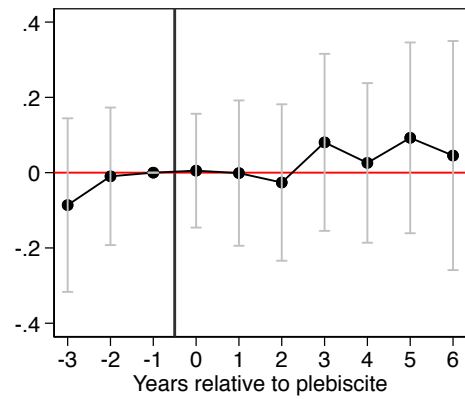
(a) Investment



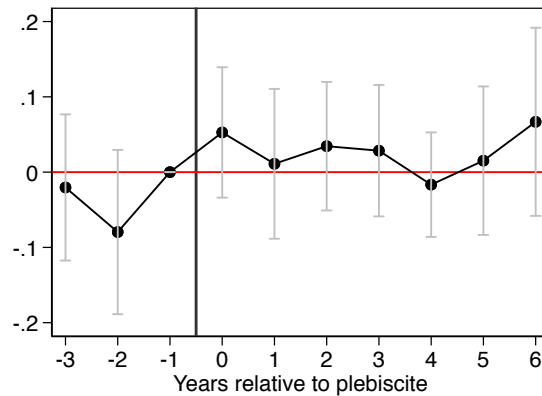
(b) Profits



(c) Productivity



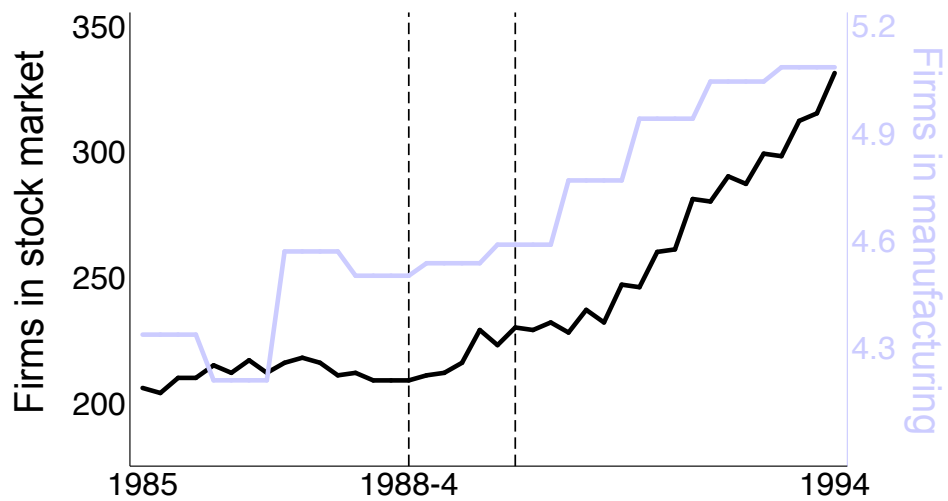
(d) Workers



(e) Debt with state-owned bank

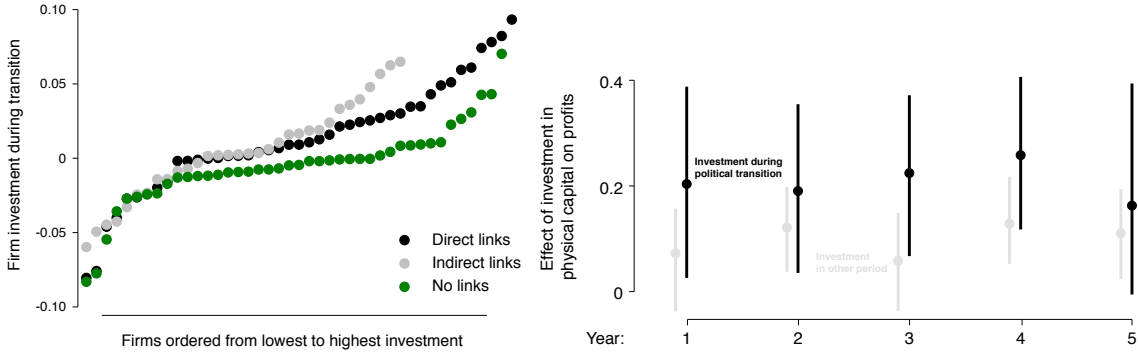
Notes: These figures show the estimated coefficients associated to firms with indirect links using a dynamic version of equation (4). Vertical lines represent 95% confidence intervals. The p -values for the joint significance of coefficients before the plebiscite: 0.16, 0.09, 0.75, 0.15, 0.12.

Figure A.6: Firm entry



Notes: This figure presents the number of firms operating in the stock market during the period under study. Vertical dash lines represent the time of the plebiscite and the beginning of the democratic period (March 11th, 1990). The second y-axis (gray) presents the number of firms operating in the manufacturing census (*Encuesta Nacional de la Industria Manufacturera, ENIA*).

Figure A.7: Firm investments during political transition



(a) Firm specific investments during political transition (b) Investment during transition and profits under democracy

Notes: Panel (a) presents estimates of firm-level investments changes in productive capacity during the transition period (1988–1990). Panel (b) presents the estimated relationship between investment during political transition and profits in the first five years of democracy. Details are as follows. We estimate the correlation between profits and firm-specific capacity responses during political transition. Because investments are expected to increase profits (at least on average), we compare the profits response to investments during political transition to the profits response to investments in the 3rd quarter of 1986. We proceed in three steps. First, to estimate firm-specific responses, we augment equation (1) by interacting time period indicators with firm specific indicators. This allow us to estimate firm specific capacity responses $\beta_{i,lame}$ with $i = 1, \dots, 118$. Panel (a) plots these coefficients. Second, we construct profits in year t by adding up quarterly profits. Third, we estimate the following cross-sectional regression each year between 1990 and 1994:

$$\Pi_{it} = \alpha_t + \tau_t \widehat{\beta}_{i,lame} + \eta_{it}$$

where Π_{it} represents profits in year t for firm i , α_t is a constant term, and $\widehat{\beta}_{i,lame}$ is our estimate of firm-specific capacity responses. To facilitate the interpretation of coefficients, we have standardized capacity responses and yearly profits. The coefficient of interest is τ_t , and our theoretical framework implies that $\tau_t > 0$. Standard errors for τ_t are calculated using a bootstrap procedure to account for the uncertainty in our estimation of firm-specific capacity responses. Panel (b) presents OLS estimates of coefficients ($\widehat{\tau}_{1990}, \dots, \widehat{\tau}_{1994}$).

Table A.1: Example of a firm with a direct link to Pinochet

Name of board member	Job in the Pinochet regime	Years in job
Guillermo Letelier	Army Officer	1980s
Sergio Melnik	Minister of Planning	1987
Julio Ponce Lerou	Pinochet's son in law	1969–
Enrique Valenzuela	Minister of Mining	1975–1978
Sergio Valenzuela	Minister of Planning	1985
Nine other board members	No links	–

Notes: Names and links of individuals working in the Board of Directors of the *Chemical and Mining Society of Chile* in 1987, a Chilean chemical company and supplier of industrial chemicals. Board members data comes from *Superintendencia de Valores y Seguros*. More details in section 2.1 and section B.

Table A.2: Links by industry

Industry:	No links	Direct links to Pinochet	Indirect links to Pinochet	Total number of firms
Accommodation and food service activities	0	2	1	3
Agriculture, forestry, and fishing	3	4	8	15
Arts, entertainment, and recreation	0	1	0	1
Construction	2	1	0	3
Education	1	0	0	1
Electricity, gas, steam and air conditioning supply	4	6	2	12
Human health and social work activities	1	0	0	1
Information and communication	0	2	2	4
Manufacturing	13	19	13	45
Mining and quarrying	2	3	2	7
Real estate activities	14	1	3	18
Transportation and storage	1	3	1	5
Wholesale and retail trade	1	1	1	3
Total:	42	43	33	118

Notes: Number of firms by industry and type of link in our data. Own construction based on information in annual reports.

Table A.3: Summary statistics by period

	Direct links	Indirect links	No links
<u>A – Transition (1988–1989)</u>			
Investment	0.01 (0.06)	0.02 (0.05)	0.00 (0.05)
Profits	0.88 (1.89)	0.08 (.65)	-0.29 (.25)
Log workers	6.41 (1.58)	5.74 (1.42)	4.59 (2.07)
Productivity	-1.34 (1.80)	-1.09 (1.30)	-0.39 (1.68)
Capital misallocation	-0.58 (0.74)	-0.74 (0.27)	-0.27 (1.08)
Output misallocation	0.82 (0.65)	0.85 (0.65)	0.90 (0.11)
Debt with state-owned banks	23 (65)	22 (66)	2 (8)
Debt with other banks	65 (112)	28 (50)	13 (26)
<u>B – Democracy (1990-1994)</u>			
Investment	0.01 (0.05)	0.02 (0.05)	0.00 (0.06)
Profits	0.79 (1.85)	0.11 (0.78)	-0.27 (0.33)
Log workers	6.73 (1.61)	5.92 (1.43)	4.82 (1.94)
Productivity	-1.78 (1.81)	-1.25 (1.33)	-0.43 (1.33)
Capital misallocation	-0.63 (0.44)	-0.68 (0.32)	-0.15 (1.15)
Output misallocation	0.65 (0.87)	0.90 (0.16)	0.82 (0.20)
Debt with state-owned banks	8 (27)	14 (60)	1 (4)
Debt with other banks	74 (110)	39 (72)	12 (29)

Notes: Averages of main variables by period. Data for 118 firms in Panel A, 99 firms in the first four rows of Panel B, 113 firms in the last two of rows of Panel B. Debt is measured in billions of Chilean pesos. Standard deviation in parentheses in columns 1-3, and standard error in parentheses in the last three columns. Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.4: Stock returns after the 1988 plebiscite

Dependent variable is cumulative abnormal stock returns

<u>Days after event:</u>	<u>Same day</u>	<u>0-5 days</u>	<u>0-10 days</u>
Direct link	-0.05*** (0.02)	-0.08*** (0.02)	-0.07*** (0.03)
Indirect link	-0.05** (0.01)	-0.08*** (0.02)	-0.10*** (0.03)
Firms	80	80	80

Notes: This table shows estimates from a cross section regression of abnormal cumulative stock returns on links to the Pinochet regime. Robust standard errors are reported in parentheses. Significance level: *** $p < 0.01$, ** $p < 0.05$.

Table A.5: Other sources of funding

Dependent variable: issuance (total amount issued in shares and bonds) or an indicator for issuance greater than zero

	Shares			Bonds		
	Issuance (1)	1[Issuance > 0] (2)	log(Issuance) (3)	Issuance (4)	1[Issuance > 0] (5)	log(Issuance) (6)
Direct link × Transition	-102.87 (65.22)	-0.02 (0.06)	-5.95** (2.73)	1.54 (1.52)	0.00 (0.05)	67.59 (88.25)
Direct link × Democracy	111.47 (121.91)	0.08 (0.06)	-1.60 (1.70)	2.45 (1.80)	-0.06** (0.03)	65.51 (89.07)
Indirect link × Transition	17.59 (76.41)	0.05 (0.05)	0.57 (0.83)	-0.94 (1.28)	0.02 (0.04)	1.99* (1.14)
Indirect link × Democracy	-66.99 (99.33)	0.12* (0.06)	-3.21*** (0.78)	0.73 (1.11)	0.02 (0.03)	
Observations	1,107	1,107	100	1,107	1,107	54
Number of firms	112	112	53	112	112	29
Firm and time F.E.	x	x	x	x	x	x
Industry F.E. × transition/democracy	x	x	x	x	x	x
Pscore × transition/democracy	x	x	x	x	x	x

Notes: Data for firms in the period 1985–1994. Issuances are measured in \$MMM Chilean pesos. Robust standard errors are clustered at the business group level and are reported in parentheses. In columns 1, 2, 4, and 5, the number of clusters is 98; in column 3 (6) is 48 (28). Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.6: Solow productivity

	Productivity	
	(1)	(2)
Direct link \times Transition	-0.13 (0.18)	-0.15 (0.15)
Direct link \times Democracy	0.07 (0.35)	0.06 (0.32)
Indirect link \times Transition	-0.19* (0.12)	-0.22 (0.13)
Indirect link \times Democracy	0.05 (0.22)	0.04 (0.29)
Firms	99	99
Observations	792	792
Firm & time F.E.	x	x
Industry F.E. \times transition/democracy	x	x
Pscore \times transition/democracy		x

Notes: Data for firms in the period 1985–1994. We calculated productivity using a Solow residual. The mean (standard deviation) of productivity before the plebiscite is 0.028 (1.531). Robust standard errors are clustered at the business group level and are reported in parentheses (88 clusters). Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.7: Synthetic controls

	Direct link		Indirect link	
	Unweighted	Weighted	Unweighted	Weighted
<u>A – Investment</u>				
Transition	0.02** [0.004, 0.05]	0.02** [0.003, 0.05]	0.02** [0.01, 0.04]	0.01 [-0.004, 0.04]
Democracy	0.00 [-0.01, 0.04]	0.00 [-0.01, 0.04]	0.01 [-0.002, 0.040]	0.01 [-0.004, 0.06]
<u>B – Profits</u>				
Transition	0.85** [0.78, 1.89]	0.20** [0.01, 0.56]	0.02 [-0.13, 0.58]	-0.01 [-0.05, 0.46]
Democracy	0.43** [0.11, 1.63]	-0.002 [-0.19, 0.45]	-0.07 [-0.42, 0.79]	-0.09 [-0.21, 0.74]

Notes: Average difference in quarterly investment for firms with direct (indirect) links and synthetic controls. Following Abadie and Gardeazabal (2003), we construct synthetic controls for each firm with a link based on a set of firm characteristics in the period 1985–1987. In particular, we use the logarithm of assets, leverage, and indicators for being part of a business group, being an exporter, and have been privatized by the dictatorship. We present two average differences between firms with links and synthetic controls:

- Unweighted: $M = \frac{1}{N \times T} \sum_i^N \sum_t^T Inv_{it} - \hat{Inv}_{it}$, where $\hat{Inv}_{it} = \sum_{j \in Controls} w_j^i Inv_{jt}$ and w_j^i are weights based on the synthetic controls algorithm.
- Weighted: $M_w = \sum_i \alpha_i \times \sum_t \frac{Inv_{it} - \hat{Inv}_{it}}{T}$ where $\alpha_i = \frac{1/\sigma_i}{\sum_i 1/\sigma_i}$ and σ_i is the goodness of fit of each synthetic control.

To compute confidence intervals, we conduct the following procedure:

1. Generate a bootstrapped sample, b , from control group.
2. Estimate w^i and compute M_b , M_{w_b} .
3. Repeat the procedure $B = 2,000$ times.
4. Compute [2.5, 97.5] percentiles of empirical distribution over the bootstrapped sample of M_b and M_{w_b} . These intervals are presented in brackets below the means.

Table A.8: Bounding exercise using estimated trends under dictatorship

<i>Dependent variable:</i>	Balance sheets		Annual reports		
	Investment	Profits	Workers	Productivity	Credit market
	(1)	(2)	(3)	(4)	(5)
Direct link × Linear trend	-0.00 (0.00)	0.02 (0.01)	0.09 (0.06)	-0.10 (0.09)	-0.03 (0.02)
Indirect link × Linear trend	-0.00*** (0.00)	-0.00 (0.01)	0.04 (0.05)	-0.07 (0.09)	0.00 (0.01)
Direct link × State bank × Linear trend					0.04** (0.02)
Direct link × State bank × Linear trend					0.01 (0.01)
Firms	118	118	98	98	107
Observations	1,636	1,636	231	231	619
Firm fixed effects	x	x	x	x	x
Time fixed effects	x	x	x	x	x
Probability of links × time fixed effects	x	x	x	x	x
<i>Calculation for direct links:</i>					
Trend prediction for the transition period (I)	0.02	0.36	0.09	-0.10	0.04
Main estimate for the transition period (II)	0.12	1.44	0.07	-0.16	0.09
Difference between I and II (<i>p</i> -value)	0.06	0.08	0.55	0.64	0.10
<i>Calculation for indirect links:</i>					
Trend prediction for the transition period (I)	0.05	-0.04	0.04	0.07	0.01
Main estimate for the transition period (II)	0.06	0.06	0.03	-0.26	0.07
Difference between I and II (<i>p</i> -value)	0.59	0.42	0.52	0.86	0.07

Notes: Estimates in this table use quarterly/annual data only from the dictatorship period. To calculate the “Trend prediction for the transition period” (“Main estimate for the transition period”) we use the estimated differential linear trend in this table (main estimates in the paper) and multiplied that number by six (quarters) in columns 1-2 and one (year) in columns 3-5. The statistical difference between both was calculated using draws from the distribution of estimates implied by their standard errors. Robust standard errors are clustered at the business group level and are reported in parentheses. There are 104 clusters in columns 1-2 and 88 clusters in columns 3-5. Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Details in section 6.2.

Table A.9: Entry barriers*Dependent variable is investment*

	(1)	(2)
Direct link × Transition × High entry costs	0.03** (0.02)	0.03** (0.02)
Direct link × Democracy × High entry costs	0.00 (0.01)	0.00 (0.01)
Indirect link × Transition × High entry costs	0.02 (0.02)	0.02 (0.02)
Indirect link × Democracy × High entry costs	0.03* (0.01)	0.03* (0.01)
Direct link × Transition	0.00 (0.01)	-0.00 (0.01)
Direct link × Democracy	0.02** (0.01)	0.01 (0.01)
Indirect link × Transition	0.00 (0.02)	-0.00 (0.02)
Indirect link × Democracy	0.01 (0.01)	-0.00 (0.01)
Firms	118	118
Observations	4,694	4,694
Firm and time F.E.	x	x
Industry F.E. × Transition/Democracy	x	x
Pscore × Transition/Democracy		x

Notes: Data for firms in the period 1985–1994. To construct industries average sunk cost (i.e. entry costs), we follow Lambson and Jensen (1998) and take the average of gross book value of property, plant, and equipment in the period 1985–1987. We define “High entry costs” as an indicator for industries with an average sunk cost above the median. Robust standard errors are clustered at the business group level and are reported in parentheses (104 clusters). Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.10: Firm entry*Dependent variable is the logarithm of total number of firms in the period 1984–2000*

	Share		Indicator	
	(1)	(2)	(3)	(4)
A – All industries				
Share of firms with links in 1987 × Post	-0.44** (0.19)	-1.24 (0.94)	-0.24*** (0.08)	-0.63* (0.35)
Industries	9	9	9	9
Observations	153	153	153	153
B – Manufacturing				
Share of firms with links in 1987 × Post	-4.31*** (1.09)	-10.78*** (3.42)	-0.06* (0.03)	-0.22* (0.11)
Industries	11	11	11	11
Observations	176	176	176	176
Industry F.E.	x	x	x	x
Year F.E.	x	x	x	x
Industry trend	x	x	x	x
Industry trend × Post		x		x

Notes: Panel A uses data from the *Superintendencia de Valores y Seguros* and Panel B uses data from the manufacturing census of firms (ENIA). The former includes listed firms and the latter includes all firms in the manufacturing census in Chile. When using the manufacturing census we can construct more narrowly-defined industries within the manufacturing census. We define “Share of firms with links in 1987” in columns 1-2 as the percentage of firms in an industry that have a link to the regime in 1987. Columns 3-4 use an indicator for industries with a high share of links (above the median). *Industry Trend* is a linear trend for each industry. Robust standard errors are reported in parentheses. Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.11: The role of economic policy uncertainty

Dependent variable:	Indicator for firms with reports mentioning:			
	Uncertainty and risk	Positive beliefs about industry or country	Negative beliefs about industry or country	Talks about policy
	(1)	(2)	(3)	(4)
Direct link \times Transition	0.19* (0.11)	0.10 (0.12)	0.04 (0.03)	0.12 (0.08)
Indirect link \times Transition	0.15 (0.15)	0.11 (0.11)	0.04 (0.04)	0.01 (0.08)
Firms	99	99	99	99
Observations	395	395	395	395
Firm fixed effects	x	x	x	x
Year fixed effects	x	x	x	x
Industry fixed effects \times Transition	x	x	x	x
Mean of dependent variable	0.11	0.22	0.03	0.06

Notes: We use the Baker et al. (2016) methodology to construct four firm-year measures of uncertainty using text analysis of reports. Standard errors clustered by firm are reported in parentheses. Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.12: Robustness to supply-side mechanism

	Debt						
	Investment	Profits	Productivity	Workers	Level	Indicator	Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Direct link \times Transition	0.02* (0.01)	0.24** (0.10)	-0.02 (0.24)	0.07 (0.09)	28*** (11)	0.19** (0.08)	0.09** (0.04)
Direct link \times Democracy	0.01 (0.01)	0.13 (0.13)	0.29 (0.47)	-0.02 (0.10)	1 (15)	0.22** (0.10)	0.07* (0.04)
Indirect link \times Transition	0.01 (0.01)	0.01 (0.08)	-0.12 (0.16)	0.04 (0.08)	29 (20)	0.09 (0.07)	0.07* (0.04)
Indirect link \times Democracy	0.02 (0.01)	0.09 (0.13)	0.11 (0.32)	0.08 (0.11)	13 (19)	0.14 (0.09)	0.06 (0.05)
Firms	118	118	99	99	112	112	112
Observations	4,694	4,694	792	792	2,073	2,073	2,073
Firm F.E.	x	x	x	x	x	x	x
Time F.E.	x	x	x	x	x	x	x
Industry F.E. \times Transition/Democracy	x	x	x	x	x	x	x
Pscore \times Transition/Democracy	x	x	x	x	x	x	x

Notes: All regressions control by a firm-specific cross-sectional index of financial constraints – proposed by Kaplan and Zingales (1997) – interacted by an indicator for the transition and democracy periods. The index is a linear combination cash flow, leverage, dividends, liquidity, and Tobin's Q. Robust standard errors are clustered at the business group level and are reported in parentheses. Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.13: Extraordinary dividends*Dependent variable is payment of extraordinary dividends*

	Extraordinary dividends		Payment of extraordinary dividends	
	(1)	(2)	(3)	(4)
Direct link × Transition	0.00 (0.02)	-0.01 (0.02)	-0.30* (0.15)	-0.20 (0.15)
Direct link × Democracy	-0.04** (0.02)	-0.05** (0.02)	-0.46*** (0.17)	-0.43** (0.19)
Indirect link × Transition	0.00 (0.02)	-0.01 (0.02)	-0.37*** (0.12)	-0.29* (0.14)
Indirect link × Democracy	0.02 (0.02)	0.01 (0.02)	-0.28 (0.17)	-0.26 (0.20)
Observations	519	519	519	519
Number of firms	65	65	65	65
Firm and time F.E.	x	x	x	x
Industry F.E. × Transition/Democracy	x	x	x	x
Pscore × Transition/Democracy		x		x

Notes: Data for firms in the period is 1985–1994. A mandatory dividend of 30% of earnings is part of the Chilean regulation. The board of the company can decide to pay extraordinary dividends above this threshold. We define “Extraordinary dividends” as payments above the threshold over total assets. Columns 3-4 use an indicator for the payment of extraordinary dividends. Robust standard errors are clustered at the business group level and are reported in parentheses. The number of clusters is 65. Significance level: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.