EDUCATION OR INDOCTRINATION?
THE VIOLENT ORIGINS OF PUBLIC SCHOOL SYSTEMS IN AN ERA OF
STATE-BUILDING

Online Supplementary Materials

Agustina S. Paglayan*


Online Appendix A (pages 2-24)

Supplementary Figures and Tables

Online Appendix B (pages 25-28)

Original Dataset of Primary School Enrollment Rates in European and Latin American Countries, 1828-2015

* Assistant Professor, Department of Political Science and School of Global Policy and Strategy, University of California, San Diego, apaglayan@ucsd.edu.
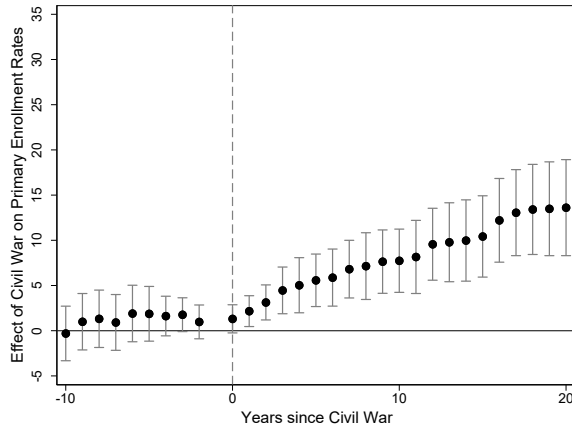
Figure A1. Primary enrollment rate (as a % of the popn. ages 5-14), by Region
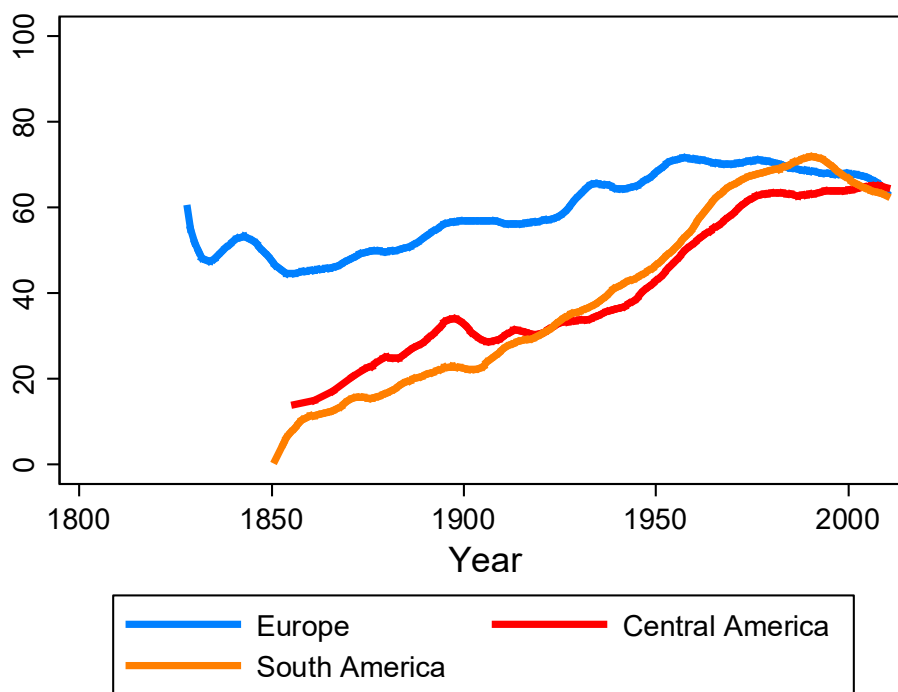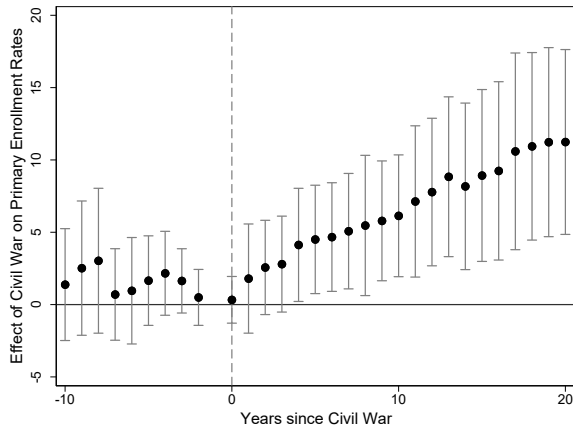

Source: Author (see main text and Online Appendix B).

Figure A2. Effect of Civil War on Primary SERs -- Treatment is the Last Year of the Civil War

Panel A: All civil wars

Panel B: Civil wars that occurred under non-democratic regimes

Note: Point estimates and 95% confidence intervals for the effect of civil war on primary enrollment rates, based on an event study model (Equation 1) estimated for the 10 years before and the 20 years after the end of a civil war. Standard errors clustered at the country level. Panel A includes all civil wars. Panel B is restricted to civil wars that took place during non-democratic regimes. Full regression results are available on APSR Dataverse.

# Figure A3. Effect of Banking Crises on Primary School Enrollment Rates
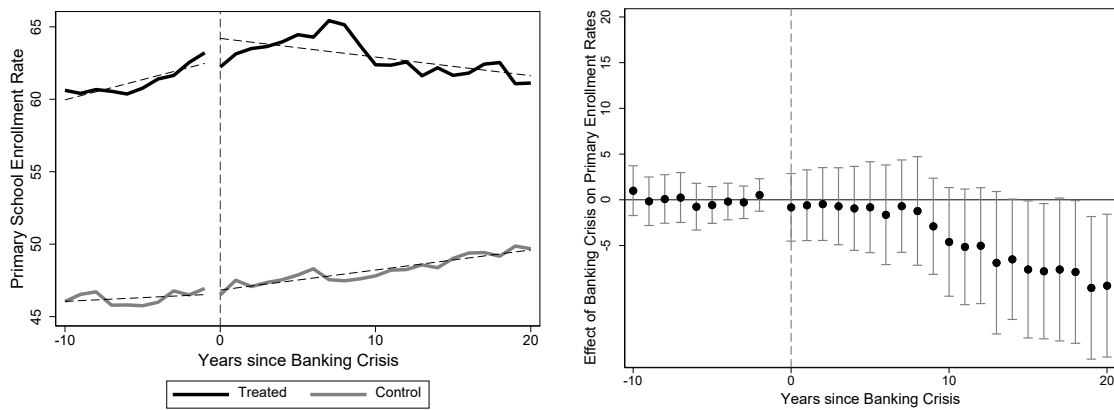
Note: Panel A: Average primary SER trend of countries that had a banking crisis in black. For each country where there was a banking crisis in year $t=T$, I compute the trend of a control group, which in any given year t is composed of countries that did not have a banking crisis in that year or previous years, weighed equally. I then compute the average trend across all control groups, depicted by the grey line. Panel B: Point estimates and 95% confidence intervals for the effect of banking crises on primary SERs, based on an event study model (analogous to Equation 1) estimated for the 10 years before and the 20 years after a banking crisis. Standard errors clustered at the country level. Full regression results are available on APSR Dataverse.

Figure A4. Robustness to outliers: Average Primary SERs in countries that experienced civil war, dropping one country at a time

Panel A: All civil wars, excluding one country at a time
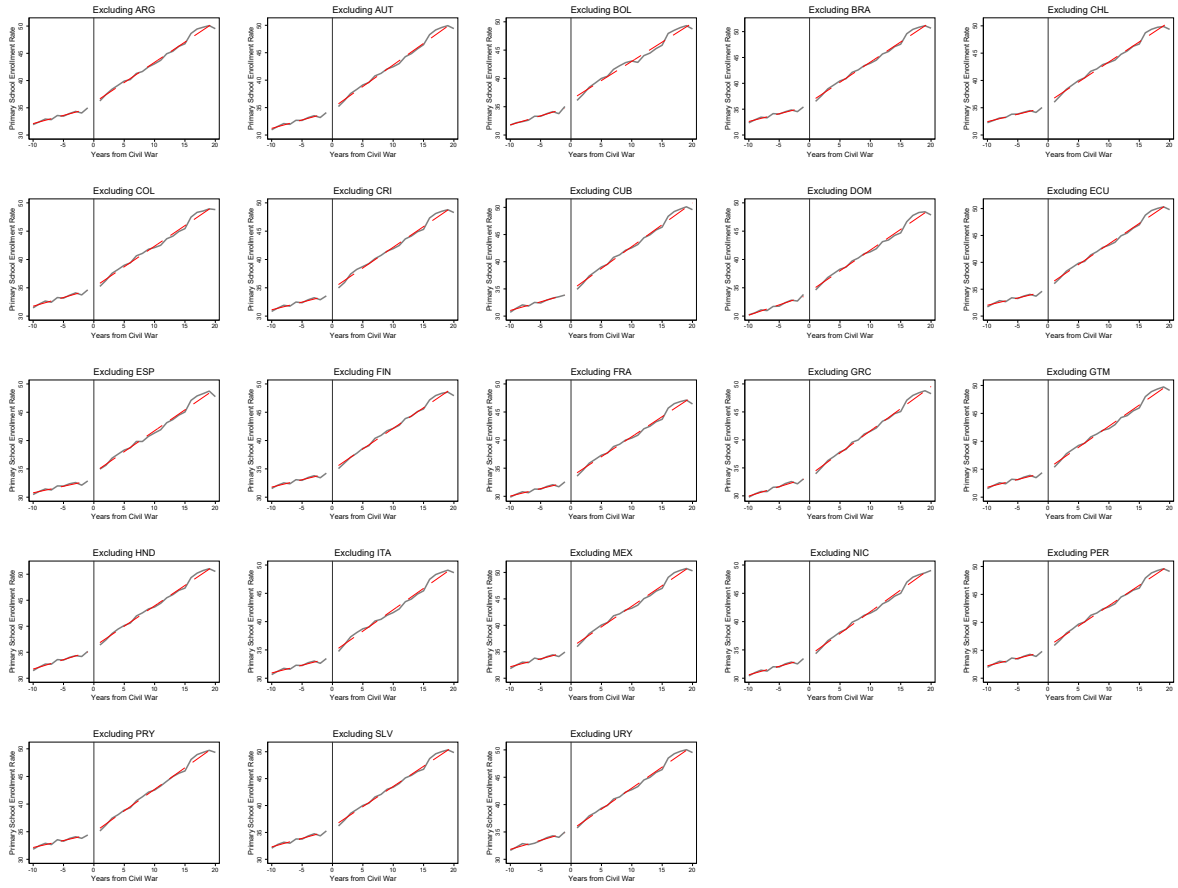
Panel B: Civil wars under non-democratic regimes, excluding one country at a time
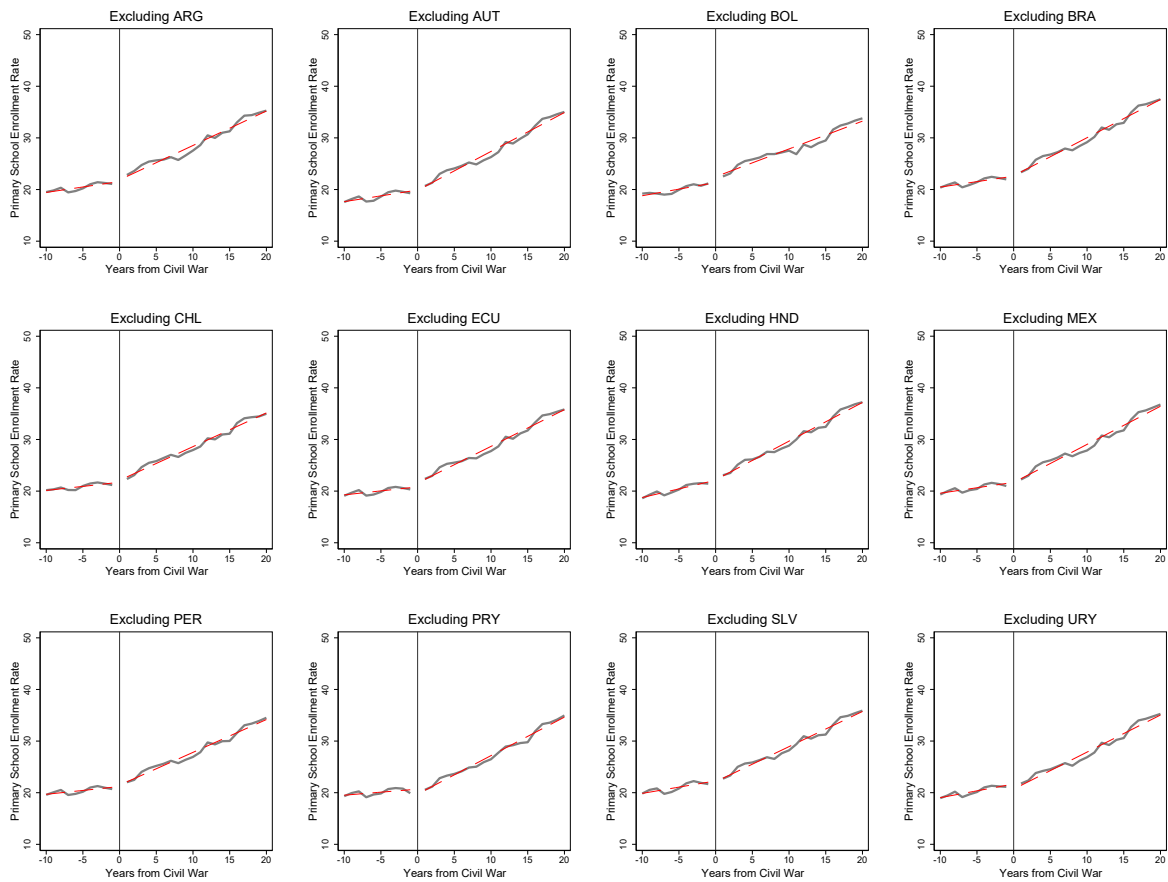
Note: Panel A above replicates the black trend in Panel A of Figure 1, dropping one country at a time. Panel B above replicates the black trend in Panel B of Figure 1, dropping one country at a time.

Source: Author for primary school enrollment rates (as a percentage of the population ages 5-14) (see Online Appendix B); CoW for timing of civil war; Boix, Miller and Rosato (2013) for regime type.

Figure A5. Robustness to outliers: Event study estimates of the effect of civil war, dropping one country at a time

Panel A: All civil wars, excluding one country at a time

Panel B: Civil wars under non-democratic regimes, excluding one country at a time
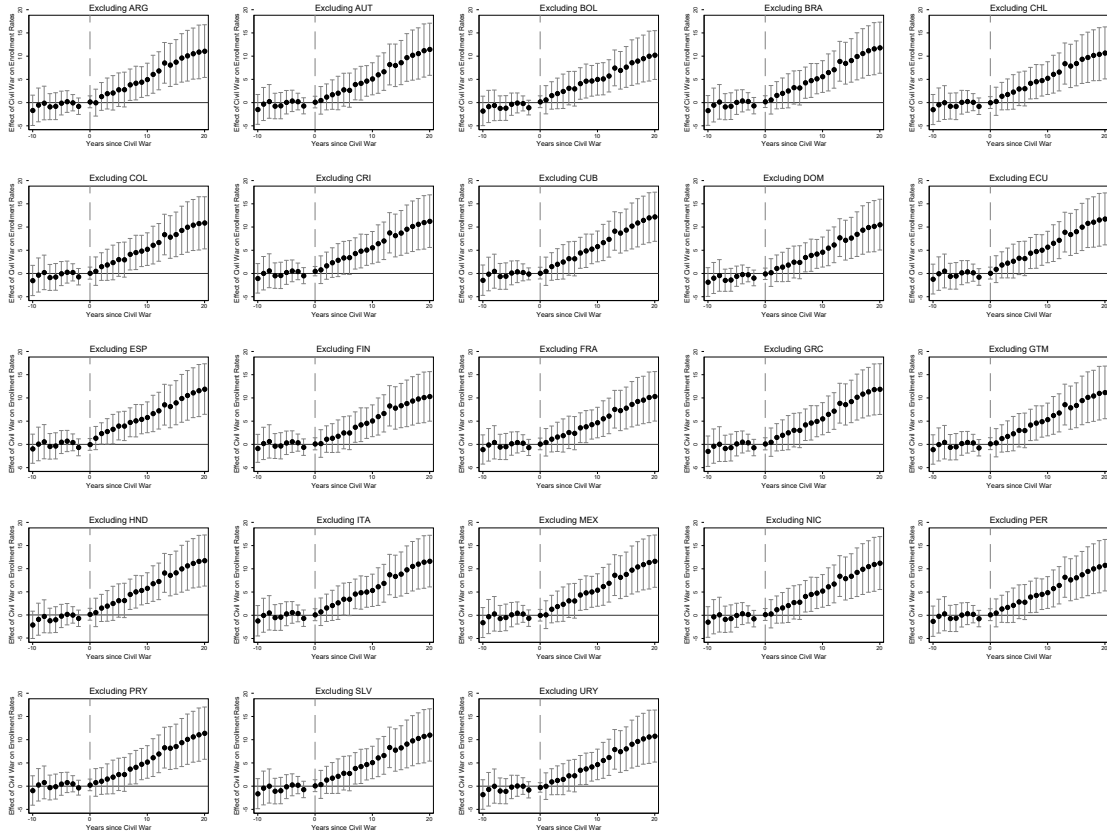

Note: Panel A above replicates the black trend in Panel A of Figure 2, dropping one country at a time. Panel B above replicates the black trend in Panel B of Figure 2, dropping one country at a time. Full regression results are available on APSR Dataverse.
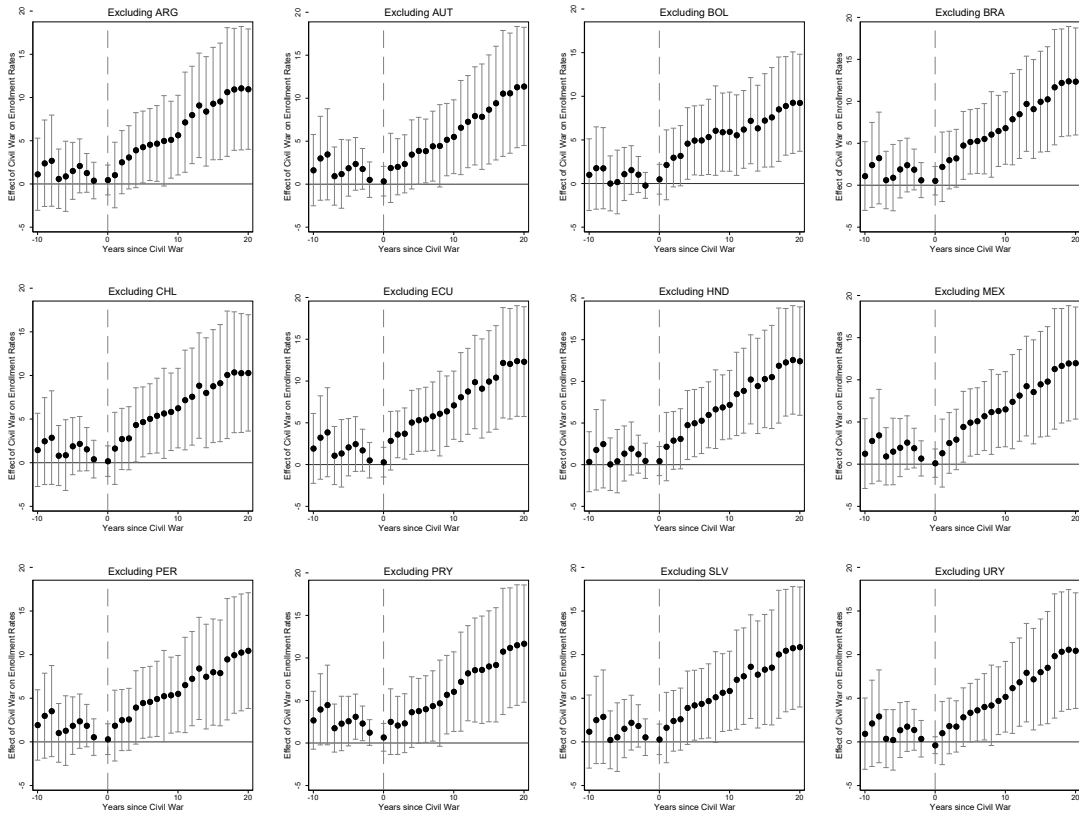
Source: Author for primary school enrollment rates (as a percentage of the population ages 5-14) (see Online Appendix B); CoW for timing of civil war; Boix, Miller and Rosato (2013) for regime type.

Figure A6. Primary SERs in countries that experienced civil war, by country

Panel A: Summary of Panels B and C

	Countries that were non-democratic before and after the civil war	Countries where civil war overlapped with regime change
slope acceleration,	ARG, BOL, HND, PER, SLV	CRI, DOM, FRA
upward intercept shift,	PRY	CUB
or both after civil war	URY	COL, GRC, NIC
no slope change or intercept shift after civil war	AUT, CHL, MEX, BRA	GTM, FIN, ITA
slope deceleration, downward intercept shift,		ESP
or both after civil war	ECU	

Panel B: Countries with non-democratic regime before, during, and after the war
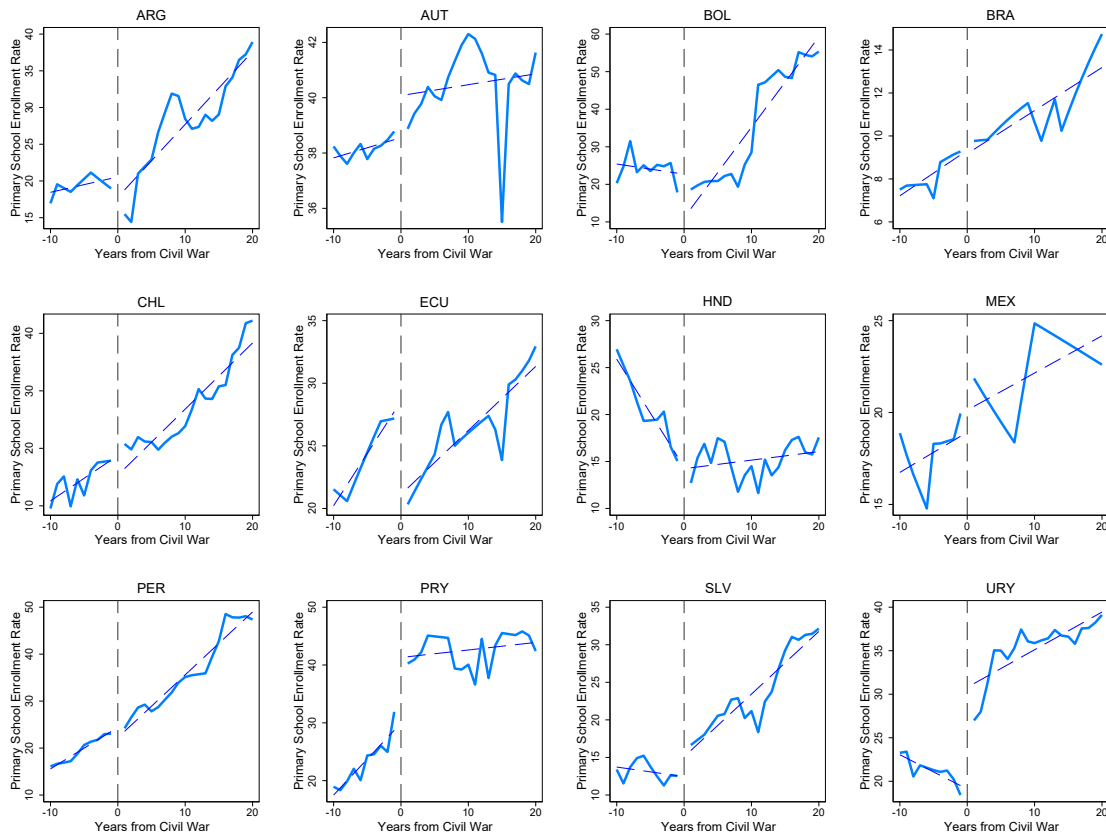
Panel C: Countries where civil war period of analysis overlapped with regime change
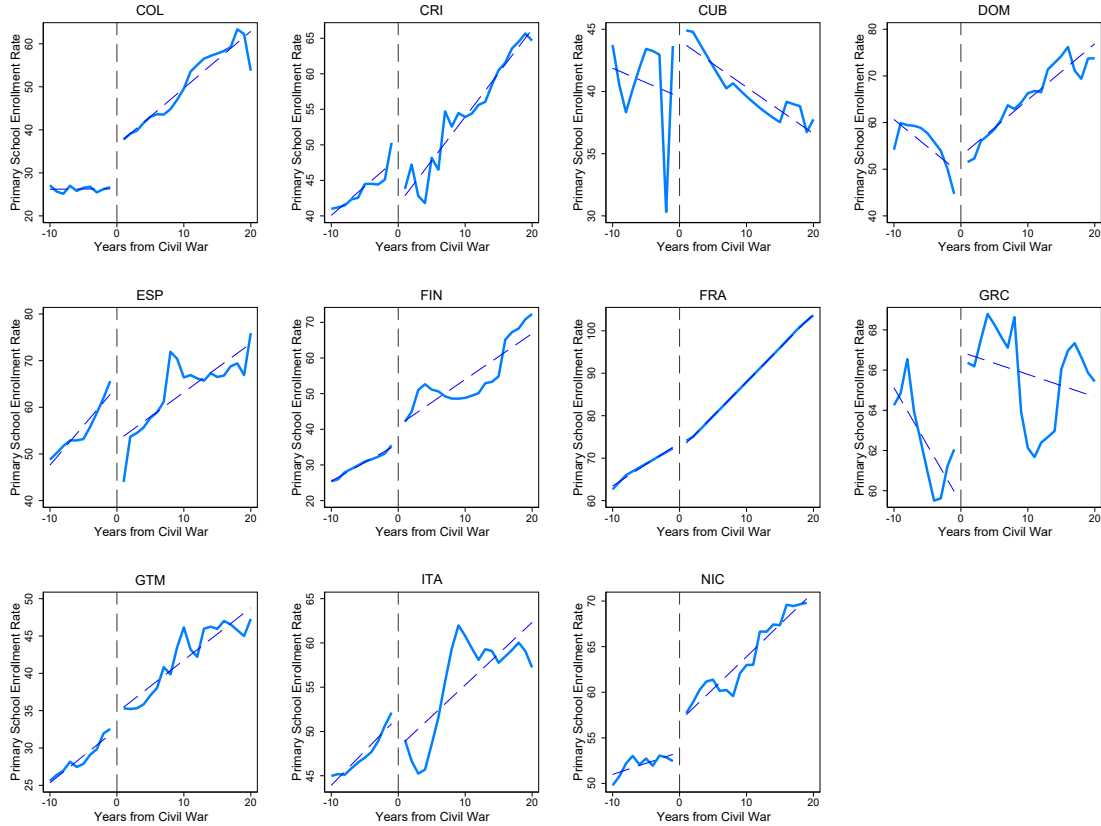
Note: <u>Panel A</u> summarizes the results of estimating the following equation for each country that experienced civil war:

$$Y_{i,t} = \beta_0 + \beta_1(year_{i,t} - t^*) + \beta_2 Treatment_{i,t} + \beta_3[(year_{i,t} - t^*)xTreatment_{i,t}] + \epsilon_{i,t},$$

where $Y_{i,t}$ measures primary SER in country i in year t, t^* is the year when country i experienced the onset of civil war, and $Treatment_{i,t}$ takes a value of 1 if country i in year t had already experienced the onset of civil war (and a value of 0 otherwise). For each country i, β_1 measures the slope of the primary SER linear trend before the occurrence of civil war, β_2 indicates whether the occurrence of civil war was accompanied by an intercept shift, and β_3 measures how the country's linear trend in primary SER changed after the occurrence of civil war. A total of 23 regression tables, one per country, are available upon request. The table in Panel A summarizes the results using information about the estimated coefficients for β_2 and β_3 and their standard errors. Full regression results are available on APSR Dataverse. "Slope acceleration" refers to cases where the estimated coefficient for

β_3 is positive and statistically significant at least at the 5% level. "Slope deceleration" refers to cases where the estimated coefficient for β_3 is negative and statistically significant. "Upward" ("downward") intercept shift refers to cases where the estimated coefficient for β_2 is positive (negative) and statistically significant. "No slope change" and "no intercept shift" refers to cases where the estimated coefficient for β_3 and β_2, respectively, were not statistically different from zero. Panel B shows the country-specific primary SER time trend for countries where civil war was preceded and followed by a non-democratic regime, in the 10 years before the beginning of the war and the 20 years after the war's end. Panel C shows the country-specific primary SER time trend for countries where the civil war period of analysis (10 years before the beginning of the war and the 20 years after the war's end) overlapped with regime change. The timing of civil wars in each country is provided in Table A1.

Source: Author for primary school enrollment rates (as a percentage of the population ages 5-14) (see Online Appendix B); CoW for timing of civil war; Boix, Miller and Rosato (2013) for regime type.

Figure A7. Primary School Enrollment Rate in Chile, 1853-1878
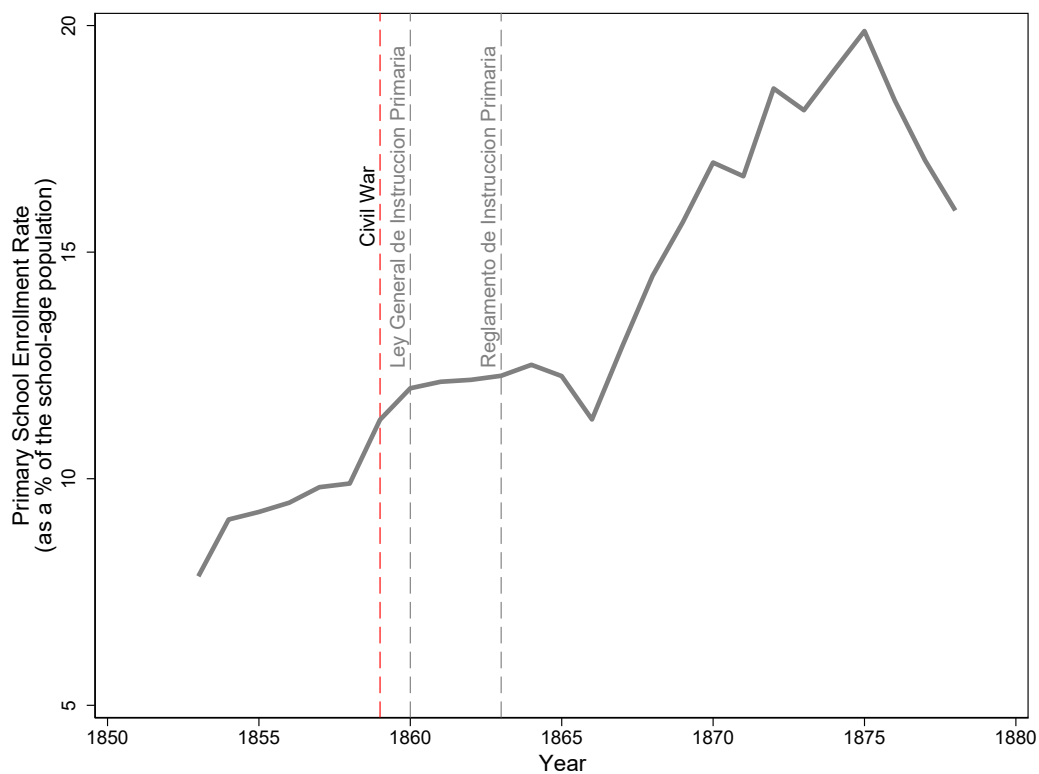
Source: Author's original dataset based on student enrollment statistics compiled by Serrano et al. (2012) (see main text and Online Appendix B).

Figure A8. Public Primary Schools and Student Enrollment in Public Primary Schools in Atacama Compared to a Synthetic Control, 1859-1878
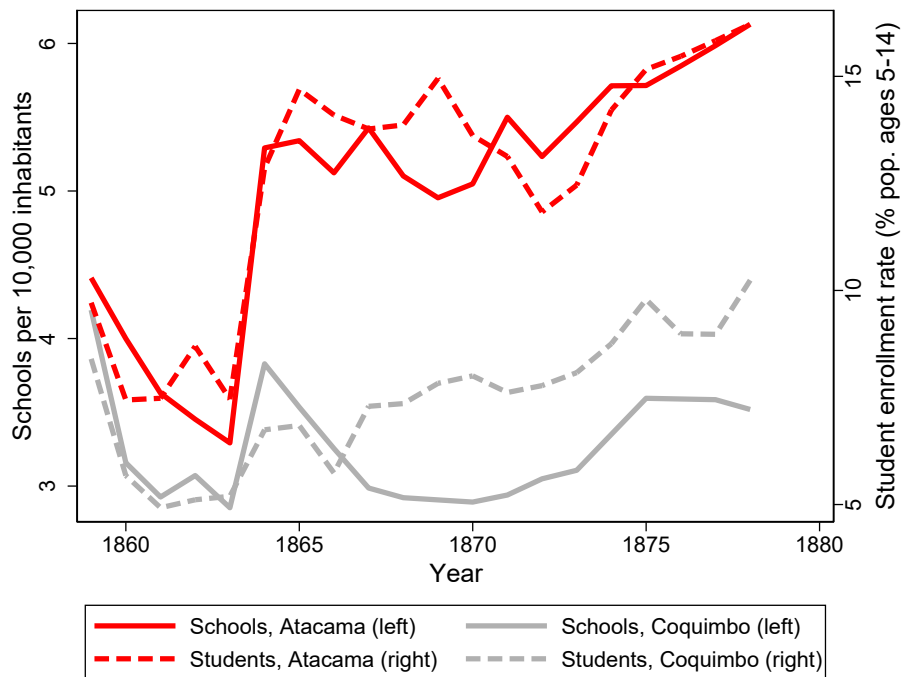
Panel A: Public Primary Schools
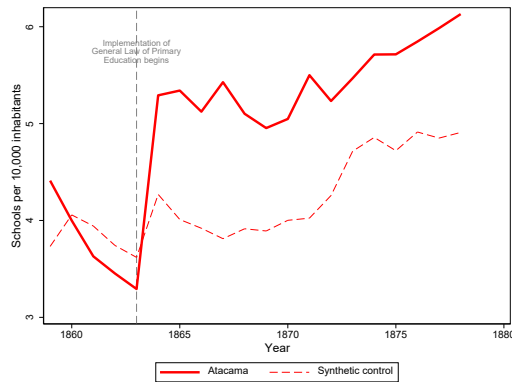
Panel B: Student Enrollment
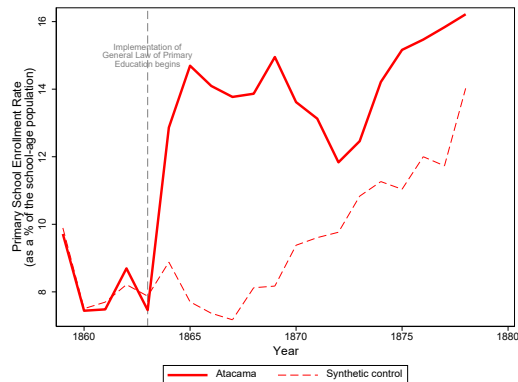
Note: The dashed vertical line corresponds to the year 1863, when the *Reglamento General de Instruccion Primaria* was introduced, which marks the beginning of the implementation of the 1860 *General Law of Primary Education*. The graph above uses synthetic control methods to estimate how the number of primary schools and student enrollment in Atacama would have evolved after the 1863 *Reglamento General de Instruccion Primaria* had Atacama not participated in the 1859 civil war. The synthetic control, given by the dashed red trend, is a weighted average of the seven provinces that did not participate in the war, where the weights per province are selected following Abadie, Diamond and Hainmueller (2010) to produce the artificial (i.e., "synthetic") control group that most closely resembles Atacama's trend in the pre-*Reglamento* period. The weights for Panel A are: Chiloe (12.2%), Llanquihue (16.4%), Valdivia (8.3%), Arauco (14%), Concepcion (13.8%), Nuble (18.9%), and Maule (16.3%). The weights for Panel B are: Chiloe (15%), Llanquihue (13.8%), Valdivia (15.3%), Arauco (13.9%), Concepcion (14.4%), Nuble (13.8%), and Maule (13.8%). The results are also robust to excluding from the synthetic control the three provinces whose distance from Santiago was greater than the distance between Atacama and Santiago (i.e., Chiloe, Llanquihue, and Valdivia).

Source: Author based on *Anuario Estadistico de la Republica de Chile* (multiple years).

Figure A9. Public Primary Schools and Enrollment in Atacama and Coquimbo, 1859-1878

Source: Author based on *Anuario Estadistico de la Republica de Chile* (multiple years).

Figure A10. Centrally-Controlled Public Primary Schools in Atacama and Fiscal Revenue in Chile, 1859-1878

Atacama saw a large increase in the number of primary schools in 1864, despite the fact that fiscal revenues *declined* between 1859 and 1864. Although revenues increased in 1865, the expansion of schooling in Atacama preceded that increase. Moreover, the contraction of revenues in 1866 was not accompanied by a reduction in the number of schools in Atacama.
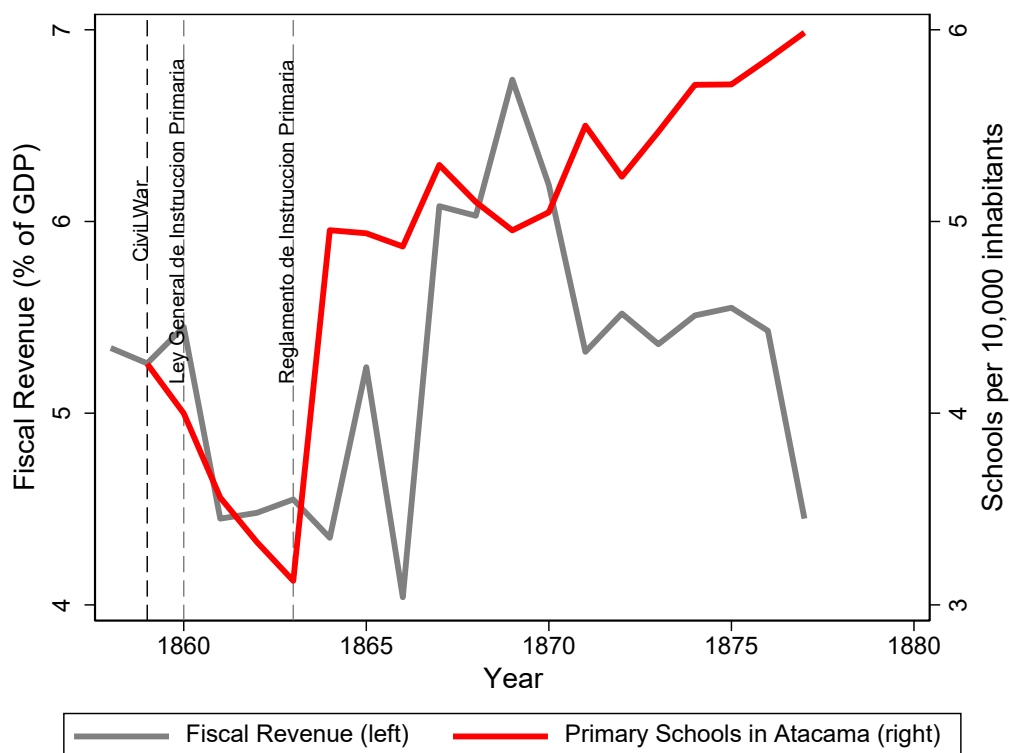
Source: For the number of public primary schools in Atacama, author based on *Anuario Estadistico de la Republica de Chile* (multiple years). For national fiscal revenues: Braun-Llona, Juan, Matias Braun-Llona, Ignacio Briones, Jose Diaz, Rolf Luders, Gert Wagner. 1998. "Economia Chilena 1810-1995: Estadisticas Historicas." Pontificia Universidad Catolica de Chile, Documento de Trabajo 187.

Figure A11. Primary schools and enrollment in France, 1813-1900

Panel A. Number of primary schools, 1813-1900
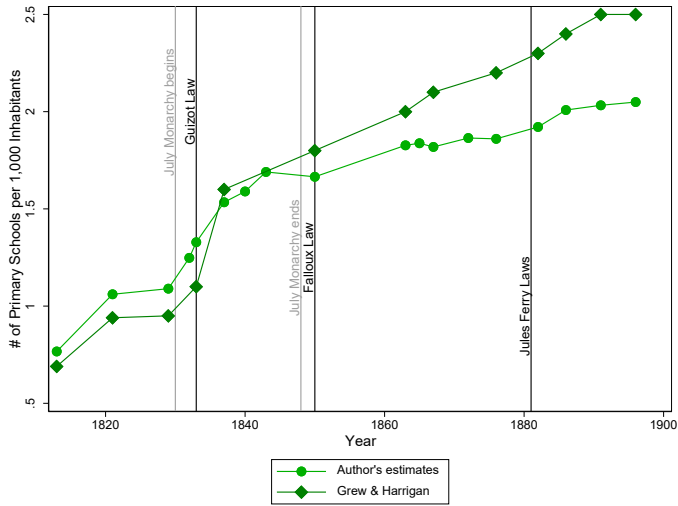
Panel B. Primary school enrollment rates, 1829-1900
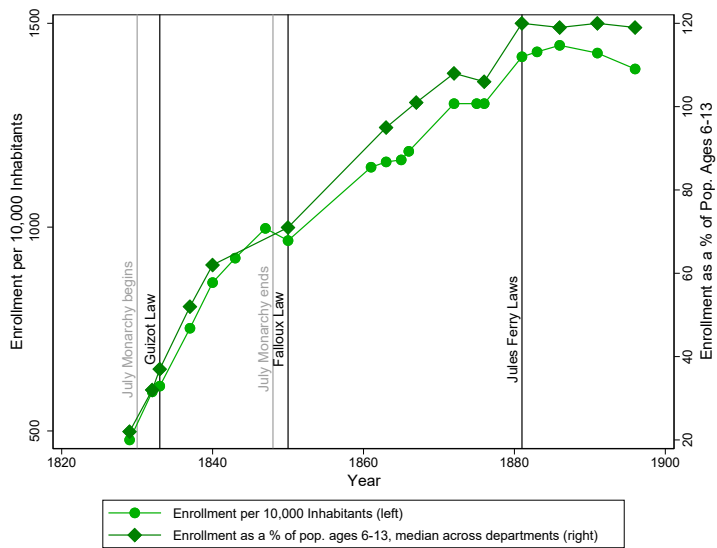
Figure A12. Primary education expenditures in France, 1820-1900

Panel A: Public and private primary education expenditures in millions of new francs at 1820 prices
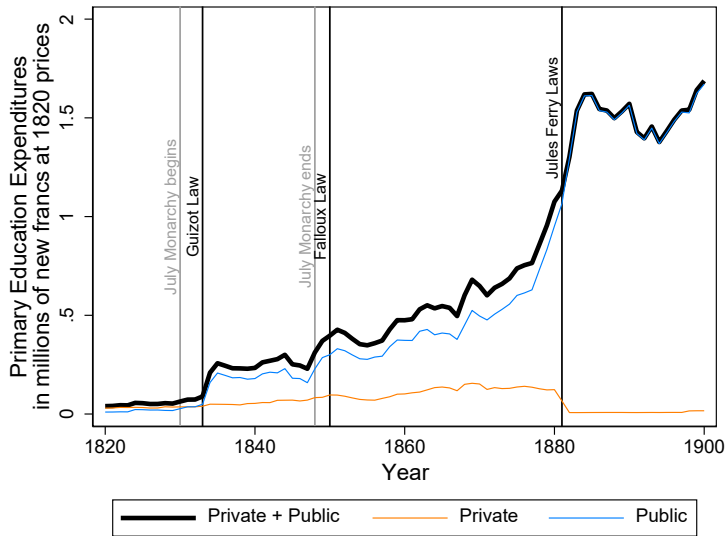
Panel B: Public primary education expenditures as a percentage of GDP and of total public spending
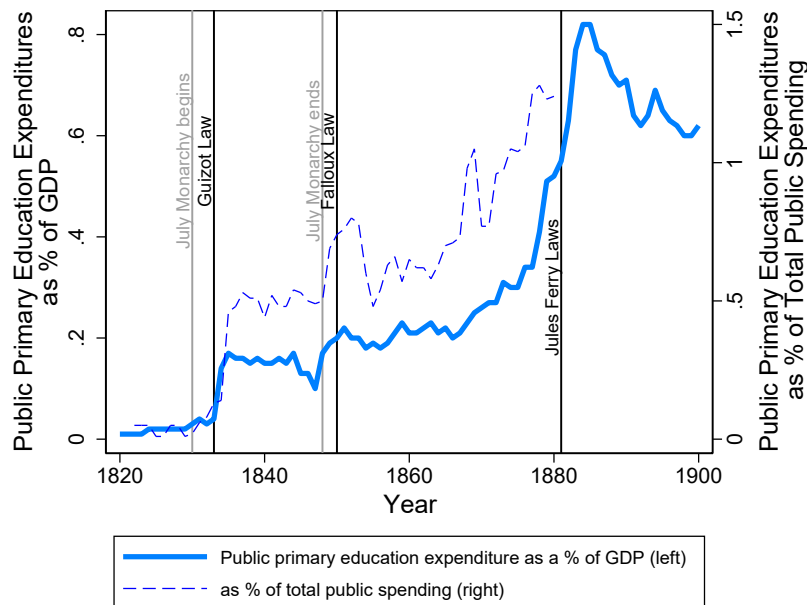
Data source: Panel A: Carry, Alain. 1999. "Le compte satellite rétrospectif de l'éducation en France (1820-1996)." Série AF, no. 25 "Histoire économique quantitative," *Économies*

et Sociétés no. 2-3 (Février-Mars). Paris: ISMÉA. Panel B: Carry (1999); Toloudis, Nicholas. 2012. *Teaching Marianne and Uncle Sam: Public Education, State Centralization, and Teacher Unionism in France and the United States*. Table 3.1 (pp. 43-4). Temple University Press.

Figure A13. Local, departmental, and central government spending on primary education in France, 1820-1870
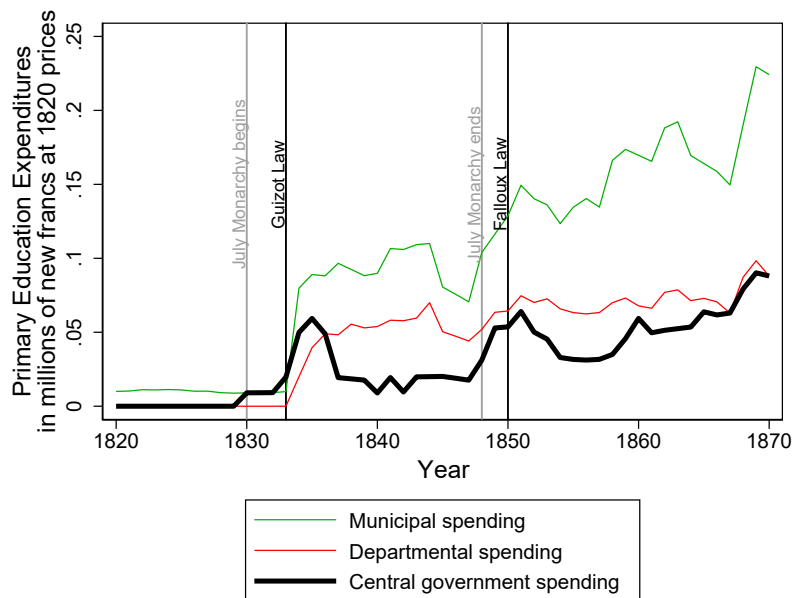
Data source: Carry, Alain. 1999. "Le compte satellite rétrospectif de l'éducation en France (1820-1996)." Série AF, no. 25 "Histoire économique quantitative," *Économies et Sociétés* no. 2-3 (Février-Mars). Paris: ISMÉA.

Figure A14. Primary schools in France by public vs. private type
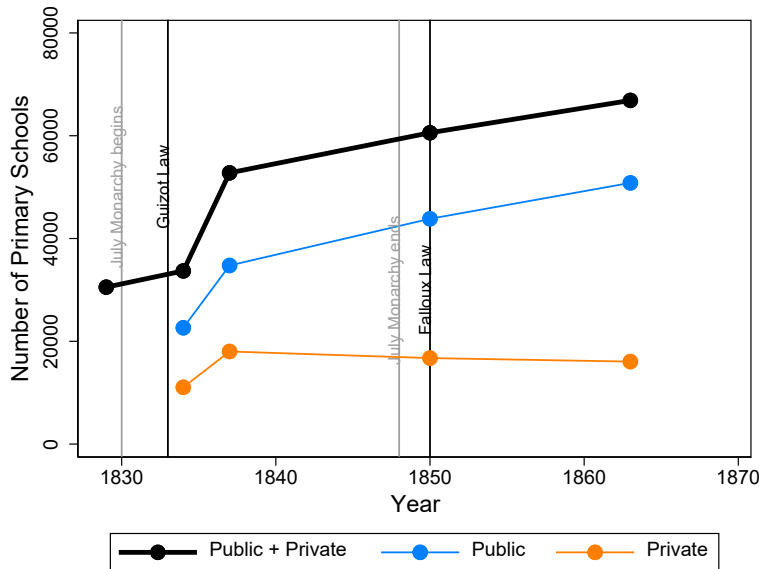
Data source: Inter-university Consortium for Political and Social Research. 1992. "Social, Demographic, and Educational Data for France, 1801-1897." Ann Arbor, MI. (ICPSR 48)

Note: Statistics about whether public and private schools were religious or not are not available for much of the period encompassing the July Monarchy. However, the available data indicate that (a) in 1837, only 17% of teachers in public schools were Catholic, a proportion that remained unchanged in 1840 (Grew and Harrigan 1991, 292); and (b) in 1850, 26% of children enrolled in public school were enrolled in a religious public school (Grew and Harrigan 1991, 280).

Table A1. List of Civil Wars

Country	Civil war years	Earliest civil war that has annual pre-treatment primary SER data	Regime type
Argentina	1841-42, 1861, 1863, 1866-67, 1870-71, 1874, 1879-80, 1955, 1975-77	1879-80	non-democratic
Austria	1821, 1848-49	1848-49	non-democratic
Bolivia	1862, 1870-71, 1952	1952	non-democratic
Brazil	1835-45, 1893-94, 1896-97, 1932	1893-94, 1896-97	non-democratic
Chile	1851, 1891, 1973	1891	non-democratic
Colombia	1840-42, 1860-61, 1876-77, 1884-85, 1895, 1899-1902, 1948-1958, 1989-2010	1948-58	transition to democracy in 1937; to autocracy in 1948; to democracy in 1958
Costa Rica	1948	1948	transition to democracy in 1949
Cuba	1912, 1958-59, 1976-91	1912	transition to democracy in 1909; to autocracy in 1916
Dominican Republic	1965	1965	transition to democracy in 1966
Ecuador	1895, 1912-14	1912-14	non-democratic
Spain	1821-23, 1834-40, 1847-49, 1868, 1872-76, 1934, 1936-39	1934, 1936-39	transition to democracy in 1931; to autocracy in 1937
Finland	1918	1918	transition to democracy in 1917
France	1830, 1848, 1871	1848	transition to democracy in 1848; to autocracy in 1852
Greece	1944-49	1944-49	transition to democracy in 1944
Guatemala	1966-68, 1970-71, 1978-84	1966-68, 1970-71	transition to democracy in 1966
Honduras	1924	1924	non-democratic
Italy	1920-22	1920-22	transition to democracy in 1919; to autocracy in 1922
Mexico	1835-36, 1841, 1847-56, 1858-61, 1867, 1876, 1899-1900, 1910-1920, 1923-24, 1926-29, 1932	1899-1900	non-democratic
Nicaragua	1978-79, 1982-90	1978-79, 1982-90	transition to democracy in 1984

Peru	1853-58, 1885, 1894-95, 1932, 1982-92	1932	non-democratic
Paraguay	1911-12, 1947	1911-12	non-democratic
El Salvador	1932, 1979-92	1932	non-democratic
Uruguay	1904	1904	non-democratic

Note: The countries that did not experience civil war in 1830-2015 are: Belgium, Switzerland, Germany, Denmark, Great Britain, Guyana, Ireland, Jamaica, Netherlands, Norway, Panama, Puerto Rico, Portugal, Sweden, and Trinidad and Tobago. Haiti had civil wars in 1868 and 1883-84, and Venezuela had civil wars in 1848-49, 1859-63, 1868, 1899, and 1901-03, but both countries lack pre-treatment primary SER data for all their civil wars.

Source: Correlates of War for timing of civil wars; Boix, Miller and Rosato (2013) for regime type; author for availability of primary SERs data.

Table A2. Heterogeneous Effect of Civil War on Primary School Enrollment Rate Depending on Whether Liberals Won the War or Not

DV: Primary enrollment rate		
Civil War	4.31	
	(2.8928)	
Civil War x LiberalsWin	2.60	
	(4.3043)	
Constant	64.00	***
	(5.7426)	
Country FE	Y	
Year FE	Y	
No. of clusters	29	

Notes: Estimated effect of civil war on primary enrollment rates based on a linear difference-in-differences framework given by: $Y_{i,t} = \gamma_i + \phi_t + \beta_1 CivilWar_{i,t} + \beta_2 CivilWar_{i,t} LiberalsWin_i + \epsilon_{i,t}$. The model includes country (γ_i) and year (ϕ_t) fixed effects. $CivilWar_{i,t}$ takes a value of 1 for treated countries in the post-treatment period; and a value of 0 otherwise. $LiberalsWin_i$ takes a value of 1 if liberals win the civil war in country *i*, and a value of 0 otherwise. The treatment is the onset of civil war. The equation is estimated using data from the 10 years before and the 20 years after the beginning of a civil war. Standard errors clustered at the country level are reported in parenthesis. Primary enrollment rates are the number of students enrolled in primary education as a percentage of the population ages 5 to 14. Estimates take into account those civil wars that did not overlap with a regime change. Effects are statistically significant at the *10%, **5%, and ***1% level.

Source: Author for primary education enrollment rates (see Online Appendix B); Correlates of War for timing of civil war.

Table A3. Linear Effect of Civil War on Primary School Enrollment Rate, With and Without Correction Proposed by Goodman-Bacon (2021) and Baker et.al. (2021)

Panel A: Linear difference-in-differences pooling all treated units

DV: Primary enrollment rate		
Civil War	6.29	***
	(1.7871)	
Constant	63.00	***
	(5.7277)	
Country FE	Y	
Year FE	Y	

Panel B: Linear difference-in-differences estimated separately for each treated cohort

DV: Primary enrollment rate		
Civil War	6.40	***
	(1.6711)	
Constant	60.25	***
	(0.0193)	
Country FE	Y	
Year FE	Y	

Notes: Primary enrollment rates are the number of students enrolled in primary education as a percentage of the population ages 5 to 14. Effects are statistically significant at the *10%, **5%, and ***1% level. **Panel A**: Estimated effect of civil war on primary enrollment rates based on a linear difference-in-differences framework given by: $Y_{i,t} = \gamma_i + \phi_t + \beta_1 CivilWar_{i,t} + \epsilon_{i,t}$. The model includes country (γ_i) and year (ϕ_t) fixed effects. $CivilWar_{i,t}$ takes a value of 1 for treated countries in the post-treatment period; and a value of 0 otherwise. Because civil war can last more than one year, the equation is estimated for the 10 years before the beginning and the 20 years after the end of a civil war. Standard errors clustered at the country level reported in parenthesis. **Panel B**: Average estimated effect of civil war on primary enrollment rates after estimating a separate linear difference-in-differences model $(Y_{i,t} = \gamma_i + \phi_t + \beta_1 CivilWar_{i,t} + \epsilon_{i,t})$ for each treatment cohort. This corrects for the inference problem identified by Goodman-Bacon (2021) using the solution implemented by Baker et.al. (2021). Standard errors clustered at the country-by-year- level reported in parenthesis.
Source: Author for primary education enrollment rates (see Online Appendix B); Correlates of War for timing of civil war.

Online Appendix B: Original Dataset of Primary School Enrollment Rates in European and Latin American Countries, 1828-2015

The original dataset of historical primary school enrollment rates in European and Latin American countries used in this article is available for download from the APSR Dataverse at https://doi.org/10.7910/DVN/3TSTEH. Use of this dataset should be accompanied by a citation of the original APSR article:

> Paglayan, Agustina S. 2021. "From Rebellion to Indoctrination: The Violent Roots of Primary Education Systems." *American Political Science Review*.

Primary school enrollment rates as a proportion of the population ages 5-14 years at the country-year level were computed using information on (1) the number of students enrolled in primary schools; (2) the total population; and (3) the estimated share of the population between ages 5-14. Tables B1 and B2 below summarize the sources used to retrieve information on (1) and (2) for the period 1828-1945. For a more detailed list including the specific source that was used for every country-year, see "Paglayan Dataset on Primary School Enrollment Rates˙Data Sources.pdf" available on the same APSR Dataverse provided above. Section B2 explains how I estimated the population ages 5 to 14. Annual primary school enrollment rates (as a % of the population ages 5 to 14) were computed in two ways: (1) by linearly interpolating the absolute numbers of primary school enrollment, and then combining those with population information to estimate the enrollment rate; and (2) by computing the primary school enrollment rates for years with available data, and then interpolating those rates linearly. The results remain consistent regardless of which method is used. For the period 1945-2015, the data come from UNESCO.

B1. Data Sources

Table B1. Number of Students Enrolled in Primary Schools: Sources

Country	Years	Sources
Argentina	1862-1945	Salvatore, Ricardo. 2013. "Between Empleomania and the Common Good: Expert Bureaucracies in Argentina." In Miguel Centeno and Agustin E. Ferraro (eds.), *State and Nation Making in Latin America and Spain*; *Informe del Consejo Nacional de Educación 1886*; U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); *Informe del Consejo Nacional de Educación* (multiple years); Ferreres, Orlando. 2005. *Dos siglos de economía argentina, 1810-2004;* Mitchell; B&R
Austria	1830-1945	Flora, Peter. 1983. State, Economy, and Society in Western Europe 1815-1975. A Data Handbook. *Volume I: The Growth of Mass Democracies and Welfare States*. Chicago: St. James Press; Mitchell; B&R
Belgium	1830-1945	Mitchell; B&R

Country	Years	Sources
Bolivia	1882-1945	Dirección Nacional de Estadística y Estudios Geográficos. 1918. *Anuario Geográfico y Estadístico de Bolivia* (multiple years); U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Brazil	1857-1945	Fletcher, Philip Ralph. 1983. *Mass Education as A State Agency of Legitimation in Brazil*. Ph.D. Dissertation Submitted to the School of Education at Stanford University; U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Switzerland	1870-1945	Flora, Peter. 1983. *State, Economy, and Society in Western Europe 1815-1975. A Data Handbook. Volume I: The Growth of Mass Democracies and Welfare States*. Chicago: St. James Press; Mitchell; B&R
Chile	1853-1945	Serrano, Sol, Macarena Ponce de Leon, and Francisca Rengifo. 2012. *Historia de la Educacion en Chile (1810-2010)*. Tomo I. Santiago de Chile: Taurus. Anexo 1, pp. 367-8; Mitchell
Colombia	1851	Safford, Frank. Ricardo. 2013. "The Construction of National States in Latin America, 1820-1890." In Miguel Centeno and Agustin E. Ferraro (eds.), *State and Nation Making in Latin America and Spain*; U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); *Memoria del Ministro de Instruccion Publica al Congreso 1880*; Mitchell; B&R
Costa Rica	1874-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Cuba	1889-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Germany	1831-1945	Flora, Peter. 1983. *State, Economy, and Society in Western Europe 1815-1975. A Data Handbook. Volume I: The Growth of Mass Democracies and Welfare States*. Chicago: St. James Press; Mitchell; B&R
Denmark	1870-1945	Mitchell; B&R
Dominican Rep.	1930-1945	Mitchell; B&R
Ecuador	1872-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell
Spain	1832-1945	Núñez, Clara Eugenia. 2005. "Educación". In Albert Carreras y Xavier Tafunell (eds.), *Estadísticas históricas de España: siglos xix-xx.* Bilbao: Fundación BBVA. Pp. 207-209.
Finland	1875-1945	Mitchell
France	1829-1945	Grew, Raymond, and Patrick J. Harrigan. 1991. *School, State, and Society. The Growth of Elementary Schooling in Nineteenth-Century France -- A Quantitative Analysis*. Ann Arbor: University of Michigan Press. Pp. 262 and 266; Mitchell
Great Britain	1850-1945	Mitchell; B&R
Greece	1830-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Guatemala	1874-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Guyana	1855-1945	Mitchell
Honduras	1902-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Haiti	1918-1943	Mitchell

Country	Years	Sources
Ireland	1852-1945	Mitchell
Italy	1861-1945	Mitchell
Jamaica	1872-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Mexico	1873-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Nicaragua	1875-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Netherlands	1850-1945	Flora, Peter. 1983. *State, Economy, and Society in Western Europe 1815-1975. A Data Handbook. Volume I: The Growth of Mass Democracies and Welfare States*. Chicago: St. James Press; Mitchell
Norway	1837-1945	Mitchell
Panama	1908-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Peru	1889-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Puerto Rico	1900-1947	Mitchell; B&R
Portugal	1848-1945	Mitchell; B&R
Paraguay	1891-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell
El Salvador	1873-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R
Sweden	1865-1945	Mitchell; B&R
Trinidad & Tobago	1854-1945	Mitchell
Uruguay	1876-1945	Mitchell
Venezuela	1882-1945	U.S. Bureau of Education, *Report of the Commissioner of Education* (multiple years); Mitchell; B&R

Note: "Mitchell" refers to: Mitchell, B. R. 2007. *International historical statistics 1750-2005*. Basingstoke: Palgrave Macmillan. "B&R" refers to: Benavot, Aaron, and Phyllis Riddle. 1988. "The expansion of primary education, 1870-1940: Trends and Issues." *Sociology of Education*: 191-210.

Table B2. Total Population: Sources

Total population was retrieved from Jan Lahmeyer and Mitchell (mid-year population estimates). Lahmeyer and Mitchell's data coincides for the earliest year in which both contain information, but Lahmeyer generally contains data on earlier years than Mitchell.
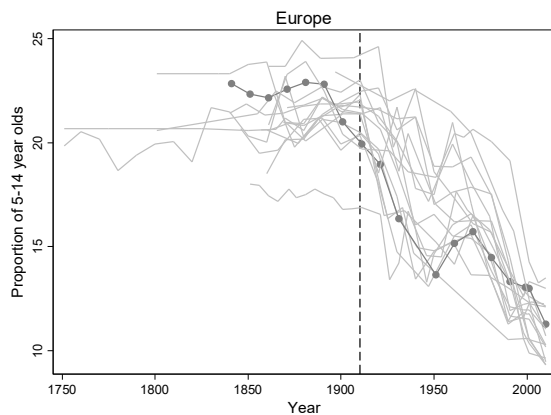
B2. Population Ages 5-14

Within any given country, the trend in the proportion of 5-14 year-olds between 1800 and 1910 tends to be very stable over time. Based on this observation, for

any given country, I assume that the proportion of 5-14 year-olds in the earliest year for which there are data available is the same proportion that we would observe if we had data for earlier years.
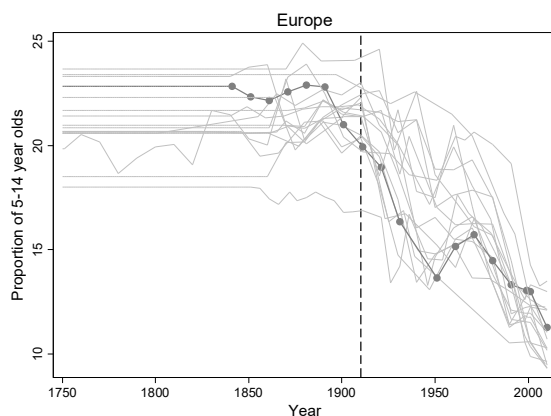
For example, in European countries, the proportion of 5-14 year-olds varies on average from 20.61% in 1800 to 20.3% in 1910. In England (marked in a darker shade of grey in the Figure B1), for instance, the earliest year with population data disaggregated by age is 1841, and the proportion of 5-14 year-olds in that year is 22.85%. By 1911, this proportion is 19.95%—a very stable proportion. What I assume is that prior to 1841, the proportion of 5-14 year-olds in England was the same as in 1841, that is, 22.85%. The assumptions for other European countries are shown in Figure B2. The same approach was used for Latin American countries.

Figure B1. Proportion of the Population Ages 5 to 14, By Country, Europe

Note: England in dark grey.

Figure B2. Estimated Proportion of the Population Ages 5 to 14, By Country, Europe

Note: England in dark grey.