Data Base on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts, 1960-2010 (ICTWSS)

Jelle Visser

Amsterdam Institute for Advanced Labour Studies AIAS
University of Amsterdam

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The ICTWSS database covers four key elements of modern political economies: trade unionism, wage setting, state intervention and social pacts. The database contains annual data for all OECD and EU member states - Australia; Austria; Belgium; Bulgaria; Canada; Chile, Cyprus, the Czech Republic; Denmark; Estonia; Germany; Greece; Finland; France; Hungary; Iceland; Ireland; Israel, Italy; Japan; Korea, Latvia; Lithuania; Luxembourg; Malta; Mexico; the Netherlands; New Zealand; Norway; Poland; Portugal; Romania; Spain; Slovakia; Slovenia; Sweden; Switzerland; Turkey; the United Kingdom; and the United States – with some additional data for emerging economies Brazil; China; India; Indonesia; Russia; and South Africa; and it runs from 1960 till 2010.

The part on social pacts was developed in the framework of the NEWGOV project, financed under the EU FP7 research framework, on "Distributive Politics, Learning and Reform: National Social Pacts", directed by Sabina Avdagic, Martin Rhodes and myself (see Avdagic et al 2011). Our database contains information on the negotiation and signing of pacts, the actor combinations involved, whether these were wage pacts or pacts dealing with other issues, whether they were broad or single-issue pacts. In addition the database contains entries on the existence of bipartite agreements between unions and employers, distinguishing between wage and non-wage agreements, and between autonomous agreements and agreements sponsored by the state or depending on legislation. Also covered is the existence of bipartite and tripartite councils or bodies for social economic policy making, advice and forecasting. All data are newly collected based on data from the project and from various national sources and comparative studies.

The part on wage setting is focusing on features such as bargaining coverage, coordination, predominant level of bargaining, the average length of agreements, government intervention, employer organization and union centralisation. The data is from various national and comparative sources, including Traxler (1994); OECD (2004); European Industrial Relations Online (EIRO, various years); the Global Wage Surveys of the ILO. For coverage data use has been made from surveys for the US, Canada, New

Zealand, the UK, Germany, the Netherlands, Israel and South Africa, as well as historical estimates from Ochel, 2001; and Visser 2010 for the Brazil, China, India, Indonesia, and South Africa.

Kenworthy (2001) is the key source for the coordination of wage setting scores, with my own data for Central and Eastern Europe and recent years added (see may chapters in EC, 2004; 2009; 2011). There are a few subtle differences in the wage coordination scale used here and the one used by Kenworthy (see codebook, infra) and for some years and countries my scores and his differ. Since the Kenworthy scale allows ranking from high to low, I have preferred his approach to the coding in Traxler, Blaschke and Kittel (2001). However, their emphasis on the governability and enforcement of agreements is picked up in the data on union centralisation (or governance) and in a separate variable on enforcement of collective agreements.

The five-point scale measuring government intervention was developed by Hassel (2006) though I have though it necessary to make two important changes, one to allow a distinction between (a) non-intervention but supporting and facilitating broad sectoral unions and agreements (the case of, for instance, Germany); and (b) non-intervention while creating or upholding a legal framework that favours fragmented and company unionism and bargaining (the case of, for instance, the UK). The other change is that the scale used here distinguishes between (a) interventions that impose by law a stop on free bargaining or a ceiling on its outcomes and (b) interventions by means of a social pact negotiated with the unions and employers for some quid pro quo. The data are from Hassel (2006), Golden and Lange (1996), Golden, Lange, and Wallerstein (2006), at http://www.shelley.polisci.ucla.edu/ (version dated June 16, 2006), and my own updates for Central and Eastern Europe, New Zealand and recent years. I have reduced the 15-points Golde-Lange-Walllerstein (2006) scale to my five-point scale based on a revision of Hassel, 2005 (see codebook, below).

Another key aspect of government intervention relates to minimum wage setting. Based on a study of the institutional aspects of minimum wage setting (does a mandatory exists in all or some parts of the economy; how do governments reach decisions; is there an index; what role do social partners play, etc.) I have made a distinction between whether or not a mandatory minimum wage exists for some or all of the economy; and how decisions regarding the minimum wage are actually made, with or without the involvement of unions and employers. The data are from the OECD, EIRO reports, ILO (2008) and various national sources

The index for union centralisation follows the methodology proposed by Iversen (1999) and combines data on the concentration or fragmentation of trade unions with information on the division of authority in the union movement between confederations (or peak associations), affiliated unions, and local or workplace branches (Visser, 1990; Windmuller, 1975). The data are new and presented here for the first time (see below, and codebook). As the index on union centralisation is a composite variable, there are separate entries for union concentration, the intra- and inter-organizational degree of unity (or cohesiveness), and the degree of authority of confederations over their affiliates,

and of affiliates over their (workplace or company) members.

On the organisation of unions and key bargaining units, indicated by the concentration or fragmentation of unions and confederations, and by the authority division between them, the main source on union concentration are Ebbinghaus and Visser (2000) for Western Europe; EIRO (2003) and the database of the Institut des Sciences du Travail of the Université Catholique du Louvain on *les partenaires sociaux en Europe,* developed for the European Commission (http://www.trav.ucl.ac.be/recherche), Carley, 2004, and various sources as well as EIRO country reports for Eastern Europe, and Golden, Lange and Wallerstein (2006). for non-European OECD countries: The data for the two five-point scales for confederal and union authority are mainly from Visser (1990) for Western Europe and the national (unpublished) reports for the DUES Handbook (Ebbinghaus and Visser, 2000) and from Golden, Lange and Wallerstein (2006) for non-European OECD Countries. The data for Central and Eastern Europe is from the UCL files and several national and comparative sources.

For the first time, and new in this database, is information on employer organization, and on the extent, coverage and nature of employee and union representation in enterprises, works councils or similar institutions. The data on employer organization is based on various sources, including Traxler and Behrens 2002; EIRO (various years); EC (2004; 2011), and national sources. The data on representation in enterprises is based on Rogers and Streeck 1995; EIRO (various years); as well as national sources.

Also new is the coding on rights of association, rights of collective bargaining and the right of strike, with separate entries for the private or market sector and the government sector, narrowly defined as the central government in this case.

Finally, the part on trade union membership and union density comes from Ebbinghaus and Visser (2000) for Western European countries, Visser, 1991, 1992, 1993 and 2006 for extensions to non-European countries, combined with recent administrative data on union organization and membership from the Dublin Foundation for the Improvement of Living and Working Conditions (Carley, 2004) and from the European Social Survey (waves of 2002 and 2004) for countries in Eastern and Central Europe (for the sources and methods: R. Jowell and Central Coordinating Team (2003): European Social Survey 2002/2003. Technical Report. London: Centre for Comparative Social Surveys, City University, and http://www.europeansocialsurvey.org. All series have been updated till 2005 in this file. Sources and methodologies are described in Visser, 2006.

New in comparison with earlier versions of this database are the separate series on union density based on national (household or labour force sample) surveys, as reported in national sources, and a variable measuring the presence or recognition of trade unions in workplaces. Also new are the data on the composition of union membership and union density rates by gender, age groups, industry, public or private sector, skill level, blue- and white-collar, company size, and native or foreign (or migrant) status.

Finally, compared to the two earlier versions, many series have been (slightly) revised. In

the case of union density rates this may result from changes in the estimated net membership, changes in the employment data, or both. In the latest version of the OECD Labour Force Statistics (accessed on 27 May 2011) there are numerous changes compared to earlier versions. Newer survey data for union membership has been used to calibrate the estimates for net union membership, including only wage and salary employees in employment.

General references:

Avdagic, Sabina, Martin Rhodes, and Jelle Visser (2011), editors. *Social Pacts in Europe*. Oxford University Press.

Carley, Mark (2004). *Trade Union Membership 1993-2003*. Dublin: European Foundation for the Improvement of Living and Working Conditions, May. http://www.eurofound.europa.eu/eiro/2004/03/update/tn0403105u.html

Carley, Mark (2009). *Trade Union Membership 2003-2008*. Dublin: European Foundation for the Improvement of Living and Working Conditions, February. http://www.eurofound.europa.eu/eiro/studies/tn0904019s/tn0904019s.htm

Ebbinghaus, Bernhard, and Jelle Visser (2000). *Trade Unions in Western Europe Since 1945*. London, Palgrave-Macmillan.

Golden, Miriam, and Michael Wallerstein (1996). *Reinterpreting Post-war Industrial Relations. Comparative data on advanced industrial societies*. Los Angeles, Ca.: UCLA Dept. of Political Science. Unpublished.

Golden, Miriam, Peter Lange, and Michael Wallerstein. (2006). *Union Centralization among Advanced Industrial Societies: An empirical study*. Los Angeles, Ca.: UCLA Dept. of Political Science; http://www.shelley.polisci.ucla.edu/ (version dated June 16, 2006).

Hancké, Bob, and Martin Rhodes (2006). EMU and Labour Market Institutions in Europe: The rise and fall of national social pacts. *Work and Occupations*. 32 (2): 196-228.

Hassel, Anke (2006). *Wage Setting, Social Pacts and the Euro. A new role for the state?* Amsterdam, Amsterdam University Press.

IST (N.D.) *Database on partenaires sociaux en Europe*, Louvain: Université Catholique du Louvain, Institut des Sciences du Travail. Computerised database developed for the European Commission; http://www.trav.ucl.ac.be/recherche

Iversen, Torben (1999). *Contested Economic Institutions. The politics of macroeconomics and wage bargaining in advanced democracies*. Cambridge, Mass., Cambridge

University Press.

Kenworthy, Lane (2001a). Wage-Setting Institutions: A survey and assessment. *World Politics*, 54(October): 57-98.

Kenworthy, Lane (2001b). Wage-Setting Coordination Scores, Dept. of Sociology, Emory University Atlanta, GA., unpublished manuscript; http://www.emory.edu/SOC/lkenworthy

Ochel, Werner (2001). Collective Bargaining Coverage in the OECD from the 1960s to the 1990s. Munich, Institute for Economic Research, unpubl. paper.

Traxler, Franz (1994). Collective Bargaining: Levels and Coverage. *OECD Employment Outlook* 1994: 167-94.

Traxler, Franz, Sabine Blaschke, and Bernhard Kittel (2001). *National Labor Relations in Internationalized Markets: A comparative study of institutions, change, and performance*. Oxford, Oxford University Press.

Visser, Jelle (1990). In Search of Inclusive Unionism. *Bulletin of Comparative Labour Relations* 18: 5-278.

Visser, Jelle (1991). Trends in Union Membership. *OECD Employment Outlook* 1991: 97-134.

Visser, Jelle (1992). Trade Union Membership Database. Amsterdam: University of Amsterdam, Sociology of Organisations Research Unit. Unpubl. (computerised file).

Visser, Jelle (2003). Unions and Unionism Around the World. In: *The International Handbook of Trade Unions*, edited by John T. Addison, and Claus Schnabel. Cheltenham, Edward Elgar: 366-415.

Visser, Jelle (2006). Union Membership Statistics in 24 Countries. *Monthly Labor Review* 129 (January): 38-49.

Windmuller, John P. (1975). The Authority of National Trade Union Confederations: A comparative analysis. In: *Union Power and Public Policy*, edited by D. Lipsky. New York: IILR Press: 91-107.

Sources to be added

ICTWSS CODEBOOK

RA_m: Right of Association, market sector

3 = yes
2= yes, with minor restrictions (e.g. recognition procedures, workplace elections, thresholds)
1= yes, with major restrictions (e.g. monopoly union, prior authorization, major groups excluded)
0 = no

RA_g: Right of Association, government

3 = yes
2 = yes, with minor restrictions (e.g., recognition procedures, thresholds, only military, judiciary or police excluded, as per ILO convention)
1 = yes, with major restrictions (e.g., monopoly union, government authorization, major groups excluded
0 = no

RCB_m: Right of Collective bargaining, market sector

3 = yes
2 = yes, with minor restrictions (e.g. registration, thresholds)
1 = yes, with major restrictions (e.g. monopoly union, government authorization, limitations on content, major groups excluded)
0 = no

RCB_g: Right of Collective bargaining, government sector

3 = yes
2 = yes, with minor restrictions (e.g. registration, thresholds, only military, judiciary or police excluded – as per ILO convention)
1 = yes, with major restrictions (e.g. monopoly union, government authorization, limitations on content, major groups excluded)
0 = no

RS_m: Right to Strike, market sector
3 = yes
2 = yes, with minor restrictions (e.g. recognized union, balloting, proportionality, respect of peace obligation)
1 = yes, with major restrictions (e.g. monopoly union, compulsory arbitration or conciliation, restrictions on issues or content, major groups excluded)
0 = no

RS_g: Right to Strike, government

3 = yes

2 = yes, with minor restrictions (e.g. recognized union, balloting, proportionality, respect of peace obligation, only only military, judiciary or police excluded – as per ILO convention)

1 = yes, with major restrictions (e.g. monopoly union, compulsory arbitration or conciliation, restrictions on issues or content, major groups excluded)

0 = no

WCoord: coordination of wage bargaining

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.

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.

3 = industry bargaining with no or irregular pattern setting, limited involvement of central organizations, and limited freedoms for company bargaining.

2 = mixed or alternating industry- and firm level bargaining, with weak enforceability of industry agreements

1 = none of the above, fragmented bargaining, mostly at company level

(Note: this classification is based on Kenworthy's 5-point classification of wage-setting coordination scores (Kenworthy, 2001a,b) and in most countries and years the scores are the same as his. The main difference is that except in the case of direct imposition of wage settlements by the government or in the case of a statutory ban on contract renewals (= score 5), I do not assume that the scale for government intervention in wage bargaining parallels the one for wage coordination. Government intervention is taken up in the separate variable: **Govint** below.

Govint: government intervention in wage bargaining

5 = the government imposes private sector wage settlements, places a ceiling on bargaining outcomes or suspends bargaining;

4 = the government participates directly in wage bargaining (tripartite bargaining, as in social pacts);

3 = the government influences wage bargaining outcomes indirectly through price-ceilings, indexation, tax measures, minimum wages, and/or pattern setting through public sector wages;

2 = the government influences wage bargaining by providing an institutional framework of consultation and information exchange, by conditional agreement to extend private sector agreements, and/or by providing a conflict resolution mechanism which links the settlement of disputes across the economy and/or allows the intervention of state arbitrators or Parliament;

1 = none of the above.

(Note: this coding is based on Hassel, 2005, p. 75, however with some changes: a) to make a difference between the case of social pacts or pact negotiations (= 4) and government imposition (= 5), which may or may not occur when pact negotiations or agreements fail; b) to add the role of public sector wage setting (= 3, when public sector settlements are used as pattern setter for private sector wage developments); c) to give more weight to the role of Parliaments or state arbitrators in the settling of disputes (= 2); and d) distinguish the case of non-interventionist governments which favour and facilitate broad sectoral organisations and negotiations (= 2) from the pure liberal or pluralist case of non-intervention and/or a liberal-pluralist regime that favours company unions and company and/or individual bargaining (= 1).

Level: The dominant level(s) at which wage bargaining takes place

5 = national or central level
4 = national or central level, with additional sectoral / local or company bargaining
3 = sectoral or industry level
2 = sectoral or industry level, with additional local or company bargaining
1 = local or company bargaining

Ext: Mandatory extension of collective agreements by public law to non-organised firms

2 = legal provision for mandatory extension available, regularly applied and affecting significant share of the workforce (>=10%);
1 = legal provision for mandatory extension available, but not regularly or widely used (<10%);
0 = legal provision for mandatory extension not available.

Length: Length of collective (wage) agreements

(1- ∞) average length of (wage clauses in) collective agreements, in years.

NMW: National Minimum Wage
2 = Statutory national (cross-sectoral or inter-occupational) minimum wage exists.
1 = Statutory minimum Wage in some sectors (occupations, regions/states) only
0 = No statutory minimum wage

NMS: Minimum Wage Setting

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.

(Note: this coding reflects the (increasing) degree of government intervention and discretion in setting the minimum wage, or – reversely – the degree to which the government is bound in its decisions by unions and employers, and/or fixed rules).

PactNeg: A social pact is (publicly) being proposed by the government, the unions or the employers, and negotiations do take place in specified year

0 = no
1 = yes

PactSign: A (tripartite) social pact between the government, the unions and the employers, or between the government and the unions, is reached and signed in specified year

0 = no
1 = yes
2 = two pacts in same year
3 = three pacts in same year
etcetera

[Note: social pacts are defines as "publicly announced formal policy contracts between the government and social partners over income, labour market or welfare policies that identify explicitly policy issues and targets, means to achieve them, and tasks and responsibilities of the signatories" (Avdagic, 2008: 11). This excludes a) tacit understandings or agreements that are not publicly announced, b) bilateral agreements between employers' organizations and trade unions that do not involve the government as negotiating party, even if implementation requires legislative action or government support .and c) so-called symbolic or declaratory pacts that do not commit the negotiating parties to specific tasks and responsibilities].

AgrSign: A (nation-wide) agreement between the central organisations of the trade unions and the employersis reached and signed in specified year

0 = no
1 = yes
2 = two agreements in same year
3 = three agreements in same year
etcetera

Aut-W: The (central) agreement is autonomously negotiated and implemented by the unions and the employers' organisations, and includes a settlement on wages and/or the procedures for wage negotiations and dispute settlement

0 = no
1 = yes

Aut-NW: The (central) agreement is autonomously negotiated and implemented by the unions and the employers' organisations, and does only regard non-wage issues
0 = no
1 = yes

Sponsor-W: The (central) agreement is negotiated and implemented by the unions and the employers' organisations and includes a settlement on wages
0 = no
1 = yes

Sponsor-NW: The (central) agreement is autonomously negotiated and implemented by the unions and the employers' organisations, and includes a settlement on wages
0 = no
1 = yes

PactStructure: Pact or agreement is negotiated by all or some of the (possible) actors

0 = No pact or agreement
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 = Agreement is negotiated between unions and employers, but implemented through legislation (or prepared for legislation)
6 = Agreement is negotiated between unions and employers and implemented without government involvement or legislation ("autonomous agreement")

(On a strict definition of pacts as tripartite agreement – Avdagic et al., 2005 - , only 1-3, possibly 1-4 constitute social pacts, whereas 5-6, whatever their importance, do not)

Pactscope: Scope of social pact

0 = no pact
1 = narrow pacts, dealing with one issue and not extending into lower-level (firm or public administration) decision making.
2 = broad pacts, dealing with several issues.
3 = pact is declaratory or symbolic e.g. declares that henceforth concertation shall apply, etc.)

Pacttype: Type of social pact

0 = no pact

1 = tax-based incomes policy
2 = regulatory or reform pact
3 = neither category, unknown or symbolic

Wage: pact or agreement is about wage issues
0 = No
1 = Yes

Non-Wage: pact or agreement is about non-wage issues
0 = No
1 = Yes

PactApplies: Wage clause in pact applies in specified year (relevant for pacts or agreements covering more than one year, or pacts that are negotiated in year t and are valid in year t+1)

0 = No
1 = Yes

AgrApplies: Wage clause in central agreement applies in specified year (relevant for pacts or agreements covering more than one year, or will be implemented in next year)

0 = No
1 = Yes

Wage_Proc: pact or agreement is about procedure for wage setting: articulation of levels, conflict procedures, etc.

0 = No
1 = Yes

Wage_Max: pact or agreement contains a norm or ceiling regarding maximum wage rise

0 = No
1 = Yes

Tax_Budget: Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding taxation and/or budgetary decisions

0 = No
1 = Yes

Work_Hrs: Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding working hours

0 = No

1 = Yes

Empl_Pol Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding employment policies (job creation, subsidies, etc.)

0 = No
1 = Yes

Empl_leg Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding employment protection legislation (labour law)

0 = No
1 = Yes

Soc_Sec Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding social security (unemployment, sickness, disability, family or children allowances)

0 = No
1 = Yes

Pensions Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding (old age, retirement) pensions

0 = No
1 = Yes

Training Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding vocational training

0 = No
1 = Yes

Union_rights Pact or agreement contains, and/or is predicated on, concessions (or promises) regarding unions (representation, recognition) rights, including employee representation, works councils, bargaining rights, etc.

0 = No
1 = Yes

Inst_conc. Pact or agreement sets up or changes nation-wide councils for concertation.

0 = No
1 = Yes

TC: existence of a standard (institutionalized) tripartite council concerning social and

economic policy (private sector).

1 = yes
0 = no

BC: existence of a standard (institutionalised) bipartite council of central or major union and employers organizations for purposes of wage setting, economic forecasting and/or conflict settlement.

1 = yes
0 = no

RI: routine involvement of unions and employers in government decisions on social and economic policy
2 = full concertation, regular and frequent involvement
1 = partial concertation, irregular and infrequent involvement\
0 = non concertation, involement is rare or absent

WC: status of works council

2 = existence and rights of works council mandated by law or basic agreement
1 = works council is voluntary and/or no sanctions for non-observance of law or agreement
0 = no works council or similar institutions

WC_struct: structure of works council representation
4 = single-channel, union, based on law or national agreement
3 = dual-channel, union dominated, based on law or national agreement
2 = dual-channel, supplementary to union, based on law or national agreement
1 = single-channel, union, based on local agreements, legal provisions for representation only if no union present or recognized
0 = single-channel, union, based on local agreements, no legal provisions for representation if no union present or recognized

WC_rights: rights of works councils
3 = economic and social rights, including codetermination on some issues
2 = economic and social rights, consultation (advice) only
1 = social rights
0 = no rights (sanctions), only information.

WC_negot: works council or local union representatives involvement in collective bargaining
2 = shop stewards or elected works council representatives (in large firms) regularly negotiate over pay and working time, and/or negotiate social pacts
1 = shop stewards or elected works council representatives (in large firms) are

occasionally and informally involved in pay and/or pact negotiations
0 = shop stewards and elected works council representatives are not or only rarely involved in local bargaining

Cfrep: Main confederation(s) represent(s) the affiliates politically and is routinely involved in consultation with government – either through bipartite or tripartite contacts

2 = score '2' on RI (routine involvement in consultation)
1 = score '1' on RI (routine involvement in consultation)
0 = score '0' on RI (routine involvement in consultation)

Cfappt: confederal (political) control over appointment of leaders of affiliates

2 = confederation appoints or has veto (directly or through government approval)
1 = affiliates and confederations share control
0 = confederation has no control over appointment process

Cfagr: confederal involvement in wage agreements negotiated by its affiliate unions

2 = confederation has mandate to negotiate agreement with employers and/or government on wage issues
1 = confederation has mandate to negotiate agreement with employers and/or government on non-wage issues
0 = none of above

Cffund: confederal or joint strike fund from which member unions are reimbursed

2 = joint strike or resistance fund has significant size (>=50 percent of total union expenditure on official strikes)
1 = joint strike or resistance fund is limited (< 50 percent of total union expenditure on official strikes)
0 = no joint strike or resistance fund held by confederation

Cfveto: confederal power over strikes by affiliates

2 = all strikes need prior approval from confederation
1 = confederation can end strikes through central procedures of conflict settlement (arbitration)
0 = confederation has no power over strikes organised by its affiliates

Cfauthority: authority of confederation over its affiliates

(0-1): additive measure over Cfrep, Cfappt, Cfagr, Cffund and Cfveto, divided by maximum score (=10).

Unagr: union (affiliate) role in wage bargaining

2 = union negotiates enforceable agreement at sector level and has veto power over company agreements
1 = union negotiates agreements at sector level allowing enterprise or company branches to vary within limits
0 = union does not negotiate sector agreements

Unappt: union (affiliate) control over appointment of workplace representatives

2 = union (affiliate) appoints workplace representatives
1 = union (affiliate) can veto candidates for workplace representation
0 = union (affiliate) has no control over appointment or election of workplace representatives

Unfin: union (affiliate) finances

2 = local and workplace branches are financed by the national union (affiliate)
1 = local and workplace branches have autonomous funds from direct member or employers contributions
0 = national union (affiliates) is dependent on financial contribution from constitutive branches and local (workplace) unions (national union is federation).

Unfund: union (affiliate) strike fund

2 = union (affiliate) has a large strike fund from which striking members are reimbursed at 70 percent or more of their base wage (without overtime pay and bonuses) for each day of strike.
1 = union (affiliate) has small strike funds from which some reimbursement (at less than 70 percent of the base wage) is guaranteed
0 = union (affiliate) has no strike fund

Unveto: union (affiliate) power over enterprise strikes

2 = union (affiliate) has veto over enterprise strikes
1 = union (affiliate) can end enterprise strikes through central procedure of conflict settlement (arbitration)
0 = union (affiliate) cannot veto or end enterprise strike

Unauthority: authority of union (affiliate) over their local or workplace branches and representatives.

(0-1): additive measure over Unagr, Unappt, Unfin, Unfund and Unveto, divided by maximum score (=10).

NECfs: Number of Employers' Confederations (Organisations)

(1- 8) = number of employers' confederations (organisations in agriculture are excluded)

ED: Employers' organisation density, as a proportion of employees in employment

(0-100) = WSEE in firms organised in employers' organisations*100/WSEE
(WSEE is wage and salary earners in employment)

NUCfs: Number of Union Confederations

(1- 8) = number of confederations (very small confederations are ignored and counted as part of the independent, autonomous or unaffiliated union membership; as a rule NCfs counts only central organisations, that have affiliate unions and membership that exceeds five percent of total union membership in the country)

ENUCfs: Effective Number of Union Confederations

(1- 8) = effective number of confederations, defined as the inverse of the Herfindahl-index or 1/H. The Herfindahl (H) index is given by $H_{cf} = \sum_i^n (p_i^2)$, where p_i is the proportion of total membership organised by the I^{th} confederation and n is the total number of confederations. By discounting the weight of smaller confederations (achieved through the squaring method), the H_{cf} index conveys an idea of the actual degree of concentration at the central or peak level in a given country. The effective number of confederations *ENCfs* is equal to the probability that any two union members are in the same confederation and thus a measure of the degree of fragmentation or unity at the central (political) level (see Iversen, 1999: 53; Visser, 1990: 172).

NAffCf1: Number of affiliates of confederation 1 (usually largest)

(1- ∞) = number of affiliated unions to confederation 1 (only national unions or federations)

ENAffCf1: Effective number of affiliates of confederation 1

(1- ∞) = effective number of affiliates, defined as the inverse of the Herfindahl-index or 1/H. The Herfindahl (H) index is given by $H_{aff} = \sum_i^n (p_i^2)$, where p_i is the proportion of total membership organised by the I^{th} affiliate and n is the total number of affiliates. By discounting the weight of the many smaller affiliates (achieved through the squaring method), the H-index conveys an idea of the actual degree of concentration within the confederation The effective number of affiliates in the first or main confederation ENAffCf1 is equal to the probability that any two union members are in the same union (affiliate) and thus a measure of the degree of fragmentation or unity in bargaining if that takes place at the

sectoral level. We may also think of the effective number of unions or affiliates in the main confederation as the effective number of bargaining units (see Iversen, 1999: 53; Visser, 1990: 172). This number is indicative of the total number of the bargaining units in a country, especially if we assume that there is joint or majority bargaining in countries with unions divided between different union confederations. Based on this assumption we can dispense with the requirement to measure the effective number of unions in minority confederations Cf2-Cf8.

MemCf1: Total membership of unions affiliated to confederation 1 (usually largest)

(1- ∞) = sum of members of affiliates in confederation 1

NAffCf2, 3, … 8: Number of affiliates of confederation 2, 3, … 8

(0- ∞) = number of affiliated unions to confederation 2-8 (only national unions or federations)

MemCf2, 3, … 8: Total membership of unions affiliated to confederation 2, 3, …8

(0- ∞) = sum of members of affiliates in confederations 2-8

NindU: Number of Independent (Not-affiliated) Unions

(0- ∞) = number of unaffiliated or independent unions (only national unions or federations)

MindU: Membership of Independent Unions

(0- ∞) = sum of members of independent or unaffiliated unions

TNUnions: Total Number of Unions

(0- ∞) = $\sum \text{NaffCf}_{1\text{-}8} + \text{NindU}$

TUM: Total Union Membership

(1- ∞) = $\sum \text{MemCf}_{1\text{-}8} + \text{MindU})$

NUM: Net Union Membership

(1- ∞) = TUM minus union members outside the active, dependent and employed labour force (i.e. retired workers, independent workers, students, unemployed, see

Ebinghaus and Visser, 2000; Visser, 1991, 2006).

WSEE: Wage and Salary Earners in Employment

(1- ∞) = employed wage and salary workers, source (unless stated otherwise) OECD, *Labour Force Statistics*

UD: Union Density rate, net union membership as a proportion wage and salary earners in employment

(0-100) = NUM*100/WSEE

UD_s: Union Density date, net union membership as a proportion wage and salary earners in employment, as in national (household or labour force surveys)

(0-100) = NUM_survey*100/WSEE_survey

UR: Union Representation rate, union membership as a proportion of dpendent and independent workers

(0-100) = (NUM+own account workers)*100/(WSEE+own account workers)

UnionCov: Union coverage of workplaces

(0-100) = employees in workplaces covered by unions or works councils as a proportion of all wage and salary earners in employment,

AdjCov: Bargaining (or Union) Coverage, adjusted

(0-100) = employees covered by wage bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining, expressed as percentage, adjusted for the possibility that some sectors or occupations are excluded from the right to bargain (removing such groups from the employment count before dividing the number of covered employees over the total number of dependent workers in employment WSEE; see Traxler, 1994)

CovPriv: Bargaining (or Union) Coverage, private or market sector

(0-100) = employees in the private or market sector covered by wage bargaining agreements as a proportion of all wage and salary earners in employment in the private or market sector

CovPub: Bargaining (or Union) Coverage, public or government sector

(0-100) = employees in the public or government sector covered by wage bargaining agreements as a proportion of all wage and salary earners in employment in the public or government sector

ShCf1: Membership share of Confederation 1

(0-1) = fraction p_1 of the membership in confederation 1 in the total membership (TUM)

ShCf2, 3, - 8: Membership share of Confederation 2, 3, - 8

(0-1) = fraction $p_{2\text{-}8}$ of the membership in confederations 2 to 8 in the total membership (TUM)

DEME: External demarcations between union confederations

2 = sharp (political, ideological, organisational) cleavages associated with conflict and competition
1.5 = moderate (occupational, regional, linguistic, religious) cleavages, limited competition
1 = no cleavages – united confederation

DEMI: Internal demarcations within union confederations

2 = sharp (organisational, occupational or skill-related) cleavages associated with conflict and competition (multiple unions within same plant or company)
1.5 = moderate (occupational or skill-related) cleavages, limited competition (multiple unionism in same plant or company)
1 = no cleavages (single jurisdictions – industry unions or enterprise unions)

Hcf: Membership concentration at central or confederal level (Herfindahl index at central or peak level)

(0-1) = given by $\sum_i^n (p_i^2)$, where p_i is the proportion of total membership organised by the i^{th} confederation and n is the total number of confederations.

Haff: Membership concentration at the industry level, within confederations (Herfindahl index at sectoral level)

(0-1) = given by $\sum_i^n (p_i^2)$, where p_i is the proportion of total membership organised by the i^{th} affiliate and n is the total number of affiliates.∑ Aff1 n (pi2), where p denotes the fraction of total membership organised by the ith affiliate and n is the total number of affiliates. This variable measures the degree of concentration or

fragmentation regarding bargaining units at the industry or occupational level.

AUTH: Summary measure of formal authority of unions regarding wage setting at peak and sectoral level

(0-1) = sum of **Cfauthority** and **Unauthorit**y, divided by maximum score (=20)

CONC: Summary measure of concentration of unions at peak and sectoral level

(0-1) = sum of **Hcf** and **Haff**, with a maximum of 1.

CENT: Summary measure of centralisation of wage bargaining, taking into account both union authority and union concentration at multiple levels (derived from Iversen's centralisation index).

(0-1) = given by $\sqrt{[(\ Cf_{authority}*DEME*H_{cf}\ ) + (Aff_{authority}*DEMI*H_{aff}\ )]}$, weighting the degree of authority or vertical coordination in the union movement with the degree of external and internal unitiy, and union concentration or horizontal coordination, taking account of multiple levels at which bargaining can take place and assuming a non-zero division of union authority over different levels (see Visser, 1990; Iversen, 1999). Taking the square root serves to magnify the differences at the low end of this scale (cf. Iversen, 1999: 53)

Country codes

AS = Australia
AU = Austria
BE = Belgium
BG = Bulgaria
BRA= Brazil
CHL= Chili
CHN= China
CND= Canada
CY = Cyprus
CZ = Czech Republic (before 1993: Czechoslovakia)
DE = Germany (before 1990: West Germany)
DK = Denmark
EE = Estonia
EL = Greece
ES = Spain
FI = Finland
FR = France
HU = Hungary
ICE= Iceland
IE = Republic of Ireland
IND= India
INDN=Indonesia
ISR= Israel
IT = Italy
JAP= Japan
KOR= Republic of Korea (South Korea)
LT = Lithuania
LU = Luxembourg
LV = Latvia
MAY=Malaysia
MEX= Mexico
MT = Malta
NL = Netherlands
NO = Norway
NZ = New Zealand
PHI= Philippines
PL = Poland
PT = Portugal
RO = Romania
SA = South Africa
SE = Sweden
SG = Singapore
SI = Slovenia

SK = Slovakia (before 1993: Czechoslovakia)
SZ = Switzerland
TUR= Turkey
UK = United Kingdom
US = United States