

# CROSS-NATIONAL DIFFERENCES IN THE TRADE UNION MOVEMENT ON THE BASIS OF INSTITUTIONS

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**Abstract:** *This study deals with an issue of collective action theory. Its question is related to the activity of trade unions. According to the literature on collective action, large organisations, such as trade unions, have problems with organising themselves. The reason for this is social and economic incentives do not work in large groups, unless they consists of several smaller groups. The hypothesis of this paper is the relationship between confederations and their affiliates plays an important role in explaining cross-national differences in trade union movement and trade union activity. Based on a study a quantitative analysis was carried out in order to explore it. The obtained result is a small contribution to the empirical literature on trade unions. The methodology included a factor analysis and k-means clustering. Two out of the selected four variables describing the relationship between confederations and the member organisations fit into the factor structure. These variables did not form an independent dimension because they were linked to other variables but their factor loadings were large and they remained in one factor. So they were not separated from each other. Based on the cluster analysis it can be stated that the resulting factors are suitable for classifying the OECD countries. Three groups of countries were identified. The first group can be characterised by relatively small importance of trade union activity compared to the other two groups. Concertation at national level is important in the other two clusters but there is a difference in the institutionalisation. Social pacts have important role in the second group of countries. Finally, corporatist states constitute the third group in which the importance of confederations is the largest. The clusters created by the factors correspond roughly to trade union models in the literature.*

**Keywords:** *trade unionism; labour institutions; federation.*

**JEL classification:** *J51; J52; K31.*

## 1. Introduction

Disputes about the realization of collective action are still popular today (see Pecorino, 2015; Sandler, 2015). Organisations are the manifestation of solving the problem of collective action, which stems from the antagonism between individual and common interest. Scientists have different opinions about the solution. The cornerstone of the debate is undoubtedly the existence of large organisations.

It is probably no exaggeration to say that trade union movement has one of the most comprehensive literature in this field. From time to time new literature reviews and books were published, for example some authors are Fiorito and Greer (1982), Riley (1997) and Schnabel (2013).

Describing trade unions' collective action is a complicated task because many factors cannot be measured precisely. This provides an opportunity to rethink the

problem. Ortiz and Riba (2015) created four indices to capture the institutionalisation of trade union activity at the national level. These four dimensions of collective action (concertation, corporatism, collective bargaining and trade union in the workplace) represent transmission channels between labour and capital (Ortiz and Riba, 2015). The importance of institutional design is also mentioned in the literature on collective action. Refunds or federated structure may foster the cooperation of group members and this is particularly significant for organisations which have large number of members (Sandler, 2015: 199). In general, large organisations – like trade unions - often have federal structures (Congleton, 2015). Yet this characteristic of the trade union movement is seldom subject to empirical analysis.

The purpose of this paper is to explore the role of federal structure in the trade union movement and to complete the description of the institutionalisation of trade union activity. In order to do this, Section 2 presents the dimensions of institutionalisation and the relationship with federal structure. Section 3 contains data and methodology. The structure of institutionalisation is examined by factor analysis and k-means clustering in Section 4. The study concludes with brief remarks in Section 5.

## **2. Institutionalisation of trade union activity**

According to Avgadic, Rhodes and Visser (2011: 62) institutionalisation is 'both a process and the outcome of a process whereby social activities become regularized and routinized as stable reference points around which actors build legitimate and sanctionable expectations'. Based on this definition Ortiz and Riba (2015: 121-122) identified three domains where trade union activity can be more or less institutionalised:

- national level negotiation about employment and social policies,
- the process of collective bargaining, and
- company or workplace level negotiation.

The authors observed two dimensions at national level not exactly in lines with their expectations: one for social pacts and another one for the corporatist systems of representation, namely the bi- or tripartite councils (Ortiz and Riba, 2015). Reasonable explanations of the separation are that eventual social pacts mean alternative to regular bi- or tripartite councils and social pacts have their own process of institutionalisation (Avgadic, Rhodes and Visser, 2011: 61-85). The third dimension is collective bargaining which is regarded to be more institutionalised in a country if it is more centralised and more coordinated and the law provides extension of collective agreements to non-union members. Trade union activity at the workplace or company level is the fourth dimension. The institutionalisation of this dimension depends on the existence of formal organs of representation and the role of these. The value of the index increases if formal organs are better involved in bread-and-butter issues, so information, consultation, or co-determination rights are enforceable.

These dimensions or levels of trade union activity are built on each other. Although indices describe individual dimensions, they contain little information on how the levels are related to each other, so how federative the trade union movement is. According to literature on collective action this relationship between the levels may play a role, and it can be a significant feature or dimension of trade union activity.

The relevance of federal structure lies in establishing national, regional and local privileged subgroups (Congleton, 2015). As Olson (1965: 62-63) showed small groups were more efficient in realization of common interest as economic and social incentives predisposed them to invest time and resources to foster this collective goal. He pointed out that social incentives could not have effect in latent group because the lack of face-to-face contact. But there is an exception. If latent group is a federation of smaller groups and the central or federated organisation offers some service to its small member organisations, the latter may apply social incentives to induce individual members' contribution to the realization of the large group's common objectives. Therefore latent group can be mobilized through social incentives (Olson, 1965). In addition, individual activities are made more visible to the group, which promotes collective action (Sandler, 2015). Congleton (2015) draws attention to the possibility of explaining the emergence of hierarchical organisational structures on the basis of *The Logic of Collective Action* written by Mancur Olson (1965). Sandler (2015) sees federal structure as a low-cost institution that changes the incentives to make the contribution a dominant strategy. Accordingly, the federal structure may be a significant factor, which is worth examining.

### **3. Data and methodology**

Two data sources are used in this paper: the ICTWSS Database and the Database for Institutional Comparisons in Europe (DICE). The importance of federal structure is analysed by exploratory factor analysis which is validated by cluster analysis.

#### **3.1. Data**

The dataset (please, see Annex for variables' list) contains variables mainly from professor Jelle Visser's Database of Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS), which can be downloaded from the website of Amsterdam Institute for Advanced Labour Studies (AIAS) (Visser, 2016a). The database provides a wide range of information on the institutional characteristics of trade unions, wage determination, state intervention and social-level agreements. Annual data for the period 1960 to 2014 cover all OECD and EU Member States, a total of 51 countries (Visser, 2013). The variables of ICTWSS Database that can be capable of capturing the connections between confederations and their affiliates are

- Confederal control over appointment of leaders of affiliates (cfappt)
- Confederal or joint strike fund (cffund)
- Main confederation(s) represent affiliates politically (cfrep) and
- Confederal power over strikes by affiliates (cfveto).

Not all countries in ICTWSS have been included in the analysis, as some important variables (A4, A8, A31, A34 and A35) are derived from CESifo Group's Database for Institutional Comparisons in Europe (DICE). The DICE Database contains organised information on institutions, regulatory systems, legal requirements and the process of their implementation. It is suitable for international comparisons in several areas, but what is most important here, the DICE Database includes table for labour market regulation in 34 countries: 'Institutional Characteristics of Trade Unions, Wage Settings, State Intervention and Social Pacts, 1960-2007' (DICE Database, 2011). Ortiz and Riba (2015) used the DICE Database but in fact its data

came from an earlier version of the ICTWSS Database (1960-2007). So I decided to use the latest version of the ICTWSS Database but for the period 1986-2007 and for 34 countries, as Ortiz and Riba (2015) did in their publication.

The following countries are included in the study: Australia, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the United States of America.

Ortiz and Riba (2015) created three new variables. 'Agenda' is an additive index, which is generated from the proportion of 13 variables related to issues treated in a social pact or agreement. 'Intensity' is the combination of 3 variables which shows the importance of the pact. 'Agents' represents the number of actors who take part in the pact or agreement. Besides, the authors smoothed all variables that are linked to social pacts or agreements in order to take into account the possibility that a social pact or agreement may be in force for three years (such as in Ireland).

### **3.2. Methodology**

A global exploratory factor analysis was conducted for the whole dataset in order to find out whether the relationship between peak organisations of trade unions and their affiliates had a role in the institutionalisation of trade union activity. The purpose was to explore if it represented a new dimension next to the other four. The method of extraction was principal axis factoring with Promax rotation. Meeting the general rule, only factors with eigenvalues equal to or bigger than one were retained. Subsequently, cluster analysis was performed in order to verify the ability of resulting factors to create groups of countries that correspond the models of trade union movements in the literature.

## **4. Results of multivariate analyses**

### **4.1. Factor analysis**

After running exploratory factor analysis the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.801, the Bartlett's test of sphericity was significant and MSA values were between 0.751 and 0.917. 'Cfappt' and 'cfrep' did not fit into the factor model, so these variables were omitted from the investigation. Based on the Kaiser criterion the extracted number of factors were four and cumulative variance was 63,014%.

The identified factors and factor loadings can be seen in Table 1. Variables related to the relationship between confederations and their member organisations did not yield a new dimension as it was expected, but were added to the factors obtained previously.

Indicators relating to the operation and importance of works councils constitute the first factor. The stronger the presence of the works council and the wider its rights, the more institutionalised the activity of the trade union at the workplace level. Factor 2 can be interpreted as the ability of confederations to influence the activity of its affiliates and to represent them in social and political affairs.

**Table 1:** Pattern matrix with the results of exploratory factor analysis

	Factor 1	Factor 2	Factor 3	Factor 4
Structure of works council (A35)	<b>0,984</b>			
Involvement of works councils in negotiation of wages (wc_negot)	<b>0,851</b>			
Status of works councils (A34)	<b>0,828</b>			
Rights of works councils (wc_rights)	<b>0,643</b>	0,305		
Extension of collective agreements (A4)	<b>0,592</b>			
Confederal power over strikes by affiliates (cfveto)		<b>0,842</b>		
Existence of institutionalised bipartite council (bc)		<b>0,840</b>		
Confederal or joint strike fund (cffund)		<b>0,709</b>		
Routine involvement in government decisions (ri)		<b>0,568</b>		
Intensity			<b>0,878</b>	
A social pact is proposed and negotiated (pactneg)			<b>0,800</b>	
Agenda			<b>0,557</b>	0,427
Agents			<b>0,542</b>	
Existence of institutionalised tripartite council (A31)		0,335	<b>0,456</b>	-0,301
Coordination of wage-setting (coord)				<b>0,831</b>
The predominant level at which wage bargaining takes place (level)				<b>0,694</b>

Source: Data are derived from Visser (2016) and DICE Database (2011)

Note: Only factor loadings bigger than 0.3 are presented (this threshold based on Hair et al, 2009).

The analysis put together the variables linked to social pacts in the third factor. The 'existence of tripartite council' is also in this factor, however this variable may be logically attributed to factor two, in which 'existence of bipartite council' and 'routine involvement in government decisions' can be found. The factor loadings of the 'existence of tripartite council' is not so high (0.456) and it is not very far from loadings for Factor 2. The last factor consists of two variables that show the degree of coordination and centralisation of collective bargaining. Variable 'cfrep' would be in Factor 2, if it were appropriate for the factor model. This may confirm the interpretation of the second factor. Finally, 'cfapp' would be part of Factor 4.

#### 4.2. Cluster analysis

Subsequently, following Ortiz and Riba (2015), k-means clustering was performed on the resulting factor scores in order to classify countries and compare the results with the authors and the literature. Cluster analysis was run for years 1997 and 2007. The results are summarised in Table 2.

Similarly to the results of Ortiz and Riba (2015) the analysis proved to be better with three clusters. There are almost the same countries in each group with the index of confederation power as in paper of Ortiz and Riba (2015).

The cluster centres differ significantly in the first cluster compared to the others. Anglo-Saxon countries and some Central and Eastern European countries are in this first group. The index of concertation and the index of collective bargaining are the highest in the second cluster, in which there are countries where the importance of social pacts increased in the 1990s and 2000s in order to facilitate compliance with the requirements of Maastricht Criteria (Baccaro, 2014).

**Table 2:** Results of cluster analysis (final cluster centres) and typology of countries based on institutionalisation of trade union activity

	<b>Cluster 1</b>	<b>Cluster 2</b>	<b>Cluster 3</b>
Index of TU institutionalisation in the workplace	-0,93040	0,29768	0,92907
Index of confederation power	-0,63959	-0,26152	0,96009
Index of concertation (social pacts)	-0,59541	1,28977	-0,16338
Index of collective bargaining	-0,76101	0,79824	0,37742
Typology of countries in 1997	Australia, Bulgaria, Canada, Cyprus, Czech Republic, Estonia, Japan, Latvia, Lithuania, Malta, New Zealand, Poland, Slovak Republic, Switzerland, United Kingdom, United States	Finland, France, Greece, Ireland, Italy, Portugal, Slovenia, Spain	Austria, Belgium, Denmark, Germany, Hungary, Luxembourg, Netherlands, Norway, Sweden
Typology of countries in 2007	Australia, Canada, Cyprus, Czech Republic, Estonia, Japan, Latvia, Malta, New Zealand, Poland, Switzerland, United Kingdom, United States	Bulgaria, Greece, Ireland, Italy, Lithuania (from 2005), Portugal, Romania, Slovak Republic, Slovenia, Spain	Austria, Belgium, Denmark, Finland (from 2007), France, Germany, Hungary, Luxembourg, Netherlands, Norway, Sweden

Source: Ortiz and Riba (2015), data are derived from Visser (2016) and DICE Database (2011)

The third cluster has the highest cluster centre values for the first and second indices. The countries here can be characterised by classic corporatism (Ortiz and Riba, 2015). Accordingly, the role of confederations seems to be the most significant in these countries.

### 5. Concluding remarks

The main conclusion of this study is that the relationship between confederations and their member organisations can contribute to explaining cross-national differences in trade union activity. However this connection needs further investigations. An interesting path for future research could be a detailed study with variables which describe more precisely the relationship between the levels of trade union activity.

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## Data annex

List of variables (mainly from ICTWSS Database)	
Variable	Label
coord	Coordination of wage-setting
level	The predominant level at which wage bargaining takes place
A4 (from DICE Database)	Mandatory or compulsory extension of collective agreements to non-organised firms
pactneg	A social pact is proposed by government, unions or employers, and negotiations do take place in specified year
pactsign	A social pact between government, unions and/or employers is signed in specified year
agrsign	Agreement between central organisations of trade unions and employers is reached and signed in specified year
pactstructure	Pact or agreement is negotiated by all or some of the (possible) actors
wage	Pact or agreement is about wage issues
wage_proc	pact or agreement is about procedure for wage setting, articulation of levels, conflict procedures, etc
wage_max	pact or agreement contains a norm or ceiling regarding maximum wage rise
agrappplies	Wage clause in central agreement applies in specified year (if agreement covers > year, or implemented in next year)
tax_budget	Pact or agreement contains, and/or is predicated on, concessions regarding taxation and/or budgetary decisions
work_hrs	Pact or agreement contains, and/or is predicated on, concessions regarding working hours
empl_pol	Pact or agreement contains or is predicated on concessions regarding employment policies (job creation, subsidies)
empl_leg	Pact or agreement contains, or is predicated on, concessions regarding employment protection legislation (labour law)
soc_sec	Pact or agreement contains, and/or is predicated on, concessions regarding social security
pensions	Pact or agreement contains, and/or is predicated on, concessions regarding (old age, retirement) pensions
training	Pact or agreement contains, and/or is predicated on, concessions regarding vocational training
union_rights	Pact or agreement contains, or is predicated, concessions regarding union rights
inst_conc	Pact or agreement sets up or changes nation-wide councils for concertation
A31 (from DICE Database)	Existence of a standard (institutionalized) tripartite council concerning social and economic policy (private sector)
Bc	Existence of institutionalised bipartite council of central union and employers organizations for wage setting
ri	Routine involvement of unions and employers in government decisions on social and economic policy
A34 (from DICE Database)	Work Councils in firms and establishments with 50 or more staff
A35 (from DICE Database)	Structure of works council or employee representation
wc_rights	Rights of works councils



<b>List of variables (mainly from ICTWSS Database)</b>	
<b>Variable</b>	<b>Label</b>
A37 (from DICE Database)	Involvement of the works council in the negotiations of wages in the firms, enterprise or establishment
cffund	Confederal or joint strike fund from which member unions are reimbursed
cfveto	Confederal power over strikes by affiliates
cfrep	Main confederation(s) represent affiliates politically and is routinely involved in consultation with government
cfappt	Confederal (political) control over appointment of leaders of affiliates
A8 (from DICE Database)	The tripartite social pact contains policy commitments
Agenda	Proportion of the 13 issues treated in the pact or agreement contained in the variables (from 'wage' to 'inst_conc', continuous: 0-0.69)
Intensity	Intensity of the pact (combination of the variables pactsign, A8 and agrsign; 0=no pact, 1=agreement, 2=social pact, 3=social pact with policy commitments)
Agents	Number of actors involved in the pact or agreement (recodification of pactstructure, 0=no pact, 1=bipartite act, 3=tripartite pact)

Source: Visser (2016b), DICE Database (2011), Ortiz and Riba (2015: 141)