

Madsen, J. B. and H. Strulik,

Testing Unified Growth Theory: Technological Progress and the Child Quantity-Quality Tradeoff

## ONLINE APPENDIX

### Appendix 1: Graphs

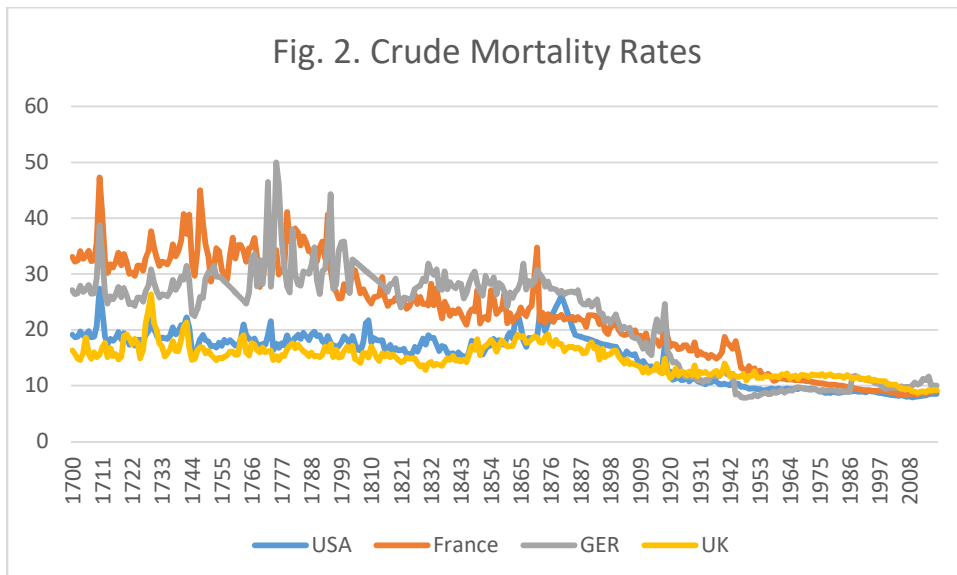
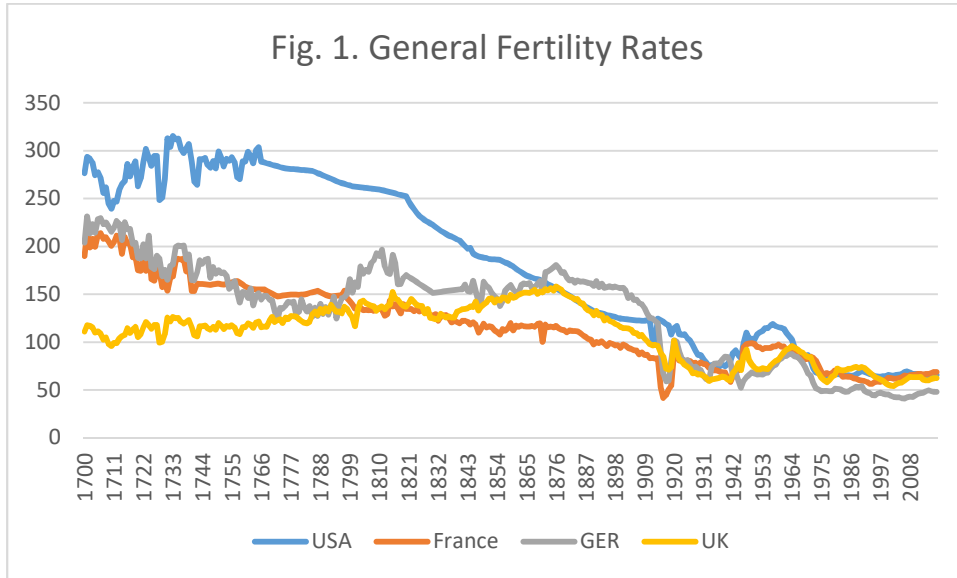


Fig. 3. Gross Enrollment Rates, Primary and Secondary

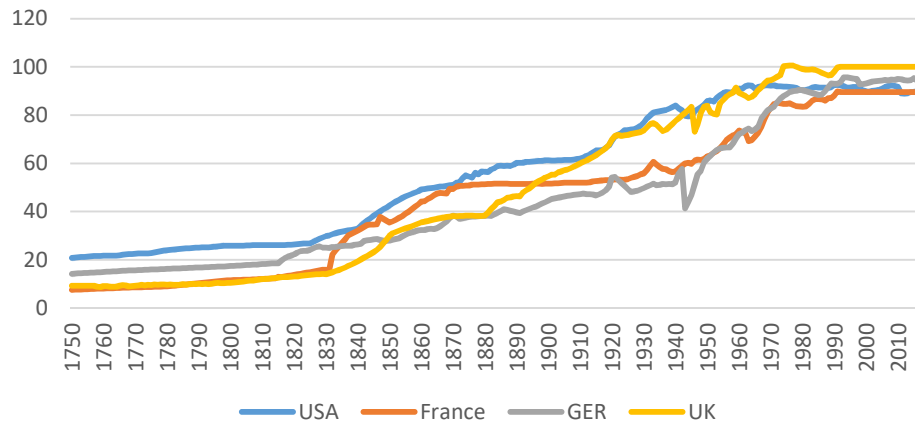
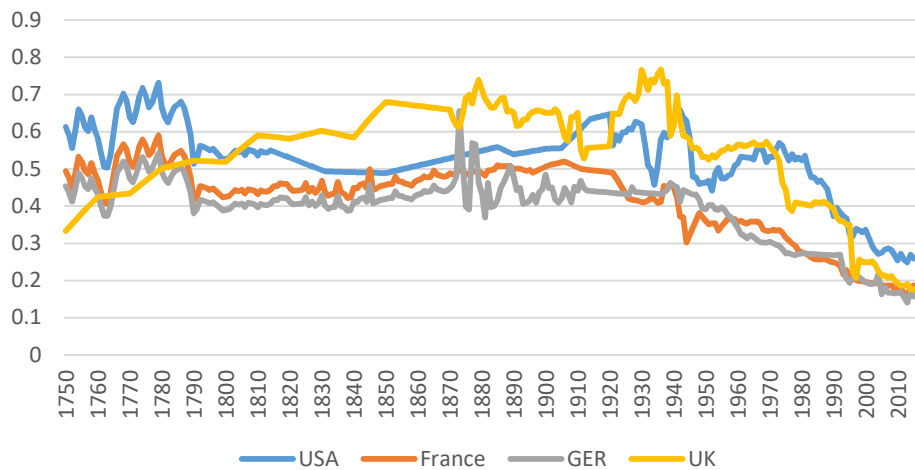
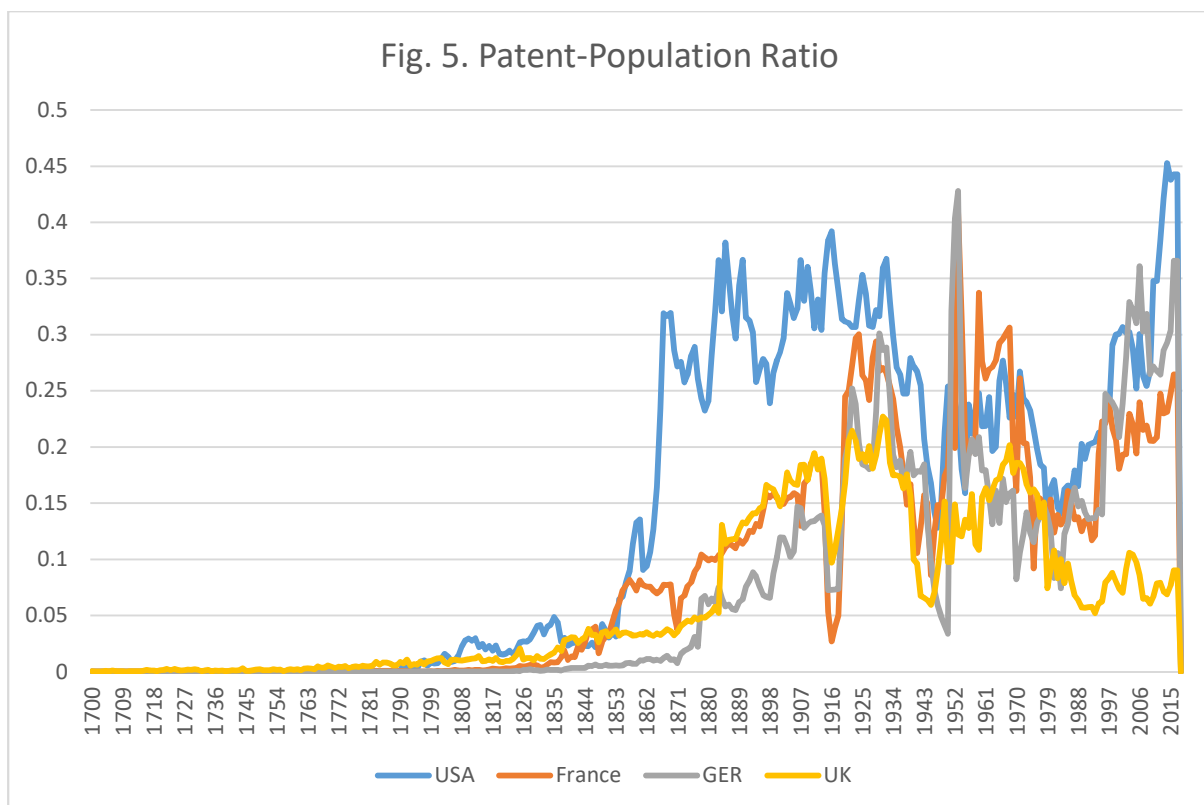


Fig. 4. Gender Wage Gap





## ONLINE TABLE

**Appendix Table A1**

	$\log FER_t$	$\log FER_t$	$\log FER_t$	$\log GER_t$	$\log GER_t$	$\log GER_t$
$\log GER_{t+1}$		-0.069***	-0.075***			
		(0.000)	(0.000)			
					-0.289***	-0.121***
					(0.000)	(0.000)
$\log(Pat/Pop)_t$	-0.006***	-0.003***	-0.016***	0.084***	0.085***	0.080***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$\log CMR_t$			0.251***			-0.495***
			(0.001)			(0.000)
$\log Wgap_t$			0.110***			-0.092***
			(0.000)			(0.000)
$\Delta \log(Y/Pop)_t$			-0.044***			-0.032

			(0.000)			(0.530)
Fixed Effects	N	N	N	N	N	N
Period	1750-2000	1750-2000	1750-2000	1750-2000	1750-2000	1750-2000
Frequency	10-Year	10-Year	10-Year	10-Year	10-Year	10-Year
# Countries	21	21	21	21	21	21
Obs.	546	546	546	546	546	546

**Notes.** *p*-values in soft parentheses. The data are measured in 10-year non-overlapping intervals. The SUR estimator is used and the parameter estimates are corrected for heteroscedasticity and serial correlation. Time-dummies and country fixed-effects are excluded from all regressions. \*\*\* = significant at 1%; \*\* = significant at 5%; \* = significant at 10%.

## DATA APPENDIX

### General Fertility Rate (*FER*)

The General Fertility Rate is the birth rate of women of child bearing age (age 15-44), calculated by dividing the total number of births in a given year by the number of women aged 15 through 44 and multiplying by 1,000. The data sources are listed below:

### CRUDE BIRTH RATES

**Canada.** 1713-1805. Hd, J., 1975. L'évolution démographique du Québec depuis 1710. Population (French edition), 253-256. 1805-1868. Pelletier, F., Légaré, J. and Bourbeau, R., 1997. Mortality in Quebec during the nineteenth century: From the State to the Cities. Population Studies, 51(1), 93-103. 1868-1960. *Historical Statistics of Canada*, 1921 to 1974 Statistics Canada (<http://www.statcan.gc.ca/pub/11-516-x/sectionb/4147437-eng.htm#1>). **United States.** 1733-1765. The data is only available in 1733 and 1761. Temkin-Greener, H. and Swedlund, A.C., 1978. Fertility Transition in the Connecticut Valley: 1740–1850. Population Studies, 32(1), 27-41. 1765-1800. Schapiro, M.O., 1982. Land Availability and Fertility in the United States, 1760–1870. *The journal of economic history*, 42(3), 577-600. 1800-1910. Andorka, R., 1978, *Determinants of Fertility in Advanced Societies*, Methuen & Co Ltd., London. 1910-1960. 1911-1959 Historical statistics of United states: the colonial times to 1970, 1960-now <http://www.cdc.gov/nchs/births.htm>. **Japan.** 1660-1900. The data is available at 5-year intervals. Drixler, F., 2013. *Mabiki: infanticide and population growth in eastern Japan, 1660-1950* (Vol. 25). Univ of California Press. 1900-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Australia.** 1788-1824. New South Wales. Butlin, Noel George, Jules Ginswick, and Pamela Statham. *Colonial statistics before 1850*. Source Papers in Economic History, No. 12. Australian National University, 1986. 1824-1850. ABS Cat. No. 3105.0.65.001 Australian Historical Population Statistics, 2008, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3105.0.65.0012008?OpenDocument>. 1850-1960. Table MFM-66, Vamplew, W. (ed.), 1987. *Australians: Historical Statistics*, Fairfax, Syme & Weldon Associates. Females of fertility age (15-44) are from 3105.0.65.001

Australian Historical Population Statistics, 2014 over the years 1841 and 1846 (NSW), 1861, 1871, 1881, 1891, and the annually 1901-2014. **New Zealand.** 1855-1960. Bloomfield, *New Zealand: A Handbook of Historical Statistics*, 1984, Table II.13. **Austria.** 1750-1820. Available in 10-year intervals. Weigl, A. (2000): *Demographischer Wandel und Modernisierung in Wien*. Pichler Verlag GmbH & Co KG: Wien, S.385. -Ehmer, Familienstruktur, 40, 49, 55. - Gemeinde-Verwaltung 1871-1873, 39; 1874-1876, 46; 1877-1879, 33; 1880-1882, 123. -*Statistisches Jahrbuch* 1938, 24. -eigene Berechnungen. 1820 to 1913. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. 1919-1939. Rothenbacher, F. 2002 *The European Population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan. 1945-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Belgium.** 1683-1830. Netherlands. 1830-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Denmark.** 1735-1800. Gille, H., 1949, *The demographic history of the Northern European Countries in the Eighteenth Century*, Population Studies: A Journal of Demography, Volume 3, Issue 1. 1800 to 1850. Chesnais, J. C., 1992, *The demographic Transition: Stages, Patterns and economic implications*, Clarendon Press, Oxford. 1850-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Finland.** 1722-1800. Gille, H., 1949, *The demographic history of the Northern European Countries in the Eighteenth Century*, Population Studies: A Journal of Demography, Volume 3, Issue 1. 1800 to 1850. Chesnais, J. C., 1992, *The demographic Transition: Stages, Patterns and economic implications*, Clarendon Press, Oxford. 1850-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **France.** 1670-1739. The data are baptized children in rural France and is divided by the total population in France and spliced with the crude mortality rates in 1740. Rebaudo, Danièle. "Le Mouvement Annuel de la population française Rurale de 1670 à 1740." *Population* (French edition) (1979): 589-606. 1740-1770. Henry L. and Blayo Y., 1975, *La Population de la France de 1740 a 1860*, Population, 30e année, Demographie Historique, 71-122. 1770-1800. Bourgeois-Pichat, 1955, *La mesure de la fecondite des populations humaines*, Comptes rendus du Congrès mondial de la population. Rome 31 août-10 septembre 1954. New-York: Nations Unies, 1955, vol. IV, séance 5, 249-260. 1801-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Germany.** 1635-1820. Frankfurt only. Karl Bücher: Die Bevölkerung von Frankfurt am Main im XIV. und XV. Jahrhundert, social-statistische Studien, Tübingen 1886. 1820-1840. Ehmer, J., 2013. Bevölkerungsgeschichte und historische Demographie 1800-2010. Walter de Gruyter. 1840-1850. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. 1850-1943. Rothenbacher, F. 2002 *The European Population, 1850-1945*, Houndmills, Basingstoke, Hampshire ; New York: Palgrave Macmillan. 1943-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Greece.** 1823-1922. B. Κοτζαμάνης, E. Ανδρουλάκη, 2008, Οι δημογραφικές εξελίξεις στη νεώτερη Ελλάδα (1830-2007) (V. Kotzamanis, E. Androulaki, 2008, Demographic developments in modern Greece (1830-2007)). 1922-1932. Table 3 in Valaoras, Vasilios G. "A reconstruction of the demographic history of modern Greece." *The Milbank Memorial Fund Quarterly* 38, no. 2 (1960): 115-139. 1932-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Ireland.** 1820-1840. Boyle, P.P. and Grádo, C.Ó., 1986. Fertility trends, excess mortality, and the Great Irish Famine. *Demography*, 23(4), 543-562. The figures are adjusted to line up with a CBR of 33 in the 1830s as estimated by Tucker, G. S. L. "Irish fertility ratios before the famine." *The Economic History Review*, 23, no. 2 (1970): 267-284. 1848-1865. Gapminder. 1865-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Italy.** 1650-

1862. Galloway, Patrick R. "A reconstruction of the population of North Italy from 1650 to 1881 using annual inverse projection with comparisons to England, France, and Sweden." *European Journal of Population/Revue europeenne de Demographie*, 10, no. 3 (1994): 223-274. **Netherlands**. 1683-1804. Amsterdam scaled to the Netherlands in 1804. Wintle, Michael. *An Economic and Social History of the Netherlands, 1800–1920: demographic, economic and social transition*. Cambridge University Press, 2000. 1804-1960. van der Bie, R., 2001. *Tweehonderd jaar statistiek in tijdreeksen, 1800-1999*. Centraal Bureau voor de Statistiek. **Norway**. 1735-1771. Gille, H., 1949. The demographic history of the Northern European countries in the eighteenth century. *Population Studies*, 3(1), 3-65. 1771-1960. STATISTISK SENTRALBYRÅ. "Ekteskap, fødsler og vandringer i Norge 1856–1960" *Oslo* (1965) and *Statistisk Sentralbyrå: "Historisk statistikk 1978."* *Oslo, Norway* (1978). **Portugal**. 1801-1886. Rodrigues, T., de Sousa, F., Freire, M.R. and Gonçalves, M.S., 2004. A população Portuguesa no século XIX. Porto: CEPESE, Edições Afrontamento, Coleção. 1886-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Spain**. 1555-1705. Tarragona area scaled. Moreno-Almárcegui, Antonio, Josep Fàbregas-Roig, Jesús J. Sánchez-Barricarte, Margarita Gonzalvo-Cirac, and Judit Vidal-Bonavilac. "Demographic reconstruction of the Camp de Tarragona area (Spain), 1547-1877." *In Annales de démographie historique*, no. 1, 171-203. Belin, 2016. 1705-1886. Llopis Agelán, E., 2004. El crecimiento de la población española, 1700-1849: índices regionales y nacional de bautismos. *Áreas: revista internacional de Ciencias Sociales*, vol. 24, 2004. 1858-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Sweden**. 1630-1759. Edvinsson, R.B., 2015. Recalculating Swedish pre-census demographic data: Was there acceleration in early modern population growth? *Cliometrica*, 9(2). 1760-1850. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. 1851-1945. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan. 1946-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Switzerland**. 1801-1869. Stat. Lief.: Bewegung der Bevölkerung, Bde. 1870-1945. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan. 1946-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York.

## TOTAL POPULATION OF WOMEN AT FERTILITY AGES

**General note:** data on total population of women at fertility ages from 1950 afterwards are obtained from United Nations, Department of Economic and Social Affairs, Population Division, 2011, World Population Prospects: The 2010 Revision. Census data of the years before 1950 were obtained from Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. Missing data between censuses were obtained by linear interpolation. The data of the years before the earliest census were backdated by assuming that the proportion of women population at fertility ages to the total population to be constant to that of the earliest census given by Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York.

## R&D INTENSITY

Madsen, J. B., A. Minniti, and F. Venturini (2021), "Wealth Inequality in the Long Run: A Schumpeterian Growth Perspective," *Economic Journal*, 131(633), 476-497.

## POPULATION AGE DISTRIBUTION

### A1.1 Primary Data Sources

- The one year interval age distributions for ages 0-110 are sourced from the Human Mortality Database, (<http://www.mortality.org/>), accessed on 27/02/2012, and henceforth HMD (<http://www.mortality.org/>).
- The HMD (<http://www.mortality.org/>) data is backdated using the Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. census data, available in the following default age distributions: 0-4; 5-9; 10-14; 15-19; 20-24; 25-29; 30-34; 35-39; 40-44; 45-49; 50-54; 55-59; 60-64; 65-69; 70-74; 75-79; 80+.
- The HMD (<http://www.mortality.org/>) data is re-categorized from 0-110+ to 0-80+ ages so that it is consistent with Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York.
- When backdating the HMD (<http://www.mortality.org/>) data, template countries are used to decompose the age group intervals in Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York.
- Growth interpolation is used to interpolate the population data, while linear interpolation is used to interpolate the percentage age distributions data.
- Backdating Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. data is done by using age distributions from a proxy country that is considered to have similar demographic patterns. Details of the backdating procedure are outlined below.

### A1.2. Backdating and converting $N$ -year interval Age Distributions to 1-year intervals

- To backdate the age distributions, Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. census data are decomposed from the default 5 (or  $N$ ) year age intervals to 1-year intervals using the age distributions from a template country.
- Using 1-year age-interval data from the template country, the first step involves breaking down the total population within each of the Mitchell's  $N$ -year intervals as follows. If  $N = 5$ , as in the default age distributions, the proportion of the age group  $A_i$ , is calculated as:  $A_i = P_i / \sum_{i=1}^N P_i$  where  $i$  takes values of 1-5 for a 5 year interval and  $P_i$  represents the population for age  $i$  within the interval; the  $P_i$  data are all obtained from the HMD (<http://www.mortality.org/>).
- The computed values of  $A_i$  are then used to split the Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. data into 1-year intervals.
- Backdating beyond the available HMD (<http://www.mortality.org/>) and Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. data is then done either by: (1) taking the age distributions from another country as a proxy, or (2) where actual and proxy data are incompatible, the age distributions are backdated as having been constant.
- A matrix of population age distributions is then constructed using actual age distributions obtained from the HMD (<http://www.mortality.org/>), template-derived age distributions obtained from the Mitchell, B.R. 2007. *International Historical*

*Statistics*, 3 volumes. Palgrave Macmillan: New York. census data, proxy age distributions, or constant values.

### A1.3. Country-Specific Data Sources and Construction

**Australia** 1812-1860 age distributions are backdated by assuming constant 1861 age distributions due to the mismatch between census-derived and proxy country data; 1861-1911 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census dates 1861, 1870, 1881, 1891, 1901, 1911 using Belgium as the template country; while 1862-1869, 1871-1880, 1882-1890, 1892-1900, 1902-1910 and 1912-1920 age distributions are linearly interpolated; 1921-2008 age distributions are obtained from the HMD (<http://www.mortality.org/>). 2009 age distributions are linearly extrapolated. **Austria.** 1812-1840 and 1841-1868 are backdated using Sweden and Belgium as proxies respectively; 1869-1934 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census dates 1869, 1880, 1890, 1900, 1910, 1923, 1934 using Belgium as the template country; while 1870-1879, 1881-1889, 1891-1899, 1901-1909, 1911-1922; 1924-1933 and 1935-1946 age distributions are linearly interpolated; 1947-2011 age distributions are obtained from the HMD (<http://www.mortality.org/>).

#### **Belgium**

1812-1840 age distributions are backdated using Sweden as the proxy; 1841-1914 and 1920-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>) with the exception of 1915-1919 missing population values which are obtained using growth interpolation.

#### **Canada**

1812-1860 age distributions are backdated by assuming that they are constant from 1861, due to the mismatch between census-derived and proxy data; 1861-1911 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census dates 1861, 1870, 1881, 1891, 1901, 1911 using Belgium as the template country; while 1862-1869, 1871-1880, 1892-1900, 1902-1910 and 1912-1920 age distributions are linearly interpolated; 1921-2008 age distributions are obtained from the HMD (<http://www.mortality.org/>). 2009 age distributions are linearly extrapolated.

**Denmark.** 1801-1834 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census dates 1801 and 1834 using Sweden as the template country. For 1801 and 1834, census data is available in combined age groups: 0-4 and 5-9; 10-14 and 15-19; 20-24 and 25-29; 30-34 and 35-39; 40-44 and 45-49; 50-54 and 55-59; 60-64 and 65-69; 70-74 and 75-79; and 80+. The combined age groups are then decomposed to Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. default age groups using data for 1840 as a template, for the proportion of males to females; while the 1802-1833 age distributions are linearly interpolated. 1835-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>) however, the population age distributions for 1835 are subsequently linearly interpolated due to inconsistencies between the HMD (<http://www.mortality.org/>) data and the estimated age distributions based on Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York.

#### **Finland**



1800-1877 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census years 1800, 1825, 1850 1865 and 1870; while the 1801-1824, 1826-1849, 1851-1864, 1866-1869, 1871-1877 age distributions are linearly interpolated; 1878-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>); however, the obtained HMD (<http://www.mortality.org/>) population data for the following ages and years was subsequently deleted due to implausibility, and consequently, the missing values were growth interpolated: 0, 1947-1950; 1, 1948-1950; 2, 1949-1951; 3, 1950-1952; 4, 1951-1953; 5, 1952-1954; 6, 1953-1955; 7, 1954-1956; 8, 1955-1957; 9, 1956-1958; 10, 1957-1959; 11, 1958-1960; 12, 1959-1961; 13, 1961-1962; 14, 1962-1963; 15, 1963-1964; 16, 1964.

### **France**

1812-1815 age distributions are backdated using Sweden as the template country. Age distributions for 1816-2010 are obtained from the HMD (<http://www.mortality.org/>); however, due to implausible cyclical trends for age distributions between actual census years, all obtained HMD (<http://www.mortality.org/>) data between the censuses, for the period 1816 to 1906 were deleted and the missing values were growth interpolated. Census years are 1816, 1821, 1826, 1831, 1836, 1841, 1846, 1851, 1856, 1861, 1866, 1871, 1876, 1881, 1886, 1891, 1896, 1901, and 1906; accordingly, the following missing years were growth interpolated: 1817-1820, 1822-1825, 1827-1830, 1832-1835, 1837-1840, 1842-1845; 1852-1855; 1857-1860; 1862-1865; 1867-1870; 1872-1875; 1877-1880; 1882-1885. 1887-1895, 1897-1900 and 1902-1905.

### **Germany**

1812-1840 and 1841-1870 are backdated using age distributions from Sweden and Belgium as proxies, respectively. Due to inconsistencies between the estimated census based age distributions in 1870-1871 and the proxy age distributions from Belgium, the proxy distributions are extended to cover 1871; 1871-1939 age groups are backdated from 1955 to 1871 using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census years 1871, 1880, 1890, 1900, 1910, 1925, 1933, 1939 using Belgium as the template country; while 1872-1879, 1881-1889, 1891-1899, 1901-1909, 1911-1924, 1926-1932, 1934-1938 and 1940-1955 are linearly interpolated; 1956-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Greece**

1812-1869 age distributions are backdated by assuming constant age distributions for 1870. The HMD (<http://www.mortality.org/>) data are not available for Greece. The principal data source is Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. and the available census years are 1870, 1879, 1889, 1907, 1920, 1928, 1940, 1950, 1961, 1971, 1981, 1991 and 1998. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. data for 1870-1998 is decomposed from the default to the 1-year interval age groups using Italy as the template country; while 1871-1878, 1880-1888, 1890-1906, 1908-1919, 1921-1927, 1929-1939, 1951-1960, 1962-1970, 1972-1980, 1982-1990, 1992-1997 and 1999-2008 are linearly interpolated; 2009 is updated using the age distributions for Italy.

### **Italy**

1812-1840 and 1841-1860 age distributions are backdated using Sweden and Belgium as proxy countries respectively; 1861-1871 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the

census years 1861 and 1871, using Belgium as the template country; while 1862-1870 are linearly interpolated; 1872-2009 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Ireland**

1812-1860 age distributions are backdated using age distributions from Sweden as the proxy; 1861-1936 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census years 1861, 1871, 1881, 1891, 1901, 1911, 1926 and 1936 using Sweden as the template country; while 1862-1870, 1872-1880, 1882-1890, 1892-1900, 1902-1910, 1912-1925, 1927-1935 and 1937-1949 are linearly interpolated; 1950-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Japan**

1812-1883 age distributions are backdated using Sweden as the proxy; 1884 is backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for 1884 and Sweden as the template; 1888-1940 age distributions are obtained from the Historical Statistics of Japan ([www.stat.go.jp/english/data/chouki/index.htm](http://www.stat.go.jp/english/data/chouki/index.htm)), accessed on 21/01/2012, HSJ ([www.stat.go.jp/english/data/chouki/index.htm](http://www.stat.go.jp/english/data/chouki/index.htm)) henceforth. The HSJ ([www.stat.go.jp/english/data/chouki/index.htm](http://www.stat.go.jp/english/data/chouki/index.htm)) has data on the following census years 1888, 1893, 1898, 1903, 1908, 1913, 1918, 1920, 1925, 1930, 1935 and 1940 in 1-year age intervals; the following years have all been linearly interpolated 1885-1887, 1889-1892, 1894-1897, 1899-1902, 1904-1907, 1909-1912, 1914-1917, 1919, 1921-1924, 1926-1929, 1931-1934, 1936-1939 and 1941-1946; 1947-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Netherlands**

1812-1840 and 1841-1849 age distributions were backdated by assuming age distributions for Sweden and Belgium as proxies, respectively; 1850-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **New Zealand**

1812-1873 age distributions are backdated using constant 1874 figures due to the mismatch between the proxy data from Sweden and the census derived age distributions; 1874-1945 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census years 1874, 1878, 1881, 1886, 1891, 1896, 1901, 1906, 1911, 1921, 1926, 1936, 1945, and using Sweden as the template; while 1875-1877, 1879-1880, 1882-1885, 1887-1890, 1892-1895, 1902-1905, 1907-1910, 1912-1920, 1922-1925, 1927-1935, 1937-1944 and 1946-1947 are linearly interpolated; 1948-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Norway**

1801-1845 are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census date 1801 and using Sweden as the template country. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. census data for 1801 are available in the combined age intervals: 0-4 and 5-9; 10-14 and 15-19; 20-24 and 25-29; 30-34 and 35-39; 40-44 and 45-49; 50-54 and 55-59; 60-64 and 65-69; 70-74 and 75-79; 80+. The 1801 age intervals are transformed to default intervals using age distributions from 1855 and 1865 as the templates;

while, 1802-1845 age distributions are linearly interpolated. The age groups estimated using Sweden as the template provide a highly consistent match with the actual HMD (<http://www.mortality.org/>) data for Norway; 1846-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Portugal**

1812-1840 and 1841-1863 age distributions are backdated using Sweden and Belgium as proxies, respectively; 1864-1939 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for census dates 1864, 1875, 1890, 1900, 1911, 1920 and 1930, where Belgium is used as the template to derive age distributions from census data in 1864, while Italy is used for 1871-1939; 1865-1874, 1876-1889, 1891-1899, 1901-1910, 1912-1919, 1921-1929 and 1931-1939 age distributions are linearly interpolated; 1940-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Spain**

1812-1855 are backdated using age distributions from Sweden as the proxy; 1857-1907 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census years 1857, 1860, 1877, 1887 and 1900 with Belgium as the template. Due to the estimated age distributions for 1857 and 1860 being implausible, 1856-1876 are linearly interpolated; 1878-1886, 1888-1889 and 1901-1907 are linearly interpolated; 1908-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Sweden**

1812-2011 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **Switzerland**

1812-1840 and 1841-1859 age distributions are backdated using age distributions for Sweden and Belgium as proxies, respectively; 1860-1875 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census dates 1860 and 1870 and using Belgium as the template; while 1861-1869, 1871-1875 are linearly interpolated; 1876-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **United Kingdom**

1812-1840 age distributions are backdated using Sweden as the proxy; 1841-1921 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census years 1841, 1851, 1861, 1871, 1881, 1891, 1901 and 1911, using Belgium as the template country; while 1842-1850, 1852-1860, 1862-1870, 1872-1880, 1882-1890, 1892-1900, 1902-1910 and 1912-1921 are linearly interpolated; 1922-2010 age distributions are obtained from the HMD (<http://www.mortality.org/>).

### **USA**

1812-1829 age distributions are backdated using Sweden as the proxy; 1830-1930 age distributions are backdated using Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. for the census years 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920 and 1930, where Sweden is used as the template for 1830-1840 and Belgium is used from 1841-1930. Mitchell, B.R. 2007. *International Historical Statistics*,

3 volumes. Palgrave Macmillan: New York. data is obtained by adding together the population for whites and Negroes, where the data for whites is available from 1830-2002 and for Negroes from 1830-1990. Data for the census years 1830, 1840, 1850 and 1860 are re-categorized into default age groups using the 1870 age distributions as a template, while growth interpolation is used to fill the 1880 missing data for the Negroes population; 1831-1839, 1841-1849, 1851-1859, 1861-1869, 1871-1879, 1881-1889, 1891-1899, 1901-1909, 1911-1919, 1921-1929, 1931-1932 are linearly interpolated; 1933-2008 age distributions are obtained from the HMD (<http://www.mortality.org/>). 2009 age distributions are linearly extrapolated.

### **Gross Enrolment Rate (GER)**

Total gross enrollment rate defined as the fraction of pupils of schooling age that is enrolled in primary, secondary and tertiary education. See Madsen, J.B. (2020). The Modernization Hypothesis and The Expansion in Education Since 1600, Economics Discussion Paper, Department of Economics, University of Western Australia. Forthcoming.

### **Per Capita Real Income (y)**

Per capita real income is measured as the ratio of real GDP to population. Data sources are listed below:

### **Real GDP**

**General note:** The updating data source is the OECD.Stat's Real Gross Domestic Product (GDP) (<http://stats.oecd.org/index.aspx?>), accessed on 19/12/2019.

**Canada.** 1600-1695. Urbanization Rate, Chandler, T., 1987. *Four Thousand Years of Urban Growth: an historical census*, St. David's University Press., Biguzzi, A. 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1695-1739. Altman, M., 1988. Economic Growth in Canada, 1695-1739: Estimates and Analysis. *The William and Mary Quarterly*, 45(4): 684-711. 1739-1820. Urbanization Rate, Chandler, T., 1987. *Four Thousand Years of Urban Growth: an historical census*, St. David's University Press., Biguzzi, A. 2013. Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1820-1960. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggdc.net/maddison/maddison-project/home.htm>). **United States.** Interpolated geometrically between the year intervals. 1650, 1675, 1700. Lindert, Peter H., and Jeffrey G. Williamson. "American Colonial Incomes, 1650–1774." *The Economic History Review* 69, no. 1 2016: 54-77. 1720, 1730, 1740, 1750, 1760, 1770, 1774. Rosenbloom, J. L. and Weiss, T., 'Economic Growth in the Mid-Atlantic Region: conjectural estimates for 1720 to 1800', *Explorations in Economic History*, 51 2014, pp. 41–59. 1774, 1781, 1789, 1790. McCusker, J. J., 'Estimating Early American Gross Domestic Product', *Historical Methods*, 33 2000, 155–59. 1790-1960. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>). **Japan.** 730, 950, 1150, 1280, 1450, 1600, 1721. Bassino, J.P., Broadberry, S., Fukao, K., Gupta, B. and Takashima, M., 2019. Japan and the Great Divergence, 730–1874. *Explorations in Economic History*, 72, pp.1-22. 1750, 1800. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggdc.net/maddison/maddison-project/home.htm>). 1804, 1846. Bassino, J.P., Broadberry, S., Fukao, K., Gupta, B. and Takashima, M., 2019. Japan and the Great

Divergence, 730–1874. *Explorations in Economic History*, 72, 1-22. 1870-1885. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). 1885-1960. Pilat, Dirk, "The Long -Term Performance of the Japanese Economy", in: Maddison, Angus, D.S. Prasada Rao and William F. Shepherd (eds.), *The Asian Economies in the Twentieth Century*, Edward Elgar Publishing, UK, 2002. **Australia**. Since the large majority of immigrants in the first 60 years of European settlement were from the UK, it is assumed that Australia was a hypothetical satellite country of the UK. Note that GDP data are available for Australia from 1800 Snooks, Graeme D. 1994. *Portrait of the Family within the Total Economy-A Study in Long-run Dynamics, Australia 1788-1990*, Cambridge University Press; Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>); and Ville, Simon, and Glenn Withers, eds. *The Cambridge Economic History of Australia*. Cambridge University Press, 2014. The trouble with the early per capita income estimates is that they are heavily influenced by the dynamics of the Aboriginal population and the assumption of their per capita income. Maddison, for example, assumes that the Aboriginal population is living at subsistence level; an assumption that makes the dynamics of per capita income highly sensitive to the change in the Aboriginal population share since per capita income of the settlers is well above subsistence levels. Thus, since the share of the population that is European is increasing from a very low number in 1800 to well above 90% in 1850, the per capita income gain over the approximate period 1800-1850 becomes artificially severely inflated. Furthermore, since no census of Aboriginals existed before the second half of the 19<sup>th</sup> century, the per capita GDP estimates become even more distorted. 1210-1848. UK. 1848-1960. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **New Zealand**. 1210-1850. 1850-1960. UK per capita income. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **Austria**. 1200-1820. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A. 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1820-1870. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). 1870-1913. Schulze, M.S., 2000. Patterns of Growth and Stagnation in the Late Nineteenth Century Habsburg Economy. *European Review of Economic History*, 4(3), 311-340. 1913-1918. Schulze, Max-Stephan. "Austria-Hungary's Economy in World War I." *The Economics of World War I* 92. 2005. 1918-1948. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>). 1948-1960. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **Belgium**. 1300-1500. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P. 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève;

Chandler, T., 1987, and Biguzzi, A. 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1500, 1550, 1600, 1650, 1700, 1750, 1812, 1846. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). 1846-1946. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>). 1946-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, Accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>).

**Denmark.** 1000-1818. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P. 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A. 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1818-1819. Hansen, S. A., 1972. *Økonomisk vækst i Danmark Bind II: 1914-1970*, 2<sup>nd</sup> ed., Universitetsforlaget, Copenhagen. 1820-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>).

**Finland.** 1600, 1650, 1700, 1750, 1800, 1850, 1860. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). 1860-2000. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>).

**France.** 1000-1280. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P. 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1280-1789. Ridolfi, L. 2016. The French Economy in the Longue Durée. *A Study on Real Wages, Working Days and Economic Performance from Louis IX to the Revolution (1250-1789)*. IMT School for Advanced Studies Lucca. 1789-1820. Marczewski, Jan. "Some Aspects of the Economic Growth of France, 1660-1958." *Economic development and cultural change* 9, no. 3. 1961: 369-386. 1820-1938. Toutain, J.C., 1987. Le Produit brut Intérieur de la France de 1789 à 1982. *Economies et sociétés: Histoire quantitative de l'économie française*, 15. 1938-2000. 1860-2000. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>).

**Germany.** 1500, 1600, 1650, 1700, 1750, 1800, 1850. Pfister, U., 2009, August. German Economic Growth, 1500-1850. In Historisches Seminar, Westfälische Wilhelms-Universität Münster. 1850-1912. Rahlf, Thomas. "Dokumentation zum Zeitreihendatensatz für Deutschland, 1834-2012." *Historical Social Research, Transition (Online Supplement)* 26v1 (2015): 2064. 1912-1962. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>).

**Greece.** 1-1833. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P. 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1833-1945. Kostelenos, G., Vasilidou, D., Kounaris, E., Petmezas, S., & Sfakianakis, M., 2007. Gross Domestic Product 1830-1939. Sources of Economic History of Modern Greece, Quantitative Data and Statistical Series 1830-1939. Athens: Historical Archive of the National Bank of Greece. 1945-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating

Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **Ireland.** 1000-1210. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1210-1840. UK, since they were in a union during a large part of the period. 1840-1913. Andersson, F. N., & Lennard, J., 2018. Irish GDP between the Famine and the First World War: estimates based on a dynamic factor model. *European Review of Economic History*, 23(1), 50-71. 1913-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **Italy.** 1-1300. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1300, 1348, 1400, 1500, 1570, 1600, 1650, 1700, 1750, 1800-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). 1300-1348. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1348-1807. Jan Luiten van Zanden and Bas van Leeuwen, 'Persistent but not Consistent: The Growth of National Income in Holland 1347-1807', *Explorations in economic history*, Vol. 49 (2) 2012, 119-130. (<http://www.cgeh.nl/reconstruction-national-accounts-holland-1500-1800-0>). 1807-2009. Barro-Ursua Macroeconomic Data, (<https://scholar.harvard.edu/barro/publications/barro-ursua-macroeconomic-data>). 1300-1830. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1830-1960. Grytten, O. H., 2004. The Gross Domestic Product for Norway, 1830-2003. *Norges Bank: Occasional Papers*, 1, 241. **Portugal.** 1300-1530. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1530-1850. Palma, N. and Reis, J., 2019. From Convergence to Divergence: Portuguese Economic Growth, 1527–1850. *The Journal of Economic History*, 1-30. 1850-1865. Nunes, Ana Bela, Eugénia Mata, and Nuno Valério. "Portuguese Economic Growth 1833-1985." *The Journal of European Economic History* (1989): 291-330. 1865-1950. Lains, P., 2003. *Os Progressos do Atraso: Uma Nova História Económica de Portugal, 1842-1992*. Instituto Ciencias Sociais da Universidade de Lisboa. 1950-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **Spain.** 985-1282. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La



Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1282-1850. Álvarez-Nogal, Carlos, and Leandro Prados De La Escosura. "The Rise and Fall of Spain (1270–1850) 1." *The Economic History Review* 66, no. 1. 2013: 1-37. 1850-1960. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **Sweden**. 1300-1560. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). 1560-1665. Schön, Lennart, and Olle Krantz. "Swedish Historical National Accounts 1560-2010." *Lund Papers in Economic History* 123, no. 2012. 2012: 1-34. 1665-1800. Edvinsson, R., 2011. New Estimates of Swedish GDP by Activity, *1665-2010, Stockholm Papers in Economic History* No. 12, Stockholm University, 55-61. 1800-1960. Schön, Lennart, and Olle Krantz. "Swedish Historical National Accounts 1560-2010." *Lund Papers in Economic History* 123, no. 2012 (2012): 1-34. **Switzerland**. 1400-1851. Urbanization Rate, Bairoch, R., Batou, J. and Chevre, P., 1988. La Population des Villes Européennes: Banque de Données et Analyse Sommaire des Résultats, 800-1850, Centre d'Histoire économique internationale de l'uni. de Genève, Librairie Droz, Genève; Chandler, T., 1987, and Biguzzi, A., 2013, Database of City Populations from around the World over time (<http://www.worldcitypop.com>). 1851-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>). **UK**. 1210-1270. Clark, G. 2010. The Macroeconomic Aggregates for England, 1209–2008. In *Research in Economic History* (pp. 51-140). 1270-1830. Broadberry, S., Campbell, B. M. S., Klein, A., Overton, M. and van Leeuwen, B., 2015, *British Economic Growth 1270-1870*, Cambridge University Press. 1830-2016. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019 (<http://www.ggd.net/maddison/maddison-project/home.htm>).

## MORTALITY

The sources below present either crude mortality rates or number of deaths. The data are updated from the World Development Indicators assessed 25.12.2019.

**Canada**. 1713-1801. Hd, J., 1975. L'évolution démographique du Québec depuis 1710. Population (french edition), 253-256. 1801-1867. Pelletier, F., Légaré, J. and Bourbeau, R., 1997. Mortality in Quebec during the nineteenth century: From the state to the cities. Population Studies, 51(1), 93-103. 1867-1920. Firestone, O. J. (1958). *Canada's Economic Development, 1867-1953: with special reference to changes in the country's national product and national wealth*. 1920-2000. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **USA**. 1855-1875. Carter, S. B., Gartner, S. S., Haines, M. R., Olmstead, A. L., Sutch, R., & Wright, G., 2006. *Historical Statistics of the United States: Millennium Edition*, Vol. A: Population. Cambridge: USA. 1875-1900. Kuznets, S., 1958. Long Swings in the Growth of Population and in Related Economic Variables. *Proceedings of the American Philosophical Society*, 102(1), 25-52. 1900-2000. 1920-2000. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes.



Palgrave Macmillan: New York. **Japan.** 1670-1861. Hanley, S.B. and Yamamura, K., 2015. *Economic and Demographic Change in Preindustrial Japan, 1600-1868*. Princeton University Press. The data is available in 10-year intervals and geometrically interpolated in-between. 1861-1872. Interpolated. 1872-2000. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Australia.** 1788-1980. Tables MFM-3 (1788-1851) and MFM-136 (1851-1980) Vamplew, W. (ed.), 1987. *Australians: Historical Statistics*, Fairfax, Syme & Weldon Associates. **New Zealand.** 1855-1960. Bloomfield, New Zealand: A Handbook of Historical Statistics, Boston, MA: GK Hall and Co, 1984, Table II.13. **Austria.** 1707-1820. Table 13 in Weigl, A., 2000: Demographischer Wandel und Modernisierung in Wien. Wien: Pilcher Verlag. The data is for Vienna. 1820-1850. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. 1850-1939. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire ; New York: Palgrave Macmillan, Tables A.4A and A.4B, where the mortality rates over the period 1850-1870 is for the Austrian Empire. 1939-1945. Interpolated. 1945-1960. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Belgium.** 1804-1830. CMR for the Netherlands. 1830-1960. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Denmark.** 1735-1839. Andersen, O., 1973. Dødelighedsforholdene i Danmark 1735-1839. Nationaløkonomisk Tidsskrift, 1973, 277-305. 1839-1960. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Finland.** 1722-1752. Gille, H., 1949. The Demographic History of the Northern European Countries in the Eighteenth Century. *Population Studies*, 3(1), 3-65. 1751-1960. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **France.** 1670-1739. The data are baptized children in rural France and is divided by the total population in France and spliced with the crude mortality rates in 1740. Rebaudo, Danièle. "Le Mouvement Annuel de la population française Rurale de 1670 à 1740." *Population* (French edition) (1979): 589-606. 1740-1770. Henry L. and Blayo Y., 1975, *La Population de la France de 1740 à 1860*, Population, 30e année, Demographie Historique, 71-122. 1770 to 1800. Bourgeois-Pichat, 1955, *La Mesure de la Fecondite des Populations Humaines*, Comptes rendus du Congrès mondial de la population. Rome 31 août-10 septembre 1954. New-York: Nations Unies, 1955, vol. IV, séance 5, 249-260. 1800-1960. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Germany.** 1748-1803. Kisskalt, Karl. "Die Sterblichkeit im 18. Jahrhundert." *Zeitschrift für Hygiene und Infektionskrankheiten* 93, no. 2-3 (1921): 438-511. The data is interpolated during the missing years 1756-1763. 1803-1850. Mitchell, B.R., 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. 1850-1942. Rothenbacher, F., 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan, Table D4. 1942-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Greece.** 1848-1960. Ministry of Interior, Population Movement for the Year, National Printing House, various issues (this periodical is available at an annual basis). **Ireland.** 1833-1863. Table 42, Vaughan, William Edward, and André Jude Fitzpatrick, eds. "Irish historical statistics: population, 1821-1971." Dublin: Royal Irish Academy, 1978. 1863-1922. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan. 1922-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Italy.** 1630-1862. The data applies only to North Italy. Galloway, Patrick R. "A reconstruction of the population of North Italy from 1650 to 1881 using annual inverse projection with comparisons to England, France, and Sweden." *European Journal of Population/Revue europeenne de Demographie* 10, no. 3 (1994): 223-274. 1862-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3

volumes. Palgrave Macmillan: New York. **Netherlands.** 1683-1804. For Amsterdam only. Reconstructing the demographic regime of Amsterdam 1681-1920 by Marco H.D. van Leeuwen and James E. Oeppen, in, *ECONOMIC AND SOCIAL HISTORY IN THE NETHERLANDS*, Vol V, Amsterdam 1993, 61-102. 1804-1960. van der Bie, R. (2001). *Tweehonderd jaar statistiek in tijdreeksen, 1800-1999.* Centraal Bureau voor de Statistiek. **Norway.** 1735-1855. Drake, M., 1965. The growth of population in Norway 1735–1855. *Scandinavian Economic History Review*, 13(2), 97-142. 1855-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Portugal.** 1801-1886. Rodrigues, T., de Sousa, F., Freire, M.R. and Gonçalves, M.S., 2004. *A População Portuguesa no Século XIX.* Porto: CEPESE, Edições Afrontamento, Coleção Economia e Sociedade. 1886-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Spain.** 1751-1850. Averages of the mortality rates in Albacete and Ciudad Real. Abarca, Vanesa, Enrique Llopis, José Antonio Sebastián, José Ubaldo Bernardos, and Ángel Luis Velasco. "El descenso de la mortalidad en la España interior: Albacete y Ciudad Real, 1700-1895." *América Latina en la historia económica* 22, no. 3 (2015): 108-144. 1850-1945. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan. 1945-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **Sweden.** 1630-1751. Edvinsson, R.B., 2015. Recalculating Swedish pre-census demographic data: Was there acceleration in early modern population growth? *Cliometrica*, 9(2), 167-191. 1751-1960. Human Mortality Database (<http://www.mortality.org/>), accessed 19.12.2019. **Switzerland.** 1750-1833. Average of mortality rates of Kanton Appenzell Ausserrhoden, Landschaft Basel, Stat Basel, Kanton Neuenburg, Stat Hent. Ritzmann-Blickenstorfer H. *Historical statistics of Switzerland.* Zurich: Chronos. 1996. 1833-1869. Table C.36. Canton de Neuchâtel. Ritzmann-Blickenstorfer H. *Historical Statistics of Switzerland.* Zurich: Chronos. 1996. 1869-1945. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire ; New York: Palgrave Macmillan. 1945-1960. Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York. **UK.** 1541-1838. **England.** Wrigley, Edward Anthony, Roger S. Schofield, and Roger Schofield. *The population history of England 1541-1871.* Cambridge University Press, 1989. 1838-1850. **England and Wales.** Mitchell, Brian R (1988) *British Historical Statistics*, Cambridge: Cambridge University Press UK, 57. 1850-1945. UK. Rothenbacher, F. 2002 *The European population, 1850-1945*, Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan. 1945-1960. **England and Wales.** Mitchell, B.R. 2007. *International Historical Statistics*, 3 volumes. Palgrave Macmillan: New York.

## POPULATION

**Australia,** 1-1819 (Geometric interpolation of the series: 1, 1000, 1500, 1800, 1850) McEvedy, Colin and Jones, Richard, 1978. *Atlas of World Population History*, London: Penguin Books Ltd. and Allen Lane; 1820-1949 Maddison, A., 2010. *Historical Statistics, Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD*, Accessed on 10/09/2012 (<http://www.ggdc.net/MADDISON/oriindex.htm>); 1950-2011 The Conference Board Total Economy Database (<https://www.conference-board.org/data/economydatabase/>), 2012. **Austria.** 1750-1869. Geometric interpolation between points in the series - 1700, 1754, 1780, 1790, 1800, 1816, 1830, 1840, 1850, 1857, 1869, Findl, Peter and Heimold Helczmanovszki (1977) "*The Population of Austria*", 1974 *World Population Year*, Vienna, p.20, Table 1. As the basic source, they cite (1973), *Die Bevölkerung Österreichs vom*

Beginn des 16. bis zur Mitte des 18. Jahrhunderts, in: Helczmanovszki Heimold (ed.), Beiträge zur Bevölkerungs- und Sozialgeschichte Österreichs. Wien. 1870-2015. Statistik Austria.

([http://www.statistik.at/web\\_en/statistics/PeopleSociety/population/population\\_censuses\\_register\\_based\\_census\\_register\\_based\\_labour\\_market\\_statistics/total\\_population/index.html](http://www.statistik.at/web_en/statistics/PeopleSociety/population/population_censuses_register_based_census_register_based_labour_market_statistics/total_population/index.html).)

**Belgium.** 1750-1750: Geometric interpolation between points in the series - 1700, 1750, Klep Paul MM (1991), *Population Estimates for Belgium by Province* (1375-1831), Academia. 1750-1815. 1815-1840: Quételet, Adolphe (1848). *Sur les Anciens Recensements de la Population Belge: (Bulletin de la commission centrale de statistique de Belgique. Extrait de Tome II)*. Klep's data are constructed from documents containing the urban centres with more than 10,000 inhabitants and numerous detailed sources are used to work out the aggregate figures. The urban data are then scaled up by urban population ratios; ratios that are mostly based on interpolation. According to Klep Paul MM (1991), *Population Estimates for Belgium by Province* (1375-1831), Academia, the error margin is 12%, suggesting that the data are quite accurate. Klep Paul MM (1991), *Population Estimates for Belgium by Province* (1375-1831), Academia, uses several sources on population for all provinces; however, he provides little detail on how the data are collected in his primary sources. It appears, however, that the early data are based on hearth taxes or censuses of hearths. The data are endorsed by Eggerickx, T., & Sanderson, J. P. 2010. *Histoire de la Population de la Belgique et de Ses Territoires: Actes de la Chaire Quételet 2005*. Presses univ. de Louvain. Furthermore, the data in the overlapping periods are almost identical to the estimates of Verhulst, P. F. (1845). *La Loi d'Accroissement de la Population. Nouv. Mem. Acad. Roy. Soc. Belle-lettr. Bruxelles*, 18(1). 1840-1870: *Statistique générale de la Belgique*, various issues. These data are reliable since they are based on census data covering the entire country. **Canada**, 1700-1819 McEvedy, Colin and Jones, Richard, 1978. *Atlas of World Population History*, London: Penguin Books Ltd. and Allen Lane; 1820-1949 Maddison, A., 2010. *Historical Statistics, Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD*, Accessed on 10/09/2012 (<http://www.ggdc.net/MADDISON/oriindex.htm>); 1950-2011 The Conference Board Total Economy Database (<https://www.conference-board.org/data/economydatabase/>), 2012. **Denmark.** 900-1600: Geometric interpolation of the series - 800, 1000, 1100, 1200, 1300, 1400, 1500, 1550, 1600, McEvedy, Colin, and Richard Jones 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. Assumed 40% fall in population 1347-1362 following the analysis of Ulsig, E. (1991) *Pest og Befolkningsnedgang i Danmark i det 14. århundrede. Historisk idsskrift*, 15, rk. 6, and then geometric interpolation from 1362 to 1400. 1600-1660: Geometric interpolation 1660-1769: Geometric interpolation between point in the series - 1660, 1735, and 1769. Lassen, A. 1966. The population of Denmark, 1660-1960. *Scandinavian Economic History Review*, 14(2), 134-157, Table 2, p 143. The estimates of Lassen (1966) are based on census material supplemented with estimates for the missing parishes. 1770-1801: Geometric interpolation of the series between the census years 1770, 1787, and 1801. Statistics Denmark, "Folketal efter hovedlandsdele (summariske tal fra folketællinger)", Table FT. 1800-1880: Statistisk Tabelværk (1905) "Befolkningsforholdene i Danmark i det 19. aarhundrede", Table 1, p. 10. The data covering the period 1660-1800 are reliable because they are based on census and poll tax data that, for a small country as Denmark, are reliable and good records from Parish registers are kept by churches since almost 100% of the population was Protestant. The post-1800 data are generally considered to be of high quality Lassen, A. 1966. The population of Denmark, 1660-1960. *Scandinavian Economic History Review*, 14(2), 134-157, Table 2, p 143. **Finland** 900-1690: Geometric interpolation of the series: 800, 1000, 1100, 1200, 1300, 1400, 1500, 1550, 1600, 1650, McEvedy, Colin, and Richard Jones 1978. *Atlas of World Population History*. Penguin Books

Ltd, Harmondsworth, Middlesex, England. 1650-1690: Geometric interpolation. 1690-1697: 30% assumed to die of starvation (see, Neumann, J.; Lindgrén, S. 1979. "Great Historical Events That Were Significantly Affected by the Weather: 4, The Great Famines in Finland and Estonia, 1695–97. *Bulletin of the American Meteorological Society*. 60(7): 775–787). 1697-1721: Geometrically interpolated. 1721: Eino Jutikkala, Finland's Population Movement in the Eighteenth Century, 549-569, Ch. 23 in (2008) "*Population in History: Essays in Historical Demography, Europe and the United States*", Vol. 2. edited by David Victor Glass, D. E. C. Eversley. 1721-1749: Geometrically interpolated. 1750-1870: Mauri Nieminen (1999) "*Vaestotilastoja 250 vuotta - Katsaus vaestotilaston historiaan vuosina 1749-1999*", Tilastokeskus (Statistics Finland): Helsinki, Table 1, pp. 52-59. Already in the 17th century, the church had begun to record the number of baptized and buried. The Church Law of 1686 gave the priests detailed instructions on what information the parishes had to gather from their parishioners and already during the 18th century, many priests undertook studies on birth and mortality rates based on church records. The information recorded in the church books are considered to be of very high standard and from these sources Statistics Finland has computed annual population statistics from 1749 and up to the 19<sup>th</sup> century when population censuses were regularly carried out Nieminen (1999). **France.** 900-1300: Geometric interpolation of the series: 1, 200, 400, 600, 800, 1000, 1100, 1200, 1300, McEvedy, Colin, and Richard Jones. 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1300-1740: Malanima, P. 2009. *Pre-Modern European Economy: One Thousand Years (10th-19th centuries)* (Vol. 5). Brill. 1740-1770: Henry, Louis, and Yves Blayo (1975) "La population de la France de 1740 a 1860", *Population*, vol. 30, no. 1, 71-122, 95. Table 12. The data are available in 5-year intervals. 1770-1788: Table on page 70, Dupâquier, Jacques. 1968. *Sur la Population Française au XVIIe et au XVIIIe Siècle*, *Revue Historique*, vol. 239, no. 1, 43-79. The data are available annually. 1789-1870: Statistical yearbooks, *Annuaire Statistique de la France*, various issues. The first indication of population is in 1328 in connection with the tax returns McEvedy, Colin, and Richard Jones. 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. The data, which are constructed from census surveys, parish and civil registers, and the first good and reliable data become available in the early 16 hundreds, Dupâquier, Jacques. 1968. *Sur la Population Française au XVIIe et au XVIIIe Siècle*, *Revue Historique*, vol. 239, no. 1, 43-79. Reliable and high frequency data on fertility and mortality are available for villages from 1670 and for cities from 1740. **Germany.** 900-1500: Geometric interpolation of the series: 1, 200, 400, 600, 800, 1000, 1100, 1200, 1300, 1400, 1500. McEvedy, Colin, and Richard Jones. 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1500-1618 and 1650-1815 (see below for the period 1618 to 1650): Pfister, Ulrich, and Georg Fertig. 2010. "The Population History of Germany: Research Strategy and Preliminary Results." Max Planck Institute for Demographic Research (MPIDR) working paper WP 2010-35. Their data are reported at decennial intervals. Their estimates are mostly based on the inverse projecting method using 450-600 parish registers from the beginning of the 17<sup>th</sup> century and scaled up by least squares regression. This information is complemented with information on partial censuses (lists of communicants, tax payers, hearths, burghers, etc.) from the late fifteenth to the early eighteenth century. Though population data are available from other sources from 1740, Pfister, Ulrich, and Georg Fertig. 2010. "The Population History of Germany: Research Strategy and Preliminary Results." Max Planck Institute for Demographic Research (MPIDR) working paper WP 2010-35, improve the existing estimates of population size over the period 1740-1800 by the use of additional proto-statistical census material produced by state authorities. The data compares well with estimates using alternative methods, For example, Pfister, Christian. 1994, *Bevölkerungsgeschichte und Historische Demographie 1500–1800*,

München: Oldenbourg. 1618-1650, geometrically interpolated (The thirty years' war (1618-1648) reduced population of Germany from an estimated 21 million to 13.5 million) Lee, Stephen J. 2005. European population growth 1500-1800, in Lee, Stephen J (ed.). *Aspects of European history 1494-1789*, Routledge. 1815-1820: Geometrically interpolated. 1820-2000: Maddison, Angus. 2003. *The World Economy: Historical Statistics*. OECD publishing.

**Greece.** 900-1819: Geometric interpolation of the series: 800, 1000, 1100, 1200, 1300, 1400, 1500, 1550, 1600, 1650-1600, 1650-1700, 1750-1800. McEvedy, Colin, and Richard Jones. 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1800-1821: Geometric interpolation 1821-1870: *Statistical Yearbook*, 1930 Table 2, 1979, 16), ELSTAT, *Statistical Yearbook* (2009-2010, 43). 1870-1931: Kostelenos G., 2003, "Historical Estimates of National Accounts Magnitudes in Greece, 1830-1939" *SPOUDAI-Journal of Economics and Business*, 53(1), 37-64. The post 1821 data are mostly based on censuses (the first Greek census was in 1828, shortly after independence) and is quite reliable. McEvedy and Jones do not list their primary sources.

**Ireland.** 900-1086: Geometric interpolation of the series: 800, 1000, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England, and geometric interpolation 1000 to 1086: 1086: Russell, J. C., 1948. *British Medieval Population*. Albuquerque, U. of New Mexico P.54. Then geometric interpretation from 1086-1100. 1100 1200, 1300: Geometric interpolation between points, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1300-1600: Malanima, Paolo (2012) The Economic Consequences of the Black Death, in Cascio, Elio Lo (ed.), *L'impatto della "Peste Antonina"*, Edipuglia. Assumed to be 1.45 mill in 1347 and fall by 40% to 1352. The data are available in 1300, 1347, 1352, 1400, and 1500. 1500-1652. Geometrically interpolated between the years 1500, 1600, and 1652, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1652 and 1672: Lenihan, P. (1997). War and Population, 1649–1652. *Irish Economic and Social History*, 24(1), 1-21 (note that data for 1872 is available from the source despite the title). 1672-1801: Connell, Kenneth Hugh. "The Population of Ireland in the Eighteenth Century." *The Economic History Review* 16.2 (1946): 111-124. The data are available: 1676, 1687, 1718, 1767, 1772, 1777, 1781, 1785, and 1788. The data are adjusted to the level of figures by Dickson, D. , Ó Grada, C. & Daultrey, S. (1982). Hearth Tax, Household Size and Irish Population Change 1672-1821. *Proceedings of the Royal Irish Academy. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature*, 125-181. Years available in Dickson et al. are: 1706, 1712, 1725, 1732, 1744, 1749, 1753, 1791, and 1801. The population data over the period 1672-1800 are from the hearth tax introduced in 1662. Dickson et al. (1982), for example, undertook critical analysis of the 1788 county-by-county house returns supplied by the hearth-tax collectors, together with the results of a sample population census organized by Bushe and based on data provided by hearth-tax officers in various districts through twenty-one counties in 1788 and 1789. Dickson et al. (1982) argue that their tests suggest that the hearth-tax returns data for the first half and in the end of the 18<sup>th</sup> century are of good quality. Over the period 1652-1801, the data are, on average, available in 9-year intervals. 1800-1870: Mitchell, Brian R (1988) *British Historical Statistics*, Cambridge: Cambridge university press UK, Table 3, 11-14. **Italy.** 900-1300: Geometric interpolation of the series: 800, 1000, 1100, 1200, 1300, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1300-1550: Malanima, Paolo., 2003. "Measuring the Italian Economy. 1300-1650. *Rivista di storia economica* 19(3): 265-296. 1550-1628: Alfani, G., 2007. Population and Environment in Northern Italy During the Sixteenth Century. *Population*, 62(4), 559-595. The data, which cover North Italy only (half of the population), are available annually in index form. 1628-

1650: Malanima, Paolo., 2003. Measuring the Italian Economy. 1300-1650: *Rivista di Storia Economica* 19(3): 265-296. 1650-1820: Galloway, Patrick R., 1994, "A Reconstruction of the Population of North Italy from 1650 to 1881 Using Annual Inverse Projection with Comparisons to England, France, and Sweden." *European Journal of Population/Revue Européenne de Demographie*, 10(3) 223-274. The data are available on an annual basis and is spliced with the population for the whole of Italy in 1820. Importantly, the data scaled up to Italy in 1820 is almost identical to the population data of Malanima, Paolo., 2003. Measuring the Italian Economy. 1300-1650: *Rivista di Storia Economica* 19(3): 265-296 in 1650 and the scaling factor stays almost constant at 2 in the overlapping period 1650-1820, noting that the data of Malanima (2003) are available at 10-year intervals. The data in Galloway, Patrick R., 1994, "A Reconstruction of the Population of North Italy from 1650 to 1881 Using Annual Inverse Projection with Comparisons to England, France, and Sweden." *European Journal of Population/Revue Européenne de Demographie*, 10(3) 223-274 are mostly based on continuous series of births, marriages, and deaths for both rural and urban parishes, usually ending around 1800. The area included in the data of Galloway (1994) consists of Piedmont, Lombardy, Emilia, Veneto, and Tuscany, while the northern regions of Liguria and Trento were excluded from the analysis because historical data were lacking for these two regions. All five regions included in the analysis contain a large number of published parish registers containing, baptisms (births), and marriages. The annual population series are inferred from inverse projection. Since the introduction of the Council of Trent in 1563, registration of births, deaths and marriages became compulsory and came under the strict control of the Catholic Church. Zero net migration is assumed for all pre-1861 data – an assumption that gained support in the study of Breschi Marco, Malanima, Paolo (eds.), 2002, *Prezzi, redditi, popolazioni in Italia: 600 anni (dal secolo XIV al XX)*, Udine, Forum, and the fact that only 13,793 Italian immigrants arrived in the US from all of Italy during the period 1820-1860 (the U.S. Census Bureau (1975, p. 106). 1820-1870: : Maddison, Angus (2003). *The World Economy: Historical statistics*. OECD publishing. **Japan**. 900 and 1150: Hiroshi Kito, (1996) "The Regional Population of Japan before the Meiji Period", *Jochi Keizai Ronsyu*, 41(1–2), 65–79 (in Japanese). The data, are available in 900 and 1150. 1000-1280: Farris, W. W., 2006, *Japan's Medieval Population: Famine, Fertility, and Warfare in a Transformative Age*. The data are constructed from fragments of household registers and land-allotment records that have survived. Data are available in 1000, 1100, 1200, 1280. The data are geometrically interpolated between the years 900, 1000, 1100, 1150, 1200, and 1280. 1280-1400: Geometrically interpolated. 1450-1870: Jean-Noël Biraben, *Le Point Sur l'Histoire de la Population du Japon*, *Population* Vol. 48 (no. 2), 443–472 (1993). The data are mostly available in 5-year intervals; otherwise in 10-year intervals. The data are calculated using inverse aggregate projection, where the fertility and mortality rates are based on village registers. The quality of the surviving information improves markedly in the second half of the 17th century. There are records of enumerations carried out in most counties and often on several occasions. Regular nation-wide censuses have been carried out since 1726. In 1871 a registration system was introduced, which made annual population figures available (Jean-Noël Biraben, 1993). **Netherlands**. 900-1400: Geometric interpolation of the series: 800, 1000, 1100, 1200, 1300, 1400, McEvedy, Colin, and Richard Jones (1978). *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1400-1804: Paping, Richard., 2014. General Dutch Population development 1400-1850: cities and countryside. Paper presented at 1st ESHD conference, Alghero, Italy. The data are available in 10-year intervals. The total population in the Netherlands is estimated by adding the population from parish family registers covering the whole country. In the overlapping intervals the estimates of Paping are very close to those of the pioneering study of J.A. Faber, H.K. Roessingh, B.H. Slicher van Bath, A.M. van der Woude and H.J. van Xanten, (1965),

“Population Changes and Economic Developments in the Netherlands: A Historical Survey”. A.A.G. Bijdragen, 12. 47-114, Landbouwwuniversiteit Wageningen . (see Figure 1 in Paping for comparison between the estimates). Noting that the method used by Faber *et al.* (1965) is quite different from that of Paping (2014) gives confidence in the estimates of Paping, where the data of Paping are used here because they are available at higher frequencies and go back further than the data of Farber *et al.* Faber *et al.* base their estimates on various documents, most importantly, Parish registers, military surveys of the male adult population between the ages of 10 and 60, tax records for which complete lists of the number of houses is available for the years 1477, 1494, 1514, 1543, 1561, 1569, 1630 and 1731 as well as statistics on net increase in the housing stock over the period 1630-1661. 1804-1870: Centraal Bureau voor de Statistiek, 2001. *Tweehonderd Jaar Statistiek in Tijdreeksen*, 1800-1999, Voorburg. **Norway**. 900-1200: Geometric interpolation of the series: 800, 1000, 1100, 1200, McEvedy, Colin, and Jones, Richard., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1200-1300: Geometrically interpolated. 1300-1526: Benedictow, O. J., 1992. *Plague in the Late Medieval Nordic Countries: Epidemiological Studies*, Oslo: Middelalderforlaget. Following Benedictow it is assumed that the population was 375,000 in 1350, fell 40% to 1360 and then interpolated geometrically between 1360 and 1526. 1526-1664: Grigg, D. B., 1980. *Population Growth and Agrarian Change: An Historical Perspective*. CUP Archive. The data are available in the years 1526, 1590, 1600, and 1664 and are geometrically interpolated in-between. 1664-1701: Geometrically interpolated. 1701: Statistics Norway, Historical Statistics Norway, 1948, Oslo, Table 7 p. 31. 1701-1735: Geometrically interpolated. The data over the period 1735 and 1855 are constructed by Drake, M., 1965. The Growth of Population in Norway 1735–1855: *Scandinavian Economic History Review*, 13(2), 97-142. The data are available in 1735, 1755, 1775, 1795, 1815, 1835, and 1855. The registration of births, deaths and marriages in Norway started in the early 17<sup>th</sup> century by the clergy, and a law of 1687 made registration compulsory. The first complete population census in Norway took place in 1769. Others followed in 1801, 1815, 1825, 1835, 1845, 1855 and 1865. 1860 and 1870: Statistics Norway, *Historical Statistics Norway*, 1948, Oslo, Table 7 p. 31. **Portugal**. 900-1100: Geometric interpolation of the series: 800, 1000, 1100, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1100-1500: Costa, L. F., Lains, P., & Miranda, S. M., 2016. *An Economic History of Portugal, 1143–2010*. Cambridge University Press. Table 1.1 p 24. The data are available for the years 1100, 1200, 1300, 1340, 1348, 1360, 1400, and 1500, and are geometrically interpolated in-between. 1500-1800: Valerio, Nuno. "Portuguese Economic Performance 1250–2000." In *13th International Congress of Economic History, Buenos Aires*. 2002. The data are available for the years 1500, 1550, 1600, 1650, 1700, 1750, 1800, and are geometrically interpolated in-between. The data are tax records, military records (the number of men who were obliged to engage in military service during wars), Inquirições for 1258 (Crowns' enquiries on seigneuries and communities), the Rol dos Tabeliães (list of public notaries) of the concelhos (1287–1290), and the Lista das Igrejas for 1320–1321, which assess the revenue of ecclesiastical benefices, including the parish churches, following a papal donation that granted a tenth of that revenue to the king of Portugal. 1800-1870: Nuno Valerio, "Recent Developments on Portuguese Retrospective national accounts", Social and Economic History Research Unit (GHES) working paper, University of Lisbon (1998). From 1864 the population data are from censuses. Over the period 1800-1864 the data are created from population counts based on ecclesiastical and administrative records covering the whole country. **Spain**. 900-1300: Geometric interpolation of the series: 800, 1000, 1100, 1200, 1300, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1357-1360: Álvarez-Nogal,



Carlos, and Leandro Prados De La Escosura, 2013. "The Rise and Fall of Spain (1270–1850)," *The Economic History Review*, 66(1), 1-37. Population is assumed to decline by 30% during the period 1348-1360 since Spain was not affected as much by the Black Death as other European Countries. 1400, 1500, and 1550: Jan de Vries, 1984, *European Urbanization 1500-1800*, Harvard Univ Press Cambridge MA and Russell, J. C., 1958. *Late Ancient and Medieval Population. Transactions of the American Philosophical Society*, 48(3), 1-152. 1550-1590: Geometrically interpolated. 1590-1703: Ojeda Nieto, Jose. 2004, "La Población de España en el Siglo XVII. Tratamiento demográfico de la bula de la Santa Cruzada." *HMiC: història moderna i contemporània*, 277-113. 1703-1717: Geometrically interpolated. 1717-1797: Bacci, M. L., 1968. Fertility and nuptiality changes in Spain from the late 18th to the early 20th century: Part I. *Population studies*, 22(1), 83-102. The data are available over the years 1717, 1768, 1777, 1787, and 1797, and geometrically interpolated between these years. The data are based on population censuses, scaled to include allow for the excluded populations (army, clergy, immigrants, foreigners) in the censuses in the 18<sup>th</sup> century. 1797-1870: López, Carlos Barciela, Albert Carreras, and Xavier Tafunell., 2005, *Estadísticas Historicas de Espana*, Vol.3. Table 2.4, p. 124-126. **Sweden.** 900-1200: Geometric interpolation of the series - 800, 1000, 1100, 1200, McEvedy, Colin, and Richard Jones., 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1200-1300: Geometrically interpolated. 1300-1571: Andersson-Palm, L., 2001: *Livet, kärleken och döden: Fyra uppsatser om svensk befolkningsutveckling 1300-1850*, Historiska institutionen, Göteborgs Universitet. The data are interpolated between the benchmark periods 1300, 1413, 1500 and 1520. Andersson-Palm bases his estimates on the number of parishes in the area corresponding to Sweden of today, which was 238510 in the early 14<sup>th</sup> century. He assumed every parish to comprise around 100 households each consisting of 4.5 persons. To assess the effect on population caused by the epidemics, Palm used data for certain regions. 1350-1360. Benedictow, Ole J., 2004. *The Black Death, 1346-1353: the complete history*. Boydell & Brewer. Assumes that the population declines by 40% to 1360. 1571-1759: Edvinsson, Rodney Benjamin, 2015, "Recalculating Swedish pre-census demographic data: Was there acceleration in early modern population growth?" *Cliometrica*, 9(2) 167-191. The data are interpolated between the years 1571, 1600, 1620, 1627 and are available annually for the period 1627-1759. The construction builds on Palm, L. A., 2000. *Folkmängden i Sveriges socknar och kommuner 1571–1997*. Books-on-Demand, Göteborg and the inverse projection method based on annual birth and death rates is used. The data are quite reliable because they covers most of Sweden and, therefore, overcome the problems associated with scaling. 1760-1960: Statistiska Centralbyrån, S., 1969. *Historisk Statistik för Sverige*, Del 1. Befolkning, AB Allmänna Förlaget, Table 2, 44. **Switzerland.** 900-1300: Geometric interpolation of the series: 1, 200, 400, 600, 800, 1000, 1100, 1200, 1300, McEvedy, Colin, and Richard Jones, 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex, England. 1300-1400: Malanima, Paolo., 2012 *The Economic Consequences of the Black Death*, in Cascio, Elio Lo (ed.), *L’impatto della “Peste Antonina”*, Edipuglia. Assumed to increase by the growth in the previous century from 1300-1347 and then fall by 40% to 1352. 1400-1450: Geometrically interpolated. 1450-1600: Grigg, D. B., 1980. *Population Growth and Agrarian Change: an historical perspective*. CUP Archive. 1600-1650: Geometrically interpolated. 1650-1800: De Vries, J., 2006. *European Urbanization, 1500-1800* (Vol. 4). Routledge. 1800-1866: Ritzmann-Blickenstorfer, H., 1996. *Historical Statistics of Switzerland*. Zurich: Chronos, Table B17. 1866-1870: Statistics Switzerland. (<http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/02/blank/data/01.html>). **UK.** 900-1000: Geometric interpolation of the series - 800, 1000, McEvedy, Colin, and Richard Jones, 1978. *Atlas of World Population History*. Penguin Books Ltd, Harmondsworth, Middlesex,



England. 1000-1086: Geometrically interpolated. 1086: "*Life in the 11th Century: Population*". The Domesday Book Online Scaled to UK using the ratio of population in England Clark, Gregory. "The long march of history: Farm wages, population, and economic growth, England 1209–1869." *The Economic History Review* 60.1 (2007): 97-135. and the UK. 1086-1200: Table 1.04 in Broadberry, S., Campbell, B. M. S., Klein, A., Overton, M. and van Leeuwen, B., 2015, *British Economic Growth 1270-1870*, Cambridge University Press. The data are interpolated between the years 1086, 1190 and 1220. They base their estimates on Hallam, H. E. (1988). Population movements in England, 1086-1350. *The Agrarian History of England and Wales*, 2, 1042-1350, Cambridge: Cambridge University Press. Hallam bases his estimates on manors projected from the Domesday censuses. 1200-1541: Two different estimates are used to bridge the population data between 1200 and 1541. Estimate one. Table 1.04 in Broadberry, S., Campbell, B. M. S., Klein, A., Overton, M. and van Leeuwen, B., 2015, *British Economic Growth 1270-1870*, Cambridge University Press. The data are interpolated between the years 1190, 1220, 1250, 1279, 1290, 1315, 1325, 1348, 1351, 1377, 1400, 1430, 1450, 1522, and 1541. 1315-1540. The construction is based on the same method as Hallam (1988). Estimate two. Table A2 in Clark, G., 2010. The macroeconomic aggregates for England, 1209–2008. In *Research in Economic History*, 51-140. The data are available in 10 year intervals and are based on Clark, Gregory. "The long march of history: Farm wages, population, and economic growth, England 1209–1869." *The Economic History Review* 60.1 (2007): 97-135. The data are for England and scaled up to the UK. The data of Clark (2007) are estimated from the records of 21 medieval communities in which he combines information from manor court rolls and the totals of tithing penny payments by males aged 12 and above. Using various regression methods, Clark arrives at aggregate population estimates for England. 1541-1700: Table A9.1 p 614 Wrigley, E. A., Davies, R. S., Schofield, R. S., & Oeppen, J. E. 1997. *English Population History from Family Reconstitution 1580-1837*. Cambridge University Press. Their data are available in 5-year intervals. They use the inverse projection method based on the monthly totals of vital events in the registers of 404 parishes, selected from approximately 10,000 parishes. The data are considered to be the gold standard of the population estimates for England and is generally endorsed for its high quality in the literature (see, e.g., Clark, 2007; Broadberry et al., 2015). As remarked by Alan Dyer in *History*, Vol. 84, No. 274 (April 1999), 346, in his review of Wrigley et al. (1997), "the work has become pivotal not only in English history, but on a world level, since in no other country is it possible to construct such an impressive sequence of data stretching over such a long period of time". Comparison between estimates 1 and 2. The two estimates follow approximately the same paths in the periods 1200-1300 and 1362-1541. The discrepancy is large in the period 1300-1362: While Clark's data show a significant, but gradual, population decline over the period 1310-1360, the 14<sup>th</sup> century population decline in the data of Broadberry et al. (2015) is essentially concentrated in the period 1348-1351. The discussion in the literature suggests a significant decline in the population shortly after the outbreak of the Black Death in 1348 (see discussion in Broadberry et al., 2015, p. 13); however, there are no precise estimates of the population decline. 1700-1800: Broadberry, S., Campbell, B. M. S., Klein, A., Overton, M. and van Leeuwen, B., 2015, *British Economic Growth 1270-1870*, Cambridge University Press (see their discussion on page 30). The sum of population of England, Scotland and Wales. The data for England is available on 5-year intervals from Wrigley et al. (1997) while they interpolate the available data for Scotland in 1700, 1750 and 1801 and assume that the data for Wales follow that of England. 1801-1900: Mitchell, Brian R., et al. *British Historical Statistics*. CUP Archive, 1988. 1900-2000: Maddison, Angus., 2003. *The World Economy: Historical Statistics*. OECD publishing. **United States. 1-1789**: (Geometric interpolation of the series: 1, 1000, 1500, 1600, 1700, 1750, 1800) McEvedy, Colin and Jones, Richard,

(1978), *Atlas of World Population History*; 1790-1819: (Geometric interpolation of the series: 10-year interval from 1790-1820) Carter, S. B. et al., (Eds.), 2006. *Historical Statistics of the United States: Earliest Times to the Present*, Millennial Edition, Vol. One, Part A, Population, Cambridge University Press; 1820-1949: Maddison, A., 2010. 1950-2011: The Conference Board Total Economy Database, 2012.

## **GENDER WAGE GAP (Gap)**

The *gender wage gap* is defined as the difference between male and female average wages divided by the male wages. Data sources are listed below:

**Canada, 1870-1910**: Gender wage gap in the US, Carter, S. B. et al., (Eds.), 2006. *Historical Statistics of the United States: Earliest Times to the Present*, Cambridge University Press; 1911-1968: Statistics Canada, Historical statistics of Canada, Section E: Wages and Working Conditions (Hourly wage rates for selected occupations in the cotton industry) ([http://www.statcan.gc.ca/pub/11-516-x/sectione/4147438-eng.htm#E60\\_68](http://www.statcan.gc.ca/pub/11-516-x/sectione/4147438-eng.htm#E60_68)); 1969-1975: Gender wage gap in the US, Carter, S. B. et al., (Eds.), 2006. *Historical Statistics of the United States: Earliest Times to the Present*, Cambridge University Press; 1976-1999: Income Statistics Division, Statistics Canada, 2000-2011: OECD.stat Earnings, Labor Force Statistics (MEI, <http://stats.oecd.org/index.aspx?>); **United States, 1870-1986**: Carter, S. B. et al., (Eds.), 2006. *Historical Statistics of the United States: Earliest Times to the Present*, Cambridge University Press; (1914-1948: Hourly Earnings, for Production Workers in 25 Manufacturing Industries); 1987-1999: Gender wage gap in Canada, Income Statistics Division, Statistics Canada, 2000-2011: OECD.stat Earnings, Labor Force Statistics **Japan, 1870-1879 & 1939-1951**: Gender wage gap in the US, Carter, S. B. et al., (Eds.), 2006. *Historical Statistics of the United States: Earliest Times to the Present*, Cambridge University Press; 1880-1938 & 1952-1953: Nominal Daily Wages for Production Workers, Hundred-Year Statistics of the Japanese Economy, Statistics Dept., Bank of Japan Statistics Dept., Bank of Japan, 1966; 1954-1999: Historical Statistics of Japan, Chapter 19: Labor and Wages, Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare (<http://www.stat.go.jp/english/data/chouki/19.htm>); 2000-2011: OECD.stat Earnings, Labor Force Statistics; **Australia, 1870-1911**: Gender wage gap in the US, Carter, S. B. et al., (Eds.), 2006. *Historical Statistics of the United States: Earliest Times to the Present*, Cambridge University Press; 1912-1980: Vamplew, W. (ed.), 1987. *Australians: Historical Statistics*, Fairfax, Syme & Weldon Associates (1912-1963: Average Annual earnings in Manufacturing, 1964-1980: Average Weekly Earnings); 1981-1999: Gender wage gap in Canada, Income Statistics Division, Statistics Canada, 2000-2011: OECD.stat Earnings, Labor Force Statistics ; **New Zealand, 1870-1999**: Gender wage gap in Australia; 2000-2011: OECD.stat Earnings, Labor Force Statistics; **Austria, 1870-1994**: Average Gender Wage Gap in Sweden, Switzerland, and the UK; 1995-1999: Gender wage gap, Eurostat database (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019; 2000-2011: OECD.stat Earnings, Labor Force Statistics. **Belgium, 1870-1993**: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-1999: Gender pay gap, Eurostat database, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019. 2000-2018: OECD.stat Earnings, Labor Force Statistics. **Denmark, 1870-1913**: Average Gender wage gap in Sweden, Switzerland, and the UK; 1914-1979: 1914-1980: H C Johansen, 2002, *Danish Population History 1600 to 1939*, University Press of Southern Denmark, Odens (Hourly Wages in the crafts and industries); 1980-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-1999: Gender pay gap, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019; 2000-2011: OECD.stat

Earnings, Labor Force Statistics **Finland**, 1870-1995: Average Gender wage gap in Sweden, Switzerland, and the UK; 1996-1999: Gender pay gap, Eurostat database, 2000-2011: OECD.stat Earnings, Labor Force Statistics **France**, 1870-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-1999: Gender pay gap, Eurostat database, 2000-2011: OECD.stat Earnings, Labor Force Statistics **Germany**, 1870-1917: Scholliers, Peter and Zamagn, Vera (eds), 1995. Labour's Reward: Real Wages and Economic Change in 19th- and 20th-century Europe, Edward Elger (wages in construction and Industry & handicraft) ; 1918-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-1999: Gender pay gap, Eurostat database, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019 2000-2011: OECD.stat Earnings, Labor Force Statistics **Greece**, 1870-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-1999: Gender pay gap, Eurostat database, 2000-2011: OECD.stat Earnings, Labor Force Statistics **Ireland**, 1870-1993: Gender wage gap in the UK; 1994-2002: Gender pay gap, Eurostat database, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019. 2003-2011: OECD.stat Earnings, Labor Force Statistics **Italy**, 1870-1889: Average Gender wage gap in Sweden, Switzerland, and the UK; 1890-1938: Scholliers, P. and Zamagn, V. (eds), 1995, (wages in construction and textiles); 1939-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-1999: Gender pay gap, Eurostat database, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019 2000-2011: OECD.stat Earnings, Labor Force Statistics. **Netherlands**, 1870-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-2001: Gender pay gap, Eurostat database, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019. 2002-2011: OECD.stat Earnings, Labor Force Statistics **Norway**, 1870-1973: Statistics Norway (1870-1940: Average Daily Wages in Agriculture and Forestry; 1941-1973: wages Index, 1985=100) (<https://www.ssb.no/en/>); 1974-1996: Average Gender wage gap in Sweden, Switzerland, and the UK; 1997-1999: Gender pay gap, Eurostat database, (<http://ec.europa.eu/eurostat/data/database>), assessed 7.9.2019. 2000-2011: OECD.stat Earnings, Labor Force Statistics **Portugal**, 1870-1993: Average Gender wage gap in Sweden, Switzerland, and the UK; 1994-2003: Gender pay gap, Eurostat database, 2004-2011: OECD.stat Earnings, Labor Force Statistics **Spain**, 1870-1913: Average Gender wage gap in Sweden, Switzerland, and the UK; 1914-1947: Salarios diarios de los trabajadores agrarios, Spain Historical Statistics; 1948-2000: Average Gender wage gap in Sweden, Switzerland, and the UK; 2001-2003: Gender pay gap, Eurostat database, 2004-2011: OECD.stat Earnings, Labor Force Statistics. **Sweden**, 1870-1920: Loneandelen och den ekonomiska utvecklingen: En empirisk-teoretisk studie / [av] Karl G. Jungenfelt : With a summary in English: Labour's share and economic development, Stockholm : Almqvist & Wiksell, 1966 (Annual firms level wages); 1921-1999: Edvinsson, R., Jacobson, T., and Waldenström, D. (eds.), 2010. Historical Monetary and Financial Statistics for Sweden: Exchange Rates, Prices, and Wages, 1277–2008, Sveriges Riksbank, Bulls Graphics in Halmstad ([www.riksbank.se/forskning/historiskstatistik](http://www.riksbank.se/forskning/historiskstatistik)); 2000-2011: OECD.stat Earnings, Labor Force Statistics **Switzerland**, 1870-1889: Gender wage gap in Sweden; 1890-1981: *Ritzmann-Blickenstorfer*, Heiner (Ed.), 1996. Historical Statistics of Switzerland <https://hssso.ch/en>; 1982-1999: Gender wage gap in Sweden; 2000-2011: OECD.stat Earnings, Labor Force Statistics **United Kingdom**, 1870-1958: Scholliers, Peter and Zamagn, Vera (eds), 1995. Labour's Reward: Real Wages and Economic Change in 19th- and 20th-Century Europe. (wages in building and cotton textiles); 1959-1967: British Labour Statistics, Historical Abstract 1886-1968, Department of Employment and Productivity, London, 1971; 1968-1999: Annual Survey of Hours and Earnings, Office of National Statistics (<http://www.ons.gov.uk/ons/index.html>) ; 2000-2011: OECD.stat Earnings, Labor Force Statistics.

## MINIMUM WORKING AGE

**Australia:** Law passed 1873-1897 Labour legislation complimented the Education Acts in that no school age children were allowed in factories/shops, Swain, S., 2009. Australia, development of child welfare policy in Australia. In Hindman, H.D. (ed.) *The World of Child Labor: An Historical and Regional Survey*. 949-952. New York: Routledge; circa 1917 legislation had been passed which prohibited children 14 years of age and under (Hindman, 2009). Child labour age laws followed compulsory schooling laws; 1964 -1972 Education Acts raised to 16 years (Burke, Gerald, and Andrew Spaul. "Australian schools: participation and funding 1901 to 2000." *Year Book Australia* 1301 (2001)). **Austria:** 1854 Austrian Code prohibits children under the age of 12 to work in the industry, from 1859 educational requirements had to be monitored, from 1859 they prohibit industry work, from 1884 laws prohibit mining work below age 12 (Anderson and Wright, 1911); 1987 Federal Act sets minimum working age to 15, requires the completion of compulsory education to start work and prohibits most occupations (ILO, 2000). **Belgium:** 1889 bill prohibited the labour of children below 12 years, limited hours of 12-16 years of age, restrictions only applied to industrial work Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge; 1914 bill restricted industrial work for 14 and under (Hindman, 2009); 1971 Labour Act restricts employment of children under 15 in all industries except for arts (Hobbs, S., Mckechnie, J., and Lavealette, M., 1999. *Child Labour: A World History Companion*. Oxford: ABC-CLIO Ltd). **Canada:** 1883 children under 14 not allowed in factory; 1907 Educational requirements (literacy test) for those over 14 who want to work (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); Compulsory education and child labour regulation followed each other, school leaving age changed in 1961 to 9 years of compulsory schooling, schooling leaving age 15 (Hindman, 2009); (Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.) **Denmark:** 1873 Factory Labour Act, no children under the age of 10, hour restrictions for those 10-14 years of age (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1901 previous act amended to increase the age to 12 as well as the hours (Hindman, 2009); 1913 school children were banned from factories and agriculture was restricted to 10 years; 1925 14 and over only in industrial, craft and transport (Hindman, 2009); No.138 Convention ILO, raised to 15 years in 1997. **Finland:** 1868 children under 12 were not allowed to work for more than 6 hour; 1879 no factory work for children under the age of 12, under 15 had restrictions; 1889 children under the age of 15 had to complete compulsory schooling (1889-1921 4 years of schooling) (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); Saarivitra, 2008); No.138 Convention ILO, raised to 15 years in 1976; 1993 compulsory schooling needed to be completed in order to be employed (ILO, 2014). **France:** 1841 Child Labour Law no child under the age of 8, the other ages restricted hours, the law also insisted on education of kids who were working until 12 years of age (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1874 Law allowed the 1841 Law to be more enforceable (Hindman, 2009); 1891 minimum age raised to 13 years (Hindman, 2009); No.138 Convention ILO, raised to 16 years in 1990. Child labour law complimentary to compulsory schooling during the 20th century – 1936 and 1967 education changes (Hindman,

2009). **Germany**: 1839 no children under 9 years of age, restricted hours for the other ages, employment of under 16s who are illiterate is forbidden (GHDI, 2014); 1853 no children under 12 in industry, others limited, under 14s must attend school 3 hours a day if they want to work (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1891 no children under 13s, over 13 must have completed primary education (Hindman, 2009); No.138 Convention ILO, raised to 15 years in 1976. **Greece**: Circa 1919 no children under 14 years of age in industry work (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); No.138 Convention ILO, raised to 15 years in 1986. **Ireland**: 1833 no child under the age of 9 in textile mills (highly enforceable) (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1867 the 1833 law was applicable to factories and workshops (Hindman, 2009); 1875 no child under the age of 10 (Hindman, 2009); 1891 no child under the age of 11 (Hindman, 2009); 1926 compulsory education was linked and age raised to 14 (Hindman, 2009); No.138 Convention ILO, raised to 15 years in 1977. **Italy**: 1886 no children under the age of 9 in industry work; 1902 no children under the age of 12 (Toniolo, G., & Vecchi, G. (2007). ITALIAN CHILDREN AT WORK, 1881—1961. *Giornale degli economisti e Annali di economia*, 401-427.); 1967 Law passed to prevent children under the age of 15 entering the workforce (Toniolo, G., & Vecchi, G. (2007). ITALIAN CHILDREN AT WORK, 1881—1961. *Giornale degli economisti e Annali di economia*, 401-427.). **Japan**: 1916 no children under age of 12, restrictions for the other ages (Matsuoka, Asa, and W. N. Doak. *Labor conditions of women and children in Japan*. Bureau of Labor Statistics, United States Department of Labor, Washington, 1931.); 1947 no children under the age of 15 (Kazutoshi Koshiro ed., *Volume 6: Fifty Year History of Industry and Labor in Postwar Japan* (Tokyo, 2000).). **New Zealand**: Child labour regulation based on compulsory schooling laws, (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge) – 1877 age 13, 1901 age 14, 1944 age 15, 1993 age 16. **Netherlands**: 1874 under 12s prohibited to work unless its agriculture or domestic, (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1889 restrictions on the hours work (Hindman, 2009); 1911 children under 13 not allowed (Hindman, 2009); 1919 children under 14 not allowed (Hindman, 2009); 1960 children under 15 not allowed (Hindman, 2009). **Norway**: 1892 Factory Act no work for children under age of 12, restriction of hours for the others. Employers responsible for children finishing elementary school, (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); No.138 Convention ILO, raised to 15 years in 1980. **Portugal**: 1891 no children under the age of 12 – not well enforced, (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1934/1936 made the 1891 legislation more enforceable (Hindman, 2009); 1969 age lifted to 14 years, Goulart, P., & Bedi, A. S. 2008. Child labour and educational success in Portugal. *Economics of Education Review*, 27(5), 575-587.; No.138 Convention ILO, raised to 16 years in 1988. **Spain**: 1902 no children under the age of 10, other ages restricted (Anderson and Wright, 1911); 1945 compulsory schooling lead to no under 12s; No.138 Convention ILO, raised to 16 years in 1977. **Sweden**: 1720 no children under the age of 10, (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1846 no children under the age of 12 could work as apprentices, factory or craft workers – compulsory schooling was introduced in 1842 leading to minimum requirements to be set in regards to employment of children (Hindman, 2009); 1881 no children under the age of 12 in factory work, other ages restricted (Hindman, 2009); 1912 no children under the age of 13 in industry work (Hindman, 2009); 1949 no children under the age of 14 at all, industry no under 15s (Hindman, 2009); No.138 Convention ILO, raised to

16 years in 1990. **Switzerland**: 1815 no children under the age of 10 (Hans R Wiedmer: *Arbeit im Industrialisierungsprozess: Veränderungen industrieller Arbeitsbedingungen in der Schweiz 1880-1914*. Chronos 1989); 1877 no children under the age of 14 (Hans R Wiedmer: *Arbeit im Industrialisierungsprozess: Veränderungen industrieller Arbeitsbedingungen in der Schweiz 1880-1914*. Chronos 1989); No.138 Convention ILO, raised to 15 years in 1999. **UK**: 1833 no children under the age of 9 in textile mills (enforced), (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); 1867 the law extended to factories and workshops (Hindman, 2009); 1874 no children under 10; 1891 no children under 11 (Hindman, 2009); 1933 no children under 15, compulsory education linked to labour laws (LOC, 2014); No.138 Convention ILO, raised to 16 years in 2000. **US**: 1842 no children under the age of 12 (Massachusetts), (Hindman, H.D. (ed.) 2009. *The World of Child Labor: An Historical and Regional Survey*. New York: Routledge); (Walter Trattner, *Crusade for the Children: A History of the National Child Labor Committee and Child Labor Reform in America* (1970)); 1848 no child under age of 12 in textiles (Pennsylvania) (Hindman, 2009); 1866 no child under 10 in manufacturing, 10-14 if want to work need to show records of school attendance for 6 months of the year (Hindman, 2009); 1899 28 states follow the 1848 law (Hindman, 2009); 1903 Alabama and Carolinas restrict age to 12 for manufacturing (Hindman, 2009); 1938 Federal legislation no employment of children under the age of 16, compulsory schooling tied to employment (Hindman, 2009).

## PATENTS

### Updating sources:

Updated using U.S. Patent and Trademark Office, Information Products Division, Technology Assessment and Forecast Branch, Washington, DC 20231, and World Intellectual Property Organisation, *Industrial Property Statistics*, Geneva.

**Patents. Canada**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171., and *Canada Yearbook*, Statistics Canada, 'Blatt für Patent-, Muster- und Zeichenwesen mit Urheberrechts-Teil', and Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171. **USA**. Dosi, G., Pavitt, K. and Soete, L. 1990, *The Economics of Technical Change and International Trade*, New York: Harvester Wheatsheaf, and Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171., **Japan**. Japanese Government, 2000, *Japanese Patent Statistics: 1884-1993*, The Patent Office: Tokyo. **Australia**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171 and Wray Vamplew (ed.), 1987, *Australians Historical Statistics*, Fairfax, Syme & Weldon Associates: Broadway, N.S.W. **New Zealand**. G. T. Bloomfield, 1984, *New Zealand: A Handbook of Historical Statistics*, G. K. Hall & Co.: Boston, Mass. and *New Zealand Official Yearbook*. **Austria**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171, and *Statistisches Jahrbuch für die Republik Österreich*. **Belgium**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171. **Denmark**. Danmarks Statistik, *Statistisk Årbog*. **Finland**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171 and *Annuaire statistiques de Finlande* and *Statistisk Årsbok För Finland*. **France**. *Annuaire Statistique de la France* and 'Blatt für Patent-, Muster- und Zeichenwesen mit Urheberrechts-Teil'. **Germany**. and Federico, P.J. 1964, 'Historical Patent

Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171, and 'Blatt für Patent-, Muster- und Zeichenwesen mit Urheberrechts-Teil' and *Statistisches Jahrbuch Für die Bundesrepublik Deutschland*. **Greece**. World Intellectual Property Organisation, *Industrial Property Statistics*, Geneva: World Intellectual Property Organisation. **Ireland**. *Saorstát Éireann, Statistical Abstract* and World Intellectual Property Organisation, *Industrial Property Statistics*, Geneva: World Intellectual Property Organisation. **Italy**. 'Blatt für Patent-, Muster- und Zeichenwesen, mit Urheberrechts-Teil', *Annuario Statistico*, and Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171. **Netherlands**. 1561-1791. Doorman, G. 1942 Inventions In The Netherlands During The 16th, 17th, And 18th Centuries. The Hague: Martinus Nijhoff. After 1790. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171., and 'Blatt für Patent-, Muster- und Zeichenwesen mit Urheberrechts-Teil' and *Jaarcijfers voor Nederland*. **Norway**. 'Statistiske opplysninger vedkommende Patentvæsenet i Norge' (1886-1933), 'Norsk Tidende for det Industrielle Rettsvern' (1939-1970), Bjørn L Basberg, 1984, 'Patenter og teknologisk endring I Norge 1840-1980. En metodediskusjon om patentdata anvendt som teknologi-indikator', Mimeo, Institutt for Økonomisk Historie, Norges Handelshøyskole, Bergen, 'Patentstyret - Styret for det industrielle rettsvern'. **Portugal**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171., and World Intellectual Property Organisation, *Industrial Property Statistics*, Geneva: World Intellectual Property Organisation. **Spain**. WIPO. **Sweden**. Federico, P.J. 1964, 'Historical Patent Statistics 1791-1961', *Journal of the Patent Office Society*, 46, 89-171., and *Statistisk Årsbok för Sverige*. **Switzerland**. Ritzmann-Blickenstorfer, Heiner (Ed.), 1996. *Historical statistics of Switzerland* <https://hssso.ch/en> **UK**. 1617-1852 (granted), Bennet Woodcroft, 1854, *Titles of Patents of Inventions*, London: Queen's Printing Office. 1852-1938 (applications). B R Mitchell and Deane, Phyllis. *Abstract of British Historical Statistics*. Cambridge: Cambridge University Press, 1962, p 269. 1939-2017. World Intellectual Property Organisation, *Industrial Property Statistics*, Geneva: World Intellectual Property Organisation.

### **Investment Machinery And Equipment (M&E), Non-Residential Buildings And Structures (B&S) And Intellectual Property Products.**

The post-1950/80 data are from OECD, *National Accounts, Vol. II*, Paris, (NA) and the OECD online database (<https://data.oecd.org/>), where the starting year vary across countries as detailed for each country below. Before 1950/80 the following sources and methods are used.

**Canada**. 1800-1870. The investment-GDP ratios for the US are used. 1870-1925: Non-residential investment is split up in M&E and B&S using the investment shares provided by Firestone, O. J. 1958. Canada's economic development, 1867-1953: with special reference to changes in the country's national product and national wealth. The investment shares are available every 10 years. The non-residential gross fixed investment are from Urquhart, M.C., 1986, *New Estimates of Gross National Product, Canada, 1870-1926, Some Implications for Canadian Development*, in Stanley Engerman and Robert E. Gallman (Eds.) *Long-Term Factors in American Economic Growth*. Chicago: The University of Chicago Press, p. 16 (Table 2.2). Investment is deflated by the GDP-deflator (Urquhart, Table 2.9). 1926-1960: F33-F55, F. H. Leacy (ed.), 1983, *Historical Statistics of Canada*, Statistics



Canada: Ottawa. **United States.** M&E. 1789-1834: Berry, T.S., 1988, *Production and Population since 1789: Revised GNP Series in Constant Dollars*, Botswick Paper No. 6, Richmond, VA: The Botswick Press, p. 17, Table 1. 1834-1889: Rhode, P. W. (2002). Gallman's annual output series for the United States, 1834-1909 (W8860). National Bureau of Economic Research. 1889-1950: Maddison, A., 1995, *Explaining the Economic Performance of Nations. Essays in Time and Space*, Edward Elgar: Aldershot, p. 156. B&S. 1789-1850. Scaled gross fixed capital formation. Berry, T.S., 1988, *Production and Population since 1789: Revised GNP Series in Constant Dollars*, Botswick Paper No. 6, Richmond, VA: The Botswick Press, p. 17, Table 1. 1850-1959: Maddison, A., 1995, *Explaining the Economic Performance of Nations. Essays in Time and Space*, Edward Elgar: Aldershot, Table 8f. **Japan:** 1800-1885. The investment-income ratios for the UK/Ireland are used. 1870-1950. 1885-1988: Maddison, A., 1995, *Explaining the Economic Performance of Nations. Essays in Time and Space*, Edward Elgar: Aldershot, p. 156. 25.7% war damage to the 1945 capital stock is incorporated into the capital stock following Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019. **Australia.** 1800-1861. The investment-GDP ratios for the UK are used. 1861-1901. M&E. Sum of nominal gross capital formation in mining, shipping and half of manufacturing investment from Butlin, N. G. (1955). Private capital formation in Australia: estimates 1861-1900 (Vol. 5). Australian National University High Wycombe, Eng.: University Microfilms. The data are deflated by the overall investment deflator, Vamplew, W. (1987). *Australians Historical Statistics*. Fairfax, Syme & Weldon Associates. New South Wales, ANA 71 and 78. B&S: sum of gross capital formation in shops, industry investment divided by two and investment in Agriculture. All from Butlin (1955). The data are deflated by the overall investment deflator, Vamplew, W. (1987). *Australians Historical Statistics*. Fairfax, Syme & Weldon Associates. New South Wales, ANA 71 and 78. 1901-1960. M&E: Sum of private and public investment, where public investment is investment in machinery and equipment plus investment in rail, all from Butlin, M. W. (1977). A preliminary annual database 1900/01 to 1973/74 (No. rdp7701). Reserve Bank of Australia. Butlin (1977) only provides values of on capital stock and depreciation in fixed prices. Thus gross capital formation is created as  $K_t - K_{t-1} + \text{Depreciation}_{t-1}$ . B&S: Sum of private and public investment in non-residential building and structures from Butlin, M. W. (1977). A preliminary annual database 1900/01 to 1973/74 (No. rdp7701). Reserve Bank of Australia. **New Zealand.** 1800-1846. The investment-GDP ratios for the UK are used. 1846-1970. Data that distinguish between M&E and B&S are not available before 1950. Instead the data are decomposed into private and public non-residential nominal investment and are deflated by the GDP deflator. Public gross capital formation is available from Mulcare, T. 1994. *Gross Capital Formation and Improved Estimates of Real Gross and Net Capital Stocks to 1990 for the New Zealand Non-market Production Sector*. Graduate School of Business and Government Management, Victoria University of Wellington. Private investment. 1846-1871: The investment-GDP ratio is assumed constant and spliced with the ratio in 1871. 1871-1900. Non-residential private gross capital formation from Dowie, J. A. 1966. The course and character of capital formation in New Zealand—1871–1900. *New Zealand Economic Papers*, 1(1), 38-58. 1900-1939: The private non-residential investment-income ratio is linearly interpolated. 1939-1950. The private non-residential investment-income ratio in New Zealand Statistical Yearbooks: ([http://www.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/nationalaccounts/long-term-data-series.aspx](http://www.stats.govt.nz/browse_for_stats/economic_indicators/nationalaccounts/long-term-data-series.aspx)), assessed 21-10-2018. 1950-1970. Real gross capital formation distributed on B&S and M&E from Philpott, B. 1991, “Real Gross Capital Formation in 22 SNA Sectors, 1950–1989”, Research Project on Economic Planning Internal Paper 226b, Victoria University of Wellington, Wellington, August. **Austria.** 1800-1870. The investment-GDP



ratios for Germany are used. 1870-1913: Real gross capital formation is generated from the capital series of Schulze, M. S. (2005). An estimate of imperial Austria's gross domestic fixed capital stock, 1870-1913. methods, sources and results. WP 2005/5 Department of Economic History LSE. Gross capital formation is recovered from the capital stock using 17% depreciation rates for M&E and 3% for B&S. M&E is computed as the sum of the following categories: Railway tracks, rolling stock, ships, machinery. B&S is computed as the sum of the following categories: Roads/bridges, agricultural buildings, public buildings and common, non-residential, buildings. 1913-1945: Total real capital formation from Österreichs volkseinkommen 1913 bis 1963, Monatsberichte des Österreichischen Instituts für Wirtschaftsforschung, Sonderheft 14. The total investment-GDP ratio is decomposed into M&E and B&S using their respective investment-GDP ratios at the endpoints. 1945-1960: Sieder, R., Steinert, H., & Tálos, E. (Eds.). 1995. *Österreich 1945-1995: Gesellschaft, Politik, Kultur* (Vol. 60). Verlag für Gesellschaftskritik. **Belgium**. 1800-1880 the investment-GDP ratios for M&E and B&S in the Netherlands are spliced with those in Belgium in 1880 and are from Albers, R. M. 2002, Machinery investment and economic growth: The dynamics of Dutch development 1800-1913. Amsterdam: Aksant. 1880-1899: noting that the Netherlands and Belgium were united over the period 1815-1830. Gross capital formation in agriculture Table 4.4 (B&S) and Table 4.5 (M&E) from van Meerten, M., 2003, *Capital Formation in Belgium, 1900-1995*, Leuven: Leuven University Press, are spliced with overall economy M&E and B&S in 1900. 1900-1950: van Meerten, M., 2003, *Capital Formation in Belgium, 1900-1995*, Leuven: Leuven University Press. War damage correction: WWI. 15.5% of 1913 GDP spread out evenly between the years 1914-1917. WWII 7.1% spread out evenly on the years 1943-45. The correction for war damage follows van Meerteen, 2003, (see his footnote no. 39). **Denmark**: 1800-1835. The investment-GDP ratios for Sweden are used. 1835-1870: The investment data, which are in nominal values, are deflated by CPI. M&E includes transport investment and B&S is the sum of investment in non-residential buildings and structure and maintenance. All the investment data are from Table 7 in Hansen, Svend Aage. *Økonomisk vækst i Danmark*. Akademisk forlag, 1976., Bind II. 1870-1950: Table V in Bjerke, Kjeld, and Niels Ussing. *Studier over Danmarks Nationalprodukt, 1870-1950*. GEC Gad, 1958. B&S is scaled total gross fixed investment in building and construction, thus includes residential investment. 1950-1980: OECD National Accounts, Vol. II. **Finland**. 1800-1861. The investment-GDP ratios for Sweden are used. 1861-1950: Hjerpe, R., 1989, *The Finnish Economy, 1860-1985*, Helsinki: Bank of Finland, Government Printing Centre. The data, which are in nominal values from Table 9A at the disaggregated levels, are deflated with the overall investment deflator (nominal investment in Table 3C, divided by real investment from Table 3A). **France**. 1800-1820. 1800-1820. The investment-GDP ratios for Belgium are used. 1820-1913: Lévy-Leboyer, M. 1978. Capital investment and economic growth in France, 1820-1930. *The Cambridge economic history of Europe*, 7(Part I), 231-95. Building and structures include residential housing investment. 1913-1939: Villa, P., 1993, *A Macroeconomic Analysis of 20th Century France*. Paris: CNRS- Editions. 1939-46: interpolation (construction sector employment from Liesner (1989, p. 191) used to bridge the two series). 1946-1950: interpolated. War damage of 2% is assumed each year over the periods 1914-17 and 1942-1945. Bolt, J. and van Zanden, J. L., 2013. The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, accessed on 18/05/2019. **Germany**. 1800-1850. Tilly, R. H. 1978. Capital Formation in Germany in the Nineteenth Century. *The Cambridge Economic History of Europe*, 7(part 1), 383-441. The data are very scattered and some of the gross investment data are in fixed 1913 prices, some in current values, while other categories are capital stock and not investment. The approach taken here is to convert all data to gross capital formation in 1913 prices and then splice them to the GCF series in 1851. Except for

investment in railway there are hardly any information on machinery and equipment investment, partly reflecting that manufacturing was a very low share of total economic activity. Thus, M&E investment is estimated as the ratio of building to machinery and equipment gross investment in private non-agricultural business and agriculture over the period 1851-1855 (from Pierenkemper, T., & Tilly, R. H. 2004. *The German Economy During the Nineteenth Century*. Berghahn Books), is used to backdate machinery and equipment based on investment in buildings and structure. 1851-1913: Table 35 in Hoffmann, Walther G. "Erster Teil." *Das Wachstum der Deutschen Wirtschaft Seit der Mitte des 19. Jahrhunderts*. Springer, Berlin, Heidelberg, 1965. There are no separate categories for M&E and B&S. Thus, M&E is estimated as the sum of the following categories: Investment in agricultural M&E, rail, and half of business investment in M&E plus structures. B&S are estimated as total non-residential investment minus the investment in M&E. 1913-1950: Kirner, W., 1968, *Zeitreihen für das Anlagevermögen der Wirtschaftsbereiche in der Bundesrepublik Deutschland*, Deutsches Institut für Wirtschaftsforschung, Duncker & Humblot: Berlin. The data are adjusted for war damage in the source. Non-residential buildings and structures. The following categories are added together: Land und Forstwirtschaft, Energiewirtschaft, Bergbau, Grundstoff- und Produktionsgüterindustrie, Investiergüterindustrie, Verbrauchsgüterindustrie, Nahrungs- und Genussmittel-industrie, Industrie Kleinbetrieb und Handwerk, Baugewerbe, Handel, Eisenbahnen, Schifffahrt, Übriger Verkehr, Nachrichtenübertragung, Kreditinstitutionen und Vers. gew., Wohnungsvermietung, Sonst. Dienstleist., Strassen und Brücken, Wasser strassen und Hafen, and Übrige staatliche Bereiche, and maintenance (Eisenbahnen, Strassen und Brücken, Strassen, Wasser, Häfen). Machinery and equipment. Total non-residential investment minus investment in M&E. **Greece**. 1800-1850. The investment-GDP ratios for Ireland/UK are used. 1850-1920: M&E is computed as the share of machinery in total imports from T12.2 in Socrates D. Petmezas, "Foreign Trade and Capital Flows in Nineteenth-century Greece", in Edhem Eldem and Socrates Petmezas (eds), *The Economic Development of Southeastern Europe in the 19th Century*, Athens: *Alpha Bank Historical Archives*, 2011, pp. 447-491, multiplied by real GDP and the share of nominal imports in total GDP. Imports are from the statistical yearbooks of Greece and nominal GDP is from George C. Kostelenos, 2003. "Historical estimates of National Accounts Magnitudes in Greece: 1830-1939", *Spoudai*, Vol. 53, No. 1, pp. 37-64, esp. Table 2a, pp. 46-47. B&S. Backdated assuming it to be a constant fraction of GDP at the 1920 level. 1920-1948: Derived from consumption of steel (M&E) and cement (B&S), Svernilson, I., 1954 *Growth and stagnation in the European economy*. United Nations Economic Commission for Europe, Geneva. 1948-1948. National Accounts of Greece, 1948-65, T23, Statics Greece. **Ireland**. 1800-1920. The investment-income ratios for M&E and B&S are based on that of the UK since Ireland was a part of the UK during almost all of this period. 1920-1952: B&S: Derived from consumption of cement, Svernilson, I., 1954. *Growth and stagnation in the European economy*., up to 1950 and bridged to 1953 using the B&S investment-income ratio for the UK. M&E: 1926-1947, based on M&E gross fixed investment from Nevin, E. 1963. *The Capital Stock of Irish Industry*. Economic and Social Research Institute (ESRI) Research Series. 1920-1925: consumption of steel, Svernilson, I., 1954. *Growth and stagnation in the European economy*., up to 1950 and bridged to 1953 using the M&E investment-income ratio for the UK. 1953-1970: M&E and B&S: Slattery, D. G. 1975. Fixed capital stock estimation: an empirical exercise using Irish data. *Journal of the Statistical and Social Inquiry Society of Ireland*, 23(2), 90-133. 1970-1995. Central Statistical Office, T17 Gross Domestic Physical Capital Formation (excluding FISIM), assessed on 21-11-2018 on (<https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=NAH17&Language=0>). **Italy**. 1800-1820. The investment-GDP ratios for UK/Ireland are used before 1850

and Spain after 1850. 1861-1970: Baffigi, A. 2011. Italian National Accounts. A project of Banca d'Italia, Istat and University of Rome Tor Vergata. *Economic History Working Papers*, Banca d'Italia No 18. Investment in non-residential buildings and structures is estimated as the sum of public investment, other investment and investment non-residential buildings.

**Netherlands.** 1800-1913. M&E include transport. Albers, R. M., 2002. *Machinery Investment and Economic Growth, The Dynamics of Dutch Development 1800-1913*, Amsterdam: Aksant. 1913-1960: Groote, P., Albers, R., & De Jong, H. 1996. A standardised time series of the stock of fixed capital in the Netherlands, 1900-1995. Groningen Growth and Development Centre, Faculty of Economics, University of Groningen. B&S is the sum of civil engineering and non-residential construction. 10% war damage is evenly spread out over the years 1943-1945.

**Norway.** 1800-1850. The investment-GDP ratios for Sweden are used. 1830-1865. Grytten, O. H. 2004. The gross domestic product for Norway, 1830-2003. *Norges Bank: Occasional Papers*, (1), 241. The data are disaggregated into M&E and B&S using their share of total investment in 1856 because only total investment are available. 1865-1929. Norway, Statistisk Sentralbyrå. "Nasjonalregnskap 1900-1929." Statistics Norway, Oslo (1953). M&E. Sum of non-transport M&E investment and investment in transport. B&S. Total investment in building and structures. 1930-1960. Sentralbyrå, Statistisk. "Nasjonal Regnskap, 1865–1960." (1965). Norges offisielle statistikk XII, No. 163. 1930-1960. M&E. Sum of non-transport M&E investment and investment in transport. B&S. Total investment in non-residential buildings and structures.

**Portugal.** 1800-1850. The investment-income ratios are assumed to follow that of the UK/Ireland. 1850-1911: The investment-income ratios are assumed to follow that of Spain. 1911-1960: da Silva, E. G., & Lains, P. 2013. Capital formation and long-run growth: Evidence from Portuguese data, 1910-2011. *Iberometrics VI*, May, 16-17. Machinery and equipment is computed as the sum of transport, machinery, equipment and other with depreciation rates of 8.25 % (0.11 after 1960) for M&E, 5.5% % (9.1 % after 1960) for transport and 11% (16% after 1960) for other investment.

**Spain.** 1800-1850. The investment-GDP ratios for Ireland/UK are used. 1850-1950: Table A7.2a De La Escosura, Leandro Prados. El progreso económico de España. Fundación BBV, 2003. M&E include investment in transport equipment.

**Sweden.** 1800-1949: Edvinsson, R., 2005: Growth, Accumulation, Crisis: With New Macroeconomic Data for Sweden. Almqvist & Wiksell. All the data are deflated by the deflator for total investment. B&S. Investment in building and structures minus investment in buildings. M&E include investment in transport.

**Switzerland.** 1800-1850. The investment-GDP ratios for Germany are used. M&E. 1850-1914: Nominal investment in M&E divided by the GDP deflator, Table R1 in Ritzmann-Blickenstorfer, 1996, *Historical Statistics of Switzerland*, Zurich: Chronos. 1914-1920: Interpolated using the investment-income ratio. 1920-1948: Derived from consumption of steel, Svernilson, I., 1954 *Growth and stagnation in the European economy*. United Nations Economic Commission for Europe, Geneva. 1948-1979. Table R3 in in Ritzmann-Blickenstorfer, 1996. *Historical Statistics of Switzerland*, Zurich: Chronos. B&S. 1850-1914. Nominal investment in M&E divided by the GDP deflator, Table R1 in Ritzmann-Blickenstorfer (1996). Computed as total nominal non-residential investment (sum of the columns entitled "investment in structures" and investment in M&E and non-residential buildings) minus investment in M&E. The data are deflated by the GDP deflator. 1914-1920. Interpolated based on the investment-GDP ratio. 1920-1926. 1927-1947. Nominal investment in building and structures minus investment in residential buildings deflated by the GDP deflator, Table R4 in Ritzmann-Blickenstorfer (1996). 1948-1970: Sum of real investment in government buildings, civil engineering and non-residential buildings, Bundesamt für Statistik: Langfristige Reihen der Nationalen Buchhaltung der Schweiz. Haupttabellen 1948–1990; Detailtabellen und Konti 1970–1990. Bern 1992 Eidg. Statistisches Amt: Revidierte Reihen der Nationalen Buchhaltung der Schweiz 1948–1976

sowie Produktionskonto 1970 (Beiträge zur schweizerischen Volkswirtschaftliche Gesamtrechnungen). **UK. 1765-1920.** Feinstein, C.H., Pollard, S., 1988, *Studies in Capital Formation in the United Kingdom, 1750-1920*, Oxford: Clarendon Press, p. 431, Table X. **1920-1960:** Feinstein, C. H. 1976. *Statistical Tables of National Income, Expenditure, and Output of the UK, 1855-1965*. Cambridge: Cambridge University Press, Table 40.

## COMPULSORY EDUCATION YEARS

### Canada

#### ONTARIO

Lawr, D. & Gidney, R. (Ed.) 1973 *Educating Canadians, A Documentary History of Public Education* (2nd ed.) Toronto, Canada: Van Nostrand Reinhold Ltd, p66.

Harris, R.S. 1967 *Quiet Revolution - A Study of the Educational System of Ontario*, Toronto: University of Toronto Press, pp7, 55.

Ontario Ministry of Education (2012) *Memorandum – Implementation of Bill 52, Learning to Age 18*, Toronto, Ontario, viewed 4 April 2012, <<http://cal2.edu.gov.on.ca/Bill52Implementation.pdf>>.

Van Pelt, D. 2012 *Response to Bill 52: Implications for Home schooled students*, Hamilton, Ontario, viewed 4 April 2012, <<http://www.societyforqualityeducation.org/newsletter/Sept06/Bill52.pdf>>, p5.

*Education Act R.S.O. 1990*, c. 2, s. 21

Sharman, K.Y. & Glassford, L. 2011, 'The Appeal of Technical Times: A comparison of the Toronto and Windsor Experiences, 1890-1930', *Historical Studies in Education*, Vol. 23, No. 2, p 62.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada, p187-18.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367, p 371

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive (‘INCA’) (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive (‘INCA’) (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## NOVA SCOTIA

Lawr, D. & Gidney, R. (Ed.) 1973 *Educating Canadians, A Documentary History of Public Education* (2nd ed.) Toronto, Canada: Van Nostrand Reinhold Ltd, p105

Bill 39 of the *Education Act*, s. 111, in Nova Scotia Legislature (1997) *Status of Bills*, viewed 6 April 2012, <[http://nslegislature.ca/HOUSE\\_BUSINESS/stat9596.htm](http://nslegislature.ca/HOUSE_BUSINESS/stat9596.htm)>.

*The Town's Compulsory Attendance Act, ss 3 and 6*, in *The Revised Statutes of Nova Scotia 1900*, (1901) Vol. 1, Commissioner of Public Works and Mines, Queen’s Printer: Halifax, Nova Scotia., p408-409.

Hugh Hindman (Ed.), *World of Child Labour: An Historical and Regional Survey*, p448. New York: Routledge.

*Annual report of the Superintendent of Education on the Public Schools of Nova Scotia for the year ended 31<sup>st</sup> July 1896* (1897) Commissioner of Public Works and Mines, Queen’s Printer: Halifax, Nova Scotia, pg. iv.

*Annual report of the Superintendent of Education on the Public Schools of Nova Scotia for the year ended 31<sup>st</sup> July 1905* (1906) MacAlpine Publishing company Ltd: Halifax, Nova Scotia, p151.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education, 6<sup>th</sup> edition, 2006/07 – Canada*, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## QUEBEC

Lawr, D. & Gidney, R. (Ed.) 1973 *Educating Canadians, A Documentary History of Public Education* (2nd ed.) Toronto, Canada: Van Nostrand Reinhold Ltd, p 224.

*Education Act* R.S.Q. c.1, s. 14.

Institut de la Statistique Quebec (2005) *1940-1959*, Gouvernement du Quebec: Quebec, viewed 6 April 2012, <[http://www.stat.gouv.qc.ca/jeunesse/1940\\_1959\\_an.htm](http://www.stat.gouv.qc.ca/jeunesse/1940_1959_an.htm)>.

Ministry of Labour Gazette (1944) *Child Labour in Ontario and Quebec*, p 264, viewed 6 April 2012, <<http://socserv.socsci.mcmaster.ca/oldlabourstudies/onlinelearning/article.php?id=896>>.

Wanner, R.A. 1999 'Expansion and ascription: trends in educational opportunity in Canada, 1920-1994', *The Canadian Review of Sociology and Anthropology*, August, Vol 36, no. 3), viewed 4 April 2012, <[http://findarticles.com/p/articles/mi\\_go2771/is\\_3\\_36/ai\\_n28736319/](http://findarticles.com/p/articles/mi_go2771/is_3_36/ai_n28736319/)>.

*The Montreal Gazette*, 19 April 1943, p 19.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, < <http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## BRITISH COLUMBIA

*School Act* 1996, R.S.B.C., s. 3.

Bill 45, *School Amendment Act* 1997, s. 3, Queen's Printer, Victoria, British Columbia, viewed 6 April 2012, < <http://www.leg.bc.ca/36th2nd/today/prgbill1.htm>>.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, < <http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## ALBERTA

*School Act* 2000 R.S.A., c.S-3, s 13(1).

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education, 6<sup>th</sup> edition, 2006/07 – Canada*, Washington DC, USA, viewed 8 April 2012, < <http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## NEW BRUNSWICK

Bennet, P.W., 2011 *Vanishing Schools, threatened communities: The Contested Schoolhouse in Maritime Canada 1850–2010*, Fernwood Publishing: Winnipeg, Canada, p9.

Miller, J.C., 1913 *Rural Schools in Canada: Their Organization, Administration and Supervision*, Columbia University: New York.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41,



viewed 4 April 2012,  
<<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education, 6<sup>th</sup> edition, 2006/07 – Canada*, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## MANITOBA

Martin, N., 2012 *School-Leaving Age set to rise – NDP Government plans to make students stay in class until they're 18*, Winnipeg Free Press: Winnipeg, Manitoba, viewed 6 April 2012, <<http://www.winnipegfreepress.com/local/school-leaving-age-set-to-rise-109151504.html>> .

*The Public Schools Act* C.C.S.M., c. P250, s. 1.1.

*The Preparing Students for Success Act (Various Acts Amended)* 2011, S.M., c.3, s 1.1.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, < <http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## NEWFOUNDLAND

*Schools Act* 1997, SNL 1997, c. S -12.2, s. 4.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, < <http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## NUNAVUT

*Nunavut* (2007), Natural Resources Canada: Ontario, Canada, viewed 6 April 2012, <<http://www.nrcan.gc.ca/earth-sciences/geography-boundary/geographical-name/geoname-origins/5739>>.

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive (‘INCA’) (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive (‘INCA’) (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## SASKATCHEWAN

*Education Act 1995*, ss. 2 and 156

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## **NORTHWEST TERRITORIES**

*Education Act* 1995, S.N.W.T., c.28, s. 27(1).

Cohen, J.E., Bloom, D.E. and Malin, M.B. (ed), 2006. *Educating All Children - A Global Agenda*, American Academy of Sciences: Cambridge, Massachusetts, USA , pp133-135.

*The School Ordinance* 1902, No. 27, 8.1, c.66, s. 85.

*The School Ordinance* 1901, c.29, ss. 132 and 142.

Lingard, C.C., (Feb 1946) 'Arctic Survey VII', *The Canadian Journal of Economics and Political Science*, p45 -74, p66

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education, 6<sup>th</sup> edition, 2006/07 – Canada*, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## YUKON

*Education Act* 2002, R.S.Y., c.61, s. 22(1).

*The Yukon Territory Act* 1898 (Y.T.), 61 Vic, c.6 (Canada), s. 2.

*The School Ordinance* 1902, No. 27, 8.1, c.66, s. 85.

*The School Ordinance* 1914, C.O.Y.T. , c.79, s. 85.

Lingard, C.C. (Feb 1946) 'Arctic Survey VII', *The Canadian Journal of Economics and Political Science*, p55

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education, 6<sup>th</sup> edition, 2006/07 – Canada*, Washington DC, USA, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive ('INCA') (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## PRINCE EDWARD ISLAND

*An Act to Amend the Statute Law* 1917, c. 10, s. 2(b).

Phillips, Charles E. 1957. *The Development of Education in Canada*, W.J. Gage and Company Limited: Canada.

Oreopoulos, P. 2005. *Canadian Compulsory School Laws and their Impact on Educational Attainment and Future Earnings*, Statistics Canada Catalogue no. 11F0019 No. 251, p 3-41, viewed 4 April 2012, <<http://publications.gc.ca/collections/Collection/Statcan/11F0019MIE/11F0019MIE2005251.pdf>>.

Smith, J.A. C., *The Right to Appropriate Education: A Comparative Study* 12 Ottawa Law Review, 371 (1980) 367

Richardson, W.L. 1922. *The Administration of Schools in the Cities of the Dominion of Canada*, PhD Dissertation, Department of Education, University of Illinois, J.M. Dent & Sons Limited: Toronto, Ontario, Canada.

World Bank (2006) *World Data on Education*, 6<sup>th</sup> edition, 2006/07 – Canada, Washington DC, USA, viewed 8 April 2012, < <http://ddp-ext.worldbank.org/EdStats/CANwde07.pdf>>.

International Review of Curriculum and Assessment Frameworks Internet Archive (‘INCA’) (2012) *INCA Summary Profile - Education in Canada*, viewed 25 March 2012, <<http://www.inca.org.uk/canada-system-mainstream.html>>.

International Review of Curriculum and Assessment Frameworks Internet Archive (‘INCA’) (2011) *Table 5: schooling: duration, phases*, viewed 25 March 2012, <<http://www.inca.org.uk/documents/Table5Schoolingdurationphases.pdf>>.

## **2. USA**

### **ALABAMA**

*Summaries of the general laws enacted and constitutional amendments proposed by the Legislature of Alabama at the 2009 Regular Session – Act 2009-564, SB334*, Legislative Reference Service: Montgomery, Alabama, viewed 31 March 2012, <[http://lrs.state.al.us/publications/2009\\_regular\\_summaries.html#Anchor-Ac-50133](http://lrs.state.al.us/publications/2009_regular_summaries.html#Anchor-Ac-50133)>.

Cooke, D.H., and Pruet, E. G., 1939. ‘Constitutional and Statutory Development of Compulsory School Attendance in Alabama’, *Peabody Journal of Education*, Vol 16, No. 5, pp 330 – 334.

Dexter, E.G., 1906. *A History of Education in the United States* , Lenox Hill Publishers and Distributers Co. : New York, p624-627

Clay, K., Lingwall, J. and Stephens Jnr, S., 2010. *Compulsory Attendance Laws and Nineteenth Century Schooling*, Stanford University: Stanford, California, USA, p8-10, viewed 31 March 2012, <[http://www.stanford.edu/group/SITE/archive/SITE\\_2010/segment\\_5/segment\\_5\\_papers/clay.pdf](http://www.stanford.edu/group/SITE/archive/SITE_2010/segment_5/segment_5_papers/clay.pdf)>.

National Center for Education Statistics (2009) *Digest of Education Statistics – Table 166: Age range for compulsory school attendance and special education services, and policies on year-round schools and kindergarten programs, by state: Selected years, 1997 through 2008*, viewed 31 March 2012, US Department of Education: Alexandria, Virginia,

<<http://nces.ed.gov/search/index.asp?q=compulsory+laws+2011&btnG=Search&client=nces>>.

Luppino, M., 2011. *Educational Sorting and Peer Effects: The Impacts of Compulsory Schooling Laws*, The Society of Labor Economists : Chicago, Illinois, USA, pp 1-35, viewed 31 March 2012, <<http://www.sole-jole.org/12226.pdf>>.

Deffenbaugh, W.S. *Compulsory School Attendance in the United States*, pp 7-77, in U.S. Bureau of Education, *Compulsory School Attendance* (1914) 573, Bulletin No.2, Government of the Interior: Washington.

Snyder, T.D. (Ed.), 1993. *120 Years of American Education: A Statistical Portrait*, National Center for Education Statistics: Virginia, U.S.A., p34, viewed 12 April 2012, <<http://nces.ed.gov/pubs93/93442.pdf>>.

## MASSACHUSETTS

*An Act further regulating school attendance* 1965 c. 741, (2012) The State Library of Massachusetts: Boston, Massachusetts, viewed 12 April 2012, <<http://archives.lib.state.ma.us/handle/2452/15329>>  
<<http://archives.lib.state.ma.us/bitstream/handle/2452/65649/1921acts0463.txt?sequence>>.

*Board of Education & another v. School Committee of Quincy & others* (1993) 415 Mass. 240.

*Care and Protection of Charles & others* (1987) 399 Mass. 324.

Ensign, F. C., 1921. *Compulsory school attendance and child labor: A study of the historical development of regulations compelling attendance and limiting the labor of children in a selected group of states*. Athens Press.

Clay, K., Lingwall, J. and Stephens Jr, S., 2010. *Compulsory Attendance Laws and Nineteenth Century Schooling*, Stanford University: Stanford, California, USA, p8-10, viewed 31 March 2012, <[http://www.stanford.edu/group/SITE/archive/SITE\\_2010/segment\\_5/segment\\_5\\_papers/clay.pdf](http://www.stanford.edu/group/SITE/archive/SITE_2010/segment_5/segment_5_papers/clay.pdf)>.

National Center for Education Statistics (2009) *Digest of Education Statistics – Table 166: Age range for compulsory school attendance and special education services, and policies on year-round schools and kindergarten programs, by state: Selected years, 1997 through 2008*, viewed 31 March 2012, US Department of Education: Alexandria, Virginia, <<http://nces.ed.gov/search/index.asp?q=compulsory+laws+2011&btnG=Search&client=nces>>.

Luppino, M., 2011. *Educational Sorting and Peer Effects: The Impacts of Compulsory Schooling Laws*, The Society of Labor Economists : Chicago, Illinois, USA, pp 1-35, viewed 31 March 2012, <<http://www.sole-jole.org/12226.pdf>>.

Deffenbaugh, W.S. *Compulsory School Attendance in the United States*, pp 7-77, in U.S. Bureau of Education, *Compulsory School Attendance* (1914) 573, Bulletin No.2, Government of the Interior: Washington.

### **3. Japan**

Goto, Y., 2008. 'Cultural Commentary: Critical Understanding of the Special Support System in social contexts', *Disability Studies Quarterly*, Vol 28, No. 3, viewed 25 March 2012, <<http://dsq-sds.org/article/view/117/117>>.

Duke, B., 2009. *The History of Modern Japanese education: Constructing the National school system, 1872 – 1890*, p337.

Saito, Y., 2008. *Education in Japan: Past and Present*, National Institute for Educational Policy Research of Japan, Ministry of Education, Culture, Sports, Science and Technology: Tokyo, Japan, p5, viewed 25 March 2012, <[http://www.nier.go.jp/English/EducationInJapan/Education\\_in\\_Japan/Education\\_in\\_Japan\\_files/201103EJPP.pdf](http://www.nier.go.jp/English/EducationInJapan/Education_in_Japan/Education_in_Japan_files/201103EJPP.pdf)>.

OECD (2012) *Strong Performers and Successful Reformers in Education: Lessons from PISA for Japan*, OECD Publishing: Paris, France, p182, viewed 25 March 2012, <[www.oecd.org/dataoecd/26/38/49802616.pdf](http://www.oecd.org/dataoecd/26/38/49802616.pdf)>

Ministry of Education, Culture, Sports, Science and Technology, (2012) *Chapter V- 1. Wartime education - the 1937 Education Council and education reforms (2) Reforms within School Education*, viewed 30 March 2012, <[http://www.mext.go.jp/b\\_menu/hakusho/html/hpbz198103/hpbz198103\\_2\\_138.html](http://www.mext.go.jp/b_menu/hakusho/html/hpbz198103/hpbz198103_2_138.html)>

Simon, R.J. and Banks, L., 2003. *Global Perspectives on Social Issues – Education*, Rowman & Littlefield Publishers Inc: Maryland, USA.

### **4. Australia**

#### **NSW**

Parliament of New South Wales, (2012), *1856 – 1889 : Responsible Government and Colonial Development*, viewed 27 March 2012, <<http://www.parliament.nsw.gov.au/prod/web/common.nsf/key/HistoryResponsibleGovernment>>

*Education Act 1990* (N.S.W.), s. 21B.

Barcan, A., 1980. *A History of Australian Education*, Oxford University Press: Melbourne, Australia.

Wilson, R., 1949. *Official Year Book of the Commonwealth of Australia No. 37 – 1946 and 1947*, Commonwealth Bureau of Census and Statistics: Canberra, Australia, p225.

Meadmore, P., 2001. 'Free, compulsory and secular'? The re-invention of Australian public education', *Journal of Education Policy*, Vol 16, No. 2, pp113 – 125.

Birch, I. and Smart, D., 1989. 'Economic Rationalization and the politics of education in Australia', *Journal of Education Policy*, Vol 4, No. 5, pp137-151.



Bessant, B., 1984. 'Free, Compulsory, and Secular Education: The 1872 Education Act, Victoria, Australia', *Paedagogica Historica: International Journal of the History of Education*, Vol 24, No. 1, pp 5-25.

UNESCO Institute for Statistics (2005) *Education statistics: Australia*, viewed 25 March 2012, p3, <[http://www.childinfo.org/files/IND\\_Australia.pdf](http://www.childinfo.org/files/IND_Australia.pdf)>.

Schools Council - National Board of Employment, Education and Training, Compulsory Years of Schooling Project (1993) *Five to Fifteen, Reviewing the 'Compulsory' years of schooling*, Project Paper No. 8, Australian Government Publishing Service: Canberra.

Press, F. and Hayes, A., 2000. *OECD Thematic Review of Early Childhood Education and Care Policy – Australian Background Report*, Commonwealth Government of Australia: Sydney, p64.

Australian Bureau of Statistics, (2000) *Participation in Education: Beyond Compulsory Schooling*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/6ca07444d2673d02ca2570ec000e3632!OpenDocument>>.

Australian Bureau of Statistics, (1998) *Educational Attainment: Gender Differences in educational achievement*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/c2a1e1b677d4ae81ca2570ec00195177!OpenDocument>>.

Australian Trade Commission, (2010), *K-12 Schools*, viewed 30 March 2012, <<http://www.studyinaustralia.gov.au/northamerica/Education-in-Australia/K-12-Schools/K-12-Schools>>.

Commonwealth Department of Education, (1981), *Development of Education 1978-80: Australian report*, UNESCO: Geneva, Switzerland, viewed 30 March 2012, pp4 and 49, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1981\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1981_e.pdf)>.

Commonwealth Department of Education, (1977), *Major trends and developments in Australian Education in 1975 and 1976*, UNESCO: Geneva, Switzerland, p2, viewed 30 March 2012, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1977\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1977_e.pdf)>.

Australian Government Commonwealth Grants Commission (2012) *State Secondary School Leaving Age Requirements*, viewed 4 April 2012, <[http://cgc.gov.au/\\_data/assets/file/0017/15209/ACT\\_-\\_2008-16\\_Schools\\_education\\_attachment\\_B.pdf](http://cgc.gov.au/_data/assets/file/0017/15209/ACT_-_2008-16_Schools_education_attachment_B.pdf)>.

Blainey, G., 2009. 'The real education revolution', *Review - Institute of Public Affairs*, Vol 61, No. 3, pp 32-33.

Shorten, A.R., 1996. 'The Legal Context of Australian Education: An Historical Exploration' *Australia and New Zealand Journal of Law and Education*, Vol 1, No. 1, pp 2-32.

## **SOUTH AUSTRALIA**

State Library of South Australia, (2008) *Learning and Education*, Government of South Australia: Adelaide, viewed 3 April 2012, <<http://www.samemory.sa.gov.au/site/page.cfm?u=1071>>.

*Education Act 1972* (S.A.), ss. 5 and 75.

Barcan, A., 1980. *A History of Australian Education*, Oxford University Press: Melbourne, Australia.

Wilson, R., 1949. *Official Year Book of the Commonwealth of Australia No. 37 – 1946 and 1947*, Commonwealth Bureau of Census and Statistics: Canberra, Australia.

Meadmore, P., 2001. 'Free, compulsory and secular'? The re-invention of Australian public education', *Journal of Education Policy*, Vol 16, No. 2.

Birch, I. and Smart, D., 1989. 'Economic Rationalization and the politics of education in Australia', *Journal of Education Policy*, Vol 4, No. 5.

Bessant, B., 1984. 'Free, Compulsory, and Secular Education: The 1872 Education Act, Victoria, Australia', *Paedagogica Historica: International Journal of the History of Education*, Vol 24, No. 1.

UNESCO Institute for Statistics (2005) *Education statistics: Australia*, viewed 25 March 2012, p3, <[http://www.childinfo.org/files/IND\\_Australia.pdf](http://www.childinfo.org/files/IND_Australia.pdf)>.

Schools Council - National Board of Employment, Education and Training, Compulsory Years of Schooling Project (1993) *Five to Fifteen, Reviewing the 'Compulsory' years of schooling*, Project Paper No. 8, Australian Government Publishing Service: Canberra.

Press, F. and Hayes, A., 2000. *OECD Thematic Review of Early Childhood Education and Care Policy – Australian Background Report*, Commonwealth Government of Australia: Sydney.

Australian Bureau of Statistics, (2000) *Participation in Education: Beyond Compulsory Schooling*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/6ca07444d2673d02ca2570ec000e3632!OpenDocument>>.

Australian Bureau of Statistics, (1998) *Educational Attainment: Gender Differences in educational achievement*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/c2a1e1b677d4ae81ca2570ec00195177!OpenDocument>>.

Australian Trade Commission, (2010), *K-12 Schools*, viewed 30 March 2012, <<http://www.studyinaustralia.gov.au/northamerica/Education-in-Australia/K-12-Schools/K-12-Schools>>.

Commonwealth Department of Education, (1981), *Development of Education 1978-80: Australian report*, UNESCO: Geneva, Switzerland, viewed 30 March 2012, pp4 and 49, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1981\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1981_e.pdf)>.

Commonwealth Department of Education, (1977), *Major trends and developments in Australian Education in 1975 and 1976*, UNESCO: Geneva, Switzerland, p2, viewed 30 March 2012, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1977\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1977_e.pdf)>.

Australian Government Commonwealth Grants Commission (2012) *State Secondary School Leaving Age Requirements*, viewed 4 April 2012, <[http://cgc.gov.au/\\_data/assets/file/0017/15209/ACT\\_-\\_2008-16\\_Schools\\_education\\_attachment\\_B.pdf](http://cgc.gov.au/_data/assets/file/0017/15209/ACT_-_2008-16_Schools_education_attachment_B.pdf)>.

Blainey, G., 2009. 'The real education revolution', *Review - Institute of Public Affairs*, Vol 61, No. 3, pp 32-33.

Shorten, A.R., 1996. 'The Legal Context of Australian Education: An Historical Exploration' *Australia and New Zealand Journal of Law and Education*, Vol 1, No. 1.

## VICTORIA

*Education and Training Reform Amendment (School Age) Act* 2009, ss. 4 and 5.

*Education and Training Reform Act* 2006 (Act No. 24/2006), s. 2.1.1

Department of Education and Early Childhood Development (2011) *Education and Training Reform Act 2006*, viewed 4 April 2012, <<http://www.education.vic.gov.au/about/directions/reviewleg.htm>>.

Barcan, A., 1980. *A History of Australian Education*, Oxford University Press: Melbourne, Australia.

Wilson, R., 1949. *Official Year Book of the Commonwealth of Australia No. 37 – 1946 and 1947*, Commonwealth Bureau of Census and Statistics: Canberra, Australia.

Meadmore, P., 2001. 'Free, compulsory and secular'? The re-invention of Australian public education', *Journal of Education Policy*, Vol 16, No. 2.

Birch, I. and Smart, D., 1989. 'Economic Rationalization and the politics of education in Australia', *Journal of Education Policy*, Vol 4, No. 5.

Bessant, B., 1984. 'Free, Compulsory, and Secular Education: The 1872 Education Act, Victoria, Australia', *Paedagogica Historica: International Journal of the History of Education*, Vol 24, No. 1.

UNESCO Institute for Statistics (2005) *Education statistics: Australia*, viewed 25 March 2012, p3, <[http://www.childinfo.org/files/IND\\_Australia.pdf](http://www.childinfo.org/files/IND_Australia.pdf)>.

Schools Council - National Board of Employment, Education and Training, *Compulsory Years of Schooling Project (1993) Five to Fifteen, Reviewing the 'Compulsory' years of schooling*, Project Paper No. 8, Australian Government Publishing Service: Canberra.

Press, F. and Hayes, A., 2000. *OECD Thematic Review of Early Childhood Education and Care Policy – Australian Background Report*, Commonwealth Government of Australia: Sydney.

Australian Bureau of Statistics, (2000) *Participation in Education: Beyond Compulsory Schooling*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/6ca07444d2673d02ca2570ec000e3632!OpenDocument>>.

Australian Bureau of Statistics, (1998) *Educational Attainment: Gender Differences in educational achievement*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/c2a1e1b677d4ae81ca2570ec00195177!OpenDocument>>.

Australian Trade Commission, (2010), *K-12 Schools*, viewed 30 March 2012, <<http://www.studyinaustralia.gov.au/northamerica/Education-in-Australia/K-12-Schools/K-12-Schools>>.

Commonwealth Department of Education, (1981), *Development of Education 1978-80: Australian report*, UNESCO: Geneva, Switzerland, viewed 30 March 2012, pp4 and 49, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1981\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1981_e.pdf)>.

Commonwealth Department of Education, (1977), *Major trends and developments in Australian Education in 1975 and 1976*, UNESCO: Geneva, Switzerland, p2, viewed 30 March 2012, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1977\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1977_e.pdf)>.

Australian Government Commonwealth Grants Commission (2012) *State Secondary School Leaving Age Requirements*, viewed 4 April 2012, <[http://cgc.gov.au/\\_data/assets/file/0017/15209/ACT\\_-\\_2008-16\\_Schools\\_education\\_attachment\\_B.pdf](http://cgc.gov.au/_data/assets/file/0017/15209/ACT_-_2008-16_Schools_education_attachment_B.pdf)>.

Blainey, G., 2009. 'The real education revolution', *Review - Institute of Public Affairs*, Vol 61, No. 3.

Shorten, A.R., 1996. 'The Legal Context of Australian Education: An Historical Exploration' *Australia and New Zealand Journal of Law and Education*, Vol 1, No. 1.

## **WESTERN AUSTRALIA**

*Acts Amendment (Higher School Leaving Age and Related provisions) Act 2005 (W.A.)*, s. 6.

*School Education Act 1999 (W.A.)*, ss. 6 and 9.

Barcan, A., 1980. *A History of Australian Education*, Oxford University Press: Melbourne, Australia.

Wilson, R., 1949. *Official Year Book of the Commonwealth of Australia No. 37 – 1946 and 1947*, Commonwealth Bureau of Census and Statistics: Canberra, Australia.

Meadmore, P., 2001. 'Free, compulsory and secular'? The re-invention of Australian public education', *Journal of Education Policy*, Vol 16, No. 2.

Birch, I. and Smart, D., 1989. 'Economic Rationalization and the politics of education in Australia', *Journal of Education Policy*, Vol 4, No. 5.

Bessant, B., 1984. 'Free, Compulsory, and Secular Education: The 1872 Education Act, Victoria, Australia', *Paedagogica Historica: International Journal of the History of Education*, Vol 24, No. 1.

UNESCO Institute for Statistics (2005) *Education statistics: Australia*, viewed 25 March 2012, p3, <[http://www.childinfo.org/files/IND\\_Australia.pdf](http://www.childinfo.org/files/IND_Australia.pdf)>.

Schools Council - National Board of Employment, Education and Training, Compulsory Years of Schooling Project (1993) *Five to Fifteen, Reviewing the 'Compulsory' years of schooling*, Project Paper No. 8, Australian Government Publishing Service: Canberra.

Press, F. and Hayes, A., 2000. *OECD Thematic Review of Early Childhood Education and Care Policy – Australian Background Report*, Commonwealth Government of Australia: Sydney.

Australian Bureau of Statistics, (2000) *Participation in Education: Beyond Compulsory Schooling*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/6ca07444d2673d02ca2570ec000e3632!OpenDocument>>.

Australian Bureau of Statistics, (1998) *Educational Attainment: Gender Differences in educational achievement*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/c2a1e1b677d4ae81ca2570ec00195177!OpenDocument>>.

Australian Trade Commission, (2010), *K-12 Schools*, viewed 30 March 2012, <<http://www.studyinaustralia.gov.au/northamerica/Education-in-Australia/K-12-Schools/K-12-Schools>>.

Commonwealth Department of Education, (1981), *Development of Education 1978-80: Australian report*, UNESCO: Geneva, Switzerland, viewed 30 March 2012, pp4 and 49, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1981\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1981_e.pdf)>.

Commonwealth Department of Education, (1977), *Major trends and developments in Australian Education in 1975 and 1976*, UNESCO: Geneva, Switzerland, p2, viewed 30 March 2012, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1977\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1977_e.pdf)>.

Australian Government Commonwealth Grants Commission (2012) *State Secondary School Leaving Age Requirements*, viewed 4 April 2012, <[http://cgc.gov.au/data/assets/file/0017/15209/ACT - 2008-16 Schools\\_education\\_attachment\\_B.pdf](http://cgc.gov.au/data/assets/file/0017/15209/ACT_-_2008-16_Schools_education_attachment_B.pdf)>.

Blainey, G., 2009. 'The real education revolution', *Review - Institute of Public Affairs*, Vol 61, No. 3.

Shorten, A.R., 1996. 'The Legal Context of Australian Education: An Historical Exploration' *Australia and New Zealand Journal of Law and Education*, Vol 1, No. 1.

## QUEENSLAND

*Subordinate Legislation* 2006 (Qld), No. 247.

*Education (General Provisions) Act* 2006 (Qld), ss. 9 and 176.

Barcan, A., 1980. *A History of Australian Education*, Oxford University Press: Melbourne, Australia.

Wilson, R., 1949. *Official Year Book of the Commonwealth of Australia No. 37 – 1946 and 1947*, Commonwealth Bureau of Census and Statistics: Canberra, Australia.

Meadmore, P., 2001. 'Free, compulsory and secular'? The re-invention of Australian public education', *Journal of Education Policy*, Vol 16, No. 2.

Birch, I. and Smart, D., 1989. 'Economic Rationalization and the politics of education in Australia', *Journal of Education Policy*, Vol 4, No. 5.

Bessant, B., 1984. 'Free, Compulsory, and Secular Education: The 1872 Education Act, Victoria, Australia', *Paedagogica Historica: International Journal of the History of Education*, Vol 24, No. 1.

UNESCO Institute for Statistics (2005) *Education statistics: Australia*, viewed 25 March 2012, p3, <[http://www.childinfo.org/files/IND\\_Australia.pdf](http://www.childinfo.org/files/IND_Australia.pdf)>.

Schools Council - National Board of Employment, Education and Training, Compulsory Years of Schooling Project (1993) *Five to Fifteen, Reviewing the 'Compulsory' years of schooling*, Project Paper No. 8, Australian Government Publishing Service: Canberra.

Press, F. and Hayes, A., 2000. *OECD Thematic Review of Early Childhood Education and Care Policy – Australian Background Report*, Commonwealth Government of Australia: Sydney.

Australian Bureau of Statistics, (2000) *Participation in Education: Beyond Compulsory Schooling*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/6ca07444d2673d02ca2570ec000e3632!OpenDocument>>.

Australian Bureau of Statistics, (1998) *Educational Attainment: Gender Differences in educational achievement*, viewed 30 March 2012, <<http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/c2a1e1b677d4ae81ca2570ec00195177!OpenDocument>>.

Australian Trade Commission, (2010), *K-12 Schools*, viewed 30 March 2012, <<http://www.studyinaustralia.gov.au/northamerica/Education-in-Australia/K-12-Schools/K-12-Schools>>.

Commonwealth Department of Education, (1981), *Development of Education 1978-80: Australian report*, UNESCO: Geneva, Switzerland, viewed 30 March 2012, pp4 and 49, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1981\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1981_e.pdf)>.

Commonwealth Department of Education, (1977), *Major trends and developments in Australian Education in 1975 and 1976*, UNESCO: Geneva, Switzerland, p2, viewed 30 March 2012, <[http://www.ibe.unesco.org/National\\_Reports/Australia/nr\\_mf\\_at\\_1977\\_e.pdf](http://www.ibe.unesco.org/National_Reports/Australia/nr_mf_at_1977_e.pdf)>.

Australian Government Commonwealth Grants Commission (2012) *State Secondary School Leaving Age Requirements*, viewed 4 April 2012, <[http://cgc.gov.au/\\_data/assets/file/0017/15209/ACT\\_-\\_2008-16\\_Schools\\_education\\_attachment\\_B.pdf](http://cgc.gov.au/_data/assets/file/0017/15209/ACT_-_2008-16_Schools_education_attachment_B.pdf)>.

Blainey, G., 2009. 'The real education revolution', *Review - Institute of Public Affairs*, Vol 61, No. 3.

Shorten, A.R., 1996. 'The Legal Context of Australian Education: An Historical Exploration' *Australia and New Zealand Journal of Law and Education*, Vol 1, No. 1.

## **5. New Zealand**

National Commission for UNESCO, *Compulsory Education in New Zealand* (2<sup>nd</sup> Ed.) (1972) UNESCO: Paris, France, viewed 26 March 2012, <<http://unesdoc.unesco.org/images/0000/000010/001035eo.pdf>>.

*Education Act 1964* (NZ), s. 109.

*Education Act 1989* (NZ), No. 80, ss 1 and 20(1).

Manatu Taonga Ministry for Culture and Heritage, *Story: Country Schooling, Page 1 - Getting an education in the 1800s*, 26 March 2012, <<http://www.teara.govt.nz/en/country-schooling/1>>.

Dakin, J.C., 1973. *World Education Series -Education in New Zealand*, David and Charles Holdings Limited: Newton Abbot, Great Britain.

Simon, R.J. and Banks, L., 2003. *Global Perspectives on Social Issues – Education*, Rowman & Littlefield Publishers Inc: Maryland, USA.

## **6. Austria**

Federal Ministry for European and Foreign Affairs, (2012) *The Austrian Foreign Ministry - Education*, viewed 8 April 2012, < <http://www.bmeia.gv.at/en/foreign-ministry/austria/facts-and-figures/education.html>>.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536, pp 516-539.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78, pp501-522.

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpra.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpra.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, (2010) *Commission Staff Working Paper - reducing early school leaving (Accompanying document to the Proposal for a Council Recommendation on policies to reduce early school leaving)*, p17, viewed 25 March 2012, < [http://ec.europa.eu/education/school-education/doc/earlywp\\_en.pdf](http://ec.europa.eu/education/school-education/doc/earlywp_en.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France, p41.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London, p555.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4, p 278.

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1, pp 4 and 6.



European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A., p 19.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **7. Belgium**

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpr.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpr.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London.

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **8. Denmark**

The Ministry of Education and Children (2012), *The Folkeskole*, viewed 8 April 2012, <<http://www.eng.uvm.dk/Education/Primary-and-Lower-Secondary-Education/The-Folkeskole>>.

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *Structures of Education and Training Systems in Europe: Denmark, 2009/10 edition*, Eurydice: Brussels, Belgium, p6, viewed 8 April 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/structures/041\\_DK\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/structures/041_DK_EN.pdf)>.

Cederbeg, M. and Lingarde, S., Nov 2008. *EPASI Country Report: Denmark*, Malmö University: Malmö, Sweden, p3, viewed 8 April 2012, <<http://www.epasi.eu/CountryReportDK.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <<http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>>.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpra.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpra.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. '*Global Educational Expansion - Historical Legacies and Political Obstacles*', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **9. Finland**

Tuononen, M., 2007. *Education in Finland: more education for more people*, Statistics Finland: Helsinki, Finland, viewed 8 April 2012, <[http://www.stat.fi/tup/suomi90/marraskuu\\_en.html](http://www.stat.fi/tup/suomi90/marraskuu_en.html)>.

Aho, E., Pitkänen, K. and Sahlberg, P., (May 2006) *Policy Development and Reform Principles of Basic and Secondary Education in Finland since 1968*, World Bank: Washington, D.C., U.S.A., p5, viewed 8 April 2012, <<http://ddp-ext.worldbank.org/EdStats/FINwp06.pdf>>.

Finnish National Board of Education (2012) *Basic Education*, viewed 25 March 2012, <[http://www.oph.fi/english/education/basic\\_education](http://www.oph.fi/english/education/basic_education)>.

Finnish National Board of Education (2012) *Historical Overview*, viewed 25 March 2012, <[http://www.oph.fi/english/education/overview\\_of\\_the\\_education\\_system/historical\\_overview](http://www.oph.fi/english/education/overview_of_the_education_system/historical_overview)>.

OECD (2011) *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*, pp110-121, viewed 25 March 2012, <http://www.oecd.org/dataoecd/32/50/46623978.pdf>.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <<http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 572.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **10. France**

Brunello, G., Fort M. and Weber, G., 2009. ‘Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe’ *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. ‘The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000’ *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpira.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpira.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, (2010) *Commission Staff Working Paper - reducing early school leaving (Accompanying document to the Proposal for a Council Recommendation on policies to reduce early school leaving)*, p17, viewed 25 March 2012, <[http://ec.europa.eu/education/school-education/doc/earlywp\\_en.pdf](http://ec.europa.eu/education/school-education/doc/earlywp_en.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <<http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 577.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. '*Global Educational Expansion - Historical Legacies and Political Obstacles*', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **11. Germany**

Piopiunik, M. (2011) *Intergenerational Transmission of Education and Mediating Channels: Evidence from Compulsory Schooling Reforms in Germany*, Ifo Working Paper No. 107, Ifo Institute for Economic Research at the University of Munich: Munich, Germany, viewed 25 March 2012, <<http://www.cesifo-group.de/portal/pls/portal/docs/1/1211256.PDF>>.

Cubberley, E.P.(1920) *The History of Education – Educational Practice and Progress considered as a phase of the development and spread of Western Civilisation*, Houghton Mifflin Company: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*, p203, viewed 25 March 2012, <<http://www.oecd.org/dataoecd/32/50/46623978.pdf>>.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpr.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpr.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 584.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

Simon, R.J. and Banks, L., 2003. *Global Perspectives on Social Issues – Education*, Rowman & Littlefield Publishers Inc: Maryland, USA.

## **12. Greece**

Dimaras, A., 1978. 'The Movement for Reform: A Historical Perspective', *Comparative Education Review*, Vol. 22, p15.



Georgiadis, N.M., 2007. 'Educational Reforms in Greece (1959-1997) and Human Capital Theory', *Journal for Critical Education Policy Studies* Vol. 5, No. 2, viewed 8 April 2012, <<http://www.jceps.com/index.php?pageID=article&articleID=105>>.

Quintini, G., 2010. *Jobs for Youth: Greece 2010*, OECD: Paris, France, p83.

Mackridge, P., 2009. *Language and National Identity in Greece, 1766 – 1976*, Oxford University Press: Oxford, UK, p164.

Thomopoulos, E., 2011. *The Greenwood Histories of the Modern Nations - The History of Greece*, ABC-CLIO: Santa Barbara, California, U.S.A., pp14 and 93.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpira.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpira.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

### **13. Ireland**

BBC News (1998) *Special Report - Key events in Northern Ireland history*, viewed 4 April 2012, <[http://news.bbc.co.uk/2/hi/special\\_report/1998/northern\\_ireland/10657.stm](http://news.bbc.co.uk/2/hi/special_report/1998/northern_ireland/10657.stm)>.

*Irish Education Act 1892's*. 1(1).

*Education (Welfare) Act 2000*, ss. 2 and 17

UNESCO (2001) *Education Provision in Ireland*, viewed 5 April 2012, <http://www.ibe.unesco.org/International/ICE/natrap/Ireland.pdf>

Snyder, T.D. (Ed.), 1993. *120 Years of American Education: A Statistical Portrait*, National Center for Education Statistics: Virginia, U.S.A., p34, viewed 12 April 2012, <<http://nces.ed.gov/pubs93/93442.pdf>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

### **14. Italy**

Ministry of Education of Italy (2004) *Summary sheets on Education Systems in Europe: Italy* 47<sup>th</sup> Session of the International Conference on Education, Geneva, Eurydice: Brussels, Belgium, p2, viewed 25 March 2012, <<http://www.ibe.unesco.org/International/ICE47/English/Natreps/reports/italy.pdf>>.

Bertola, G. and Sestito, P., 2011, *Economic History Working Paper No. 6 - Comparative Perspective on Italy's Human Capital Accumulation*, Banca D'Italia Eurosystem, pp7-10, viewed 25 March 2012, <[http://www.bancaditalia.it/pubblicazioni/pubsto/quastoeco/quadsto\\_06/Qse\\_06.pdf](http://www.bancaditalia.it/pubblicazioni/pubsto/quastoeco/quadsto_06/Qse_06.pdf)>.

European Commission, (2011) National system overview on education systems in Europe, 2011 edition , Eurydice: Brussels, Belgium, p2, viewed 9 April 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_IT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_IT_EN.pdf)>.

World Bank (2007) *World Data on Education, 6th ed, 2006/07 - Italy*, pp1 and 5, viewed 9 April 2012, <<http://ddp-ext.worldbank.org/EdStats/ITAwde07.pdf>> .

United States Bureau of Education (1896) *Chapters from the Report of the Commissioner of Education for 1894-95, Education in the Netherlands and Italy*, Government Printing Office: Washington D.C., US.A., p545.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpira.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpira.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12* , Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 598.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

Simon, R.J. and Banks, L., 2003. *Global Perspectives on Social Issues – Education*, Rowman & Littlefield Publishers Inc: Maryland, USA.

## **15. Luxembourg**

European Quality Assurance in Vocational Education and Training (2012), *Luxembourg*, viewed 25 March 2012, <<http://www.eqavet.eu/gns/what-we-do/implementing-the-framework/luxembourg.aspx>>.

Tozzi, P. and Etienne, R., 2008. *EPASI, Country report: Luxembourg (Dec 2008)*, Departement de Sciences de l'Education, Universite Paul Valery Montpellier 3: Montpellier, France, p 3, viewed 25 March 2012, <<http://www.epasi.eu/CountryReportLX.pdf>>.

European Commission, Education, Audiovisual & Culture Executive Agency (2009) *Organisation of the education system in Luxembourg 2009/2010*, Eurybase, Eurydice: Brussels, Belgium, p 15, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase\\_full\\_reports/LU\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase_full_reports/LU_EN.pdf)>.

Brock, C. and Tulasiewicz, W. (Ed.) (2000) *Education in a single Europe* (2<sup>nd</sup> Ed.), Routledge: London, pp250-251.

Le Government du Grand-Duche De Luxembourg, Service information et presse (2004) *Everything you need to know about Luxembourg*, viewed 29 March 2012, <[http://www.eu2005.lu/en/savoir\\_lux/lux\\_publications/tt\\_savoir/tt\\_savoir.pdf](http://www.eu2005.lu/en/savoir_lux/lux_publications/tt_savoir/tt_savoir.pdf)>.

Hansen, J., 1997. *Secondary Education in Luxembourg*, Council of Europe: Strasbourg, France, p22

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. *'Global Educational Expansion - Historical Legacies and Political Obstacles'*, American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **16. Netherlands**

Hindman, H.D. (Ed.) (2009) *World of Child Labor: A Historical and Regional Survey*, M.E. Sharpe Inc: New York, USA, p635.

Cabus, S.J. and Wittex, K.D., 2010. *Does School Time Matter? - On the impact of compulsory education age on school dropout*, Institute for Public Economics Conferences, 10th journées Louis-André Gérard-Varet, Marseille, France, June 20-22, 2011, viewed 8 April 2012, <http://www.vcharite.univ-mrs.fr/ocs/index.php/LAGV/LAGV10/paper/view/145/77>

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpira.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpira.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 603.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **17. Norway**

Ljungberg, J. and Nilsson, A., 2005. *Human Capital and Economic Growth: Sweden 1870-2000*, 6<sup>th</sup> Conference of the European Historical Economics Society, Istanbul, Turkey, 9-10 September 2005, p15.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March

2012,

<[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 603.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.



## **18. Portugal**

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2007) *The Information Database on Education Systems in Europe - The Education System in Portugal 2006/07*, Eurybase : Brussels, Belgium, pp 8, 9 and 14, viewed 27 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase\\_full\\_reports/PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase_full_reports/PT_EN.pdf)>.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012,

<[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **19. Spain**

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *Organisation of the education system in Spain 2009/2010*, Eurydice: Brussels, Belgium, pp18 and 80, viewed 27 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase\\_full\\_reports/ES\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/eurybase_full_reports/ES_EN.pdf)>.

Domke, J., 2011. *Education, Fascism, and the Catholic Church in Franco's Spain*, Dissertations. Paper 104, viewed 8 April 2012, [http://ecommons.luc.edu/luc\\_diss/104](http://ecommons.luc.edu/luc_diss/104)

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpira.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpira.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, pp1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

Simon, R.J. and Banks, L., 2003. *Global Perspectives on Social Issues – Education*, Rowman & Littlefield Publishers Inc: Maryland, USA.

## **20. Sweden**

Ministry of Education and Research (2000) *The EFA Report 2000 from Sweden: Early Childhood Education (ECE)*, World Education Forum, Dakar, Senegal, 26-28 April 2000, viewed 28 March 2012, <[http://www.unesco.org/education/wef/countryreports/sweden/rapport\\_1.html](http://www.unesco.org/education/wef/countryreports/sweden/rapport_1.html)>.

Carlson, M. Rabo, A. and Gok, F. (ed) (2007) *Education in 'Multicultural' Societies Turkish and Swedish Perspectives*, Transactions Vol. 18, Swedish Research Institute in Istanbul: Sweden, p3.

Swedish Institute (2009) *Education in Sweden: A lesson for life*, viewed 28 March 2012, <<http://www.sweden.se/eng/Home/Education/Basic-education/Facts/Education-in-Sweden/>>.

Greenaway, E. (Sep 1999) *Lower secondary education: an international comparison*, Appendix 1, viewed 29 March 2012, [http://www.inca.org.uk/pdf/lower\\_secondary\\_no\\_intro\\_99.pdf](http://www.inca.org.uk/pdf/lower_secondary_no_intro_99.pdf)

Hinnerich, B. T. and Pettersson-Lidbom, P., 2010. *Democracy, Redistribution, and Political Participation: Evidence from Sweden 1919-1950*, Dissertation, Department of Economics, Stockholm University, p11, viewed 8 April 2012, <<http://www.cepr.org/meets/wkcn/7/786/papers/Pettersson-Lidbom.pdf>>.

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Murtin, F. and Martina Viarengo, M., 2011. 'The Expansion and Convergence of Compulsory Schooling in Western Europe, 1950 – 2000' *Economica* Vol. 78

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpra.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpra.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 613.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **21. Switzerland**

Flora, P. (Ed.), (1987) *Series C - Growth to Limits the Western European Welfare States Since World War II*, Vol 4, Walter de Gruyter & Co.: Berlin, Germany, p633.

Heidenheimer, A.J., 1997. *Disparate Ladders: Why School and University Policies Differ in Germany, Japan and Switzerland*, Transaction Publishers: New Brunswick, New Jersey, U.S.A. pp39-40.

OECD (2009) *OECD Economic Surveys: Switzerland Volume 2009/20 - December 2009, Supplement No. 2*, pp119-120.

Hega, G.M., 2000. 'Federalism, Subsidiarity and Education Policy in Switzerland', *Regional & Federal Studies*, Vol. 10, No. 1, pp 1-35.

European Agency for Development in Special Needs Education (2010) *Complete National Overview - Switzerland*, viewed 29 March 2012, <[www.european-agency.org/country-information/switzerland/national-overview/complete-national-overview](http://www.european-agency.org/country-information/switzerland/national-overview/complete-national-overview)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 618.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

## **22. UK**

Brunello, G., Fort M. and Weber, G., 2009. 'Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe' *Economic Journal*, Vol 119, No. 536.

Garrouste, C., 2010. *JRC Scientific and Technical Reports - 100 years of Educational Reforms in Europe: a contextual database*, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, p100, viewed 25 March 2012, <[http://mpr.ub.uni-muenchen.de/31853/1/Reforms\\_jrc57357.pdf](http://mpr.ub.uni-muenchen.de/31853/1/Reforms_jrc57357.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Compulsory Education in Europe 2011/12*, Eurydice: Brussels, Belgium, viewed 25 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/compulsory\\_education/compulsory\\_education.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/compulsory_education/compulsory_education.pdf)>.

European Commission, Education, Audiovisual & Culture Executive Agency, (2012) *Key Data on Education in Europe 2012*, Eurydice: Brussels, Belgium, pp28-29, viewed 26 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf)>

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

The Government of the Hong Kong Special Administrative Region - Education Bureau, (2010) *Report on Review of 9-year Compulsory Oct 1997 Education (Revised Edition) Appendix 6 - Brief Description of Compulsory Education in other countries*, viewed 26 March 2012, <http://www.edb.gov.hk/index.aspx?langno=1&nodeID=546>.

OECD (1983) *Compulsory Schooling in a Changing World*, OECD: Paris, France.

European Commission, Education, Audiovisual & Culture Executive Agency, (2010) *The Structure of the European Education Systems 2010/11: schematic diagrams*, Eurydice: Brussels, Belgium, pp1-8, viewed 26 March 2012, <<http://eacea.ec.europa.eu/education/eurydice/documents/tools/108EN.pdf>>.

Flora, P. et al., 1983. *State, Economy and Society in Western Europe 1815-1975 - A Data Handbook in two Volumes*, Vol. 1, Macmillan Press: London. p 623.

Soysal, Y.N. and Strang, D., 1989. 'Construction of the First Mass Education Systems in Nineteenth Century Europe', *Sociology of Education*, Vol. 62, No. 4

Ramirez, F.O. and Boli, J. (1987) 'The Political Construction of Mass Schooling: European Origins and Worldwide Institutionalization', *Sociology of Education*, Vol. 60, No. 1

European Commission, Education, Audiovisual & Culture Executive Agency (2010) *National system overviews on education systems in Europe and ongoing reforms, 2010 edition*, Eurydice: Brussels, Belgium, p2, viewed 29 March 2012, <[http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national\\_summary\\_sheets/047\\_PT\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_PT_EN.pdf)>.

The Board of Education of Victoria (1871) *Extract from The Eighth Report of the Board of Education of Victoria 1869 –Appendix to the Journals of the House of Representatives, 1871 Session I, G-16*, National Library of New Zealand: Wellington, New Zealand, pp1-19, viewed 28 March 2012, <<http://atojs.natlib.govt.nz/cgi-bin/atojs?a=d&d=AJHR1871-I.2.2.4.24&e=-----10--1-----0>>.

Fort, M., 2006. *Educational Reforms across Europe: A Toolbox for Empirical Research* (2006) Dissertation, Department of Economics and Statistical Sciences, University of Padova, p1-97, viewed 9 April 2012, <[http://www2.dse.unibo.it/fort/files/papers/fort\\_reforms.pdf](http://www2.dse.unibo.it/fort/files/papers/fort_reforms.pdf)>.

Benavot, A., Resnik, J. and Corrales, J., 2006. 'Global Educational Expansion - Historical Legacies and Political Obstacles', American Academy of Arts and Sciences: Cambridge, Massachusetts, U.S.A.

OECD (2011) *Chapter C – Access to Education, Participation and Progression*, p303, viewed 30 March 2012, <<http://www.oecd.org/dataoecd/61/34/48631055.pdf>>.

Simon, R.J. and Banks, L., 2003. *Global Perspectives on Social Issues – Education*, Rowman & Littlefield Publishers Inc: Maryland, USA.