

# ONLINE APPENDIX

## Privatization and business groups: Evidence from the *Chicago Boys* in Chile

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### List of Figures

A.1 Business ownership data before 1970 . . . . .	iii
A.2 An example of indirect control in a connected privatization . . . . .	iv

### List of Tables

A.1 Definition of variables and sources . . . . .	v
A.2 Underpricing in privatization and connected buyers . . . . .	vi
A.3 Additional results, year of privatization and buyer connectedness . . . . .	vii
A.4 Additional results, coefficients for controls . . . . .	viii
A.5 Robustness of results, privatization and business groups . . . . .	ix
A.7 Robustness of results, additional business group patterns . . . . .	xi
A.8 Robustness of results, <i>after</i> the economic crisis (1984) . . . . .	xii
A.9 Robustness of results, <i>after</i> the economic crisis (1985) . . . . .	xiii
A.10 Robustness of results, firms within groups . . . . .	xiv
A.11 Flexible size control, business group . . . . .	xv
A.12 Flexible size control, economic crisis . . . . .	xvi
A.13 Flexible size control, role within groups . . . . .	xvii

## A The Production Development Corporation

The Production Development Corporation – or CORFO due to its Spanish acronym (*Corporación de Fomento de la Producción en Chile*) – was founded in 1939 under the government of Pedro Aguirre Cerda (1938-1941), remains nowadays an important part of the state, and is perceived as an important partner of the business world. This public entity was created by law number 6334, and intended to promote the country's industrialization and development. Although its intellectual roots can be found in the Great Depression in 1929, it was actually created at the same time than the Reconstruction Corporation, which was in charge of helping with the reconstruction after an earthquake hit the south of Chile (Chillán, January 1939).

*The 1939-1970 period* Initially, the Production Development Corporation was managed by the Ministry of Finance, the Ministry of Development, the Ministry of Agriculture, and the President of the Central Bank, among others. Among the goals of the Corporation we found: (i) formulate a plan promoting production, (ii) collaborate with the public and private sectors, and (iii) promote consumption of national products, among others (Article N. 22). The leaders of the Corporation made the electricity and steel sectors priority areas. The operations began with what were known as *Planes de Acción Inmediata* (Immediate Action Plans) to mitigate the earthquake's impacts. These plans were followed by the creation of the National Electricity Company (*Empresa Nacional de Electricidad*, ENDESA) and the Pacific Steel Company (*Compañía de Aceros del Pacífico*, CAP S.A.). In the 1960s the Corporation assisted an important investment plan, creating the National Telecommunications Company (*Empresa Nacional de Telecomunicaciones*, Entel) and the National Television (*Televisión Nacional de Chile*, TVN), among others. All in all, the corporation acted as an ally of the private sector until the victory of the Popular Unity in the 1970 presidential elections.

Appendix I in Hachette and Lüders (1992) provides the complete list of firms under the umbrella of the Corporation in 1970, 1973, 1983 and 1989.

Figure A.1: Business ownership data before 1970

Compañía de Seguros de Punta Arenas (100%/o)

Los principales personeros de este grupo son: Pedro Menéndez Préndez, Beltrán Urenda Zegers, Alfonso Campos Menéndez y otros.

2. Grupo Angelini

Este grupo controla fundamentalmente las siguientes empresas:

- \* Pesquera Eperva (51%/o)
- \* Pesquera Indo (38,7%/o)
- \* Grace y Cía. (75%/o)
- \* Maderas Cholguán (19,2%/o)

Los principales personeros de este grupo son: Anacleto Angelini Fabri, Gino Angelini Fabri, Felipe Zaldívar Larraín y otros.

3. Grupo Said

Este grupo controla y controlaba las siguientes empresas:

- \*\* Banco Nacional del Trabajo (40%/o)
- \*\* Banco Panamericano (64%/o)
- \* Rayón Said Industrias Químicas S.A. (100%/o)
- Fábrica de Envases Modernos (100%/o)
- Compañía de Seguros La Panamericana (80%/o)

Participa minoritariamente en \* Cobre Cerrillos (34%/o) y en Fábrica Victoria de Puente Alto (33%/o)

Además son propietarios de dos corporaciones financieras con sede en Bahamas, la Olympus Investment Finance Corporation y la Brade Investment Corporation

A través de estas financieras afianzan el control sobre las empresas antes mencionadas.

Los principales personeros del grupo son: Antonio Said Kattan, Domingo Said Kattan, Jacobo Said Kattan.

(a) Movimiento de Acción Popular (1972)

BOLSA DE COMERCIO

N.º	SOCIEDADES	Naturaleza del Negocio	Acciones Transadas	PRECIOS 1960 Centésimos de Eº			
				Medio	Mayor	Menor	Cierre a de Día
<b>Bancarias</b>							
1	Central	Banco Mixto	133	3,704	4,000	2,400	3,982
2	Concepción	Bco. Comerc. Partic.	224.462	23,66	37,—	11,—	18,—
3	Concepción (nueva emisión)	" " "	40.162	17,40	20,—	14,50	7,—
4	Continental	" " "	160.802	7,72	8,50	7,—	30,—
5	Crédito e Inversiones	" " "	256.295	27,62	33,—	23,—	—
6	Comercial de Curicó	" " "	—	—	—	—	—
7	Chile	" " "	884.766	341,87	435,—	280,—	350,—
8	Edwards y Cía.	" " "	115.975	57,56	80,—	45,—	41,—
9	Español (antes de canje) v/n Eº 0,20(1)	" " "	530.299	28,61	35,—	22,50	—
10	Español (después de canje) v/n Eº 1,—	" " "	—	—	—	—	—
11	Hipotecario de Chile	" " "	4.190	167,21	170,—	165,—	170,—
12	Hipotecario de Valparaíso	Crédito Hipotecario	193.899	75,50	115,—	82,—	100,—
13	Israelita (antes canje) v/n Eº 0,10. (1)	" " "	15.632	16,60	16,75	14,50	19,—
14	Israelita (después de canje) v/n Eº 1,—	Bco. Comerc. Partic.	341.216	30,86	35,50	26,—	—
15	Italiano	" " "	1.444	207,92	213,—	200,—	200,—
16	Nacional del Trabajo	" " "	431.305	26,77	35,—	18,25	27,—
		Bco. Comerc. Partic.	1.194.770	8,85	10,50	7,—	9,—

La utilidad de los Bancos corresponde a los dos semestres.  
 1.—CENTRAL.—Durante el año 1960 se colocaron 125.432 accs. de Eº 1,00 v/n. (\*) De la utilidad se destinaron 44 centésimos por acción a dividendo y el saldo al Fisco.  
 2.—CONCEPCIÓN.—Se trunsa oficialmente sólo al contado desde Agosto 17.  
 3.—CONTINENTAL.—Emisión de 1.500.000 accs. 1 x 0,33 pagadas a Eº 0,10 y 500.000 accs. 1 x 10 liberada de Eº 0,10.  
 4.—CREDITO.—Emisión de 1.600.000 accs. 1 x 0,8125 liberada de Eº 0,20 v/n.  
 5.—COMERCIAL DE CURICO.—La emisión de 1.600.000 accs. 1 x 0,10 liberada de Eº 0,20 v/n.  
 6.—CHILE.—Dividendos de 1958, 1959 y 1960 se incluyeron 0,5, 2,00 y 2,40 centésimos respectivamente, 61% venta valores.  
 7.—EDWARDS.—Die. 29. Emisión de 3.500.000 accs. 7 x 10 liberada de Eº 0,10 v/n. y 914.634 accs. 1.829.268 x 10 liberada de Eº 0,10 u opción a recibir un dividendo de 1,50 centésimos neto, y Emisión de 585.306 accs. 1 x 10 liberada de Eº 0,10.  
 8.—NACIONAL DEL TRABAJO.—Emisión de 431.305 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 9.—ITALIANO.—Emisión de 1.444 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 10.—ESPAÑOL.—Emisión de 530.299 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 11.—ESPAÑOL.—Emisión de 530.299 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 12.—HIPOTECARIO DE CHILE.—Emisión de 4.190 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 13.—HIPOTECARIO DE VALPARAISO.—Emisión de 193.899 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 14.—ISRAELITA.—Emisión de 341.216 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 15.—ISRAELITA.—Emisión de 341.216 accs. 1 x 10 liberada de Eº 1,00 v/n.  
 16.—NACIONAL DEL TRABAJO.—Emisión de 431.305 accs. 1 x 10 liberada de Eº 1,00 v/n.

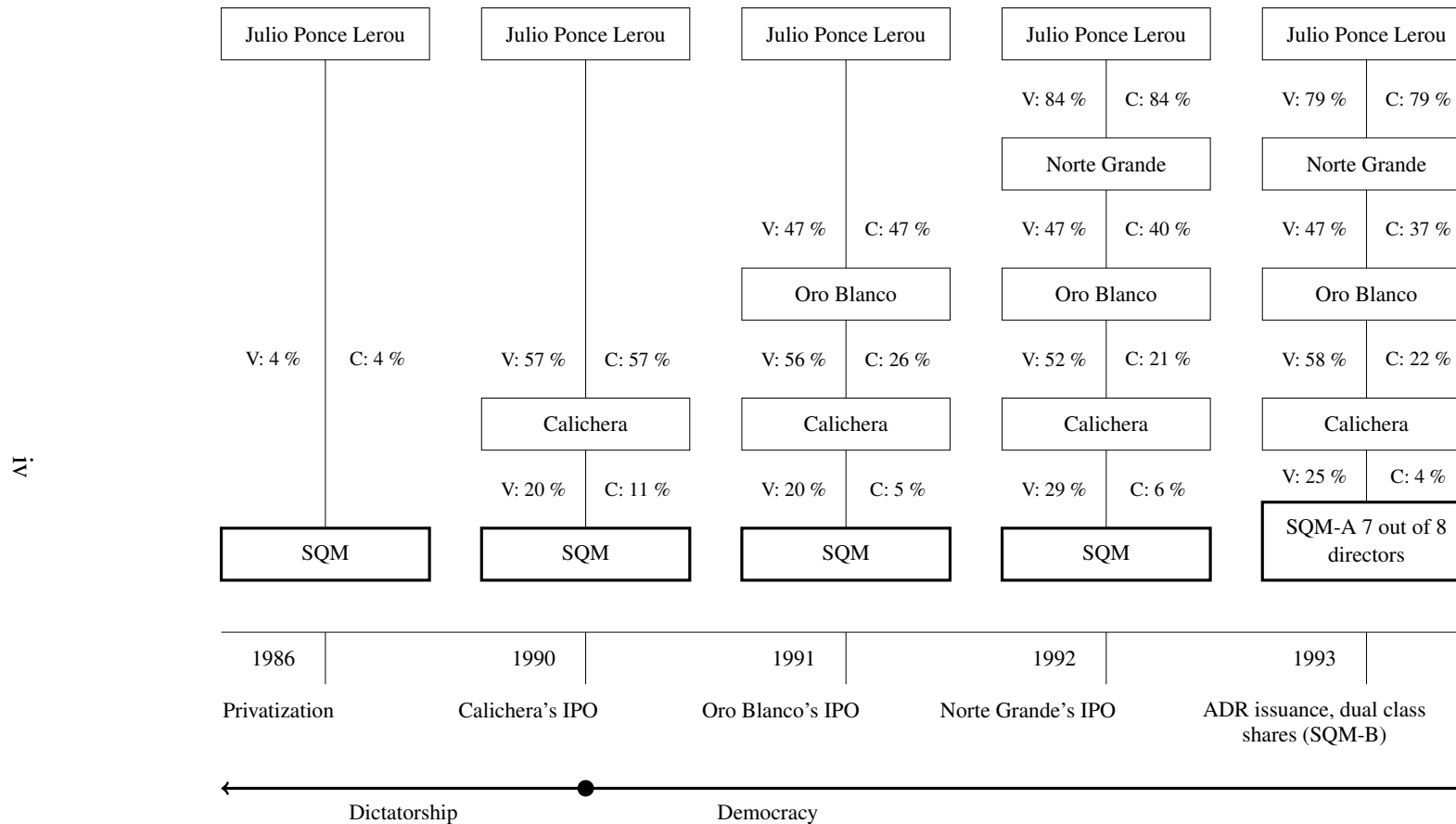
BOLSA DE COMERCIO AÑO 1970 (1)

Nº	SOCIEDADES	NATURALEZA DEL NEGOCIO	Acciones transadas	PRECIOS 1970 (centésimos de Eº)			Cierre al 31 - XII 1970	Book Value (Centésimos de Eº)
				Medio	Mayor	Menor		
<b>BANCARIAS</b>								
1	Central de Chile	Banco Regulador de la Economía Nac.	26	1.692,38	2.000	1.000	2.000	7.553,61
2	Comercial de Curicó	Banco Comercial Privado	78.983	62,97	68	48	35	208,56
3	Concepción	id.	—	—	—	—	—	67,19
4	Constitución	id.	65.198	10,71	15	9	12	78,58
5	Continental	id.	58.239	59,29	80	49	40	842,05
6	Crédito e Inversiones	id.	9.656.064	250,98	385	100	135	621,60
7	Chile	id.	1.831.591	37,74	42	13	14	124,31
8	Edwards	id.	814.507	223,59	315	85	90	340,19
9	Español	Banco Comercial Privado	916.649	109,59	244	33	30	151,90
10	Hipotecario de Chile	Institución de Crédito Hipotecario	—	—	—	—	—	20,76
11	Hipotecario de Desarrollo	id.	213.006	50,32	70	45	15	129,24
12	Israelita	id.	561.748	45,64	65	15	15	192,11
13	Nac. del Trabajo	id.	1.153	123,00	122	—	61	192,11
14	O'Higgins a. de em.	id.	—	—	—	—	—	282,46
15	O'Higgins desp. de em.	id.	191.504	110,41	200	50	70	—
16	Osoirno y La Unión	id.	—	—	—	—	—	—

NOTAS.— La Utilidad de los Bancos y la utilidad por acción corresponden a los dos semestres de 1970.  
 1.—CENTRAL.—Durante 1970 se emitieron 224.212 acciones de las series B y C.  
 2.—COMERCIAL DE CURICO.— Los dividendos de 1968 y 1969 han sido ajustados al canje de 10 x 1; la emisión de Oct. 27 de 1969 sólo recibió un 50% del dividendo de Eº 0,65 pagado en Julio.  
 3.—CONCEPCIÓN.— Ene. 14) Emisión de 500.000 acciones 1 x 3 liberadas de Eº 0,50 valor nominal.  
 4.—CONTINENTAL.— Ene. 14) Emisión de 1.500.000 acciones 1 x 4 liberadas de Eº 0,33 valor nominal.  
 5.—CREDITO.— Ene. 14) Emisión de 1.600.000 acciones 1 x 0,8125 liberadas de Eº 0,20 v/n; Jul. 6) El dividendo de Eº 0,20 y el reparto de Eº 0,04 dieron opción a recibir sólo una de las siguientes alternativas: a) el dividendo total de Eº 0,30 en dinero; b) Eº 0,20 y el reparto de Eº 0,04 dieron opción a recibir sólo una de las siguientes alternativas: a) el dividendo de Eº 0,04 más una emisión de 1 x 10,208107 liberadas; b) el dividendo de Eº 0,26 más una cuota de 1 x 78,55108 liberadas; c) el reparto de Eº 0,04 más una emisión de 1 x 10,208107 liberadas; Jul. 6) Emisión de 2.946.808 acciones 1 por 22 liberadas de Eº 1,— v/n; Nov. 23) Emisión de 3.330.891 acciones 1 x 20 liberadas de Eº 1 v/n; (\*) Si se optó por recibir los dividendos en dinero, durante 1970 se percibió Eº 0,55 y un 10,25% en accs. liberadas; en caso de optar por las acciones, se percibió un dividendo de Eº 0,065 por acción más un 31,88 por ciento en crías liberadas.

(b) Santiago Stock Exchange (1960, 1970)

**Figure A.2:** An example of indirect control in a connected privatization



*Notes:* This figure provides an example of the evolution of controlling stakes in the Chemical and Mining Society of Chile (SQM), the largest Chilean non-metallic mining company which was privatized during the Pinochet years. This firm is an observation in our data and corresponds to a firm bought by a “connected buyer.” Besides showing how indirect control appears over time, the figure presents information about voting rights (in bold text, “V: x%”) and cash-flow rights (in bold italics, “C: x%”) in each year. *Source:* Own construction using administrative data from the *Superintendencia de Valores y Seguros*.

**Table A.1: Definition of variables and sources**

<b>Sample</b>	Definition (1)	Source (2)
Universe of firms	All Firms listed in Chile's stock market (set $\mathcal{A}$ )	SVS
Privatized firms	Firms privatized by Pinochet and with reports (set $\mathcal{B}$ , with $\mathcal{B} \subset \mathcal{A}$ )	SVS, Congress Report (2004)
Control firms	Firms which operated at the same time than privatized firms but remained private (set $\mathcal{C}$ , with $\mathcal{C} \subset \mathcal{A}$ and $\mathcal{C} \cap \mathcal{B} = \emptyset$ )	SVS
<b>Outcomes</b>		
Business groups	Firms under the same controller belong to the same group. Controllers own more than 50% of the firm. Detected using ownership data.	SVS
Old business groups	Business groups operating before Pinochet (1960, 1970). Detected using ownership data.	Santiago Stock Exchange (1960, 1970); Lagos (1962); Movimiento de Acción Popular (1972); Aguirre (2017)
New business groups	Business groups operating after Pinochet which did <i>not</i> existed before. Detected using ownership data.	SVS minus old business groups
Pyramid	Indicator for firms part of a pyramid, detected when group has more than two layers or some firm in group with wedge different than zero	SVS
Wedge	Indicator for difference between cash and voting rights greater than zero	SVS
Provider	Indicator for firms providing net loans larger than 5% of assets	
Receiver	Indicator for firms providing net loans smaller than -5% of assets	
<b>Pre-privatization variables</b>		
Assets	Three-year average of assets before the year of privatization	Balance sheets (SVS)
Return over equity	Three-year average of earnings before interest, taxes, and depreciation	Balance sheets (SVS)
Sales	Three-year average of sales, measured in monetary units	Balance sheets (SVS)
Leverage	Three-year average of debt over assets before the year of privatization	Balance sheets (SVS)
<b>Other</b>		
Industries	Own classification reading description of activities and using two-digit industries	Annual reports, United Nations (2008)

*Notes:* This table presents definitions and sources for all variables used in the paper. Balance sheets and annual reports for each firm-year come from the *Superintendencia de Valores y Seguros* (SVS).

**Table A.2:** Underpricing in privatization and connected buyers

Dependent variable: Underpricing in privatization			
	(1)	(2)	(3)
Firm sold to connected buyer	0.21* (0.12)	0.20 (0.13)	0.24* (0.14)
Observations	50	50	50
R-squared	0.055	0.158	0.190
Industry fixed effects		X	X
Pre-privatization controls			X
Avg. dep. variable (unconnected)	-0.01	-0.01	-0.01

*Notes:* Each observation is a privatized firm. All firms in our sample were privatized in the period 1973–1989. Robust standard errors in parenthesis. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.3:** Additional results, year of privatization and buyer connectedness

Dependent variable: Indicator for firm sold to connected buyer				
	(1)	(2)	(3)	(4)
Privatized <i>after</i> the economic crisis	0.23* (0.14)	0.39** (0.19)	0.26* (0.14)	0.37 (0.25)
Privatized firms	50	50	50	50
Industry fixed effects		X		X
Pre-privatization controls		X		X
R-squared	0.06	0.28	0.07	0.25

*Notes:* In this table each observation is a firm and coefficients correspond to cross-sectional estimates of the linear probability model in equation (3) in the subsample of privatized firms. All firms in the sample were privatized in the period 1973–1989. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . More details in section 6.1.

**Table A.4:** Additional results, coefficients for controls

Dependent variable: Indicator firm belongs to business group in 1990						
	Any group		New group		Old group	
	(1)	(2)	(3)	(4)	(5)	(6)
Firm privatized by Pinochet	0.47*** (0.16) [0.00]	0.38* (0.19) [0.06]	0.37*** (0.13) [0.00]	0.32** (0.16) [0.03]	0.09 (0.18) [0.60]	0.06 (0.19) [0.78]
Firm sold to connected buyer		0.14 (0.14) [0.36]		0.08 (0.14) [0.47]		0.06 (0.16) [0.72]
Log total assets <i>before</i> priv.	0.01 (0.02)	0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	0.02 (0.03)	0.03 (0.03)
Leverage <i>before</i> priv.	-0.12 (0.23)	-0.11 (0.23)	0.07 (0.17)	0.08 (0.17)	-0.19 (0.27)	-0.18 (0.28)
Log sales <i>before</i> priv.	-0.02* (0.01)	-0.02 (0.02)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.02)	-0.01 (0.02)
Return over equity <i>before</i> priv.	-0.16 (0.25)	-0.14 (0.25)	-0.04 (0.19)	-0.03 (0.20)	-0.12 (0.30)	-0.12 (0.30)
Firms	79	79	79	79	79	79
Industry fixed effects	X	X	X	X	X	X
Avg. dep. variable (non-privatized)	0.41	0.41	0.07	0.07	0.55	0.55

*Notes:* In this table each observation is a firm and coefficients correspond to cross-sectional estimates of the linear probability models in equations (3) and (4). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Robust standard errors in parenthesis and  $p$ -values correcting for small sample inference in square brackets. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . More details in section 6.1.



**Table A.5:** Robustness of results, privatization and business groups

Dep. variable: Indicator firm belongs to business group at some point in period 1991-2005						
	Any group		New group		Old group	
	(1)	(2)	(3)	(4)	(5)	(6)
Firm privatized by Pinochet	0.28** (0.13) [0.05]	0.21 (0.15) [0.18]	0.34** (0.16) [0.02]	0.27 (0.18) [0.10]	-0.06 (0.18) [0.75]	-0.06 (0.20) [0.76]
Firm sold to connected buyer		0.11 (0.10) [0.40]		0.10 (0.14) [0.43]		0.00 (0.16) [0.97]
Firms	79	79	79	79	79	79
Industry fixed effects	X	X	X	X	X	X
Pre-privatization controls	X	X	X	X	X	X
Avg. dep. variable (non-privatized)	0.41	0.41	0.07	0.07	0.55	0.55

*Notes:* In this table each observation is a firm and coefficients correspond to cross-sectional estimates of the linear probability models in equations (3) and (4). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Robust standard errors in parenthesis and  $p$ -values correcting for small sample inference in square brackets. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . More details in section 6.1.

**Table A.6: Robustness, role within groups**

	Pyramid		Wedge		Providers		Receivers	
Firm privatized by Pinochet	0.25 (0.26)	0.07 (0.29)	0.17 (0.27)	-0.08 (0.31)	-0.03 (0.16)	-0.22 (0.17)	0.02 (0.05)	0.05 (0.07)
Firm sold to connected buyer		0.23* (0.13)		0.30* (0.18)		0.24** (0.10)		-0.04 (0.04)
Firms	48	48	48	48	48	48	48	48
Industry fixed effects	X	X	X	X	X	X	X	X
Pre-privatization controls	X	X	X	X	X	X	X	X
Avg. dep. variable (non-privatized)	0.58	0.58	0.58	0.58	0.27	0.27	0.07	0.07

*Notes:* In this table each observation is a firm and coefficients correspond to cross-sectional estimates of the linear probability models in equations (3) and (4). We focus on the subsample of firms that were part of a business group in 1990. All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Robust standard errors in parenthesis and  $p$ -values correcting for small sample inference in square brackets. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . More details in section 6.2.

**Table A.7: Robustness of results, additional business group patterns**

	Truncate matching	Matching control	Matching $k$ -neighbor	Control group	Drops takeovers	Coefficient stability	Journalistic investig.	Extended sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Business group (eq. 3)</b>								
Firm privatized by Pinochet	0.43** (0.18)	0.44*** (0.15)	0.18 (0.17)	0.34 (0.31)	0.41** (0.17)	0.86	0.47*** (0.16)	0.23 (0.14)
<b>Business group (eq. 4)</b>								
Firm privatized by Pinochet	0.34 (0.26)	0.37 (0.15)	0.18 (0.17)	0.24 (0.41)	0.24 (0.23)	0.83	0.38* (0.19)	0.10 (0.16)
Firm sold to connected buyer	0.16 (0.19)	0.13 (0.15)	0.29** (0.14)	0.15 (0.30)	0.25 (0.17)	-0.12	0.14 (0.14)	0.25* (0.14)
<b>New business group (eq. 4)</b>								
Firm privatized by Pinochet	0.34 (0.26)	0.35** (0.17)	0.24*** (0.07)	0.25 (0.23)	0.42** (0.16)	0.85	0.32** (0.16)	0.12 (0.13)
Firm sold to connected buyer	0.16 (0.19)	0.11 (0.14)	0.19 (0.13)	-0.04 (0.16)	-0.11 (0.14)	0.19	0.08 (0.14)	0.15 (0.13)
<b>Old business group (eq. 3)</b>								
Firm privatized by Pinochet	-0.07 (0.20)	0.03 (0.18)	-0.06 (0.17)	0.12 (0.31)	0.07 (0.20)	0.19	0.09 (0.18)	0.03 (0.15)
<b>Old business group (eq. 4)</b>								
Firm privatized by Pinochet	-0.17 (0.20)	0.02 (0.19)	-0.06 (0.17)	-0.00 (0.41)	-0.18 (0.20)	-0.02	0.06 (0.19)	-0.02 (0.16)
Firm sold to connected buyer	0.19 (0.25)	0.02 (0.17)	0.10 (0.13)	0.19 (0.30)	0.36** (0.17)	0.14	0.06 (0.16)	0.11 (0.16)
Firms	49	79	79	36	68	79	79	112
Industry fixed effects	X	X	X	X	X	X	X	X
Pre-privatization controls	X	X	X	X	X	X	X	X

*Notes:* In this table each observation is a firm and estimates come from a different estimation strategy. “Eq. 3” refers to the econometric specification in equation (3) and “Eq. 4” to the specification in (4). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Columns 1-3 offer three different matching estimators. Column 4 includes an additional control for group affiliation in 1970 (subsample with available information). Column 5 drops from the estimation the few firms with takeovers. Column 6 implements the coefficient stability method proposed by Altonji et al. (2005) and extended by Oster (2019). Column 7 uses a different definition of “connected buyers.” Finally, column 8 includes more firms in the control group by relaxing the data requirements. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.8:** Robustness of results, *after* the economic crisis (1984)

	Truncate matching	Matching control	Matching <i>k</i> -neighbor	Control group	Drops takeovers	Coefficient stability	Journalistic investig.	Extended sample
<b>Business group</b>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Privatized <i>after</i> the economic crisis	0.40* (0.22)	0.39** (0.17)	0.11 (0.10)	0.33 (0.32)	0.38** (0.19)	0.95	0.45*** (0.17)	0.25* (0.15)
Privatized <i>before</i> the economic crisis	0.52* (0.30)	0.58*** (0.19)	0.14 (0.27)	0.49 (0.56)	0.59*** (0.21)	1.58	0.56*** (0.19)	0.17 (0.20)
<b>New business group</b>								
Privatized <i>after</i> the economic crisis	0.49*** (0.17)	0.48*** (0.14)	0.39*** (0.09)	0.24 (0.18)	0.36** (0.13)	0.90	0.40*** (0.13)	0.23* (0.13)
Privatized <i>before</i> the economic crisis	0.51* (0.30)	0.21 (0.22)	0.05 (0.05)	-0.03 (0.23)	0.32 (0.20)	1.24	0.24 (0.22)	0.08 (0.15)
<b>Old business group</b>								
Privatized <i>after</i> the economic crisis	-0.09 (0.20)	-0.09 (0.17)	-0.29 (0.12)	0.09 (0.33)	0.02 (0.20)	0.38	0.05 (0.18)	0.01 (0.15)
Privatized <i>before</i> the economic crisis	0.01 (0.48)	0.36 (0.30)	0.09 (0.27)	0.52 (0.57)	0.28 (0.32)	0.99	0.32 (0.28)	0.09 (0.22)
Firms	49	79	79	36	68	79	79	112
Industry fixed effects	X	X	X	X	X	X	X	X
Pre-privatization controls	X	X	X	X	X	X	X	X

*Notes:* In this table each observation is a firm and estimates come from a different estimation strategy. All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Columns 1-3 offer three different matching estimators. Column 4 includes an additional control for group affiliation in 1970 (subsample with available information). Column 5 drops from the estimation the few firms with takeovers. Column 6 implements the coefficient stability method proposed by Altonji et al. (2005) and extended by Oster (2019). Column 7 uses a different definition of “connected buyers.” Finally, column 8 includes more firms in the control group by relaxing the data requirements. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.9:** Robustness of results, *after* the economic crisis (1985)

	Truncate matching	Matching control	Matching <i>k</i> -neighbor	Control group	Drops takeovers	Coefficient stability	Journalistic investig.	Extended sample
<b>Business group</b>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Privatized <i>after</i> the economic crisis	0.33 (0.23)	0.30 (0.19)	0.04 (0.11)	0.14 (0.37)	0.28 (0.21)	0.76	0.37* (0.19)	0.17 (0.16)
Privatized <i>before</i> the economic crisis	0.56*** (0.17)	0.59*** (0.14)	0.08 (0.21)	0.49 (0.29)	0.60*** (0.15)	1.53	0.61*** (0.14)	0.31* (0.16)
<b>New business group</b>								
Privatized <i>after</i> the economic crisis	0.53** (0.20)	0.51*** (0.16)	0.42*** (0.11)	0.23 (0.19)	0.38** (0.15)	0.95	0.43*** (0.14)	0.24* (0.14)
Privatized <i>before</i> the economic crisis	0.46** (0.22)	0.30* (0.18)	0.08 (0.05)	0.21 (0.22)	0.31* (0.17)	1.29	0.28 (0.17)	0.13 (0.14)
<b>Old business group</b>								
Privatized <i>after</i> the economic crisis	-0.19 (0.22)	-0.21 (0.19)	-0.38*** (0.13)	-0.09 (0.34)	-0.10 (0.21)	0.07	-0.06 (0.19)	-0.07 (0.16)
Privatized <i>before</i> the economic crisis	0.10 (0.28)	0.29 (0.21)	0.00 (0.22)	0.28 (0.32)	0.30 (0.24)	0.89	0.34 (0.21)	0.18 (0.18)
Firms	49	79	79	36	68	79	79	112
Industry fixed effects	X	X	X	X	X	X	X	X
Pre-privatization controls	X	X	X	X	X	X	X	X

*Notes:* In this table each observation is a firm and estimates come from a different estimation strategy. All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Columns 1-3 offer three different matching estimators. Column 4 includes an additional control for group affiliation in 1970 (subsample with available information). Column 5 drops from the estimation the few firms with takeovers. Column 6 implements the coefficient stability method proposed by Altonji et al. (2005) and extended by Oster (2019). Column 7 uses a different definition of “connected buyers.” Finally, column 8 includes more firms in the control group by relaxing the data requirements. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.10: Robustness of results, firms within groups**

	Truncate matching	Matching control	Matching $k$ -neighbor	Control group	Drops takeovers	Coefficient stability	Journalistic investig.	Extended sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Pyramid (eq. 3)</b>								
Firm privatized by Pinochet	0.18 (0.23)	0.21 (0.18)	0.24* (0.13)	0.44 (0.34)	0.41** (0.19)	0.27	0.29* (0.18)	0.12 (0.13)
<b>Wedge (eq. 3)</b>								
Firm privatized by Pinochet	0.04 (0.23)	0.10 (0.19)	0.08 (0.13)	0.24 (0.36)	0.30 (0.20)	0.20	0.16 (0.19)	-0.06 (0.14)
<b>Provider (eq. 3)</b>								
Firm privatized by Pinochet	0.04 (0.13)	0.06 (0.11)	-0.08 (0.11)	0.01 (0.21)	0.09 (0.11)	0.41	0.09 (0.10)	0.07 (0.08)
<b>Receiver (eq. 3)</b>								
Firm privatized by Pinochet	-0.07 (0.07)	-0.05 (0.06)	-0.02 (0.06)	-0.02 (0.08)	-0.05 (0.06)	-0.17	-0.05 (0.06)	-0.10** (0.04)
<b>Receiver (eq. 4)</b>								
Firm privatized by Pinochet	-0.08 (0.08)	-0.04 (0.07)	-0.02 (0.06)	0.04 (0.09)	-0.05 (0.08)	-0.16	-0.04 (0.06)	-0.10* (0.05)
Firm sold to connected buyer	0.01 (0.06)	-0.02 (0.05)	-0.04 (0.05)	-0.05 (0.11)	0.01 (0.05)	0.02	-0.09 (0.05)	-0.00 (0.05)
Firms	49	79	79	36	68	79	79	112
Industry fixed effects	X	X	X	X	X	X	X	X
Pre-privatization controls	X	X	X	X	X	X	X	X

*Notes:* In this table each observation is a firm and estimates come from a different estimation strategy. “Eq. 3” refers to the econometric specification in equation (3) and “Eq. 4” to the specification in (4). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. Columns 1-3 offer three different matching estimators. Column 4 includes an additional control for group affiliation in 1970 (subsample with available information). Column 5 drops from the estimation the few firms with takeovers. Column 6 implements the coefficient stability method proposed by Altonji et al. (2005) and extended by Oster (2019). Column 7 uses a different definition of “connected buyers.” Finally, column 8 includes more firms in the control group by relaxing the data requirements. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.11:** Flexible size control, business group

	Business group	New group	Old group
	(1)	(2)	(3)
Firm privatized by Pinochet	0.44*** (0.15)	0.40*** (0.13)	0.04 (0.17)
Firms	79	79	79
Industry fixed effects	X	X	X
Flexible size control	X	X	X
Other pre-privatization controls	X	X	X

*Notes:* In this table each observation is a firm and estimates come from equation (3). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. The main difference with the results in the paper is the inclusion a flexible control for firm size pre-privatization, i.e. indicators for quartiles of the size distribution as measured by assets. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.12:** Flexible size control, economic crisis

	Before/after 1984		Before/after 1985	
	<i>New group</i>	<i>Old group</i>	<i>New group</i>	<i>Old group</i>
	(1)	(2)	(3)	(4)
Privatized <i>after</i> the crisis	0.52*** (0.14)	-0.10 (0.17)	0.52*** (0.16)	-0.21 (0.19)
Privatized <i>before</i> the crisis	0.13 (0.25)	0.38 (0.33)	0.28 (0.17)	0.30 (0.21)
Firms	79	79	79	79
Industry fixed effects	X	X	X	X
Flexible size control	X	X	X	X
Other pre-privatization controls	X	X	X	X

*Notes:* In this table each observation is a firm and estimates come from equation (3). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. The main difference with the results in the paper is the inclusion a flexible control for firm size pre-privatization, i.e. indicators for quartiles of the size distribution as measured by assets. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Table A.13:** Flexible size control, role within groups

	Pyramid	Wedge	Providers	Receivers
	(1)	(2)	(3)	(4)
Firm privatized by Pinochet	0.03 (0.20)	-0.07 (0.20)	-0.08 (0.12)	-0.04 (0.07)
Firm sold to connected buyer	0.40*** (0.15)	0.40** (0.15)	0.19* (0.10)	-0.02 (0.05)
Firms	79	79	79	79
Industry fixed effects	X	X	X	X
Flexible size control	X	X	X	X
Other pre-privatization controls	X	X	X	X

*Notes:* In this table each observation is a firm and estimates come from equation (3). All privatizations occurred in the period 1973–1989. Firms in the control group operated during the same period of time but remained private throughout these years. The main difference with the results in the paper is the inclusion a flexible control for firm size pre-privatization, i.e. indicators for quartiles of the size distribution as measured by assets. See section 6.3 for details. Robust standard errors in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .