Comparative Welfare States Data Set, 2014 Assembled by David Brady, Evelyne Huber, and John D. Stephens

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Citation: In any work using data from this data set, please cite both the data set and, where appropriate, the original source. In most cases, the original source can simply be cited as OECD or ILO. In others, for example the union and industrial relations data from the Visser dataset, a full citation should be included. Please cite this data set as David Brady, Evelyne Huber, and John D. Stephens, Comparative Welfare States Data Set, University of North Carolina and WZB Berlin Social Science Center, 2014. Since we periodically update and correct the data, it is advisable to cite the date on which you download the data.

General Notes: All economic and financial figures are at current (i.e. market) prices unless otherwise noted. For those countries belonging to the Eurozone, all figures denoted in national currencies are expressed in euros. To convert a figure from euros to a legacy currency, use the appropriate irrevocable conversion rate (currency unit per euro): Austrian Schilling = 13.7603, Belgium Franc = 40.3399, Finnish Markka = 5.94573, French Franc = 6.55957, Deutsche Mark = 1.95583, Greek Drachma = 340.750, Irish Pound = 0.787564, Italian Lira = 1936.27, Luxembourg Franc = 40.3399, Dutch Guilder = 2.20371, Portuguese Escudo = 200.482, Spanish Peseta = 166.386. The user should be aware that the OECD and Penn World Tables are not consistent in their treatment of German data prior to 1990. Sometimes it refers to West Germany and sometimes to both East and West Germany.

- Country identification: AUL = Australia, AUS = Austria, BEL = Belgium, CAN = Canada, DEN = Denmark, FIN = Finland, FRA = France, FRG = (West) Germany, GRE = Greece, IRE = Ireland, ITA=Italy, JPN = Japan, LUX = Luxembourg, NET = Netherlands, NZL = New Zealand, NOR = Norway, POR = Portugal, SPA = Spain, SWE = Sweden, SWZ = Switzerland, UKM = United Kingdom, USA = United States.
- Numeric country identification: 1 = Australia, 2 = Austria, 3 = Belgium, 4 = Canada, 5 = Denmark, 6 = Finland, 7 = France, 8 = (West) Germany, 9 = Greece, 10 = Ireland, 11 = Italy, 12 = Japan, 13 = Luxembourg, 14 = Netherlands, 15 = New Zealand, 16 = Norway, 17 = Portugal, 18 = Spain, 19 = Sweden, 20 = Switzerland, 21 = United Kingdom, 22 = United States.

year 1960 to 2014.

Table of Contents

1.	Wage, Salary, and Income Distribution Data	3
2.	Social Spending, Revenue, and Welfare State Institutions Data	8
	2.1 Social Policy	8
	2.2 Education	13
3.	Labor Force and Labor Institutions Data	18
4.	Demographic Data	23
5.	Macroeconomic Data: Penn World Table (PWT)	26
6.	Macroeconomic Data: Others	28
	6.1 Macro-Economic Data: Other Sources	28
	6.2 Central Bank Independence	32
	6.3 Research and Development Spending	33
	6.4 Product Market Regulation	34
7.	Political Variables	35
	Appendix A: Derivation of Knowledge-Intensive Service (KIS) Variables	40
	Appendix B: Derivation of Political Party Variables	42

1. WAGE, SALARY, AND INCOME DISTRIBUTION DATA

Two sets of poverty and gini variables are provided below, one containing "pre-fisc" figures and the other containing "post-fisc" figures. The pre-fisc variables are based on income amounts prior to the payment of direct taxes and receipt of public transfers (i.e. gross or market income). The post-fisc variables are based on income amounts net of direct taxes paid and public transfers received (i.e. net or disposable income).

- lisrpr_tot Relative post-fisc poverty rate for total population, based on 50% median-income threshold. Source: Luxembourg Income Study (LIS), *Key Figures*, http://www.lisproject.org/key-figures/key-figures.htm [accessed 20 Feb 2013]. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- lisrpr_child Relative post-fisc poverty rate for children (aged 17 and younger), based on 50% median-income threshold. Source: see lisrpr_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- lisrpr_eld Relative post-fisc poverty rate for the elderly (aged 65 and older), based on 50% median-income threshold. Source: see lisrpr_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- lisrpr_tpf Relative post-fisc poverty rate for children living in two-parent households, based on 50% median-income threshold. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- lisrpr_smf Relative post-fisc poverty rate for children living in single-mother households, based on 50% median-income threshold. Source: see lisrpr_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- pct_csmf Children living in single-mother households, as a percentage of total children. Source: see lisrpr_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- Pre_tot Relative pre-fisc poverty rate for total population, based on 50% median-income threshold. Source: Estimated from the LIS database based on household income before taxes and transfers (calculated as GI-SOCTRANS). When pre-tax income was not available, estimates were based on pre-transfer income (GINET-SOCTRANS). Income is equalized by the square root of household members. See website here: http://www.lisdatacenter.org/data-access/key-figures/inequality-and-poverty/programs/. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.
- pre_singm Relative pre-fisc poverty rate for children in single-mother households, based on 50% median-income threshold. Source: see pre_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.

pre_eld Relative pre-fisc poverty rate for children in elderly households, based on 50% median-income threshold. Source: see pre_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.

pre_ue Relative pre-fisc poverty rate for the unemployed, based on 50% median-income threshold. Source: see pre_tot. Missing: Japan, New Zealand, and Portugal. Years covered: 1967-2010.

post_ue Relative post-fisc poverty rate for the unemployed, based on 50% median-income threshold. Missing: Japan, New Zealand, and Portugal. Source: pre_tot. Years covered: 1967-2010.

- pregini_2559 Pre-fisc gini index of inequality among households with heads aged 25-59. Source: Estimated from the LIS database, http://www.lisproject.org. Missing: Japan, Luxembourg, New Zealand, and Portugal. Years covered: 1967-2010.
- postgini_2559 Post-fisc gini index of inequality among households with heads aged 25-59. Source: see pre_gini59. Missing: Japan, Luxembourg, New Zealand, and Portugal. Years covered: 1967-2010.
- pregini_1864 Pre-fisc gini index of inequality among adults aged 18-64. Source: Estimated from the LIS database, http://www.lisproject.org, September 2015. Estimates rely on LIS conventions for equivalence scale, weighting, bottom- and top-coding, missing values and zero incomes, and treatment of currency, see:

 http://www.lisdatacenter.org/data-access/key-figures/inequality-and-poverty/.

 However, the definition of pre-fisc income uses the variable "FACTOR," which sums labor and capital income before taxes and transfers. Missing: New Zealand, and Portugal. Years covered: 1967-2013.
- postgini_1864 Post-fisc gini index of inequality among adults aged 18-64. Source: Estimated from the LIS database, http://www.lisproject.org, September 2015. Estimates rely on LIS conventions for income concept, equivalence scale, weighting, bottom-and top-coding, missing values and zero incomes, and treatment of currency, see: http://www.lisdatacenter.org/data-access/key-figures/inequality-and-poverty/. Missing: New Zealand, and Portugal. Years covered: 1967-2013.
- lisgini GINI Coefficient (disposable household income, whole population). Source: LIS, "Download Key Figures," http://www.lisdatacenter.org/data-access/key-figures/download-key-figures/ [accessed 1 July 2015]. Missing: New Zealand, Portugal. Years covered: 1967-2013.
- lisd9010 Percentile Ratio (90/10) (disposable household income, whole population). Source: see postgini_lis.
- lisd9050 Percentile Ratio (90/50) (disposable household income, whole population). Source: see postgini_lis.

lisd8020 Percentile Ratio (80/20) (disposable household income, whole population).

Source: see postgini_lis.

mktmeasure LIS market income measure. Coding: 0 = pre transfer, post tax (labeled "net" by

LIS); 1 = pre transfer, post some taxes, pre on other taxes (labeled "mixed" by

LIS); 2 = pre tax and pre transfer (labeled "gross" by LIS). Source: see

postgini_lis.

postginioecd Post Taxes and Transfers GINI Coefficient, household disposable income, whole

population. Source: OECD, "Income Distribution Database," at http://www.oecd.org/social/income-distribution-database.htm

[accessed 16 July 2015]. Years Covered: 1974-2013. Data up to 2011 uses OECD's income definition until 2011; data from 2012 on uses the OECD's new

income definition.

preginioecd Pre Taxes and Transfers GINI Coefficient, household disposable income, whole

population. Source: see postgini.

ginimkt_1865 Gini coefficient market income, before taxes and transfers, working age

population: 18-65. Source: see postgini.

ginidisp_1865 Gini coefficient disposable income, post taxes and transfers, working age

population: 18-65. Source: see postgini.

p9010de P90/P10 Disposable Income Decile Ratio, household disposable income, whole

population. Source: see postgini.

p8020de P80/P20 Disposable Income Decile Ratio, household disposable income, whole

population. Source: see postgini.

mgini Market (Pre-Tax-and-Transfer) GINI Coefficient. Household income, whole

population. Source: Solt, Frederick. 2014. "The Standardized World Income Inequality Database." Working paper. SWIID Version 5.0, October 2014. Years

covered: 1960-2013.

ngini Net (Post-Tax-and-Transfer) GINI Coefficient Household income, whole

population. Source: see mgini.

rred Relative Redistribution; market-income inequality minus net-income inequality,

divided by market-income inequality. Household income, whole population.

Source: see mgini. Years covered: 1960-2013.

abred Absolute Redistribution; market-income inequality minus net-income inequality.

Household income, whole population. Source: see mgini Years covered: 1960-

2013.

top1share Top 1% income share, based on pre-tax incomes. Source: Alvaredo, Facundo,

Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, *The World Top Incomes Database*, http://g-mond.parisschoolofeconomics.eu/topincomes [accessed Spring 2015]. Missing: Austria, Belgium, Greece, and Luxembourg.

Years covered: 1960-2013.

top1sharec Top 1% income share, including capital gains and based on pre-tax incomes.

Source: see top1share. Missing: All except Canada, Germany, Japan, Spain,

Sweden, and the United States. Years covered: 1960-2013.

top1tenshare Top 0.1% income share, based on pre-tax incomes. Source: see top1share.

Missing: Austria, Belgium, Finland, Greece, and Luxembourg. Years covered:

1960-2013.

top1tensharec Top 0.1% income share, including capital gains and based on pre-tax incomes.

Source: see top1share. Missing: All except Canada, Germany, Japan, Spain,

Sweden, and the United States. Years covered: 1960-2013.

miwsenc Average income of wage and salaried employees in national currency units.

Source: OECD, *Health Data* (2003). Missing: Greece, Luxembourg, and Portugal.

Years covered: 1960-2000.

compens Total compensation of employees, in millions of national currency units. Sources:

OECD, Health Data (2003) and OECD, National Accounts Statistics (database),

doi: 10.1787/na-data en [accessed 12 Dec 2012]. Years covered: 1960-2011.

earnprod Average annual wages of a full-time production worker, in national currency

units. Source: OECD, "Historical APW Data" [received 21 Oct 2011]. Years

covered: 1974-2005.

wages Wage rate index, showing the growth of average nominal wages over time

relative to a base year (1990, 1995 or 2005 = 100, depending on country). Note that the indices for Canada, Finland, Ireland, and the United States are based on average wages in manufacturing. Sources: IMF, *International Financial Statistics* via IMF's eLibrary, http://elibrary-data.imf.org [accessed 12 Dec 2012] and prior releases for 1999 and 2003. Missing: Luxembourg and Portugal. Years covered:

1960-2010.

lowpay Incidence of low pay, defined as the percentage of workers earning less than two-

thirds of the median wage. Source: OECD, *Labour Force Statistics* (database), doi: 10.1787/data-00302-en [accessed 14 Jan 2013]. Missing: Luxembourg. Years

covered: 1960-2011.

Two different sets of variables for wage dispersion are included below: one set (p90p50, p50p10) is based exclusively on recent OECD data while the other (p90p50v2, p50p10v2) has been constructed using older OECD data. There is significant overlap between the two sets of

variables, but the first is likely more accurate while the second has better range. There is also an important distinction in how Germany is treated in the two sets: the first contains figures for a unified Germany while the second supplies figures for West Germany (i.e. the Federal Republic of Germany before 1991).

p90p50 Ratio of gross earnings received by a worker at the 90th earnings percentile to that received by a worker at the 50th percentile. Source: see lowpay. Missing: Luxembourg. Years covered: 1960-2011.

p50p10 Ratio of gross earnings received by a worker at the 50th earnings percentile to that received by a worker at the 10th percentile. Source: see lowpay. Missing: Luxembourg. Years covered: 1960-2011.

p90p50v2 Ratio of gross earnings received by a worker at the 90th earnings percentile to that received by a worker at the 50th percentile. Source: OECD, *Database on Trends in Earnings Dispersion* (various years). Missing: Luxembourg. Years covered: 1960-2006.

p50p10v2 Ratio of gross earnings received by a worker at the 90th earnings percentile to that received by a worker at the 50th percentile. Source: see p90p50v2. Missing: Luxembourg. Years covered: 1960-2006.

p90p10 Ratio of gross earnings received by a worker at the 90th earnings percentile to that received by a worker at the 10th percentile. Gross earnings of full-time dependent employees. Source: OECD, *Decile Ratios of Gross Earnings*. Accessed 1 July 2015. Years covered: 1970-2013.

Mininum wage setting, degree of government intervention. Coding: 0 = No statutory minimum wage, no sectoral or national agreements; 1 = minimum wages are set by (sectoral) collective agreement or tripartite wage boards in (some) sectors; 2 = minimum wages are set by national (cross-sectoral or interoccupational) agreement ("autonomous agreement") between unions and employers; 3 = national minimum wage is set by agreement (as in 1 or 2) but extended and made binding by law or Ministerial decree; 4 = national minimum wage is set through tripartite negotiations; 5 = national minimum wage is set by government, but after (non-binding) tripartite consultations; 6 = minimum wage set by judges or expert committee, as in award-system; 7 = minimum wage is set by government but government is bound by fixed rule (index-based minimum wage); 8 = minimum wage is set by government without fixed rule. Source: Visser, Jelle. *ICTWSS* (database, v 4.0), http://www.uva-aias.net/207 [accessed 9 May 2013]. Years covered: 1960-2010.

Social security taxes collected, as a percentage of GDP. These taxes consist of compulsory social contributions paid by employers, employees, the self-employed, and the unemployed to government-established social insurance

sstaxes

schemes. Source: OECD, *Revenue Statistics* (database), doi: 10.1787/ctpa-rev-data-en [accessed 12 Dec 2012]. Years covered: 1960-2011.

pytaxes

Payroll taxes collected, as a percentage of GDP. These taxes are paid by employers as a condition for employing workers. Unlike social security taxes, no entitlement is conferred to employees by the payment of these taxes. Payroll taxes can be assessed as a percentage of payroll or as a fixed fee per worker. Source: OECD, *Revenue Statistics* (database), doi: 10.1787/ctpa-rev-data-en [accessed 12 Dec 2012]. Years covered: 1960-2011.

2. SOCIAL SPENDING, REVENUE, AND WELFARE STATE INSTITUTIONS DATA

2.1 Social Policy

Overall benefit generosity, an index where higher values indicate more generosity. This variable is equal to the sum of uegen, sickgen, and pengen and represents a slightly modified version of Gøsta Esping-Andersen's decommodification index.

Source: Scruggs, Lyle. 2013. *Comparative Welfare Entitlements Dataset* 2, Version 2014-03. Missing: Luxembourg. Years covered: 1971-2010. Note:

Scruggs' CWED2 dataset is available at: http://cwed2.org/.

uegen Unemployment benefit generosity, an index where higher values indicate more

generosity. Missing: Luxembourg. Source: see gen. Years covered: 1971-2011.

sickgen Sickness benefit generosity, an index where higher values indicate more

generosity. Missing: Luxembourg. Years covered: 1971-2011.

pengen Pension benefit generosity, an index in which higher values indicate more

generosity. Source: see gen. Missing: Luxembourg. Years covered: 1971-2010.

unempsi Net replacement rate of the benefit from unemployment insurance for an average

production worker, in a single-person household. This is the ratio of the net unemployment insurance benefit to net income earning at the average wage level for a production worker. Note: A systematic calculation error in the data for Spain has been corrected. Source: van Vliet and Koen Caminada, *Unemployment Replacement Rates Dataset among 34 Welfare States, 1971-2009, an Update,*

Extension and Modification of the Scruggs' Welfare State Entitlements Data Set.

Years covered: 1970-2009.

unempco Net replacement rate of the benefit from unemployment insurance for an average

production worker, in a household with a one-earner couple and two dependent

children. Source: see unempsi. Years covered: 1970-2009.

rr1y_23 Gross replacement rate of unemployment insurance for the first year of

unemployment. The replacement rate is calculated as the average annual benefit

received by workers associated with three different family types (single, married with a dependent spouse, married with a working spouse) as a share of two-thirds of the average annual earnings for a production worker. Source see smbe. Years covered: 1961-2007.

rr45y_23

Gross replacement rate of unemployment insurance for the fourth and fifth years of unemployment. The replacement rate is calculated as the average annual benefit received by workers associated with three different family types (single, married with a dependent spouse, married with a working spouse) as a share of two-thirds of the average annual earnings for a production worker. Source: see smbe. Years covered: 1961-2007.

smbe

A summary measure of the gross replacement rate for unemployment insurance. The replacement rate is calculated as the average annual benefit received by workers associated with three different family types (single, married with a dependent spouse, married with a working spouse) at two levels of earnings (67% and 100% of average annual earnings for a production worker) for three different durations (1 year, 2-3 years, and 4-5 years). Source: OECD, *Database on Benefit Entitlements and Gross Replacement Rates* [received 21 Oct 2011]. Years covered: 1961-2007.

sstran

Public expenditure on social benefits other than social transfers in kind, as a percentage of GDP. These social benefits consist of all cash transfers, including social insurance payments and social assistance benefits, proided by government units and social security funds. Sources: OECD, *Historical Statistics*, various years; OECD, *National Accounts Statistics* (database), doi: 10.1787/na-data-en [accessed 18 Apr 2013]. Years covered: 1960-2011.

hlpub

Public expenditure on health care, in millions of national currency units. This variable synthesizes several versions of health data from the OECD, and efforts have been made to harmonize the series, primarily for earlier years. Sources: OECD, *Health Care Systems in Transition*, 1990, Table 2; OECD, *Health Data*, 1995, 1998, 2003, OECD, *Health Data* (database), doi: 10.1787/health-data-en [accessed 7 Apr 2013]. Years covered: 1960-2011.

totheal

Total expenditure on health care in millions of national currency units. Sources: see hlpub. Years covered: see 1960-2011.

ptotheal

Public expenditure on health care, as a percentage of total expenditure on health care (hlpub/totheal). Sources: see hlpub. Years covered: 1960-2011.

phealgdp

Public expenditure on health, as a percentage of GDP. Source: see hlpub. Years covered: 1960-2011.

pcrexnc

Public current expenditure on health care, as a percentage of GDP. Sources: see hlpub. Years covered: 1960-2011.

tcrexnc Total current expenditure on health care, as a percentage of GDP. Sources: see

hlpub. Years covered: 1960-2011.

pinpat Public current expenditure on in-patient health care, as a percentage of GDP.

Sources: see hlpub. Missing: Greece. Years covered: 1960-2011.

tinpat Total current expenditure on in-patient health care, as a percentage of GDP.

Sources: see hlpub. Missing: Greece. Years covered: 1960-2011.

poupat Public current expenditure on out-patient health care, as a percentage of GDP.

Sources: see hlpub. Missing: Greece. Years covered: 1960-2011.

Total current expenditure on out-patient health care, as a percentage of GDP.

Sources: see hlpub. Missing: Greece, Ireland, and the United Kingdom. Years

covered: 1960-2011.

tmedcv Share of population with total medical coverage, either through public programs

or primary private insurance. Sources: OECD, *Health Data* (database), doi: 10.1787/health-data-en [accessed 1 Jun 2013]; Cohen, Robin A., Diane M. Makuc, Amy B. Bernstein, Linda T. Bilheimer, and Eve Powell-Griner. 2009. "Health Insurance Coverage Trends, 1959-2007: Estimates from the National Health Interview Survey." Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics for some

US figures. Years covered: 1960-2011.

pmedcy Share of population with total medical coverage through public programs.

Sources: see tmedcy. Years covered: 1960-2011.

inpatev Share of population with in-patient medical coverage through public programs.

Sources: see tmedcv Years covered: 1960-2011.

oupatev Share of population with out-patient medical coverage through public programs.

Sources: see tmedcy Years covered: 1960-2011.

daycare Public expenditure on daycare/home-help services under family policy, as a

percentage of GDP. Source: OECD, Social Expenditure Statistics (database), doi:

10.1787/data-00166-en [accessed 16 Jun 2013]. Years covered: 1980-2010.

oldcash Public and mandatory private expenditure on old-age cash benefits as percentages

of GDP. Source: see daycare. Years covered: 1980-2010.

oldage_pub Public expenditure on old-age benefits as a percentage of GDP. This variable is

equal to the sum of cash and in-kind old-age benefits. The main cash benefits include standard and early retirement pensions, and the main in-kind benefits include residential care and home-help services. Source: see daycare. Years

covered: 1980-2010.

survivor pub Public expenditure on survivor benefits as a percentage of GDP. This variable is equal to the sum of cash and in-kind survivor benefits. The main cash benefit consists of survivor pensions, and the main in-kind benefit consists of funeral services. Source: see daycare. Years covered: 1980-2010. incap_pub Public expenditure on incapacity-related benefits as a percentage of GDP. This variable is equal to the sum of cash and in-kind incapacity benefits. The main cash benefits include disability pensions, occupational injury insurance, and sick pay, and the main in-kind benefits include residential care, home-help services, rehabilitation services. Source: see daycare. Years covered: 1980-2010. health pub Total public expenditure on health care, as a percentage of GDP. There is no differentiation between cash and in-kind benefits for health care, and there are not distinct sub-categories. Source: see daycare. Years covered: 1980-2010. family pub Public expenditure on family benefits, as a percentage of GDP. This variable is equal to the sum of cash and in-kind family benefits. The main cash benefits include disability pensions, occupational injury insurance, and sick pay, and the main in-kind benefits include residential care, home-help services, rehabilitation services. Source: see daycare. Years covered: 1980-2010. almp_pub Public expenditure on active labor market policies, as a percentage of GDP. This variable is equal to the sum of cash and in-kind active labor market policy benefits. Source: see daycare. Years covered: 1980-2010. unemp_pub Public spending on unemployment benefits, as a percentage of GDP. Source: see daycare. This variable is equal to the sum of cash and in-kind unemployment benefits. Years covered: 1980-2010. housing_pub Public expenditure on housing benefits, as a percentage of GDP. Source: see daycare. This variable is equal to the sum of cash and in-kind housing benefits. Missing: Japan and the United States. Years covered: 1980-2010.

other_pub Public expenditure on other social benefits, as a percentage of GDP. Source: see daycare. Years covered: 1980-2010.

socx_pub Total public social expenditure, as a percentage of GDP. Source: see daycare. Years covered: 1980-2010.

oldage_pmp Public and mandatory private expenditure on old-age benefits, as a percentage of GDP. See oldage_pub for more details. Source: see daycare. Years covered: 1980-2010.

survivor_pmp Public and mandatory private expenditure on survivor benefits, as percentage of GDP. See survivor_pub for more details. Source: see daycare. Years covered: 1980-2010.

incap_pmp Public and mandatory private expenditure on incapacity-related benefits, as a percentage of GDP. See incap_pub for more details. Source: see daycare. Years covered: 1980-2010.

health_pmp Public and mandatory private expenditure on health, as a percentage of GDP. See health_pub for more details. Source: see daycare. Years covered: 1980-2010.

family_pmp Public and mandatory private expenditure which supports families, as a percentage of GDP. See family_pub for more details. Source: see daycare. Years covered: 1980-2010.

almp_pmp Public and mandatory private expenditure on active labor market programs, as a percentage of GDP. See almp_pub for more details. Source: see daycare. Years covered: 1980-2010.

unemp_pmp Public and mandatory private spending on unemployment benefits, as a percentage of GDP. See unemp_pub for more details. Source: see daycare. Years covered: 1980-2010.

housing_pmp Public and mandatory private expenditure on housing, as a percentage of GDP. See housing_pub for more details. Source: see daycare. Missing: Japan and the United States. Years covered: 1980-2010.

other_pmp Public and mandatory private expenditure on other social policy areas, as a percentage of GDP. See other_pub for more details. Source: see daycare. Years covered: 1980-2010.

socx_pmp Public and mandatory private social expenditures, as a percentage of GDP. Source: see daycare. Years covered: 1980-2010.

almppes Public expenditure on public employment services and administration, as a percentage of GDP. This variable captures services related to job coaching, reference, and placement and the administration of ALMP programs and unemployment benefits. Source: OECD, "Public expenditure and participant stocks on LMP: Public expenditure of LMP by main categories (% GDP)" at https://stats.oecd.org/Index.aspx?DataSetCode=LMPEXP [accessed 16 July 2015]. Years covered: 1985-2011.

almptrain Public expenditure on job training, as a percentage of GDP. This variable covers two categories of training: vocational and remedial training for the unemployed and targeted retraining for the employed. Source: see almppes. Years covered: 1985-2011.

almpjob Public expenditure on job rotation and job sharing, as a percentage of GDP.

Source: see almppes. Years covered: 1985-2011.

almpincen Public expenditure on employment incentives, as a percentage of GDP. This

variable includes two types of subsidies: recruitment subsidies for employers that hire unemployed persons and employment maintanence subsidies used for specific restructuring purposes or economic difficulties. Source: see almppes.

Years covered: 1985-2011.

almprehab Public expenditure on vocational rehabilitation and work programs for the

disabled, as a percentage of GDP. Source: see almppes. Years covered: 1985-

2011.

almpdir Public expenditure on direct job creation, as a percentage of GDP. Source: see

almppes. Years covered: 1985-2011.

almpstart Public expenditure on start-up incentives, as a percentage of GDP. This variable

measures start-up funds provided to new businesses started by unemployed

persons. Source: see almppes. Years covered: 1985-2011.

unemsup Public expenditure on out-of-work income maintenance and support, as a

percentage of GDP. This variable includes unemployment insurance and

unemployment assistance benefits (social assistance that is explicitly targeted on

the unemployed). Source: see almppes. Years covered: 1985-2011.

earlyretire Public expenditure on early retirement benefits, as a percentage of GDP. Source:

see almppes. Years covered: 1985-2011.

2.2 Education

edspendtw Total public education spending as a percent of GDP. S. T. A. Wilkens, Sorting

Out the Relationship Between Education and the Welfare State, MA thesis, Department of Sociology, University of North Carolina at Chapel Hill, 2005, Wilkens' source is World Bank, *World Development Indicators*, 2004. Missing:

Greece, Luxembourg, Portugal, and Spain.

edspendmb Total public education spending as a percent of GDP. Assembled by Marius

Busemeyer from various OECD sources. See page 605 of the following citation for details. Marius Busemeyer, 'Determinants of public education spending in 21 OECD democracies, 1980-2001', *Journal of European Public Policy*, 14:4, 582 –

610. Missing: Luxembourg.

edexpub Total general (local, regional and central) government expenditure on education

(current, capital, and transfers), expressed as a percentage of GDP. Source: see

World dataBank, *World Development Indicators* (WDI) (database), http://databank.worldbank.org/ [accessed 10 Jul 2013]. Years covered: 1970-2010.

ed0exp

Public expenditure on pre-primary education (ISCED-97 level 0), as a percentage of GDP. Some data are included elsewhere and appear missing: CAN (2003, 2005-10); GRE (1997-2005); LUX (1997, 2001-07); and NOR (2001). Source: OECD, *Education Statistics* (database), doi: 10.1787/edu-data-en [accessed 31 Jul 2013]. Years covered: 1995-2010.

ed1exp

Public expenditure on primary education (ISCED-97 level 1), as a percentage of GDP. Some data are included elsewhere and appear missing: CAN (1997-2001, 2003, 2005-07). Source: see ed0exp. Years covered: 1995-2010.

ed2exp

Public expenditure on lower-secondary education (ISCED-97 level 2), as a percentage of GDP. Some data are included elsewhere and appear missing: BEL (1998-2010); CAN (1997-2001, 2003, 2005-10); GRE (1997-2005); LUX (1997, 2002); NOR (1997-2001); SPA (1998); and UKM (1997-2004). Source: see ed0exp. Missing: Belgium, Canada, and Greece. Years covered: 1995-2010.

ed3exp

Public expenditure on upper-secondary education (ISCED-97 level 3), as a percentage of GDP. Some data are included elsewhere and appear missing: CAN (1999-2001, 2003, 2005-10); LUX (2001); SPA (1999-2006); SWE (1997-2010); and USA (1997-2000). Source: see ed0exp. Years covered: 1995-2010.

ed4exp

Public expenditure on post-secondary education (ISCED-97 level 4), as a percentage of GDP. Some data are included elsewhere and appear missing: BEL (1998-2010); CAN (1997-2001, 2003, 2005-10); DEN (1999-2010); FIN (1997-2010); JPN (1997-2010); GRE (1997-2005); LUX (2001); NOR (1997-2010); POR (1997-2010); SPA (1997-2010); SWE (1997); SWZ (2008-10); UKM (1997-2004); and USA (1997-2010). Missing: Belgium, Finland, Japan, Norway, Portugal, Spain, and the United States. Source: see ed0exp. Years covered: 1995-2010.

ed56exp

Public expenditure on tertiary education (ISCED-97 levels 5 and 6), as a percentage of GDP. Source: see ed0exp. Years covered: 1995-2010.

edexp

Public expenditure on education (all levels), as a percentage of GDP. Expenditures not allocated by level are also included. Source: see ed0exp. Years covered: 1995-2010.

ed0ex

Total expenditure on pre-primary education (ISCED-97 level 0), as a percentage of GDP. The funding sources include: all levels of government (central, regional, and local); private firms, households, and other entities; and international sources. Source: se ed0exp. Missing: Greece. Years covered: 1995-2010.

ed1ex Total expenditure on primary education (ISCED-97 level 1), as a percentage of

GDP. See ed1exp and ed0ex for more details. Source: see ed0exp. Years covered:

1995-2010.

ed2ex Total expenditure on lower-secondary education (ISCED-97 level 2), as a

percentage of GDP. See ed2exp and ed0ex for more details. Source: see ed0exp.

Missing: Belgium, Canada, Greece, and Norway. Years covered: 1995-2010.

Total expenditure on upper-secondary education (ISCED-97 level 3), as a ed3ex

percentage of GDP. See ed3exp and ed0ex for more details. Source: see ed0exp.

Years covered: 1995-2010.

ed4ex Total expenditure on post-secondary education (ISCED-97 level 4), as a

percentage of GDP. See ed4exp and ed0ex for more details. Source: see ed0exp.

Missing: Belgium, Finland, Japan, Norway, Portugal, Spain, and the United

States. Years covered: 1995-2010.

ed56ex Total expenditure on tertiary education (ISCED-97 levels 5 and 6), as a

percentage of GDP. See ed0ex for more details. Source: see ed0exp. Missing:

Luxembourg. Years covered: 1995-2010.

Total expenditure on education (all levels), as a percentage of GDP. Expenditures edex

not allocated by level are also included. Source: see ed0exp. See ed0ex for more

details. Years covered: 1995-2010.

Note that the educational attainment variables listed below are structured in a somewhat unintuitive manner. The variables ednosch, ed1, ed2, and ed3 sum to 100%, and each represents the percentage of a given population with educational attainment at a particular level. For the latter three of these variables, attainment is defined as any education at a particular level—this includes both some and complete schooling at the level. The variables ed1comp, ed2comp, and ed3comp represent the percentages of the population with complete schooling at the respective levels. Therefore, to calculate the percentage of the population with some education at a given level, the "comp" attainment variable is subtracted from the main attainment variable for the level (e.g. ed1some = ed1 - ed1comp). Finally, it is important to remember that all of these variables capture the *highest* level of attainment, meaning that those counted in ed3 are not counted in ed2 and ed1.

ednosch Percentage of the population aged 25 and over with no schooling. Source: Barro,

> Robert J. and Jong-Wha Lee. 2010. Barro-Lee Educational Attainment Dataset 1950-2010, Harvard University, http://www.barrolee.com/ [accessed 19 Jul 2013].

Years covered: 1960-2010 (in 5-year intervals).

ed1 Percentage of the population aged 25 and over with any primary schooling.

Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).

ed1comp	Percentage of the population aged 25 and over who have completed primary school. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
ed2	Percentage of the population aged 25 and over with any secondary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
ed2comp	Percentage of the population aged 25 and over with complete secondary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
ed3	Percentage of the population aged 25 and over with any tertiary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
ed3comp	Percentage of the population aged 25 and over with complete tertiary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
aveyrsed	Average years of education attained in the population aged 25 and over. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
mednosch	Percentage of the male population aged 25 and over with no schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
med1	Percentage of the male population aged 25 and over with any primary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
med1comp	Percentage of the male population aged 25 and over who have completed primary school. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
med2	Percentage of the male population aged 25 and over with any secondary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
med2comp	Percentage of the male population aged 25 and over with complete secondary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
med3	Percentage of the male population aged 25 and over with any tertiary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
med3comp	Percentage of the male population aged 25 and over with complete tertiary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
maveyrsed	Average years of education attained in the male population aged 25 and over. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
fednosch	Percentage of the female population aged 25 and over with no schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).

fed1	Percentage of the female population aged 25 and over with any primary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
fed1comp	Percentage of the female population aged 25 and over who have completed primary school. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
fed2	Percentage of the female population aged 25 and over with any secondary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
fed2comp	Percentage of the female population aged 25 and over with complete secondary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
fed3	Percentage of the female population aged 25 and over with any tertiary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
fed3comp	Percentage of the female population aged 25 and over with complete tertiary schooling. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
faveyrsed	Average years of education attained in the female population aged 25 and over. Source: see ednosch. Years covered: 1960-2010 (in 5-year intervals).
mysmf2529	Mean years of schooling, males and females ages 25-29. Source: Wail Benaabdelaali, Saîd Hanchane, Abdelhak Kamal, (2012), "Chapter 13 Educational Inequality in the World, 1950-2010: Estimates from a New Dataset", John A. Bishop, Rafael Salas, in (ed.) Inequality, Mobility and Segregation: Essays in Honor of Jacques Silber (Research on Economic Inequality, Volume 20), Emerald Group Publishing Limited, pp. 337 – 366. Years covered: 1960-2010 (in 5-year intervals).
mysm2529	Mean years of schooling, males ages 25-29. Source: see mysmf2529.
mysf2529	Mean years of schooling, females ages 25-29. Source: see mysmf2529.
mysmf2599	Mean years of schooling, males and females ages 25-99. Source: see mysmf2529.
mysm2599	Mean years of schooling, males ages 25-99. Source: see mysmf2529.
mysf2599	Mean years of schooling, females ages 25-99. Source: see mysmf2529.
ginitot2599	Educational GINI Index, ages 25+. Source: see mysmf2529.
egini1599bhk	Educational GINI Index, ages 15+. Source: see mysmf2529.
egini15t	Education Gini index for population aged 15 and over. Source: Thomas, Vinod, Yan Wang, and Xibo Fan. 2003. "Measuring Education Inequality: Gini Coefficients of Education for 140 Countries (1960-2000)." <i>Journal of</i>

	Educational Planning and Administration. 17(1): 5-33. Missing: Luxembourg. Years covered: 1960-2000.
sds15t	Standard deviation of years of education attained in the population aged 15 and over. Source: see egini15t. Missing: Luxembourg. Years covered: 1960-2000.
ays15t	Average years of education attained in the population aged 15 and over. Source: see egini15t. Missing: Luxembourg. Years covered: 1960-2000.
aysbl15t	Average years of education attained in the population aged 15 and over (from Barro-Lee dataset). Source: see egini15t. Missing: Luxembourg. Years covered: 1960-2000.
ed0enr	Total enrollment in pre-primary education (ISCED-97 level 0), in thousands. Source: OECD, <i>Education Statistics</i> (database), doi: 10.1787/edu-data-en [accessed 9 Jul 2013]. Years covered: 1985-2011.
ed1enr	Total enrollment in primary education (ISCED-97 level 1), in thousands. Source: see ed0enr. Years covered: 1985-2011.
ed2enr	Total enrollment in lower-secondary education (ISCED-97 level 2), in thousands. Source: see ed0enr. Years covered: 1985-2011.
ed3enr	Total enrollment in upper-secondary education (ISCED-97 level 3), in thousands. Source: see ed0enr. Years covered: 1985-2011.
ed4enr	Total enrollment in pre-primary education (ISCED-97 level 4), in thousands. Source: see ed0enr. Years covered: 1985-2011.
ed56enr	Total enrollment in tertiary education (ISCED-97 levels 5 and 6), in thousands. Source: see ed0enr. Years covered: 1985-2011.
edenr	Total enrollment in education programs (all levels), in thousands. Source: see ed0enr. Years covered: 1985-2011.
edexp_eurostat Total public expenditure on education as a percentage of GDP, all levels of education combined. Source: Eurostat, v3.0.3.4-20150504-5575b-PROD_EUROBASE [accessed 20 July 2015]. Years covered: 1991-2011. Missing: Australia, Canada, Luxembourg, New Zealand.	

3. LABOR FORCE AND LABOR INSTITUTIONS DATA

Union density, defined as net union membership as a percentage of employed wage and salary earners. Sources: Visser, Jelle. *ICTWSS* (database, v 3.0 and v 4.0), http://www.uva-aias.net/207 [accessed 9 May 2013]. Years covered: 1960-2012.

adj_cov

Bargaining or union coverage, defined as employees covered by wage bargaining agreements as a percentage of all employees with the right to bargaining. Source: see ud. Years covered: 1960-2011.

unioncent

Union centralization. A summary measure, combining measures of confederal (political) control over appointment of leaders of affiliates, confederal involvement in wage agreements negotiated by its affiliate unions, confederal or joint strike fund from which member unions are reimbursed, and confederal power over strikes by affiliates. Each component is coded from 0 to 2, so the index has a scale of 0 to 8, with 0 representing minimal centralization and 8 maximum centralization. Source: see ud. Years covered: 1960-2011.

pactstruct

Social pact, presence and nature. Coding: 0 = No pact; 1 = Pact is negotiated by government, all (mainstream) union confederations and employers peak associations; 2 = Pact is negotiated without major (mainstream) union(s); 3 = Pact is negotiated without major (mainstream) employers association(s); 4 = Pact is negotiated between unions and employers, but with heavy involvement of the government in negotiations ("shadow of hierarchy", threats, side-payments); 5 = Pact is negotiated between unions and employers, but implemented through legislation (or prepared for legislation); 6 = Pact is negotiated between unions and employers and implemented without government involvement or legislation ("autonomous agreement"). Source: see ud. Years covered: 1960-2011.

cent

Centralization in wage bargaining. This measure combines measures of union authority and union concentration (derived from Iversen's centralization index). Ranges from 0 to 1, with 0 representing no centralization and 1 complete centralization. Source: see ud. Years covered: 1960-2011.

wcoord

Wage setting coordination. Codings: 1 = fragmented wage bargaining, confined largely to individual firms or plants; 2 = fixed or alternating industry- and firm level bargaining, with weak enforceability of industry agreements; 3 = industry-level bargaining with no or irregular pattern setting, limited involvement of central organizations, and limited freedoms for firm-level bargaining; 4 = mixed industry and economy-wide bargaining: a) central organisations negotiate non-enforceable central agreements (guidelines) and/or b) key unions and employers associations set pattern for the entire economy; 5 = economy-wide bargaining, based on a) enforceable agreements between the central organisations of unions and employers affecting the entire economy or entire private sector, or on b) government imposition of a wage schedule, freeze, or ceiling. Source: see ud. Years covered: 1960-2011.

hunemr

Harmonized unemployment rate, the number of unemployed persons as a percentage of the civilian labour force. To improve international comparability, a unifrom definition of unemployment was used in the development of this measure. According to this definition, the unemployed are persons of working age

who, in the reference period: are without work; are available for work; and have taken specific steps to find work. Source: Years covered: 1960-2011.

unemr

Unemployment rate, the number of unemployed persons as a percentage of the civilian labour force. Source: OECD, *Employment and Labour Force Statistics* (database), doi: 10.1787/lfs-lfs-data-en [accessed 2 Apr 2013]. Years covered: 1960-2011.

hunemr2

wagsal

Harmonized unemployment rate, the number of unemployed persons as a percentage of the civilian labour force. Note: This variable is the product of an effort to extend the harmonized unemployment series listed above using old harmonized estimates and new unharmonized estimates from the OECD. Sources: OECD. 1999. *Quarterly Labor Force Statistics*, No. 4; OECD. 2002 and 2003. *Main Economic Indicators*, Paris: OECD; OECD, *Employment and Labour Force Statistics* (database), doi: 10.1787/lfs-lfs-data-en [accessed 2 Apr 2013]. Years covered: 1960-2011.

munemr Male unemployment rate. See unemr. Years covered: 1960-2011.

funemr Female unemployment rate. See unemr. Years covered: 1960-2011.

tlabfo Size of civilian labor force, in thousands. Source: OECD, *Employment and Labour Force Statistics* (database), doi: 10.1787/lfs-lfs-data-en [accessed 2 Apr 2013]. Years covered: 1960-2011.

Size of armed forces, in thousands. Sources: OECD, Employment and Labour Force Statistics (database), doi: 10.1787/lfs-lfs-data-en [accessed 2 Apr 2013]; Correlates of War Project, National Material Capabilities Data (database, v 4.0), http://www.correlatesofwar.org/COW2%20Data/Capabilities/nmc4.htm [accessed 30 Jun 2013]; World dataBank, World Development Indicators (WDI) (database), http://databank.worldbank.org/ [accessed 24 Apr 2013]. Years covered: 1960-2011.

tcemp Civilian employment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

agempn Agricultural employment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

inempn Industrial employment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

srempn Service employment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

Wage and salaried employees, in thousands. Source: see tlabfo. Years covered: 1960-2011.

20

empown Employers and persons working on own account, in thousands. Source: see tlabfo.

Years covered: 1960-2011.

unpfmw Unpaid family workers, in thousands. Source: see tlabfo. Years covered: 1960-

2011.

mlabfo Male labor force, in thousands. Source: see tlabfo. Years covered: 1960-2011.

mcvemp Male civilian employment, in thousands. Source: see tlabfo. Years covered: 1960-

2011.

flabfo Female labor force, in thousands. Source: see tlabfo. Years covered: 1960-2011.

fevemp Female civilian employment, in thousands. Source: see tlabfo. Years covered:

1960-2011.

tunemp Total unemployment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

munemp Male unemployment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

funemp Female unemployment, in thousands. Source: see tlabfo. Years covered: 1960-

2011.

ep Employment protection, an index ranging from 0 (least protection) to 2 (most

protection). This series was constructed by chaining together OECD data and using interpolation to fill in missing points. Source: Nickell, William, *The CEP-OECD Institutions Data Set* (1960-2004), http://eprints.lse.ac.uk/19789/. Missing:

Greece and Luxembourg. Years covered: 1960-1995.

epl Employment protection legislation, an index of the overall strictness ranging from

0 (least strictness) to 2 (most strictness). This variable has been constructed by using the ep series above to extrapolate the OECD data on employment protection legislation (version 1). Source: see ep. Missing: Greece and Luxembourg. Years

covered: 1960-2003.

epl_Allard Employment protection legislation, an index of the overall strictness ranging from

0 (least strictness) to 5 (most strictness). This variable has been constructed by using a slightly modified version of the OECD's coding methodology to extend the OECD data on employment protection legislation (version 1) back in time. Source: Allard, Gayle. 2005. "Measuring Job Security Over Time: In Search of a Historical Indicator." Instituto de Empressa Working Paper WP-05. Missing:

Greece and Luxembourg. Years covered: 1960-2003.

oecd_epl Employment protection legislation, an index of the overall strictness ranging from

0 (least strictness) to 6 (most strictness). This variable is the unweighted average

of the sub-indicators of employment protection legislation for regular contracts (permepl in this dataset) and temporary contracts (tempepl in this dataset). All of these data come from version 1 of the OECD's EPL data. Source: OECD, *Employment and Labour Force Statistics* (database), doi: 10.1787/lfs-lfs-data-en [accessed 5 Apr 2013]. Years covered: 1985-2008.

permepl

Employment protection legislation for permanent employment, an index of the overall strictness ranging from 0 (least strictness) to 6 (most strictness). Source: see oecd_epl. Years covered: 1985-2008.

tempepl

Employment protection legislation for temporary employment, an index of the overall strictness ranging from 0 (least strictness) to 6 (most strictness). Source: see oecd_epl. Years covered: 1985-2008.

nld

Number of industrial disputes (strikes and lockouts). Notes: Australia, excludes strikes with less than 10 workdays not worked; Belgium, excludes public sector; Canada, only includes strikes lasting at least half a day with more than 10 days lost; Denmark, up to 1995, excludes strikes with less than 100 work-days lost; France, one strike represents one establishment on strike; Ireland, only strikes lasting at least one day or with at least 10 work-days lost; Japan, excludes strikes lasting less than half a day; Norway, excludes strikes lasting less than one day; New Zealand, excludes strikes with less than 10 workdays lost (from 2000, 5 workdays), includes partial strikes and lockouts, prior to 1998, excludes public sector; Spain, excludes Basque country; Sweden, strikes in which at least 8 hours not worked; Switzerland, excludes strikes lasting less than one day; UK, excludes strikes involving fewer than 10 workers or lasting less than one day if 100 or more workdays not worked; US, 1977-present, includes only those disputes involving 1000 or more workers. Sources: ILO, LABORSTA. Years covered: 1960-2010.

wi

Workers involved in labor disputes, in thousands. See nld. Years covered: 1960-2010.

wdl

Working days lost, in thousands. See nld. Years covered: 1960-2010.

govemp

Government employment in services, in thousands. Source: OECD, *Health Data* (1995 and 1998). Missing: Greece, Ireland, and Portugal. Years covered: 1960-1997.

cgewap

Civilian government employment as a percentage of the working-age population (ages 15-64). Source: Cusack, Thomas R. 2004. *Data on Public Employment and Wages for 21 OECD countries*, WZB (Berlin Social Research Center), http://www.wzb.eu/en/persons/thomas-r-cusack?s=5662 [accessed 3 Jul 2011]. Missing: Luxembourg and New Zealand. Years covered: 1960-1999.

cgewap2

Civilian government employment as a percentage of the working-age population (ages 15-64). Note: This variable is the product of an effort to extend Cusacks' cgewap variable using ILO data on government employment and IISS data on military personnel. Sources: Cusack, Thomas R. 2004. *Data on Public Employment and Wages for 21 OECD countries*, WZB (Berlin Social Research Center), http://www.wzb.eu/en/persons/thomas-r-cusack?s=5662 [accessed 3 Jul 2011], ILO, *LABORSTA* (database), http://laborsta.ilo.org/ [accessed 3 Jun 2013], International Institute for Strategic Studies, *The Military Balance* (various years). Years covered: 1960-2010

empe

Persons engaged in work, in thousands. This variable includes both employees and the self-employed. Source: EU KLEMS, see Appendix A. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

kis1e

Persons engaged in knowledge-intensive services, in thousands (KIS-HT approach). See Appendix A for an overview of the KIA approach. Source: see empe. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

kishte

Persons engaged in knowledge-intensive services classified as high tech, in thousands. Source: see empe. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

kis2e

Persons engaged in knowledge-intensive services, in thousands (KIA approach). See Appendix A for an overview of the KIS-HT approach. Source: see empe. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

emp

Total employees, in thousands. Source: EU KLEMS, see Appendix A. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

kis1

Employees in knowledge-intensive services, in thousands (KIS-HT approach). See Appendix A for an overview of the KIS-HT approach. Missing: Canada, New Zealand, Norway, and Switzerland. Source: see empe. Years covered: 1970-2007.

kisht

Employees in knowledge-intensive services classified as high tech, in thousands. Source: see empe. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

kis2

Employees in knowledge-intensive services, in thousands (KIA approach). See Appendix A for an overview of the KIA approach. Source: see empe. Missing: Canada, New Zealand, Norway, and Switzerland. Years covered: 1970-2007.

4. DEMOGRAPHIC DATA

pop	Population, in thousands. Source: OECD, <i>Employment and Labour Force Statistics</i> (database), doi: 10.1787/lfs-lfs-data-en [accessed 2 Apr 2013]. Years covered: 1960-2011.
plt15	Population aged under 15 years, in thousands. Source: see popnew. Years covered: 1960-2011.
p1564	Population aged 15 to 64 years, in thousands. Source: see popnew. Years covered: 1960-2011.
po65	Population aged 65 and older, in thousands. Source: see popnew. Years covered: 1960-2011.
female	Female population, in thousands. Source: see popnew. Years covered: 1960-2011.
male	Male population, in thousands. Source: see popnew. Years covered: 1960-2011.
mlt15	Male population aged under 15 years, in thousands. Source: see popnew. Years covered: 1960-2011.
m1564	Male population aged 15 to 64 years, in thousands. Source: see popnew. Years covered: 1960-2011.
mo65	Male population aged 65 years and older, in thousands. Source: see popnew. Years covered: 1960-2011.
po15	Population 15 years and over. Source: calculated using p1564 and po65new. Years covered: 1960-2011.
immigration	International migrant stock as a percentage of the population; additional information available at World Bank database. Source: World Bank, <i>World Development Indicators</i> (database). Years covered: 1960-2010.
lifexp	Life expectancy at birth for total population, in years. Source: OECD, <i>Health Statistics</i> (database), doi: 10.1787/data-00350-en [accessed 18 Feb 2013]. Years covered: 1960-2011.
flifexp	Female life expectancy at birth, in years. Source: see lifexp. Years covered: 1960-2011.
mlifexp	Male life expectancy at birth, in years. Source: see lifexp. Years covered: 1960-2011.
infmort	Number of deaths among children aged 0-1 per thousand of live births. Source: see lifexp. Years covered: 1960-2011.

births Number of births, in thousands. Source: see lifexp. Years covered: 1960-2011. Number of deaths, in thousands. Source: see lifexp. Years covered: 1960-2011. deaths Total fertility rate, births per woman. Source: World dataBank, World tfr Development Indicators (WDI) (database), http://databank.worldbank.org/ [accessed 24 Apr 2013]. Years covered: 1960-2011. yearlost Potential years of life lost, all causes, ages 0-69, per 100 000 population. Source: see lifexp. Years covered: 1960-2010. lifeexpf65 Female life expectancy at age 65. Source: see lifexp. Years covered: 1960-2010. lifeexpm65 Male life expectancy at age 65. Source: see lifexp. Years covered: 1960-2010. deathall Deaths from all causes, per 100,000 people. Source: see lifexp. Years covered: 1960-2010. Deaths per 100,000 population caused by cerebrovascular diseases. Source: see cerevasc lifexp. Years covered: 1960-2010. Deaths caused by ischaemic heart disease, per 100,000 people. Source: see lifexp. ischaemic Years covered: 1960-2010. neoplasm Deaths caused by malignant neoplasms of the trachea, bronchus and lung, per 100,000 people. Source: see lifexp. Years covered: 1960-2010. goodhealth Percentage of the total population (all ages) reporting health greater than or equal to good. Source: see lifexp. Years covered: 1980-2010. Percentage of the population aged 25-44 reporting health greater than or equal to hstat2544 good. Source: see lifexp. Years covered: 1980-2010. lowbirthwt Number of live births weighing less than 2500 grams as a percentage of total number of live births. Source: see lifexp. Years covered: 1960-2010. workabsill Self-reported absence from work due to illness. Source: see lifexp. Missing: Austria, Belgium, Germany, Ireland, Japan, Luxembourg, Netherlands, New Zealand, Norway, Sweden, and the United Kingdom. Years covered: 1970-2011. Percentage of the population that is overweight or obese based on measured body oomeasure mass index. Source: see lifexp. Missing: Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and

Switzerland. Years covered: 1978-2011.

dailysmoke Percentage of the population aged 15 and over who are daily smokers. Source: see

lifexp. Years covered: 1978-2011.

beddays Acute care beddays per capita. An acute care bedday is counted when: a patient is

confined to a hospital bed, the patient stays overnight in the hospital bed, and the patient is in the hospital to receive curative care. Source: see lifexp. Years

covered: 1960-2010.

urban Population in urban agglomerations of more than 1 millions, percentage of total

population. Source: World dataBank, *World Development Indicators* (WDI) (database), http://databank.worldbank.org/ [accessed 24 Apr 2013]. Years

covered: 1960-2011.

5. MACROECONOMIC DATA: Penn World Table (PWT)

The PWT provides a comprehensive series of national accounts data that are designed to be internationally comparable. In the PWT's construction, PPP figures produced by the International Comparisons Program (ICP) are used to adjust national account figures for international price differences and convert the figures into a common currency unit. See Summers and Heston's "The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950-1998" (Quarterly Journal of Economics, 1991) and the ICP's website (icp.worldbank.org) for more information. PWT version 8.0 was constructed by research teams at the University of California, Davis and the University of Groningen (www.ggdc.net/pwt).

As noted on the first page of this codebook, the PWT is inconsistent with some other sources in the treatment of Germany prior to 1990. The PWT team advises: Consistent with the statistical advice of the OECD and others, all growth rates before 1989 are for West Germany and are applied to the unified Germany level in 1989. To get West Germany figures, simply scale down GDP, population, employment, etc. to the West German level using the 1989 ratio of West Germany to unified Germany for each of these variables.

The PWT team has also made several other recommendations and cautionary statements for users of its data (from pages 42-43 of the PWT 8.0 User Guide):

- 1. Use GDPe and GDPo series only as a measure of the relative level across countries. For comparing GDP growth, use the series of GDP at constant national prices from the National Accounts data, RGDPNA.
- 2. Use GDPe when interested in comparative well-being; use GDPo when interested in an economy's productive capacity.
- 3. Beware that observations in PWT that are directly based on PPP benchmark data or interpolations between PPP benchmarks are more reliable than observations based on extrapolations from benchmarks and can show differences in patterns such as the Penn effect.
- 4. Beware that revisions to National Accounts data can have a substantial impact on the level of GDP and on GDP growth rates and that such revisions are typically the dominant reason for changing data between PWT versions.

rgdpe	Expenditure-side real GDP at chained PPPs, in millions of 2005 international dollars. Source: Penn World Tabel 8.0. Years covered: 1960-2011.
rgdpo	Output-side real GDP at chained PPPs, in millions of 2005 international dollars. Source: see rgdpe. Years covered: 1960-2011.
rgdpecap	Real GDP per capita (based on rgdpe), in 2005 international dollars. Source: see rgdpe. Years covered: 1960-2011.
poppwt	Population, in thousands. Source: see rgdpe. Years covered: 1960-2011.
emppwt	Persons engaged in employment, in thousands. Source: see rgdpe. Years covered: 1960-2011.
avh	Average annual hours worked by a person engaged in employment. Source: see rgdpe. Years covered: 1960-2011.
hc	Index of human capital per person, based on years of schooling (Barro and Lee 2012) and returns to education (Psacharopoulos 1994). Source: see rgdpe. Years covered: 1960-2011.
ctfp	Total factor production (TFP) level at current PPPs (USA=1). Source: see rgdpe. Years covered: 1960-2011.
rgdpna	Real gross domestic product, in millions of 2005 international dollars at constant 2005 prices. Source: see rgdpe. Years covered: 1960-2011.
rkna	Captial stock, in 2005 international dollars at constant 2005 prices. Source: see rgdpe. Years covered: 1960-2011.
rtfpna	Total factor production (TFP) at constant prices (2005=1). Source: see rgdpe. Years covered: 1960-2011.
labsh	Labor compensation as a share of GDP at current prices. Source: see rgdpe. Years covered: 1960-2011.
csh_c	Household consumption as a share of GDP at current PPPs. Source: see rgdpe. Years covered: 1960-2011.
csh_i	Gross capital formation as a share of GDP at current PPPs. Source: see rgdpe. Years covered: 1960-2011.
csh_g	Government consumption as a share of GDP at current PPPs in 2005 international dollars. Source: see rgdpe. Years covered: 1960-2011.

csh_x	Merchandise exports as a share of GDP at current PPPs. Source: see rgdpe. Years covered: 1960-2011.
csh_m	Merchandise imports as a share of GDP at current PPPs. Source: see rgdpe. Years covered: 1960-2011.
csh_r	Residual trade and GDP statistical descrepencies as a share of GDP at current PPPs. Source: see rgdpe. Years covered: 1960-2011.
v_c	Household consumption, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
v_i	Investment, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
v_g	Government consumption, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
V_X	Merchandise exports, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
v_m	Merchandise imports, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
v_gdp	Gross domestic product, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
v_gfcf	Gross fixed capital formation, in millions of national currency units at current prices. Source: see rgdpe. Years covered: 1960-2011.
tradeopen	Trade openness, defined as the sum of exports (v_x) and imports (v_m) as a percentage of GDP (v_gdp), all at current prices. Source: see rgdpe. Years covered: 1960-2011.

6. MACROECONOMIC DATA: OTHERS

6.1 Macro-Economic Data: Other Sources

Outward portfolio investment flows (i.e portfolio investments abroad), in millions of US dollars at current prices. A portfolio investment consists of a passive investment in a financial security (e.g. equity, bond) that does not provide a substantial or lasting management interest in the security's issuer (i.e. a portfolio investor does not become involved in the daily operations of the enterprises issuing the security). Note: This variable is presented as positive rather than negative values, as is reported in the source data (reflecting the negative value for the balance of payments). The data for Belgium and Luxembourg are combined

for the years 1975-2001 and are reported for Belgium (i.e. Luxembourg is coded as missing for these years). Source: IMF, *International Financial Statistics* via IMF's eLibrary, http://elibrary-data.imf.org [accessed 26 Feb 2013]. Years covered: 1960-2008.

inwpi

Inward portfolio investment flows (i.e. portfolio investments in reporting economy), in millions of US dollars at current prices. See extpi for a definition of portfolio investments. Note: The data for Belgium and Luxembourg are combined for the years 1975-2001 and are reported for Belgium (i.e. Luxembourg is coded as missing for these years). Source: see extpi. Years covered: 1960-2008.

ofdi

Outward direct investment flows (i.e. direct investment abroad), in millions of US dollars at current prices. A direct investment consists of an active investment in a new or existing enterprise that entails substantial and lasting control over the management of the enterprise. Note: This variable is presented as positive rather than negative values, as is reported in the source data (reflecting the negative value for the balance of payments). The data for Belgium and Luxembourg are combined for the years 1975-2001 and are reported for Belgium (i.e. Luxembourg is coded as missing for these years). Source: IMF, *International Financial Statistics* via IMF's eLibrary, http://elibrary-data.imf.org [accessed 26 Feb 2013] Years covered: 1960-2008.

ifdi

Inward direct investment flows (i.e. direct investment in reporting economy), in millions of US dollars at current prices. Note: The data for Belgium and Luxembourg are combined for the years 1975-2001 and are reported for Belgium (i.e. Luxembourg is coded as missing for these years). Source: see ofdi. Years covered: 1960-2008.

cur100

Current account openness (imports, exports, invisibles), an index ranging from 0 (no openness) to 100 (complete opennes). Source: Quinn, Dennis P. and A. Maria Toyoda. 2008. "Does Capital Account Liberalization Lead to Economic Growth?" *Review of Financial Studies* 21(3): 1403-1449, http://explore.georgetown.edu/publications/index.cfm?Action=View&DocumentID=39608. Missing: Luxembourg. Years covered: 1960-2004. Missing: Luxembourg. Years covered: 1960-2004.

cap100

Capital account openness (inward and outward flows), an index ranging from 0 (no openness) to 100 (complete opennes). Source: see cap100.

kaopen

Capital account openness, an index. Source: Chinn, Menzie D. and Hiro Ito. 2008. "A New Measure of Financial Openness." *Journal of Comparative Policy Analysis* 10(3): 309-322, http://web.pdx.edu/~ito/Chinn-Ito_website.htm. Missing: Luxembourg. Years covered: 1970-2010.

ckaopen

Capital account openness, an index This variable is a modification of kaopen, with a key difference being that ckaopen only considers policies from the current year instead of a five-year moving average. Source. Karcher, Sebastian and David A. Steinberg. 2013. "Assessing the Causes of Capital Account Liberalization: How Measurement Matters." *International Studies Quarterly* 57(1): 128-137. Missing: Luxembourg. Years covered: 1966-2010.

Although the two series listed below (gdpncu and gdpnc) are measures of the same concept (GDP), their values diverge significantly for many countries and years. In particular, the IMF series is often systematically lower than the OECD series, particularly for Greece, Germany, Ireland, and Portugal and for earlier years. These differences will be propagated when these series are used as devisors for expenditure and revenue figures (i.e. the IMF-based percentage figures will generally be higher than their OECD-based counterparts). Note that a third series for nominal GDP can be calculated using the Penn World Table data by multiplying ppp and tcgdp.

Gross domestic product, in millions of national currency units at current prices.
Source: IMF, International Financial Statistics via IMF's eLibrary,

http://elibrary-data.imf.org [accessed 26 Feb 2013]. Years covered: 1960-2011.

gdpnc Gross domestic product, in millions of national currency units at current prices. Source: OECD, *Health Statistics* (database, economic reference series), doi:

10.1787/data-00350-en [accessed 26 Feb 2013] Years covered: 1960-2011.

gdpncn Gross domestic product, in millions of national currency units at 2005 prices.

Source: see gdpnc. Years covered: 1960-2011.

gdppp Gross domestic product, in millions of US dollars at purchasing power parity.

Source: see gdpnc. Years covered: 1960-2011.

gdpusd Gross domestic product, in millions of US dollars at current exchange rates and

prices. Source: see gdpnc. Years covered: 1960-2011.

gdppc Gross domestic product per capita, in national currency units at current prices.

Source: see gdpnc. Years covered: 1960-2011.

xcusd Exchange rate, in national currency units per US dollar. Source: OECD, National

Accounts Statistics (database), doi: 10.1787/na-data-en [accessed 26 Feb 2013].

Years covered: 1960-2011.

ppp Purchasing power parity for GDP, national currency units per US dollar. Source:

see xcusd. Years covered: 1960-2011.

cpi Inflation rate, as a percentage change in consumer prices from the prior year to

the current year. Source: OECD, *Main Economic Indicators* (database), doi:

10.1787/mei-data-en [accessed 17 Apr 2013]. Years covered: 1960-2011.

cpi2 Consumer price index, with 2005 as the base year (2005=100). Source: see cpi.

Years covered: 1960-2011.

grossk Gross fixed capital formation, in millions of national currency units at current

prices. Sources: IMF, *International Financial Statistics* via IMF's eLibrary, http://elibrary-data.imf.org [accessed 18 Apr 2013] and OECD, *National Accounts Statistics* (database), doi: 10.1787/na-data-en [accessed 18 Apr 2013].

Years covered: 1960-2011.

export Exports of goods and services, valued in millions of national currency units at

current prices. Source: IMF, *International Financial Statistics* via IMF's eLibrary, http://elibrary-data.imf.org [accessed 26 Feb 2013]. Years covered: 1960-2011.

import Imports of goods and services, valued in millions of national currency units at

current prices. Source: see export. Years covered: 1960-2011.

govexp Total general government expenditure, as a percentage of GDP at current prices. Sources: OECD, *National Accounts Statistics* (database), doi: 10.1787/na-data-en

[accessed 13 Apr 2013]; OECD, *Health Data* (1995, 1998, and 2003). Years

covered: 1960-2011.

govrev Total general government revenue, as a percentage of GDP at current prices.

Source: see govexp. Years covered: 1960-2011.

govdef Net general government lending or borrowing, in millions of national currency

units at current prices. A positive value for this measure represents a surplus while a negative value indicates a deficit. Source: OECD, *National Accounts Statistics* (database), doi: 10.1787/na-data-en [accessed 9 Jun 2013]. Years covered: 1960-

2011.

govcons General government final consumption expenditure, in millions of national currency units at current prices. Source: IMF, *International Financial Statistics*

via IMF's eLibrary, http://elibrary-data.imf.org [accessed 27 Feb 2013]. Years

covered: 1960-2011.

cgovrev Central government revenue, in millions of national currency units at current

prices. Sources: IMF, *International Financial Statistics* and *Government Finance Statistics* via IMF's eLibrary, http://elibrary-data.imf.org [accessed 27 Feb 2013] and earlier releases from 1979, 1989, and 2003; OECD, *National Accounts Statistics* (database), doi: 10.1787/na-data-en [accessed 13 Apr 2013]. Years

covered: 1960-2011.

cgovexp Central government expenditure, in millions of national currency units at current

prices. Sources: see cgovrev. Years covered: 1960-2011.

mil

Military expenditure as a percentage of GDP. Sources: Stockholm International Peace Research Institute (SIPRI), *SIPRI Yearbook* (1975, 1982, 1985, 1988, 1992, 1995, 1999, and 2003) New York: Oxford University Press; SIPRI, *Military Expenditure Database*, http://www.sipri.org/research/armaments/milex/ [accessed 29 Jun 2013]. Years covered: 1960-2011.

debt

General government gross financial liabilities as a percentage of GDP at current prices. Source: OECD, *National Accounts Statistics* (database), doi: 10.1787/nadata-en [accessed 17 Apr 2013]. Years covered: 1970-2011.

6.2 Central Bank Independence

bankales

Central bank independence, an index ranging from 1 (least independence) to 4 (most independence). This index captures whether the central bank has final authority over monetary policy, whether government officials sit on the governing board of the bank, and whether more than half of the members are appointed by the government. Sources: Alesina, Alberto. 1988. "Macroeconomics and Politics." *NBER Macroeconomics Annual*. Cambridge, MA: Cambridge University Press and Armingeon, Klaus, Philipp Leimgruber, Michelle Beyeler and Sarah Menegale. 2005. *Comparative Political Data Set 1960-2003*, Institute of Political Science, University of Berne. Missing: Austria, Greece, Ireland, Luxembourg, and Portugal. Years covered: 1960-1996.

bankeff

Central bank independence, an index ranging from 1 (least independence) to 5 (most independence). The components of this index are: the location of final responsibility for monetary policy, the absence or presence of government officials on the board of central bank, and the percentage of board appointees made by the government. Sources: Eijffinger, Sylvester C. W. and Jakob De Haan. 1996. "The Political Economy of Central-Bank Independence." *Special Papers in International Economies* 19; Armingeon, Klaus, Philipp Leimgruber, Michelle Beyeler and Sarah Menegale. 2005. *Comparative Political Data Set* 1960-2003, Institute of Political Science, University of Berne. Missing: Greece, Ireland, Luxembourg, and Portugal. Years covered: 1960-1996.

bankgr 1

Central bank political independence, an index ranging from 0 (least independence) to 8 (most independence). This index focuses on the appointment procedures for board members, the length of members' terms in office, and the existence of statutory requirements to pursue monetary stability. Sources: Grilli, Vittorio, Donato Masciandro, and Guido Tabellini. 1991. "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries." *Economic Policy* 13: 341-392; Armingeon et al. 2005, see bankales. Missing: Finland, Greece, Luembourg, Norway, Portugal, and Sweden. Years covered: 1960-1996.

bankgr_2

Central bank political and economic independence, an index ranging from 0 (least independence) to 15 (most independence). In addition to tapping political independence (see bankgr_1), this index captures the extent to which a central

bank is free from government influence in setting monetary policy. Sources: see bankgr_1. Missing: Finland, Greece, Luembourg, Norway, Portugal, and Sweden. Years covered: 1960-1996.

bankcuk

Central bank legal independence, an unweighted index ranging from 0 (least independence) to 1 (most independence). This index is the aggregate of sixteen legal characteristics of central bank charters grouped into four clusters: the appointment, dismissal, and legal term of office of the governor of the central bank; the institutional location of the final authority for monetary policy and the procedures for the resolution of conflicts between the government and the central bank; the importance of price stability in comparison to other objectives; and the stringency and universality of limitations on the ability of the government to borrow from the central bank. Sources: Cukierman, Alex. 1994. *Central Bank Strategy, Credibility, and Independence*. Cambridge, MA: MIT Press; Armingeon et al. 2005, see bankales. Missing: Greece and Portugal. Years covered: 1960-1996.

bankfrei

Central bank independence, an index ranging from 1 (most independence) to 3 (least independence). This index summarizes the indexes bankales, bankeff, bankgr_2 and bankcuk. Figures for some countries have been changed to reflect law changes: Austria (1985f), New Zealand (1990f) Canada (1991f), France, Finland, United Kingdom, Sweden and Belgium (1993f). Freitag, Markus. 1999. "Politik und Währung. Ein internationaler Vergleich." Ph.D Dissertation, University of Bern; see bankales. Missing: Greece, Luxembourg, and Portugal. Years covered: 1960-1998.

6.3 Research And Development Spending

Expenditure on research and development by all sources, as a percentage of GDP. Source: OECD, *Science, Technology and R&D Statistics* (database), doi: 10.1787/strd-data-en [accessed 9 Apr 2013]. Years covered: 1981-2011.

rdbus Expenditure on research and development by businesses, as a percentage of GDP. Source: see rd. Years covered: 1981-2011.

rdgov Expenditure on research and development by government (all levels), as a percentage of GDP. Source: see rd. Years covered: 1981-2011.

rdhed Expenditure on research and development by institutions of higher education, as a percentage of GDP. Source: see rd. Missing: Denmark and Germany. Years covered: 1981-2011.

rdpnp Expenditure on research and development by private non-profit organizations, as a percentage of GDP. Source: see rd. Years covered: 1981-2011.

rdperbus Expenditure on research and development performed by businesses, as a

percentage of GDP. Source: see rd. Years covered: 1981-2011.

rdpergov Expenditure on research and development performed by governments (all levels),

as a percentage of GDP. Source: see rd. Years covered: 1981-2011.

rdperhed Expenditure on research and development performed by institutions of higher

education, as a percentage of GDP. Source: see rd. Years covered: 1981-2011.

rdperpnp Expenditure on research and development performed by private non-profit

organizations, as a percentage of GDP. Source: see rd. Missing: Italy and

Luxembourg. Years covered: 1981-2011.

6.4 Product Market Regulation

The following variables are the OECD indicators of regulation in energy, transport, and communications (ETCR). ETCR indicators summarize regulatory provisions in seven non-manufacturing sectors: telecoms, electricity, gas, post, rail, air passenger transport, and road freight. ETCR indicators focus on regulations that affect competitive pressures in areas where competition is economically viable and on potential costs that these regulations entail. Indicators may include information regarding barriers to entry, public ownership, market structure, vertical integration, and price controls (varies by sector). Each indicator is measured on a scale from 0 to 6, with 0 indicating the least regulation and 6 indicating the most regulation. For more information see Conway, P. and G. Nicoletti. (2006). "Product market regulation in non-manufacturing sector sin OECD countries: measurements and highlights." *OCED Economics Department Working Paper No. 530*. http://www.oecd.org/eco/pmr. Years covered: 1975-2007.

airlines Airline industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: OECD Product Market Regulation Database (2012). Years

covered: 1975-2007.

telecom Telecom industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: see airlines. Years covered: 1975-2007.

electric Electricity industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: see airlines Years covered: 1975-2007.

gas Gas industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: see airlines. Years covered: 1975-2007.

post Postal industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: see airlines. Years covered: 1975-2007.

rail Rail industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: see airlines. Years covered: 1975-2007.

road Road industry regulation, on a scale from 0 (least regulation) to 6 (most

regulation). Source: see airlines. Years covered: 1975-2007.

etcragg Total regulation in energy, transport, and communications (ECTR), on a scale

from 0 (least regulation) to 6 (most regulation). This aggregate indicator is the simple mean of the seven sectoral indicators (i.e. airlines, telecom, electricity, gas,

post, rail, and road) aggregated across all types of regulations. Source: see

airlines. Years covered: 1975-2007.

eternopub Total regulation in energy, transport, and communications (ECTR) excluding

ownership regulation, on a scale from 0 (least regulation) to 6 (most regulation). This aggregate indicator is the simple mean of the seven sectoral indicators (i.e. airlines, telecom, electricity, gas, post, rail, and road) aggregated across all types of regulations except those concerning ownership. Source: see airlines. Years

covered: 1975-2007.

etcrpub Total ownership regulation (i.e. requirements of public ownership) in energy,

transport, and communications (ECTR), on a scale from 0 (least regulation) to 6 (most regulation). This aggregate indicator is the simple mean of the seven sectoral indicators (i.e. airlines, telecom, electricity, gas, post, rail, and road) for

public ownership. Source: see airlines. Years covered: 1975-2007.

etcrenbar Total entry regulation in energy, transport, and communications (ECTR), on a

scale from 0 (least regulation) to 6 (most regulation). This aggregate indicator is the simple mean of the seven sectoral indicators (i.e. airlines, telecom, electricity, gas, post, rail, and road) for barriers to entry. Source: see airlines. Years covered:

1975-2007.

7. POLITICAL VARIABLES

vturn The total number of votes cast (valid or invalid) in the most recent election

divided by the number of people registered for the election, expressed as a percentage. Sources: Mackie and Rose (1991), annual election reports and issues of the *Political Data Yearbook* published by the *European Journal of Political*

Research since 1986, IDEA Voter Turnout Database. Years covered: 1960-2011.

For detailed information about the construction of the following variables (leftvot to rtctcum), refer to Appendix B.

leftvot Share of votes cast for parties classified as left in the most recent election.

Sources: Mackie and Rose (1991), annual election reports and issues of the *Political Data Yearbook* published by the *European Journal of Political Research* since 1986, IDEA *Voter Turnout Database* – see Appendix B for further details.

Years covered: 1960-2011.

leftseat Share of seats in parliament won by parties classified as left in the most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. leftcab Share of seats in parliament held by leftist parties in the most recent government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011. leftmaj Share of seats in parliament won by leftist parties in the most recent government as a percentage of seats needed for a parliamentary majority (½ parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011. leftcum Cumulative leftcab score from 1946 to the year of the observation. For example, ltcabcum for Australia 1948 = leftcab 1946 + leftcab 1947 + leftcab 1948. Sources: leftvot and Appendix B. Years covered: 1960-2011. Share of votes cast for parties classified as (secular) center in the most recent cnvot election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament won by parties classified as (secular) center in the cnseat most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. cncab Share of seats in parliament held by (secular) center parties in the most recent government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament won by (secular) center parties in the most recent cnmaj government as a percentage of seats needed for a parliamentary majority (½ parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011. Cumulative cncab score from 1946 to the year of the observation. Sources: leftvot cncum and Appendix B. Years covered: 1960-2011. Share of votes cast for parties classified as center Christian in the most recent cncrvot election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament won by parties classified as center Christian in the cncrseat most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. cncrcab Share of seats in parliament held by center, Christian parties in the most recent government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011.

Share of seats in parliament won by center, Christian parties in the most recent cncrmaj government as a percentage of seats needed for a parliamentary majority (1/2 parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011. Cumulative energab score from 1946 to the year of the observation. Sources: cncrcum leftvot and Appendix B. Years covered: 1960-2011. Share of votes cast for parties classified as center Catholic in the most recent cnctvot election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament won by parties classified as center Catholic in the cnctseat most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. cnctcab Share of seats in parliament held by center, Catholic parties in the most recent government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011. cnctmaj Share of seats in parliament won by center, Catholic parties in the most recent government as a percentage of seats needed for a parliamentary majority (1/2 parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011. Cumulative cnctcab score from 1946 to the year of the observation. Sources: cnctcum leftvot and Appendix B. Years covered: 1960-2011. Share of votes cast for parties classified as (secular) right in the most recent rtvot election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament won by parties classified as (secular) right in the most rtseat recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament held by (secular) right parties in the most recent rtcab government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011. Share of seats in parliament won by (secular) right parties in the most recent rtmaj government as a percentage of seats needed for a parliamentary majority (½ parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011. Cumulative rtcab score from 1946 to the year of the observation. Sources: leftvot rtcum and Appendix B. Years covered: 1960-2011.

rtcrvot Share of votes cast for parties classified as right Christian in the most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011.

rtcrseat Share of seats in parliament won by parties classified as right Christian in the most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011.

rtcrcab Share of seats in parliament held by right, Christian parties in the most recent government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011.

Share of seats in parliament won by right, Christian parties in the most recent government as a percentage of seats needed for a parliamentary majority (½ parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011.

rtcrcum Cumulative rtcrcab score from 1946 to the year of the observation. Sources: leftvot and Appendix B. Years covered: 1960-2011.

rtctvot Share of votes cast for parties classified as right Catholic in the most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011.

rtctseat Share of seats in parliament won by parties classified as right Catholic in the most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011.

rtctcab Share of seats in parliament held by right, Catholic parties in the most recent government as a percentage of all seats held by the government. Sources: leftvot and Appendix B. Years covered: 1960-2011.

share of seats in parliament won by right, Catholic parties in the most recent government as a percentage of seats needed for a parliamentary majority (½ parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011.

rtctcum Cumulative rtctcab score from 1946 to the year of the observation. Sources: leftvot and Appendix B. Years covered: 1960-2011.

The following seven variables have been used to develop measures of "constitutional structure veto points". For examples of such measures, see Huber, Ragin, and Stephens (1993) and Huber and Stephens (2001).

fed Degree of federalism in political system: 0 = no federalism, 1 = weak federalism, 2 = strong federalism. Sources: Lijphart (1984, 1999), see Huber, Ragin, and Stephens (1993). Years covered: 1960-2011.

pres Presence of presidentialism in political system: 0 = no, parliamentary system, 1 = no

yes, presidential or collegiate executive. Sources: Lijphart (1984, 1999), see

Huber, Ragin, and Stephens (1993). Years covered: 1960-2011.

singmemd Presence. Sources: Lijphart (1984, 1999), see Huber, Ragin, and Stephens (1993).

Years covered: 1960-2011.

strbic Degree of bicameralism in political system: 0 = no bicameralism (only one

chamber), 1 = medium-strength or weak bicameralism (two chambers, one substantially stronger than the other), 2 = strong bicameralism (two chambers with relatively equal power). Sources: Liphart (1984, 1999), see Huber, Ragin,

and Stephens (1993). Years covered: 1960-2011.

referen Degree to which referenda are used in national policymaking: 0 = never or

infrequently, 1 = frequently. Sources: Lijphart (1984, 1999), see Huber, Ragin,

and Stephens (1993). Years covered: 1960-2011.

judrev Presence of judicial review in political system: 0 = no, judicial review absent, 1 = no

yes, judicial review present. Sources: Lijphart (1984, 1999), see Huber, Ragin,

and Stephens (1993). Years covered: 1960-2011.

authleg Degree of authoritarianism in political system in 1900: 0 = no authoritarianism,

full democracy (cabinet responsibility vested in an elected parliament or executive, full male suffrage), 1 = partial authoritarianism, limited democracy (cabinet responsibility vested in an elected parliament or executive, limited male suffrage), 3 = full authoritarianism, no democracy (cabinet responsibility vested in an unelected body or individual, suffrage is non-existent or insignificant).

Source: John D. Stephens, see Ch. 4 in Rueschemeyer, Stephens, Stephens

(1992). Years covered: 1960-2011.

fempar Share of seats in parliament held by women after the most recent election. For

countries with bicameral systems, figures are for the lower chamber only. Source:

Inter-Parliamentary Union (1995, 1997, 2011). Years covered: 1960-2011.

femparca Cumulative average in fempar from 1946 to the year of observation. Source: see

fempar. Years covered: 1960-2011.

Appendix A:

Derivation of Knowledge-Intensive Service (KIS) Variables

All of the variables have been derived using codes and definitions associated with NACE (classifications of economic activities in the European Community) Rev. 1.1.

There are two different classification approaches used by Eurostat to aggregate service sectors by knowledge intensity—denoted here as KIS-HT and KIA. Although both approaches use the level of tertiary educational attainment of sectoral workers as their main criterion for classifying sectors, there are notable differences in their classification decisions. Some of the sectors considered to be knowledge intensive in the KIS-HT approach are not regarded as knowledge intensive in the KIA approach. These discrepancies are due to the use of a looser definition of knowledge intensity in the KIS-HT approach (education levels are the main but not sole factors considered in categorizing service sectors) and the use of different thresholds for differentiating between knowledge-intensive and less knowledge-intensive sectors in the two approaches.

Two distinct methods are also used in defining the membership of each economic sector. The first extends membership to all persons engaged—both employed and self-employed—in a particular sector while the second limits membership only to those employed in a given sector. Separate sets of aggregate figures have been generated using data associated with each of these methods.

Sources:

EU KLEMS Growth and Productivity Accounts, March 2008 and November 2009 releases, http://www.euklems.net/ [accessed 4 Apr 2012].

The 2008 release of EU KLEMS, which covers 72 industries from 1970 to 2005, is the main source for deriving the aggregate indicators for high-tech manufacturing, knowledge-intensive services, and knowledge-intensive activities. Data from the 2009 release, which covers 32 industries from 1970 to 2007, have been used to extend the range of these indicators to 2007. As part of this process, some of disaggregated sector figures have been imputed using compositional ratios from 2005. Given that some of the data for 2006 and 2007 are imputed, the indicators derived from these data should be considered less certain.

To improve coverage of several variables in earlier years, some of the components used in calculating these variables have been imputed. Using a similar approach to the one described above, missing data for categories 91 and 92 have been estimated by multiplying the

figures for the relevant top-level categories (i.e. O) by compositional ratios for nearby years.

Composition of KIS Variables					
Sectors			Variables		
Description	Code	kis1(e)	kisht(e)	kis2(e)	
Water transport	61	X			
Air transport	62	X		X	
Post and telecommunications	64	X	X		
Financial intermediation, except insurance and pension funding	65				
Insurance and pension funding, except compulsory social security	66	X (J)		X (J)	X (J)
Activities auxiliary to financial intermediation	67				
Real estate activities	70				
Renting of machinery, equipment, and household goods	71				
Computer and related activities	72	X (K)		X	
Research and development	73	X	X	X	
Other business activities	74			X	
Public administration and defense; compulsory social security	75 (L)			X	
Education	80 (M)	X		X	
Health and social work	85 (N)	X		X	
Activities of membership organizations n.e.c.	91			X*	
Recreational, cultural and sporting activities	92	X*		X*	

^{*} Imputed from top-level indicator (category O). Note that category 99 (Extra-territorial organizations and bodies) was entirely excluded due to extensive missingness.

Appendix B:

Derivation of Political Party Variables

The data for vote and seat shares have been collected from Mackie and Rose (1991), Mackie's annual election reports that appeared in *EJPR*, and the annual releases of the *Political Data Yearbook* published by *EJPR* since 1991. Known typographical and mathematical errors appearing in these sources have been corrected.

Data for a political party are only recorded for a particular election if it meets one of the following two criteria for inclusion: it receives at least 2.0% of the vote share in the election and at least 2.0% of the seat share in the election OR it receives at least 2.0% of the vote share in the election and at least 2.0% of the vote share in another election. If the party does not meet either of these criteria in any election, then it is completely excluded from the data set. Parties satisfying these criteria are listed in the tables below, with the years listed next to each party indicating the elections for which they satisfy one of these criteria.

Parties that meet the above criteria are also categorized as either left, center, or right, with stances on social policy being a key dimension of differentiation. Moreover, parties that are deemed centrist or right-wing may be further classified as Christian or Catholic depending on their sources of support. If a party combines both Catholic and Protestant forces, such as the German Christian Democrats (CDU/CSU), it is categorized as Christian.

Although most of the party classifications are time-invariant, some do change over time to reflect major political realignments. For example, the categorization for the Danish Liberal Party (Venstre) shifts from "Center" to "Right" around 1979 because the party adopted a platform that moved it firmly to the right.

The vote and seat shares reported for each country have been weighted to reflect electoral and government transitions. Therefore, the vote shares are weighted for years in which elections occurred and the seat shares are weighted for years in which new governments formed. The election and investiture dates used to calculate these weights are rounded to the nearest numerical month (from 0 to 12). In instances where there are two or more dates for an election, the first date is used. The data for the election and investiture dates come from the sources listed above and Woldendorp, Keman, and Budge (2000).

In the tables below, parties are listed using their most recent English names and most common abbreviations. Prior party names and abbreviations are provided in brackets for reference.

Australia

Left	The Greens (Greens) Labor Party (ALP)	1996 – 1943 –
Center	Australian Democrats (AD) Democratic Labor Party (DLP) [Anti-Communist Australian Labor Party until 1957, electoral alliance with Queensland Labor Party in 1958 and 1961]	1977 – 2001 1955 – 1972

Right	Australia Party (AP)	1972 - 1974
	Family First Party (FFP)	2004 –
	Liberal Party (LIB)	1943 –
	National Party (NPA) [Country Party until 1975, National Country Party from 1975 to 1982]	1943 –
	One Nation (ON)	1998 - 2001
	United Australia Party (UAP)	1943
Austria		
Left	Communist Party (KPÖ)	1945 – 1962
	The Greens – The Green Alternative (Greens) [Green	1986 –
	Alternative until 1993] Social Democratic Party (SPÖ)	1945 –
Right	Alliance for the Future of Austria (BZÖ)	2006 –
	Freedom Party (FPÖ)	1945 –
	Liberal Forum (LIF)	1994 – 1999, 2008
Right, Catholic	People's Party (ÖVP)	1945 –
Belgium		
Left	Communist Party (KPB/PCB)	1946 – 1954,
		1961 – 1981
	Ecolo (Francophone) [coded "Left" for the period from 1991 onward]	1981 –
	Francophone Socialist Party (PS)	1978 –
	Green! (Flemish) [Agalev until 2003, coded "Left" for the period from 1991 onward]	1981 –
	Socialist Party (BSP/PSB)	1946 – 1977
	Social Progressive Alternative (SP.a) [Flemish Socialist Party (SP) until 2001, electoral alliance with SPIRIT from 2002 to 2008]	
	Walloon Rally (RW)	1968 – 1978
Center	Ecolo (Francophone) [coded "Center" for the period before 1991]	1981 –
	Francophone Democratic Front (FDF) [includes electoral alliance with Pluralistic and Democratic Liberal Party (PLDP) in 1974]	1968 – 1981
	Green! (Flemish) [Agalev until 2003, coded "Center" for the period form 1991 onward]	1981 –
	Liberal/Socialist cartel (LSC)	1954 – 1958
Center, Catholic	Catholic Party (CVP/PSC)	1946 – 1965

	Christian Democratic and Flemish (CD&V) [Christian People's Party (CVP) until 2001, includes electoral alliance with N-VA in 2007]	1968 –
	Humanist Democratic Center (CDH) (Francophone) [Christian Social Party (PSC) until 2002]	1968 –
Right	De Decker's List (LDD) (Flemish) Flemish Interest (VB) (Flemish) [Flemish Block (VB) until 2004]	2007 1991 –
	National Front (FN) (Francophone) New Flemish Alliance (N-VA) [People's Union (VU) until 2001]	1995, 2003 – 1949, 1954 – 2003
	Open Flemish Liberals and Democrats (VLD) [Flemish Party for Liberty and Progress (PVV) until 1992, Flemish Liberals and Democrats (VLD) from 1992 to 2007]	1971 –
	Party for Liberty and Progress (PVV/PLP) [Liberal Party (LP/PL) until 1961]	1946 – 1968
	Reform Movement (MR) (Francophone) [PLP until 1976, Party for Reforms and Freedom in Wallonia from 1976 to 1979 (PRLW), Liberal Reform Party (PRL) from 1979 to 2002, includes Brussels Liberal Party (PLB), electoral alliance with FDF since 1995 and Movement of Citizens for Change (MCC) since 1999]	1971 –
Canada		
Left	Bloc Québécois (BQ) Green Party (GPC) New Democratic Party (NDP) [Cooperative Commonwealth Federation (CCF) until 1961]	1993 – 2004 – 1945 –
Center	Liberal Party (LIB)	1945 –
Right	Conservative Party (CP) [Progressive Conservative Party (PC) until 2003]	1945 –
	Canadian Alliance (CA) [Reform Party until 2000] Ralliement des Créditistes (RC) Social Credit Party (SC)	1988 – 2000 1965 – 1968 1945 – 1965, 1972 – 1979
Denmark		
Left	Common Course (FK) Communist Party (DKP)	1987 1945 – 1957, 1973 – 1977

	Left Socialists (VS) Social Democrats (SD) Socialist People's Party (SF) Unity List [Red-Green Alliance] (EL)	1975 – 1984 1945 – 1960 – 1994 –
Center	Center Democrats (CD) Justice Party (DR)	1973 – 1998 1947 – 1960, 1973, 1977 – 1979
	Liberal Alliance (L) [New Alliance (NA) until 2008] Liberal Center (LC) Liberal Party [Venstre] (V) [coded "Center" for the period before 1979] Radical Liberal Party [Social Liberal Party] (RV)	2007 – 1966 1945 –
Center, Christian	• • • • • • • • • • • • • • • • • • • •	1971 – 1990, 1998 – 2001
Right	Conservative People's Party (KF) Danish People's Party (DF) Independents' Party (U) Liberal Party [Venstre] (V) [coded "Right" for the period from 1979 onward] Progress Party (FrP)	1945 – 1998 – 1953 – 1964 1945 – 1973 – 1998
Right, Christian	Danish Union (DS)	1945
Finland		
Left	Democratic Alternative (DEVA) Finnish People's Democratic Union (SKDL) Green League (VIHR) Left-Wing Alliance (VAS) Social Democratic League of Workers and Smallholders (TPSL) Social Democratic Party (SDP)	1987 1945 – 1987 1987 – 1991 – 1962 – 1966
Center	Center Party (KESK) [Agrarian League (ML) until 1965, includes electoral alliance with LKP in 1983] Liberal People's Party (LKP) [National Progressive Party (ED) until 1951, Finnish People's Party (KP) from 1951 to 1965]	1945 – 1945 – 1979
	Swedish People's Party (SFP/RKP) True Finns (PS) [Rural Party (SMP) until 1995]	1945 – 1962, 1970 – 1991, 2007
Right	National Coalition (KOK)	1945 –
Right, Christian	Christian Democrats (KD) [Christian League (SKL) until 2001]	1972 –

France

Left	Communist Party (PCF)	1945 –
	Far Left (EXG)	1997 –
	The Greens (LV) [includes ecologist movement that contested elections before the party's formal creation in 1984]	1978, 1993 –
	Other Ecologists (AE)	1993 – 1997
	Other Left (DVG)	1997, 2007
	Socialist Party (PS) [includes electoral alliance with RSP from 1967 to 1968, includes electoral alliance with Left Radicals (MRG until 1996, PRS from 1996 to 1998, PRG from 1998 onward) since 1972]	1945 –
	Unified Socialist Party (PSU)	1962 – 1973
Center	Center Democracy and Progress (CDP)	1973
	Democratic Center (CD)	1967 – 1968
	Democratic Movement (MoDem) [Union for French Democracy (UDF) until 2007, coded "Center" for the period from 2002 onward]	1978 –
	Radical Socialist Party (RSP) [includes electoral alliance with Democratic and Socialist Union of the Resistance (UDSR) from 1946, includes Rally of the Republican Lefts (RGR) from 1946 to 1956]	1945 – 1962
	Reformers' Movement (MR)	1973
Center, Christian	Popular Republican Movement (MRP)	1945 – 1962
Right	Conservatives/Moderates (DVD)	1945 – 1967, 1973, 1981, 1988 –
	National Front (FN)	1986 –
	New Center (NC)	2007 –
	Republican Party (PR) [Independent Republicans (FNRI) until 1977]	1962 – 1973
	Democratic Movement (MoDem) [Union for French Democracy (UDF) until 2007, coded "Right" for the period before 2002]	1978 –
	Union for a Popular Movement (UMP) [various Gaullist parties—starting with Gaullist Union (UG) in Nov. 1946—until 1976, Rally for the Republic (RPR) from 1976 until 2002, briefly called Union for the Presidential Majority in 2002]	1951 –
	Union for the Defense of Traders and Artisans [Poujadists] (UDCA)	1956

Note: The data for years prior to 1993 cover Metropolitan France only, meaning that data for French departments outside Europe proper are excluded. From 1993 onward, however, all departments are included in the data.

Germany

Left	Alliance 90/The Greens (Greens) [The Greens until 1993]	1983 –
	Communist Party (KPD)	1949 – 1953
	Left Party (Left) [Party of Democratic Socialism (PDS) until 2005, Left Party/PDS from 2005 to 2007]	1990 –
	Social Democrats (SPD)	1949 –
Center	All-German Bloc/League of Expellees and Deprived of Rights (GB/BHE)	1953 – 1957
	Free Democrats (FDP) [coded "Center" for the period before 2005]	1949 –
Right	Economic Reconstruction League (WAV)	1949
	Free Democrats (FDP) [coded "Right" for the period from 2005 onward]	1949 –
	German Party (DP)	1949 – 1957
	National Democratic Party (NDP)	1965 – 1969
Right, Catholic	Bavarian Party (BP)	1949
	Center Party (DZP)	1949
Right, Christian	Christian Democratic Union/Christian Social Union (CDU/CSU)	1949 –

Note: The data for Germany are technically for the Federal Republic of Germany (FRG). Therefore, for years prior to 1990, the data are limited to West Germany. For 1990 onward, the data are for a unified Germany.

Greece

Alliance of Progressive and Left-Wing Forces (APLF) [electoral alliance between KKE-es, EDA, and others]	1977
Coalition of the Radical Left (SYRIZA) [coalition of the Left and Progress (SYN) before formation of broader electoral alliance in 2004]	1989 –
Communist Party (KKE)	1974 – 1985, 1993 –
Communist Party, Interior (KKE-es)	1974 - 1977
Democratic Party of Working People (DKEL)	1956 – 1958
Democratic Social Movement (DIKKI)	1996 - 2000
Ecologist Greens (OP)	2009 –
Pan-Hellenic Socialist Movement (PASOK)	1974 –
United Democratic Left (EDA) [Democratic Front (DP) until 1951, includes electoral alliance, Pandemocratic Democratic Front (PAME), with KAE in 1961]	1950 – 1977
	 [electoral alliance between KKE-es, EDA, and others] Coalition of the Radical Left (SYRIZA) [coalition of the Left and Progress (SYN) before formation of broader electoral alliance in 2004] Communist Party (KKE) Communist Party, Interior (KKE-es) Democratic Party of Working People (DKEL) Democratic Social Movement (DIKKI) Ecologist Greens (OP) Pan-Hellenic Socialist Movement (PASOK) United Democratic Left (EDA) [Democratic Front (DP) until 1951, includes electoral alliance, Pandemocratic Democratic Front (PAME), with

	United Left (UL) [electoral alliance of EDA, KKE, KKE-es]	1974
Center	Democratic Union (DE) [electoral alliance between DKEL, EDA, EPEK, KAE, LF, PDE, and others]	1956
	Farmers and Workers' Party (KAE) [Farmers' and Workers' Rally (SAE) until 1956]	1950, 1956 – 1958
	Georgios Papandreou Party (KGP) [Democratic Socialist Party (DSK) until 1950]	1946 – 1951
	Liberal Democratic Union (PDE)	1956
	Liberal Party (LF)	1946 – 1958
	National Party (EKE)	1946 – 1950
	National Political Union (EPE) [electoral alliance between EEK, KGP, KVF, and others]	1946
	National Progressive Center Union (EPEK)	1950 – 1958
	National Reconstruction Front (MEA) [National Unity Party (EEK) until 1950]	1946 – 1950
	Progressive Agrarian Democratic Union (PADE) [electoral alliance between DKEL, EPEK, KAE, and KP]	1958
	Union of the Democratic Center (EDIK) [Center Union (EK) until 1967, Center Union – New Forces (EK-ND) from 1974 to 1976, includes electoral alliance with KP in 1961]	1961 – 1977
	Union of Parties (EK) [electoral alliance between EPEK, LF, and Socialist Party—Union of Popular Democracy (SK-ELD)]	1952
	Venizelist Liberal Party (KVF)	1946
Right	Greek Rally (ES)	1951 – 1952
	National Liberal Party (EFK)	1946
	National Radical Union (ERE) [includes electoral alliance with KP in 1964]	1956 – 1964
	Nationalist Party (KE) [includes electoral alliance, Independent Political Front (PAP), with Greek Renaissance Party (KEA) in 1950]	1946 – 1950
	New Democracy (ND)	1974 –
	People's Party (LK)	1946 – 1951,
	·	1956 – 1958
	Political Spring (POLAN)	1993 – 1996
	Progressive Party (KP)	1958, 1963
	Union of the People's Parties (ELK) [electoral alliance between KE and LK]	1958
	United Patriotic Party (IPE) [electoral alliance between LK, MK, EFK, and others]	1946
Right, Christian	Popular Orthodox Rally (LAOS)	2004 –

Note: There are no data for Greece for the period from 1967 to 1973 because it was governed by a military junta during this time.

Ireland

Left	Clann na Poblachta (CNP)	1948 – 1954
Leit	Democratic Left (DL)	1948 – 1934 1992 – 1997
	Green Party (Greens)	1997 – 2007
	Labour Party (LAB)	1944 –
	National Labour Party (NLP)	1944 – 1948
	Sinn Féin (SF) [Sinn Féin II, Sinn Féin III]	1957 – 1961,
		1997 – 1901, 1997 –
	United Left Alliance (ULA)	2011
	Workers' Party (WP)	1982 – 1989
Center	Fianna Fáil (FF)	1944 –
	, ,	
Right	Clann na Talmhan (CNT)	1944 – 1957
	Fine Gael (FG)	1944 –
	Progressive Democrats (PD)	1987 – 2007
Italy		
Left	Bonino List (LB) [Pannella List until 1999]	1994, 2001
	Communist Party (PCI) [includes electoral alliance	1946 – 1987
	with Party of Proletarian Unity for Communism (PdUP) in 1983]	
	Communist Refoundation Party (PRC)	1992 - 2006
	Democratic Party (PD)	2008
	Democrats of the Left (DS) [Democratic Party of the Left (PDS) until 1998]	1992 – 2001
	Federation of the Greens (Greens) [Green List until 1991, includes electoral alliance, the Sunflower, with PSDI in 2001]	1987 – 2006
	The Olive Tree [electoral alliance between DL, DS, and others]	2006
	Party of Italian Communists (PdCI)	2006
	Popular Democratic Front (FDP) [electoral alliance	1948
	between PCI and PSI]	
	Radical Party (PR)	1979 - 1987
	Rose in the Fist (RnP) [electoral alliance between PR and Social Democrats (SDI)]	2006
	Socialist Party (PSI) [Socialist Party of Proletarian	1946 – 1963,
	Unity (PSIUP) until 1947]	1972 - 1994
	Socialist Party of Proletarian Unity (PSIUP)	1968
	Unified Socialist Party (PSU)	1968
Center	Democratic Socialist Party (PSDI)	1948 – 1963,

		1972 – 1992
	Italian Renewal/Dini List (RI)	1996
	Italy of Values/Di Pietro List (IdV)	2001 –
	Republican Party (PRI) [includes Republican	1946 - 1948,
	Democratic Concentration (CDR) in 1946]	1968 – 1992
Center, Catholic	Democratic Center Union (UDC) [Christian Democratic Center—United Christian Democrats (CCD-CDU) until 2002]	1996 –
	The Daisy [DL]	2001
	Popular Party (PPI) [Christian Democracy (DC) until 1994]	1946 – 1996
	Segni Pact (PS)	1994
Right	Common Man Front (UQ)	1946
	Forza Italia (FI)	1994 - 2006
	Liberal Party (PLI) [National Democratic Union (UDN)	1946 - 1972,
	in 1946, National Bloc (BN) in 1948]	1983 – 1992
	Lega Nord (Northern League) (LN)	1992 –
	Monarchist National Party (PNM)	1946 – 1958
	National Alliance (AN) [Italian Social Movement	1948 - 2006
	(MSI) until 1972, Italian Social Movement-	
	National Right (MSI-DN) from 1972 to 1995]	
	People of Freedom (PDL)	2008
	Popular Monarchist Party (PMP)	1958

Note: Beginning in 1994, Italy implemented a new electoral system that combined a first-past-the-post system (used for 75% of the seats) with a proportional system (used for remaining 25% of the seats). The country eventually returned to a a party-list proportional representation system in 2005. Therefore, for the elections in 1994, 1996, and 2001, the data for vote shares only reflect the results for the proportional component of the mixed electoral system while the data for seat shares represent the combined results for both components.

Japan

Left	Communist Party (JCP)	1946 – 1952, 1955 –
	Democratic Party of Japan (DP)	1996 –
	Democratic Socialist Party (DSP)	1960 - 1993
	Left-Wing Socialist Party (LWSP)	1952 - 1955
	Right-Wing Socialist Party (RWSP)	1952 - 1955
	Social Democratic Party (SDP) [Socialist Party (JSP)	1946 - 1949,
	until 1991]	1958 –
Center	Clean Government Party [Komeitō] (CGP)	1967 – 1993,
	•	2000 –
	Japan New Party (JNP)	1993
	New Sakigake Party	1993
	People's Cooperative Party (PCP) [Japan Cooperative	1946 – 1949

	Party (CO-OP) until 1947]	
Right	Hatoyama Liberal Party (HLP)	1953
	Japan Democratic Party (JDP)	1955
	Japan Renewal Party (JRP)	1993
	Liberal Democratic Party (LDP)	1958 –
	Liberal Party (LP) [Japan Liberal Party until 1948,	1946 – 1955, 2000
	Democratic Liberal Party from 1948 to 1950]	
	New Frontier (NFP)	1996
	New Liberal Club (NLC)	1976 – 1983
	Progressive Reform Party (PRP) [Japan Progressive	1946 – 1953
	Party (JPP) until 1947, Japan Democratic Party	
	(JDP) from 1947 to 1950, People's Democratic	
	Party (PDP) 1950 to 1952]	
	Your Party (YP)	2009

Note: Beginning in 1994, Japan introduced a new electoral system for the lower house of the Diet. The new system combines plurality voting in single-member districts (for 300 of the seats) with regional, closed-list proportional representation (for the remaining 200 seats, reduced to 180 seats in 2000). For elections occurring after this change, data for vote shares are based on the arithmetic means of the results for the two systems. For instance, in the 1996 election, the Communist Party (JCP) received 12.6% of the votes in the single-member districts and 13.1% of the votes in the regional proportional component. The arithmetic mean for JCP is thus 12.6*300/500+13.1*200/500, which equals 12.8%. Data for the seat shares represent the simple sums of the results for both components of the electoral systems.

Luxembourg

Left	Communist Party (KPL)	1945 – 1989
	Green Alternative Party (GAP)	1984 – 1989
	Green List, Ecological Initiative (GLEI)	1989
	The Greens (Greens)	1994 –
	Independent Socialist Party (PSI)	1979 – 1984
	The Left (Left)	1999, 2009
	Social Democratic Party (SDP)	1974 - 1979
	Socialist Workers' Party (LSAP)	1945 –
Center	Democratic Party (DP) [Patriotic and	1945 –
	Democratic Group (GPD) prior to 1951,	
	Democratic Group (GDL) from 1951 to	
	1955]	
	Popular Independent Movement (MIP)	1964
Right	Alternative Democratic Reform Party (ADR)	1989 –
	[Action Committee 5/6ths Pensions for	
	Everyone until 1989, Action Committee	
	5/6ths from 1989 to 1992, Action	
	Committee for Democracy and Pensions	
	Justice from 1992 to 2006]	
	National Movement Luxembourg for the	1989 – 1994

Luxembourgers (NB)		
Right, Catholic	Christian Social Party (CSV) 19	45 –
Netherlands		
Left	Communist Party (CPN) Democratic Socialists '70 (DS70) GreenLeft (GL) Labour Party (PvdA) Pacifist Socialist Party (PSP) Radical Political Party (PPR)	1946 – 1972, 198 1971 – 1972 1989 – 1946 – 1963 – 1967, 1981 – 1982 1972, 1981
	Socialist Party (SP)	1998 –
Center	Democrats '66 (D66) General Association of Elderly People (AOV)	1967 – 1994
Center, Catholic	Catholic People's Party (KVP)	1946 – 1972
Center, Christian	Christian Democratic Appeal (CDA) Christian Historical Union (CHU) ChristianUnion (CU) Reformed Political Federation (RPF)	1977 – 1946 – 1972 2002 – 1998
Right	Center Democrats (CD) Farmers' Party (BP) List Pim Fortuyn (LPF) Party for Freedom (PVV) People's Party for Freedom and Democracy (VVD) [Freedom Party (PvdV) until 1948] Political Reformed Party (SGP)	1994 1963 – 1967 2002 – 2003 2006 1946 –
Right, Catholic	Catholic National Party (KNP)	1952
Right, Christian	Anti-Revolutionary Party (ARP)	1964 – 1972
New Zealand		
Left	Alliance Party (ALL) [electoral alliance between Di Greens, NLP, and Mana Motuhake]	P, 1993 – 1999
	Green Party (Greens)	1999 –
	Labour Party (LAB)	1943 – 1072 – 1078
Center	Values Party (VP) Democratic Party (DP) [Social Credit Political Leag (SC) until 1982, Social Credit Party from 1982 (1983]	
	Māori Party (Māori)	2005 - 2008
	New Zealand First (NZF)	1999 –

	United Future (UF)	2002 – 2005
Right	Association of Consumers and Taxpayers (ACT) National Party (NP)	1996 – 2002, 2008 1943 –
Right, Christian	Christian Heritage Party (CHP) [includes electoral alliance, Christian Coalition (CC), with Christian Democrats (CD) in 1996]	1993 – 1999

Note: After winning approval in a 1993 referendum, New Zealand adopted a form of mixed-member proportional representation as its electoral system. In following elections, data for vote shares are based on the results for the party-vote component of each election.

Norway

Left	Communist Party (NKP)	1945 – 1961
	Labor Party (DnA)	1945 –
	Socialist Left Party (SV) [Socialist People's Party (SF) until 1975]	1961 –
Center	Center Party (Sp) [Farmers' Party (Bp) until 1959]	1945 –
	Liberal Party (Venstre) (V)	1945 –
	Joint Non-Socialist Lists (NSL) [local electoral alliance between H, KrF, Sp, and V]	1949, 1957 – 1961, 1969 – 1981
Center, Christian	Christian People's Party (KrF)	1945 –
Right	Conservative Party [Høyre] (H)	1945 –
	Progress Party (FrP) [Anders Lange's Party (ALP) until 1977]	1973, 1981 –

Portugal

Left Communist Party – Ecologist Party – The Greens 1 (PCP-PEV) [Communist Party (PCP) until 1987, United Democratic Coalition (CDU) from 1987 to	1975 – 1975, 1979 – 1985
1995]	1975, 1979 – 1985
Democratic Movement (MDP)	
Ecologist Party – The Greens (PEV)	1983 – 1985
Left Bloc (BE)	1999 –
Socialist Party (PS)	1975 –
United People Alliance (APU) [electoral alliance 1 between MDP and PCP in 1979 and 1980; electoral alliance between MDP, PCP, and PEV in 1983 and 1985]	1979 – 1985
Center Democratic Alliance (AD) [electoral alliance between 1 CDS-PP, PSD, and PPM in 1979 and 1980]	1979 – 1980
Democratic Renewal Party (PRD) 1	1985 – 1987

	Social Democratic Party (PSD) [Popular Democratic Party (PPD) until 1976, coded "Center" for the period before 2002]	1975 –
Right	Popular Monarchist Party (PPM) Social Democratic Party (PSD) [Popular Democratic Party (PPD) until 1976, coded "Right" for period from 2002 onward]	1979 – 1980 1975 –
Right, Catholic	Center Social Democrats – Popular Party (CDS-PP) [Center Social Democrats (CDS) until 1993]	1975 –

Note: There are no data for Portugal prior to 1975 because the country was under authoritarian rule.

Spain

Left	Catalonian Left Republicans (ERC)	2004
	Socialist Party (PSOE)	1977 –
	United Left (IU) [Communist Party (PCE) before	1977 –
	formation of broader electoral alliance in 1986]	
Center	Convergence and Unity (CiU)	1979 –
	Democratic and Social Center (CDS)	1982 - 1989
	Democratic Convergence of Catalonia (CDC)	1977
	Union of the Democratic Center (UCD)	1977 – 1982
Right	Popular Party (PP) [Popular Alliance (AP) until 1986, Popular Coalition (CP) from 1986 to 1989]	1977 –

Note: There are no data for Spain prior to 1977 because the country was under authoritarian rule.

Sweden

Left	Green Party (MP) Left Party (V) [Communist Party (K) until 1967, Left Party – Communists (VKP) from 1967 to 1990]	1988 – 1944 –
	Social Democrats (S)	1944 –
Center	Center Party (C) [Farmers' League (BF) until 1957] People's Party – the Liberals (FP)	1944 – 1944 –
Center, Christian	Christian Democrats (KD) [Christian Democratic Unity (KDS) until 1996]	1988 –
Right	Moderate Party (M) [Rightist Party (HP) until 1969] New Democracy (NyD) Sweden Democrats (SD)	1944 – 1991 2006 –

Switzerland

C '	1047 1070
	1947 – 1979
	1987 –
Social Democrats (SPS/PSS)	1943 –
Democratic Party (DP/PD)	1943 – 1959
Green Liberal Party (GLP/PVL)	2011
Independents' Party (LdU/AdI)	1943 – 1991
Swiss People's Party (SVP/UDC) [Farmers, Traders and Citizens' Party (BGB/PAI) until 1971 coded	1943 –
"Center" for the period before 1991]	
Christian Democratic People's Party (CVP/PDC)	1943 –
Conservative Christian Social Party from 1957 to	
1970, coded "Center, Catholic" for the period from	
1971 onward]	
Evangelical People's Party (EVP/PEV)	1971 – 1983,
	2003 –
Conservative Democratic Party (BDP/PBD)	2011
Freedom Party (FPS/PSL) [Automobile Party (AP/PA) until 1994]	1987 – 1995
Liberal Party (LPS/PLS)	1943 - 2003
Radical Democratic Party (FDP/PRD)	1943 –
Republican Movement (REP)	1971 - 1975
Swiss Democrats (SD/DS) [National Action (NA/AN)	1971 - 1975,
until 1990]	1983 – 1995
Swiss People's Party (SVP/UDC) [Farmers, Traders	1943 –
and Citizens' Party (BGB/PAI) until 1971, coded	
"Right" for the period from 1991 onward]	
Christian Democratic People's Party (CVP/PDC)	1943 –
[Catholic Conservative Party until 1957,	
1970, coded "Right, Catholic" for the period from	
1970, coded Right, Catholic for the period from	
	Green Liberal Party (GLP/PVL) Independents' Party (LdU/AdI) Swiss People's Party (SVP/UDC) [Farmers, Traders and Citizens' Party (BGB/PAI) until 1971, coded "Center" for the period before 1991] Christian Democratic People's Party (CVP/PDC) [Catholic Conservative Party until 1957, Conservative Christian Social Party from 1957 to 1970, coded "Center, Catholic" for the period from 1971 onward] Evangelical People's Party (EVP/PEV) Conservative Democratic Party (BDP/PBD) Freedom Party (FPS/PSL) [Automobile Party (AP/PA) until 1994] Liberal Party (LPS/PLS) Radical Democratic Party (FDP/PRD) Republican Movement (REP) Swiss Democrats (SD/DS) [National Action (NA/AN) until 1990] Swiss People's Party (SVP/UDC) [Farmers, Traders and Citizens' Party (BGB/PAI) until 1971, coded "Right" for the period from 1991 onward] Christian Democratic People's Party (CVP/PDC) [Catholic Conservative Party until 1957, Conservative Christian Social Party from 1957 to

Note: Data for the vote shares only reflect the results for the National Council, the lower house of the Federal Assembly. Data for the seat shares represent the combined results for both chambers of he Federal Assembly.

United Kingdom

Left	Labour Party (LAB)	1945 –
Center	Liberal Party (LIB) Liberal Democrats (LIB DEM) [Social Democratic	1945 – 1979 1983 –

	Party (SDP) – Liberal Alliance until 1988] Scottish National Party (SNP)	1974, 1997
Right	Conservative Party (CON) National Liberal Party (NLP)	1945 – 1945 – 1950
	UK Independence Party (UKIP)	2005

United States

Center	Democratic Party (DEM)	1944 –
Right	Republican Party (GOP)	1944 –

Note: The percentages of total votes are based on the results of presidential elections. For each mid-term election, data from the prior presidential election are used for the vote percentages. Moreover, the party that holds the presidency is considered to be the party in government. The seat shares represent the combined results for both chambers of Congress.