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.

id 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.

idn 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.

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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.

minwage 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 inter-occupational) 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.

sstaxes 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 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.

1. **SOCIAL SPENDING, REVENUE, AND WELFARE STATE INSTITUTIONS DATA**

**2.1 Social Policy**

gen 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.

toupat 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.

pmedcv Share of population with total medical coverage through public programs. Sources: see tmedcv. Years covered: 1960-2011.

inpatcv Share of population with in-patient medical coverage through public programs. Sources: see tmedcv Years covered: 1960-2011.

oupatcv Share of population with out-patient medical coverage through public programs. Sources: see tmedcv 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)](https://stats.oecd.org/index.aspx?queryid=28935)” 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.

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

edex Total expenditure on education (all levels), as a percentage of GDP. Expenditures 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).” *Journal of 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, *Education Statistics* (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**

ud 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.

unioncentUnion 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 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.

armed 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.

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

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.

fcvemp Female civilian employment, in thousands. Source: see tlabfo. Years covered: 1960-2011.

tunemp Total uncmployment, 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.

epEmployment 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\_AllardEmployment 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, *Employment and Labour Force Statistics* (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, *World Development Indicators* (database). Years covered: 1960-2010.

lifexp Life expectancy at birth for total population, in years. Source: OECD, *Health Statistics* (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.

deaths Number of deaths, in thousands. Source: see lifexp. Years covered: 1960-2011.

tfr Total fertility rate, births per woman. Source: World dataBank, *World 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.

cerevasc Deaths per 100,000 population caused by cerebrovascular diseases. Source: see lifexp. Years covered: 1960-2010.

ischaemic Deaths caused by ischaemic heart disease, per 100,000 people. Source: see lifexp. 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.

hstat2544 Percentage of the population aged 25-44 reporting health greater than or equal to 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.

oomeasure Percentage of the population that is overweight or obese based on measured body 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**

extpi 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.

cur100Current 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.

kaopenCapital account openness, an index. Source: Chinn, Menzie D. and Hiro Ito. 2008. ["A New Measure of Financial Openness."](http://web.pdx.edu/~ito/kaopen_Chinn-Ito_hi0523.pdf) *Journal of Comparative Policy Analysis* 10(3): 309-322, http://web.pdx.edu/~ito/Chinn-Ito\_website.htm. Missing: Luxembourg. Years covered: 1970-2010.

ckaopenCapital 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.

gdpncu 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.

debtGeneral government gross financial liabilitiesas a percentage of GDP at current prices. Source: OECD, *National Accounts Statistics* (database), doi: 10.1787/na-data-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**

rd 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.

etcrnopub 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.

cnvot Share of votes cast for parties classified as (secular) center in the most recent election. Sources: see leftvot and Appendix B. Years covered: 1960-2011.

cnseat Share of seats in parliament won by parties classified as (secular) center in the 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.

cnmaj Share of seats in parliament won by (secular) center 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.

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

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

cncrseat Share of seats in parliament won by parties classified as center Christian in the 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.

cncrmaj Share of seats in parliament won by center, 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.

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

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

cnctseat Share of seats in parliament won by parties classified as center Catholic in the 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 (½ parliamentary seats + 1). Sources: leftvot and Appendix B. Years covered: 1960-2011.

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

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

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

rtcab Share of seats in parliament held by (secular) right 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.

rtmaj Share of seats in parliament won by (secular) right 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.

rtcum Cumulative rtcab score from 1946 to the year of the observation. Sources: leftvot 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.

rtcrmaj 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.

rtctmaj 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 = 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: Lijphart (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 = 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

| **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 | X (J) |  | X (J) |
| Insurance and pension funding, except compulsory social security | 66 |  |
| Activities auxiliary to financial intermediation | 67 |  |
| Real estate activities | 70 | X (K) |  |  |
| Renting of machinery, equipment, and household goods | 71 |  |  |
| Computer and related activities | 72 | X | X |
| Research and development | 73 | 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. | | | | |

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

# 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)  Family First Party (FFP)  Liberal Party (LIB)  National Party (NPA) [Country Party until 1975, National Country Party from 1975 to 1982]  One Nation (ON)  United Australia Party (UAP) | 1972 – 1974  2004 –  1943 –  1943 –  1998 – 2001  1943 |

**Austria**

|  |  |  |
| --- | --- | --- |
| Left | Communist Party (KPÖ)  The Greens – The Green Alternative (Greens) [Green Alternative until 1993]  Social Democratic Party (SPÖ) | 1945 – 1962  1986 –  1945 – |
| Right | Alliance for the Future of Austria (BZÖ)  Freedom Party (FPÖ)  Liberal Forum (LIF) | 2006 –  1945 –  1994 – 1999, 2008 |
| Right, Catholic | People's Party (ÖVP) | 1945 – |

**Belgium**

|  |  |  |
| --- | --- | --- |
| Left | Communist Party (KPB/PCB)  Ecolo (Francophone) [coded “Left” for the period from 1991 onward]  Francophone Socialist Party (PS)  Green! (Flemish) [Agalev until 2003, coded “Left” for the period from 1991 onward]  Socialist Party (BSP/PSB)  Social Progressive Alternative (SP.a) [Flemish Socialist Party (SP) until 2001, electoral alliance with SPIRIT from 2002 to 2008]  Walloon Rally (RW) | 1946 – 1954,  1961 – 1981  1981 –  1978 –  1981 –  1946 – 1977  1978 –  1968 – 1978 |
| Center | Ecolo (Francophone) [coded “Center” for the period before 1991]  Francophone Democratic Front (FDF) [includes electoral alliance with Pluralistic and Democratic Liberal Party (PLDP) in 1974]  Green! (Flemish) [Agalev until 2003, coded “Center” for the period form 1991 onward]  Liberal/Socialist cartel (LSC) | 1981 –  1968 – 1981  1981 –  1954 – 1958 |
| Center, Catholic | Catholic Party (CVP/PSC)  Christian Democratic and Flemish (CD&V) [Christian People's Party (CVP) until 2001, includes electoral alliance with N-VA in 2007]  Humanist Democratic Center (CDH) (Francophone) [Christian Social Party (PSC) until 2002] | 1946 – 1965  1968 –  1968 – |
| Right | De Decker’s List (LDD) (Flemish)  Flemish Interest (VB) (Flemish) [Flemish Block (VB) until 2004]  National Front (FN) (Francophone)  New Flemish Alliance (N-VA) [People's Union (VU) until 2001]  Open Flemish Liberals and Democrats (VLD) [Flemish Party for Liberty and Progress (PVV) until 1992, Flemish Liberals and Democrats (VLD) from 1992 to 2007]  Party for Liberty and Progress (PVV/PLP) [Liberal Party (LP/PL) until 1961]  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] | 2007  1991 –  1995, 2003 –  1949, 1954 – 2003  1971 –  1946 – 1968  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]  Canadian Alliance (CA) [Reform Party until 2000]  Ralliement des Créditistes (RC)  Social Credit Party (SC) | 1945 –  1988 – 2000  1965 – 1968  1945 – 1965, 1972 – 1979 |

**Denmark**

|  |  |  |
| --- | --- | --- |
| Left | Common Course (FK)  Communist Party (DKP)  Left Socialists (VS)  Social Democrats (SD)  Socialist People's Party (SF)  Unity List [Red-Green Alliance] (EL) | 1987  1945 – 1957,  1973 – 1977  1975 – 1984  1945 –  1960 –  1994 – |
| Center | Center Democrats (CD)  Justice Party (DR)  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) | 1973 – 1998  1947 – 1960, 1973, 1977 – 1979  2007 –  1966  1945 –  1945 – |
| Center, Christian | Christian Democrats (KD) [Christian People's Party (KrF) until 2003] | 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  1945 – |
| 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]  Swedish People’s Party (SFP/RKP)  True Finns (PS) [Rural Party (SMP) until 1995] | 1945 –  1945 – 1979  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)  Far Left (EXG)  The Greens (LV) [includes ecologist movement that contested elections before the party's formal creation in 1984]  Other Ecologists (AE)  Other Left (DVG)  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]  Unified Socialist Party (PSU) | 1945 –  1997 –  1978, 1993 –  1993 – 1997  1997, 2007  1945 –  1962 – 1973 |
| Center | Center Democracy and Progress (CDP)  Democratic Center (CD)  Democratic Movement (MoDem) [Union for French Democracy (UDF) until 2007, coded “Center” for the period from 2002 onward]  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]  Reformers' Movement (MR) | 1973  1967 – 1968  1978 –  1945 – 1962  1973 |
| Center, Christian | Popular Republican Movement (MRP) | 1945 – 1962 |
| Right | Conservatives/Moderates (DVD)  National Front (FN)  New Center (NC)  Republican Party (PR) [Independent Republicans (FNRI) until 1977]  Democratic Movement (MoDem) [Union for French Democracy (UDF) until 2007, coded “Right” for the period before 2002]  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]  Union for the Defense of Traders and Artisans [Poujadists] (UDCA) | 1945 – 1967, 1973, 1981, 1988 –  1986 –  2007 –  1962 – 1973  1978 –  1951 –  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]  Communist Party (KPD)  Left Party (Left) [Party of Democratic Socialism (PDS) until 2005, Left Party/PDS from 2005 to 2007]  Social Democrats (SPD) | 1983 –  1949 – 1953  1990 –  1949 – |
| Center | All-German Bloc/League of Expellees and Deprived of Rights (GB/BHE)  Free Democrats (FDP) [coded “Center” for the period before 2005] | 1953 – 1957  1949 – |
| Right | Economic Reconstruction League (WAV)  Free Democrats (FDP) [coded “Right” for the period from 2005 onward]  German Party (DP)  National Democratic Party (NDP) | 1949  1949 –  1949 – 1957  1965 – 1969 |
| Right, Catholic | Bavarian Party (BP)  Center Party (DZP) | 1949  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**

|  |  |  |
| --- | --- | --- |
| Left | Alliance of Progressive and Left-Wing Forces (APLF) [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 KAE in 1961]  United Left (UL) [electoral alliance of EDA, KKE, KKE-es] | 1977  1989 –  1974 – 1985,  1993 –  1974 – 1977  1956 – 1958  1996 – 2000  2009 –  1974 –  1950 – 1977  1974 |
| Center | Democratic Union (DE) [electoral alliance between DKEL, EDA, EPEK, KAE, LF, PDE, and others]  Farmers and Workers' Party (KAE) [Farmers' and Workers' Rally (SAE) until 1956]  Georgios Papandreou Party (KGP) [Democratic Socialist Party (DSK) until 1950]  Liberal Democratic Union (PDE)  Liberal Party (LF)  National Party (EKE)  National Political Union (EPE) [electoral alliance between EEK, KGP, KVF, and others]  National Progressive Center Union (EPEK)  National Reconstruction Front (MEA) [National Unity Party (EEK) until 1950]  Progressive Agrarian Democratic Union (PADE) [electoral alliance between DKEL, EPEK, KAE, and KP]  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]  Union of Parties (EK) [electoral alliance between EPEK, LF, and Socialist Party—Union of Popular Democracy (SK-ELD)]  Venizelist Liberal Party (KVF) | 1956  1950, 1956 – 1958  1946 – 1951  1956  1946 – 1958  1946 – 1950  1946  1950 – 1958  1946 – 1950  1958  1961 – 1977  1952  1946 |
| Right | Greek Rally (ES)  National Liberal Party (EFK)  National Radical Union (ERE) [includes electoral alliance with KP in 1964]  Nationalist Party (KE) [includes electoral alliance, Independent Political Front (PAP), with Greek Renaissance Party (KEA) in 1950]  New Democracy (ND)  People's Party (LK)  Political Spring (POLAN)  Progressive Party (KP)  Union of the People's Parties (ELK) [electoral alliance between KE and LK]  United Patriotic Party (IPE) [electoral alliance between LK, MK, EFK, and others] | 1951 – 1952  1946  1956 – 1964  1946 – 1950  1974 –  1946 – 1951,  1956 – 1958  1993 – 1996  1958, 1963  1958  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)  Democratic Left (DL)  Green Party (Greens)  Labour Party (LAB)  National Labour Party (NLP)  Sinn Féin (SF) [Sinn Féin II, Sinn Féin III]  United Left Alliance (ULA)  Workers' Party (WP) | 1948 – 1954  1992 – 1997  1997 – 2007  1944 –  1944 – 1948  1957 – 1961,  1997 –  2011  1982 – 1989 |
| Center | Fianna Fáil (FF) | 1944 – |
| Right | Clann na Talmhan (CNT)  Fine Gael (FG)  Progressive Democrats (PD) | 1944 – 1957  1944 –  1987 – 2007 |

**Italy**

|  |  |  |
| --- | --- | --- |
| Left | Bonino List (LB) [Pannella List until 1999]  Communist Party (PCI) [includes electoral alliance with Party of Proletarian Unity for Communism (PdUP) in 1983]  Communist Refoundation Party (PRC)  Democratic Party (PD)  Democrats of the Left (DS) [Democratic Party of the Left (PDS) until 1998]  Federation of the Greens (Greens) [Green List until 1991, includes electoral alliance, the Sunflower, with PSDI in 2001]  The Olive Tree [electoral alliance between DL, DS, and others]  Party of Italian Communists (PdCI)  Popular Democratic Front (FDP) [electoral alliance between PCI and PSI]  Radical Party (PR)  Rose in the Fist (RnP) [electoral alliance between PR and Social Democrats (SDI)]  Socialist Party (PSI) [Socialist Party of Proletarian Unity (PSIUP) until 1947]  Socialist Party of Proletarian Unity (PSIUP)  Unified Socialist Party (PSU) | 1994, 2001  1946 – 1987  1992 – 2006  2008  1992 – 2001  1987 – 2006  2006  2006  1948  1979 – 1987  2006  1946 – 1963,  1972 – 1994  1968  1968 |
| Center | Democratic Socialist Party (PSDI)  Italian Renewal/Dini List (RI)  Italy of Values/Di Pietro List (IdV)  Republican Party (PRI) [includes Republican Democratic Concentration (CDR) in 1946] | 1948 – 1963,  1972 – 1992  1996  2001 –  1946 – 1948,  1968 – 1992 |
| Center, Catholic | Democratic Center Union (UDC) [Christian Democratic Center—United Christian Democrats (CCD-CDU) until 2002]  The Daisy [DL]  Popular Party (PPI) [Christian Democracy (DC) until 1994]  Segni Pact (PS) | 1996 –  2001  1946 – 1996  1994 |
| Right | Common Man Front (UQ)  Forza Italia (FI)  Liberal Party (PLI) [National Democratic Union (UDN) in 1946, National Bloc (BN) in 1948]  Lega Nord (Northern League) (LN)  Monarchist National Party (PNM)  National Alliance (AN) [Italian Social Movement (MSI) until 1972, Italian Social Movement–National Right (MSI-DN) from 1972 to 1995]  People of Freedom (PDL)  Popular Monarchist Party (PMP) | 1946  1994 – 2006  1946 – 1972,  1983 – 1992  1992 –  1946 – 1958  1948 – 2006  2008  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)  Democratic Party of Japan (DP)  Democratic Socialist Party (DSP)  Left-Wing Socialist Party (LWSP)  Right-Wing Socialist Party (RWSP)  Social Democratic Party (SDP) [Socialist Party (JSP) until 1991] | 1946 – 1952,  1955 –  1996 –  1960 – 1993  1952 – 1955  1952 – 1955  1946 – 1949,  1958 – |
| Center | Clean Government Party [Komeitō] (CGP)  Japan New Party (JNP)  New Sakigake Party  People's Cooperative Party (PCP) [Japan Cooperative Party (CO-OP) until 1947] | 1967 – 1993,  2000 –  1993  1993  1946 – 1949 |
| Right | Hatoyama Liberal Party (HLP)  Japan Democratic Party (JDP)  Japan Renewal Party (JRP)  Liberal Democratic Party (LDP)  Liberal Party (LP) [Japan Liberal Party until 1948, Democratic Liberal Party from 1948 to 1950]  New Frontier (NFP)  New Liberal Club (NLC)  Progressive Reform Party (PRP) [Japan Progressive Party (JPP) until 1947, Japan Democratic Party (JDP) from 1947 to 1950, People's Democratic Party (PDP) 1950 to 1952]  Your Party (YP) | 1953  1955  1993  1958 –  1946 – 1955, 2000  1996  1976 – 1983  1946 – 1953  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)  Green Alternative Party (GAP)  Green List, Ecological Initiative (GLEI)  The Greens (Greens)  Independent Socialist Party (PSI)  The Left (Left)  Social Democratic Party (SDP)  Socialist Workers' Party (LSAP) | 1945 – 1989  1984 – 1989  1989  1994 –  1979 – 1984  1999, 2009  1974 – 1979  1945 – |
| Center | Democratic Party (DP) [Patriotic and Democratic Group (GPD) prior to 1951, Democratic Group (GDL) from 1951 to 1955]  Popular Independent Movement (MIP) | 1945 –  1964 |
| Right | Alternative Democratic Reform Party (ADR) [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 Luxembourgers (NB) | 1989 –  1989 – 1994 |
| Right, Catholic | Christian Social Party (CSV) | 1945 – |

**Netherlands**

|  |  |  |
| --- | --- | --- |
| Left | Communist Party (CPN)  Democratic Socialists '70 (DS70)  GreenLeft (GL)  Labour Party (PvdA)  Pacifist Socialist Party (PSP)  Radical Political Party (PPR)  Socialist Party (SP) | 1946 – 1972, 1981  1971 – 1972  1989 –  1946 –  1963 – 1967,  1981 – 1982  1972, 1981  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 –  1946 – 1981 |
| Right, Catholic | Catholic National Party (KNP) | 1952 |
| Right, Christian | Anti-Revolutionary Party (ARP) | 1964 – 1972 |

**New Zealand**

|  |  |  |
| --- | --- | --- |
| Left | Alliance Party (ALL) [electoral alliance between DP, Greens, NLP, and Mana Motuhake]  Green Party (Greens)  Labour Party (LAB)  Values Party (VP) | 1993 – 1999  1999 –  1943 –  1972 – 1978 |
| Center | Democratic Party (DP) [Social Credit Political League (SC) until 1982, Social Credit Party from 1982 to 1983]  Māori Party (Māori)  New Zealand First (NZF)  United Future (UF) | 1954 – 1987  2005 – 2008  1999 –  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)  Labor Party (DnA)  Socialist Left Party (SV) [Socialist People's Party (SF) until 1975] | 1945 – 1961  1945 –  1961 – |
| Center | Center Party (Sp) [Farmers' Party (Bp) until 1959]  Liberal Party (Venstre) (V)  Joint Non-Socialist Lists (NSL) [local electoral alliance between H, KrF, Sp, and V] | 1945 –  1945 –  1949, 1957 – 1961, 1969 – 1981 |
| Center, Christian | Christian People’s Party (KrF) | 1945 – |
| Right | Conservative Party [Høyre] (H)  Progress Party (FrP) [Anders Lange's Party (ALP) until 1977] | 1945 –  1973, 1981 – |

**Portugal**

|  |  |  |
| --- | --- | --- |
| Left | Communist Party – Ecologist Party – The Greens (PCP-PEV) [Communist Party (PCP) until 1987, United Democratic Coalition (CDU) from 1987 to 1995]  Democratic Movement (MDP)  Ecologist Party – The Greens (PEV)  Left Bloc (BE)  Socialist Party (PS)  United People Alliance (APU) [electoral alliance between MDP and PCP in 1979 and 1980; electoral alliance between MDP, PCP, and PEV in 1983 and 1985] | 1975 –  1975, 1979 – 1985  1983 – 1985  1999 –  1975 –  1979 – 1985 |
| Center | Democratic Alliance (AD) [electoral alliance between CDS-PP, PSD, and PPM in 1979 and 1980]  Democratic Renewal Party (PRD)  Social Democratic Party (PSD) [Popular Democratic Party (PPD) until 1976, coded “Center” for the period before 2002] | 1979 – 1980  1985 – 1987  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)  Socialist Party (PSOE)  United Left (IU) [Communist Party (PCE) before formation of broader electoral alliance in 1986] | 2004  1977 –  1977 – |
| Center | Convergence and Unity (CiU)  Democratic and Social Center (CDS)  Democratic Convergence of Catalonia (CDC)  Union of the Democratic Center (UCD) | 1979 –  1982 – 1989  1977  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]  Social Democrats (S) | 1988 –  1944 –  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**

|  |  |  |
| --- | --- | --- |
| Left | Communist Party (PdA/PST)  Green Party (GPS/PES)  Social Democrats (SPS/PSS) | 1947 – 1979  1987 –  1943 – |
| Center | Democratic Party (DP/PD)  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] | 1943 – 1959  2011  1943 – 1991  1943 – |
| Center, Catholic | 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] | 1943 – |
| Center, Christian | Evangelical People’s Party (EVP/PEV) | 1971 – 1983,  2003 – |
| Right | 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] | 2011  1987 – 1995  1943 – 2003  1943 –  1971 – 1975  1971 – 1975,  1983 – 1995  1943 – |
| Right, Catholic | Christian Democratic People’s Party (CVP/PDC) [Catholic Conservative Party until 1957, Conservative Christian Social Party from 1957 to 1970, coded “Right, Catholic” for the period from 1971 onward] | 1943 – |

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 Party (SDP) – Liberal Alliance until 1988]  Scottish National Party (SNP) | 1945 – 1979  1983 –  1974, 1997 |
| Right | Conservative Party (CON)  National Liberal Party (NLP)  UK Independence Party (UKIP) | 1945 –  1945 – 1950  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.