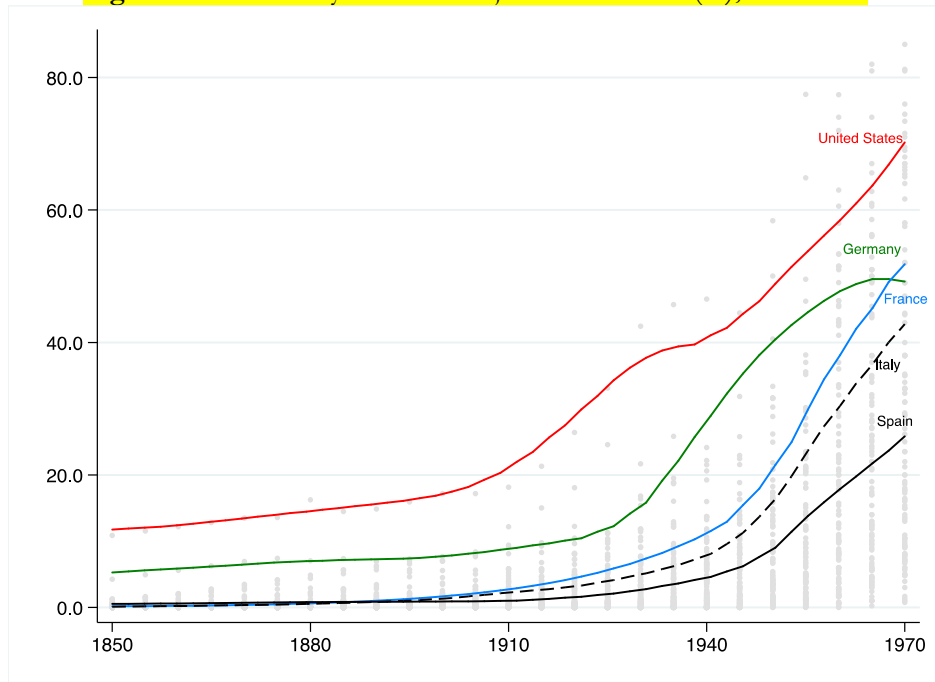


Appendix

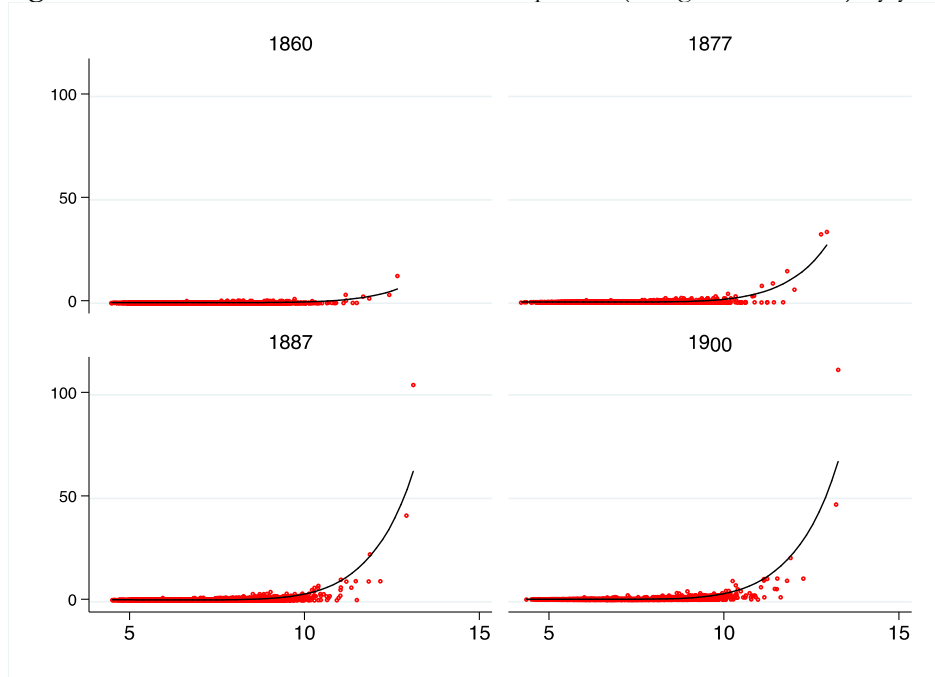
Figure A.1. Secondary education adjusted enrolment (%), 1850-1970



Note: Enrolment refers to males and females. The lines illustrate smoothed average for each of the selected countries whereas the dots show the actual values.

Source: Barro and Lee dataset.

Figure A.2. Private schools and size of municipalities (in logarithmic scale) by year.



Note: The solid line represented a kernel-weighted local polynomial smoothing. Municipal size or population is in logarithmic scale. **Source:** see text.

Table A.1. Relation of Old Regime universities and those that still existed in early 19th century.

Municipality	OR	Existence		Province (1833)
	existence GZ1855	RC1807	early 19 th -c. GZ1855	
Orihuela	Yes	Yes	Yes	Alicante
Ávila	Yes	Yes	Yes	Ávila
Palma de Mallorca	Yes	No	Yes	Baleares
Barcelona	Yes	No	No	Barcelona
Vic	Yes	No	No	Barcelona
Laguna, La	Yes	No	No	Canarias
Almagro	Yes	Yes	Yes	Ciudad Real
Santiago de Compostela	Yes	Yes	Yes	Coruña
Girona	Yes	No	No	Gerona
Granada	Yes	Yes	Yes	Granada
Sigüenza	Yes	Yes	Yes	Guadalajara
Oñati	Yes	Yes	Yes	Guipúzcoa
Huesca	Yes	Yes	Yes	Huesca
Baeza	Yes	Yes	Yes	Jaén
Cervera	Yes	Yes	Yes	Lérida
Lleida	Yes	No	No	Lérida
Solsona	Yes	No	No	Lérida
Alcalá de Henares	Yes	Yes	Yes	Madrid
San Lorenzo de El Escorial	Yes	No	No	Madrid
Ayegui-Itache	Yes	Yes	Yes	Navarra
Estella	Yes	No	No	Navarra
Pamplona/Iruña	Yes	No	No	Navarra
Oviedo	Yes	Yes	Yes	Oviedo
Palencia	Yes	No	No	Palencia
Salamanca	Yes	Yes	Yes	Salamanca
Osuna	Yes	Yes	Yes	Sevilla
Sevilla	Yes	Yes	Yes	Sevilla
Burgo de Osma-Ciudad de Osma	Yes	Yes	Yes	Soria
Tarragona	Yes	No	No	Tarragona
Tortosa	Yes	No	No	Tarragona
Toledo	Yes	Yes	Yes	Toledo
Gandia	Yes	Yes	Yes	Valencia
Valencia	Yes	Yes	Yes	Valencia
Valladolid	Yes	Yes	Yes	Valladolid
Zaragoza	Yes	Yes	Yes	Zaragoza

Source: RC1807: *Real Cédula de S.M. y señores del Consejo, por la qual se reduce el numero de las Universidades literarias del Reyno (1807)*; GZ1855: Gil de Zárate (1855).

Table A.2. Ecclesiastical administration of mid-19th century Spain.

Municipality	Diocese	Archdiocese	Province
Orihuela	Orihuela	Valencia	Alicante
Almería	Almería	Granada	Almería
Ávila	Ávila	Santiago	Ávila
Badajoz	Badajoz	Santiago	Badajoz
Ciudadella de Menorca	Menorca	Valencia	Baleares
Eivissa	Ibiza	Tarragona	Baleares
Palma de Mallorca	Mallorca	Valencia	Baleares
Barcelona	Barcelona	Tarragona	Barcelona
Vic	Vich	Tarragona	Barcelona
Burgos	Burgos	Burgos	Burgos
Coria	Coria	Santiago	Cáceres
Plasencia	Plasencia	Santiago	Cáceres
Cádiz	Cádiz	Sevilla	Cádiz
Laguna, La	Tenerife	Sevilla	Canarias
Palmas de Gran Canaria, Las	Canarias	Sevilla	Canarias
Segorbe	Segorbe	Valencia	Castellón
Córdoba	Córdoba	Toledo	Córdoba
Santiago de Compostela	Santiago	Santiago	Coruña
Cuenca	Cuenca	Toledo	Cuenca
Girona	Gerona	Tarragona	Gerona
Granada	Granada	Granada	Granada
Guadix	Guadix	Granada	Granada
Sigüenza	Sigüenza	Toledo	Guadalajara
Barbastro	Barbastro	Zaragoza	Huesca
Huesca	Huesca	Zaragoza	Huesca
Jaca	Jaca	Zaragoza	Huesca
Jaén	Jaén	Toledo	Jaén
Astorga	Astorga	Santiago	León
León	León	Exentas	León
Lleida	Lérida	Tarragona	Lérida
Seu d'Urgell, La	Urgel	Tarragona	Lérida
Solsona	Solsona	Tarragona	Lérida
Calahorra	Calahorra	Burgos	Logroño
Lugo	Lugo	Santiago	Lugo
Mondoñedo	Mondoñedo	Santiago	Lugo
Málaga	Málaga	Sevilla	Málaga
Cartagena	Cartagena	Toledo	Murcia
Pamplona/Iruña	Pamplona	Burgos	Navarra
Tudela	Tudela	Burgos	Navarra
Ourense	Orense	Santiago	Ourense
Oviedo	Oviedo	Exentas	Oviedo
Palencia	Palencia	Burgos	Palencia
Tui	Tuy	Santiago	Pontevedra
Ciudad Rodrigo	Ciudad Rodrigo	Santiago	Salamanca
Salamanca	Salamanca	Santiago	Salamanca
Santander	Santander	Burgos	Santander
Segovia	Segovia	Toledo	Segovia
Sevilla	Sevilla	Sevilla	Sevilla
Burgo de Osma-Ciudad de Osma	Osma	Toledo	Soria
Tarragona	Tarragona	Tarragona	Tarragona
Tortosa	Tortosa	Tarragona	Tarragona
Albarracín	Albarracín	Zaragoza	Teruel
Teruel	Teruel	Zaragoza	Teruel
Toledo	Toledo	Toledo	Toledo
Valencia	Valencia	Valencia	Valencia
Valladolid	Valladolid	Toledo	Valladolid
Zamora	Zamora	Santiago	Zamora
Tarazona	Tarazona	Zaragoza	Zaragoza
Zaragoza	Zaragoza	Zaragoza	Zaragoza

Note: Excluding Ceuta, belonging to the Archdiocese of Sevilla. The diocese of La Calzada-Logroño integrated in mid-19th century the historic diocese of Calahorra. **Source:** see text.

Table A.3. Descriptive statistics by wave (whole sample)

Period		New entry	Pop.	Pop. Gr.	Male Lit.	Seat J.D.	<i>Instituto</i>	P. C. (Mu)	P. C. (JD)	Agr. Emp.	Rail acc.
1860-77											
	Mean	0.0093	6.9170	0.0626	0.3394	0.0591	0.0067	0.0043	0.0812	0.5600	2.3929
	St. Dev.	0.0959	1.0109	0.9366	0.1675	0.2359	0.0816	0.0651	0.2731	0.1136	1.1710
	Max.	1.0000	12.6568	8.1640	0.9325	1.0000	1.0000	1.0000	1.0000	0.8890	4.3320
	Min.	0.0000	4.4773	-9.1097	0.0092	0.0000	0.0000	0.0000	0.0000	0.0130	-4.6052
	Obs.	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763
1877-87											
	Mean	0.0267	6.9276	0.3767	0.3882	0.0591	0.0080	0.0122	0.2132	0.5674	1.4437
	St. Dev.	0.1611	1.0344	1.1907	0.1801	0.2359	0.0890	0.1100	0.4096	0.1039	1.3007
	Max.	1.0000	12.9419	15.9951	0.8795	1.0000	1.0000	1.0000	1.0000	0.8740	3.5053
	Min.	0.0000	4.2047	-9.4717	0.0000	0.0000	0.0000	0.0000	0.0000	0.0800	-4.6052
	Obs.	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763
1887-1900											
	Mean	0.0169	6.9653	0.1366	0.4227	0.0598	0.0075	0.0336	0.4702	0.5760	1.1283
	St. Dev.	0.1288	1.0424	0.9694	0.1747	0.2371	0.0861	0.1803	0.4991	0.1123	1.3153
	Max.	1.0000	13.1101	9.8395	0.9019	1.0000	1.0000	1.0000	1.0000	0.9060	3.3062
	Min.	0.0000	4.5109	-9.1264	0.0334	0.0000	0.0000	0.0000	0.0000	0.0690	-4.6052
	Obs.	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763	7,763
1860-1900											
	Mean	0.0176	6.9366	0.1919	0.3834	0.0593	0.0074	0.0167	0.2548	0.5678	1.6550
	St. Dev.	0.1315	1.0295	1.0470	0.1775	0.2363	0.0856	0.1282	0.4358	0.1102	1.3735
	Max.	1.0000	13.1101	15.9951	0.9325	1.0000	1.0000	1.0000	1.0000	0.9060	4.3320
	Min.	0.0000	4.2047	-9.4717	0.0000	0.0000	0.0000	0.0000	0.0000	0.0130	-4.6052
	Obs.	23,289	23,289	23,289	23,289	23,289	23,289	23,289	23,289	23,289	23,289

Note: **New entry:** creation of at least one new private centre in a municipality in the wave; **Pop.:** Natural log of population in $t - 1$; **Pop. Gr.:** Annual population growth during from the last wave (%); **Male lit.:** Share of males who can read and write in $t - 1$; **Seat J.D.:** 1 if municipality was seat of judicial district in $t - 1$, 0 otherwise; ***Instituto*:** 1 if municipality had a public centre or *Instituto* in $t - 1$, 0 otherwise; **P.C. (Mu):** 1 if municipality had a private centre in $t - 1$, 0 otherwise; **P.C. (JD):** 1 if judicial district had a private centre in $t - 1$, 0 otherwise; **Agr. Emp.:** Share of judicial district agricultural employment in $t - 1$; **Rail acc.:** Natural log of distance to rail access (station or stop), measured in hours.

Figure A.3. Sample of the sources used.

MADRID

73

NOMBRES	DOMICILIOS	INSTITUTOS á que están incorporados.
San Antonio Abad.....	Hortaleza, 69	
Alfonso XII.....	Monasterio del Escorial.	
Escuelas Pías de San Ildefonso....	Alcalá de Henares.	
San Ignacio.....	Costanilla de los Angeles, 1.	
Hispano Romano.....	Mendizábal, 34.	
San Pablo.....	Barco, 15.	
Calderón de la Barca.....	Salud, 21.	
Jesús.....	Desengaño, 12.	
Pontes.....	Barco, 18.	
Santo Angel.....	Atocha, 30.	
Ibérico.....	Corredera de San Pablo, 10.	
Niño Jesús.....	Valverde, 35.	
San Ildefonso.....	León, 29 y 31.	
Matritense.....	Fuencarral, 90.	
Carpetano.....	Huertas, 59.	
Clásico-Español.....	Serrano, 23.	
Corazón de Jesús.....	Bola, 12.	
Martínez de la Rosa.....	Conde de Aranda 6.	
San Fermín.....	Fuencarral, 119.	
Hispano-Americano.....	Ferraz, 19.	
Santo Tomás.....	Orellana, 9.	
San Pedro.....	Carranza, 6.	
Salvador.....	Plaza de Rames, 4.	
San Gregorio.....	Zurbarán, 15.	
San Casiano.....	Goya, 14.	Cardenal Cisne
San Juan Bautista.....	San Bernardo, 52.	ros.
San Pío V.....	Piamonte, 13	
San Laureano.....	Corredera de San Pablo, 43.	
San Mauricio.....	Glorieta de Bilbao, 4.	
San Carlos.....	Hortaleza, 33.	
Cabero.....	Alcalá, 113.	
Complutense.....	Alcalá de Henares.	
San José.....	Reyes, 21.	
Jovellanos.....	Plaza de Santa Bárbara, 2.	
San Miguel.....	Montera, 51.	
Sagrado Corazón.....	Prado, 12.	
Certamen.....	Duque de Rivas, 2.	
San Jerónimo.....	Lealtad, 10.	
Los Angeles.....	Cruz, 30.	
San Estanislao.....	Arco de Santa María, 4.	
La Concepción.....	Colmenar Viejo.	
Fray Luis de Granada.....	Silva 18.	
San Joaquín.....	San Bernardo, 41.	
Ateniense.....	Jacometrezo, 71.	
Nuestra Señora del Carmen.....	Leganés.	
San Luis y San Estanislao.....	Puebla, 17.	
León XIII.....	Claudio Coello, 55	
San José de Calasanz.....	Huertas, 51.	
Nuestra Señora del Pilar.....	Postigo de San Martín, 11 y 13	
San Isidro.....	Espíritu Santo, 58.	

Source: *Anuario estadístico de instrucción pública correspondiente al curso de 1899 a 1900.*

Table A.4. Curriculum of the *Bachillerato*, 1861.

FIRST YEAR	Latin and Spanish grammar (2 daily lessons)
	Christian doctrine and sacred history (3 weekly lessons)
	Principles of arithmetic and exercises (3 weekly lessons)
SECOND YEAR	Latin and Spanish grammar (2 daily lessons)
	Notions of descriptive geography (3 weekly lessons)
	Principles of geometry and exercises (3 weekly lessons)
THIRD YEAR	Latin translation and Greek language (1 daily lesson, alternating)
	Notions of general History and History of Spain (3 weekly lessons)
	Arithmetic and algebra (1 daily lesson)
FOURTH YEAR	Elements of rhetoric and poetics and Spanish and Latin composition (1 daily lesson)
	Greek language translation exercises (3 weekly lessons)
	Elements of geometry and rectilinear trigonometry (1 daily lesson)
FIFTH YEAR	Psychology, logic and moral philosophy (1 daily lesson)
	Elements of physics and chemistry (1 daily lesson)
	Notions of natural history (3 weekly lessons)
Note: 1 French language course (in any year)	

Source: *Real decreto modificando el plan de estudios de segunda enseñanza*, Gaceta de Madrid, n°. 243 (26/08/1861).