

ONLINE APPENDIX

The intergenerational transmission of higher education: Evidence from the 1973 coup in Chile

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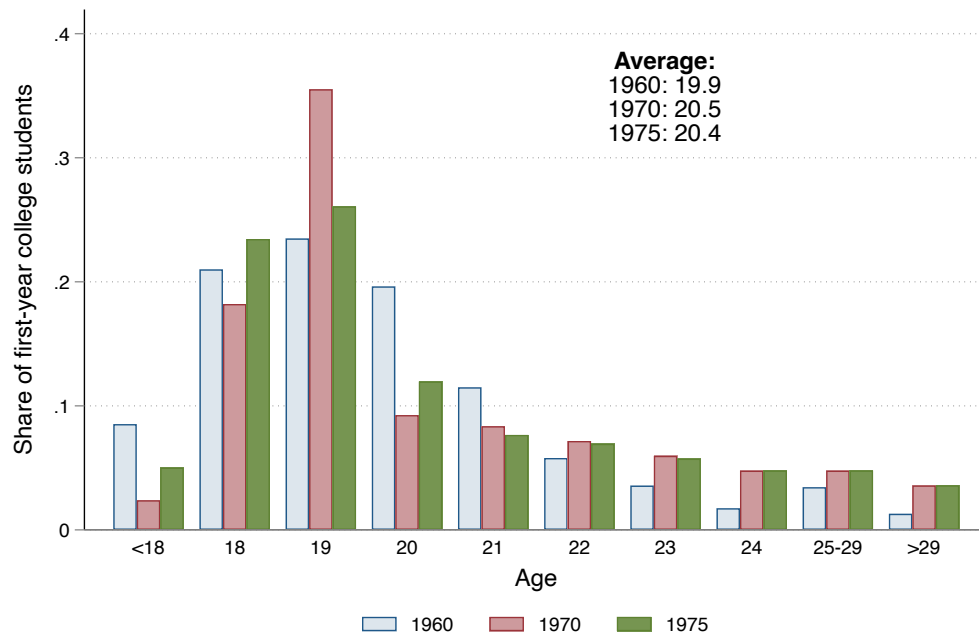
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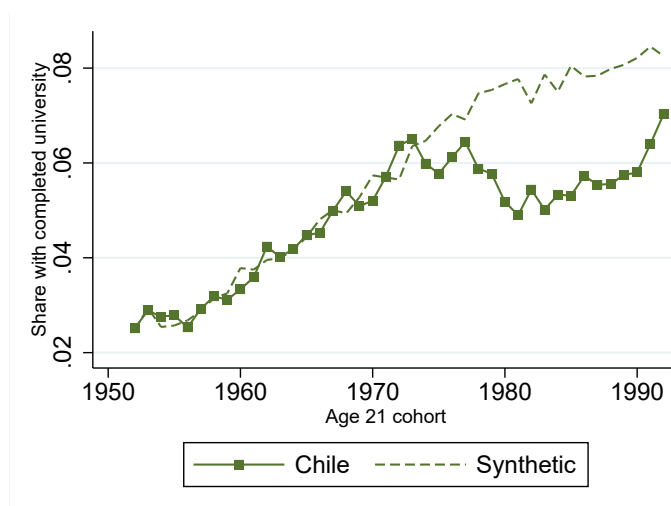
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Figure A.1: Descriptive statistics – Age distribution of first-year college students

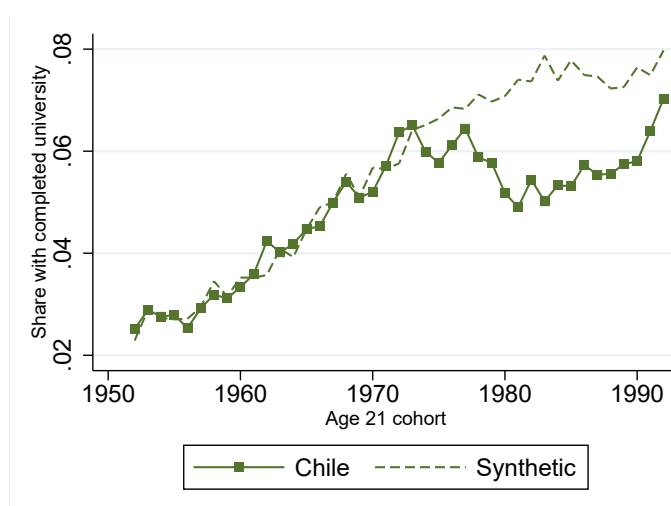


Notes: Information for 1960 comes from the 1960 population census (INE, 1965). The sources for 1970 and 1975 are Schiefelbein (1976) and Echeverría (1982), based on administrative records and the 1970 population census. Data for 1970 corresponds to the entire tertiary sector, i.e. including post-secondary vocational institutions. For the average, we set age at 17, 25 and 30 for the < 18, 25 – 29 and > 29 age groups respectively, which likely leads to an underestimate of the age of first-year college students.

Figure A.2: Synthetic control analysis



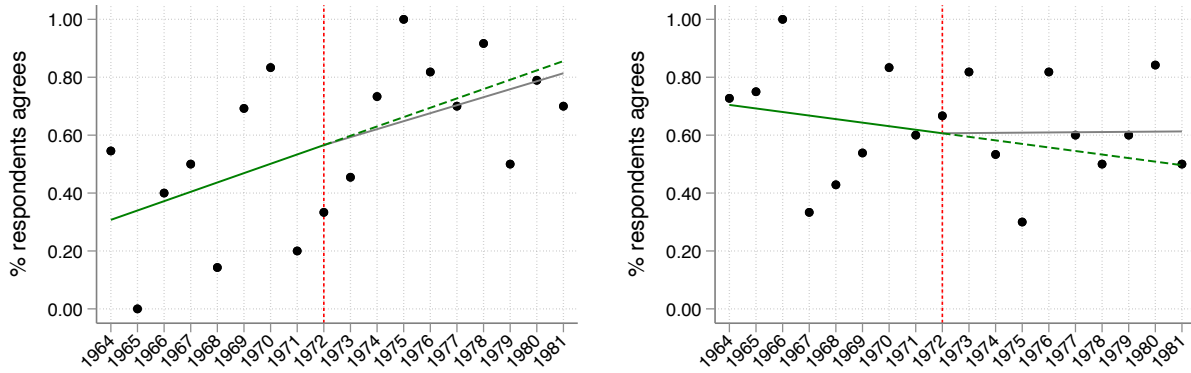
(a) Latin American countries



(b) All available countries

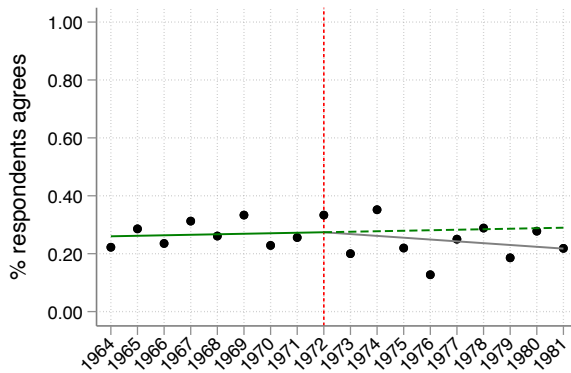
Notes: These figures show the results from a synthetic control analysis using harmonized data from IPUMS International. The dependent variable is the share of people older than 20 years of age who completed college. Data for Chile corresponds to 1992 census. For other countries, we use available censuses between 1987 and 1997. To build the synthetic control we use lags of the share of people with completed college education as well as the share of people between 18 and 65 years of age, the share of women, and the share of people with secondary education. Country codes for donors in panel (a) are: ARG, BOL, BRA, COL, DOM, ECU, HND, HTI, MEX, NIC, PAN, PER, PRY, SLV, and URY. Country codes for donors in panel (b) are the same as in panel (a) plus ARM, AUT, BEN, BFA, BGD, BWA, CAN, CHE, CHN, EGY, ESP, ETH, FJI, FRA, GHA, GRC, HUN, IDN, IND, IRL, JAM, JOR, KEN, KHM, LBR, MAR, MNG, MYS, NGA, PHL, POL, PRT, ROU, SEN, THA, TUR, UKR, USA, VNM, and ZAF.

Figure A.3: Additional results – World Values Survey

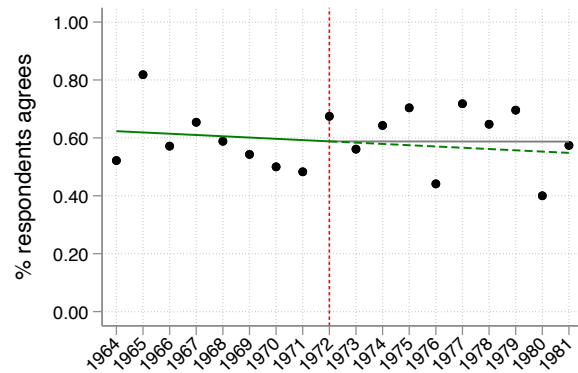


(a) Worried about child education

(b) Has confidence in higher education



(c) Hard work is important among children



(d) Hard work brings success

Notes: All figures focus on the population of individuals who responded questions related to education in the World Value Survey Time Series (1981-2020). Panel (a) displays the share of people who answered to be “very much” or “a great deal” worried about not being able to give one’s children a good education. Panel (b) performs the same analysis but focuses on the share of respondents who reported to have “quite a lot” or “a great deal” of confidence in universities, respectively. Panels (c) and (d) replicate the analysis but now using as dependent variable the share of respondents who reported to agree “quite a lot” or “a great deal” with the statement that hard work is important for children (panel c) and brings success (panel d), respectively. Vertical lines indicate the year of the military coup. The solid green line corresponds to the best linear fit for cohorts reaching college age before 1973. The dashed green line shows the linear extrapolation for subsequent cohorts. The solid grey line corresponds to the best linear fit for cohorts reaching college age in 1973 or afterwards. Notice that WVS time-series shows how the values of Chile have been changing over time - rather than how the values of a selected group of people (panel) have been changing over their life.

Table A.1: College completion

	(1)	(2)	(3)	(4)	(5)
Panel A	Dep. variable: Indicator for parents who completed college				
Parental cohort trend	0.002*** (0.0007)	0.002*** (0.0007)	0.000 (0.0008)	-0.000 (0.0008)	-0.000 (0.0007)
× After 1973 coup	-0.012*** (0.0010)	-0.012*** (0.0010)	-0.013*** (0.0010)	-0.013*** (0.0010)	-0.013*** (0.0010)
Panel B	Dep. variable: Indicator for completing college				
Parental cohort trend	0.001 (0.0010)	0.001 (0.0010)	-0.001 (0.0009)	-0.001 (0.0009)	-0.001* (0.0009)
× After 1973 coup	-0.006*** (0.0012)	-0.006*** (0.0012)	-0.005*** (0.0012)	-0.006*** (0.0012)	-0.005*** (0.0011)
Individuals	233,129	233,129	233,129	233,129	233,129
<i>Fixed effects:</i>					
County of birth by gender	Yes	Yes	Yes	Yes	Yes
Parent gender by child gender	No	Yes	Yes	Yes	Yes
Child age	No	No	Yes	Yes	Yes
Relation to household head	No	No	No	Yes	Yes
Child is high school graduate	No	No	No	No	Yes
R ² (panel A)	0.075	0.077	0.084	0.085	0.089
R ² (panel B)	0.041	0.042	0.049	0.050	0.091
Avg. dependent variable (panel A)	0.250	0.250	0.250	0.250	0.250
Avg. dependent variable (panel B)	0.459	0.459	0.459	0.459	0.459

Notes: The dependent variable is stated in the header of each panel. The sample of individuals includes all respondents in the 2017 census between the ages of 25 and 40 who we can connect to at least one parent born between 1943 and 1960 and who reported full secondary education. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 21, normalized to zero in 1972. “After 1973 coup” is an indicator for parents who reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.2: Years of college

	(1)	(2)	(3)	(4)	(5)
Panel A	Dep. variable: Parents' years of college				
Parental cohort trend	0.013* (0.0077)	0.014* (0.0078)	0.003 (0.0078)	0.002 (0.0078)	0.002 (0.0078)
× After 1973 coup	-0.086*** (0.0094)	-0.086*** (0.0094)	-0.091*** (0.0095)	-0.090*** (0.0095)	-0.089*** (0.0095)
Panel B	Dep. variable: Years of college				
Parental cohort trend	0.024** (0.0118)	0.026** (0.0118)	-0.003 (0.0122)	-0.003 (0.0122)	-0.004 (0.0118)
× After 1973 coup	-0.024 (0.0157)	-0.024 (0.0157)	-0.035** (0.0156)	-0.035** (0.0156)	-0.031** (0.0151)
Individuals	233,129	233,129	233,129	233,129	233,129
<i>Fixed effects:</i>					
County of birth by gender	Yes	Yes	Yes	Yes	Yes
Parent gender by child gender	No	Yes	Yes	Yes	Yes
Child age	No	No	Yes	Yes	Yes
Relation to household head	No	No	No	Yes	Yes
Child is high school graduate	No	No	No	No	Yes
R ² (panel A)	0.024	0.024	0.026	0.026	0.027
R ² (panel B)	0.006	0.007	0.010	0.010	0.017
Avg. dependent variable (panel A)	1.486	1.486	1.486	1.486	1.486
Avg. dependent variable (panel B)	3.305	3.305	3.305	3.305	3.305

Notes: The dependent variable is stated in the header of each panel. The sample of individuals includes all respondents in the 2017 census between the ages of 25 and 40 who we can connect to at least one parent born between 1943 and 1960 and who reported full secondary education. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 21, normalized to zero in 1972. “After 1973 coup” is an indicator for parents who reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.3: Heterogeneity by gender

		Dependent variable: Indicator for college enrollment							
Gender of parent:		Both		Female			Male		
Gender of child:		Female	Male	Both	Female	Male	Both	Female	Male
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Parental cohort trend		-0.000 (0.0010)	-0.000 (0.0012)	0.000 (0.0014)	-0.001 (0.0015)	0.002 (0.0021)	-0.001 (0.0009)	-0.000 (0.0013)	-0.001 (0.0013)
× After 1973 coup		-0.006*** (0.0014)	-0.007*** (0.0015)	-0.008*** (0.0019)	-0.006*** (0.0020)	-0.011*** (0.0027)	-0.006*** (0.0013)	-0.006*** (0.0018)	-0.006*** (0.0018)
IIA:	Individuals	114,021	119,108	94,599	47,927	46,672	138,498	66,076	72,422
<i>Fixed effects:</i>									
County of birth		Yes	Yes	No	Yes	Yes	No	Yes	Yes
County of birth by gender		No	No	Yes	No	No	Yes	No	No
Parent gender by child gender		Yes	Yes	No	No	No	No	No	No
Child age		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²		0.052	0.065	0.061	0.050	0.061	0.068	0.058	0.070
Avg. dependent variable		0.615	0.549	0.563	0.602	0.523	0.594	0.625	0.566

Notes: The dependent variable is an indicator for individuals who attended at least one year to college. Sample includes all respondents in the 2017 census between the ages of 25 and 40 that we can connect to at least one parent born between 1943 and 1960 and who reported having graduated from high school. Each column further restricts the sample by gender of parent or child as indicated in the header. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 21, normalized to zero in 1972. “After 1973 coup” is an indicator for parents who reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.4: Heterogeneity by regional exposure

Dependent variable: Indicator for college enrollment				
Heterogeneity (high/low exposure):	Based on regional growth in share college attendance		Based on regional growth in years of college	
Sample:	Parents	Children	Parents	Children
	(1)	(2)	(3)	(4)
Parental cohort trend (low exposure)	0.002** (0.0011)	-0.002 (0.0011)	0.002** (0.0010)	-0.002 (0.0010)
× After 1973 coup	-0.018*** (0.0016)	-0.004*** (0.0016)	-0.018*** (0.0015)	-0.005*** (0.0015)
Parental cohort trend (high exposure)	0.010*** (0.0015)	0.006*** (0.0018)	0.011*** (0.0017)	0.006*** (0.0019)
× After 1973 coup	-0.038*** (0.0024)	-0.019*** (0.0027)	-0.038*** (0.0026)	-0.018*** (0.0028)
Individuals	233,129	233,129	233,129	233,129
<i>Fixed effects:</i>				
County of birth by gender	Yes	Yes	Yes	Yes
Parent gender by child gender	Yes	Yes	Yes	Yes
Child age	Yes	Yes	Yes	Yes
R ²	0.096	0.063	0.095	0.063
Avg. dependent variable	0.309	0.582	0.309	0.582

Notes: The dependent variable is an indicator for individuals who attended college for at least one year. Columns 1 and 3 shows the results for parental college enrollment, while columns 2 and 4 for children. The sample of individuals includes all respondents in the 2017 census between the ages of 25 and 40 who we can connect to at least one parent born between 1943 and 1960 and who reported full secondary education. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 21, normalized to zero in 1972. We interact the parental cohort trend with an indicator for regions with (i) low exposure to the contraction of higher education and (ii) high exposure to the contraction. In columns 1 and 2, we define high/low exposure using the regional growth between in college enrollment between 1960 and 1970 using census data from both of these years. In columns 3 and 4, we define high/low exposure similarly but now using the regional growth in average years of college between 1960 and 1970. “After 1973 coup” is an indicator for parents who reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.5: Robustness of results – Different windows for the age of children

Ages of individuals included:	Dependent variable: Indicator for college enrollment				
	20-40	30-40	25-35	25-45	25-30
	(1)	(2)	(3)	(4)	(5)
Parental cohort trend	-0.000 (0.0009)	0.001 (0.0011)	0.003*** (0.0010)	-0.000 (0.0009)	0.004*** (0.0013)
× After 1973 coup	-0.007*** (0.0012)	-0.013*** (0.0016)	-0.009*** (0.0013)	-0.007*** (0.0012)	-0.006*** (0.0016)
Individuals	233,129	131,150	187,158	233,129	118,909
<i>Fixed effects:</i>					
County of birth by gender	Yes	Yes	Yes	Yes	Yes
Parent gender by child gender	Yes	Yes	Yes	Yes	Yes
Child age	Yes	Yes	Yes	Yes	Yes
R ²	0.063	0.056	0.055	0.063	0.053
Avg. dependent variable	0.582	0.533	0.608	0.582	0.639

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Notes: The dependent variable is an indicator for individuals who attended at least one year to college. The estimating sample in the paper includes all respondents in the 2017 census between the ages of 25 and 40 who we can connect to at least one parent born between 1943 and 1960 who reported full secondary education. Alternative samples are described in the header of each column. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 21, normalized to zero in 1972. “After 1973 coup” is an indicator for parents who reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.6: Robustness of results – College age is 19 years old

	(1)	(2)	(3)	(4)	(5)
Panel A	Dep. variable: Indicator for parents who attended college				
Parental cohort trend	0.001 (0.0006)	0.001* (0.0006)	-0.002*** (0.0005)	-0.002*** (0.0005)	-0.002*** (0.0005)
× After 1973 coup	-0.017*** (0.0009)	-0.017*** (0.0009)	-0.018*** (0.0009)	-0.018*** (0.0009)	-0.017*** (0.0009)
Panel B	Dep variable: Indicator for college enrollment				
Parental cohort trend	0.002*** (0.0007)	0.003*** (0.0007)	-0.002*** (0.0006)	-0.002*** (0.0006)	-0.002*** (0.0005)
× After 1973 coup	-0.005*** (0.0011)	-0.005*** (0.0011)	-0.006*** (0.0010)	-0.006*** (0.0010)	-0.005*** (0.0009)
Individuals	259,819	259,819	259,819	259,819	259,819
<i>Fixed effects:</i>					
County of birth by gender	Yes	Yes	Yes	Yes	Yes
Parent gender by child gender	No	Yes	Yes	Yes	Yes
Child age	No	No	Yes	Yes	Yes
Relation to household head	No	No	No	Yes	Yes
Full secondary	No	No	No	No	Yes
R ² (panel A)	0.086	0.088	0.096	0.097	0.101
R ² (panel B)	0.044	0.045	0.062	0.063	0.131
Avg. dependent variable (panel A)	0.301	0.301	0.301	0.301	0.301
Avg. dependent variable (panel B)	0.579	0.579	0.579	0.579	0.579

Notes: The dependent variable is stated in the header of each panel. Sample includes all respondents in the 2017 census between the ages of 25 and 40 who we can connect to at least one parent that was born between 1943 and 1960 who reported full secondary education. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 19, normalized to zero in 1972. “After 1973 coup” is an indicator for parents who reached age 19 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1

Table A.7: Dropout decisions in primary and secondary school

Dependent variable:	Primary education								Secondary education			
	1st	2nd	3rd	4th	5th	6th	7th	8th	1st	2nd	3rd	4th
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Parental cohort trend	0.000 (0.0001)	0.000 (0.0001)	0.000 (0.0001)	0.000 (0.0001)	0.000 (0.0001)	0.000 (0.0001)	0.000 (0.0002)	0.000* (0.0002)	0.001** (0.0003)	0.001*** (0.0003)	0.001** (0.0004)	0.001 (0.0004)
× After 1973 coup	-0.000 (0.0002)	-0.000 (0.0002)	-0.000 (0.0002)	-0.000 (0.0002)	0.000 (0.0002)	0.000 (0.0002)	-0.000 (0.0002)	-0.000 (0.0002)	-0.001* (0.0003)	-0.001*** (0.0004)	-0.002*** (0.0005)	-0.002*** (0.0005)
Individuals	233,129	233,129	233,129	233,129	233,129	233,129	233,129	233,129	233,129	233,129	233,129	233,129
<i>Fixed effects:</i>												
County of birth by gender	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Parent gender by child gender	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Child age	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.005	0.005	0.005	0.005	0.006	0.006	0.007	0.007	0.010	0.011	0.013	0.015
Avg. dependent variable	0.996	0.996	0.996	0.995	0.994	0.993	0.992	0.991	0.981	0.976	0.961	0.950

Notes: The dependent variable is an indicator for last year of completed education, from 1st year of primary (column 1) up to last year of high school (column 12). Sample includes all respondents in the 2017 census between the ages of 25 and 40 who we can connect to at least one parent born between 1943 and 1960 who reported full secondary education. “Parental cohort trend” is a continuous variable indicating the year at which the parent reached age 21, normalized to zero in 1972. “After 1973 coup” is an indicator for parents who reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1