Work Document 4

Social Dialogue Indicators

This document is addressed to partners of Social Dialogue project and aims to guide the gathering data process. It deals with social dialogue indicators with a final remark on validity and reliability of indicators.

1. General framework

Information about representative bodies membership, considering both professional and theory staff, follow the methodology relating to indicates to measure union membership as set out in the ILO Resolution concerning statistics of labor disputes [1].
There are two main methods of compiling union membership statistics. The first is to carry out a household, enterprise or labour force *survey*. The method has clear advantages for calculating detailed union density rates by sex, employment status, industrial branch, enterprise size, educational attainment, level of earning or other characteristics. The survey method gives better results when it is clear to respondents what is meant by a union and membership, and if problems of statistical sampling are solved.
The second method is a compilation of membership statistics from questionnaires completed by individual unions or trade union federations. In many countries this task is undertaken by an official register, a government office, a central statistical bureau, or one or more trade union federations. In some cases such data are compiled by independent researchers, either on the basis of unpublished registers, government surveys or even their own surveys. This kind of data offers advantages for a study of membership developments in relation to union type, membership concentration, inter-union competition, union politics and union ideology.
According to the ILO [2], one of the main difficulties with the second method is statistical coverage or the identification of unions (i.e. not so much whether an organization should be considered as a "trade or labour union", but simply locating and identifying the existence of small new unions).
Self-reporting of membership reflects different administrative and political practices and may yield incomparable and unreliable results. Unions may have reasons to overstate or understate their membership figures in reports to the press, public agencies, political parties, employers or competitors. They may apply different norms regarding who is to be considered as a "member in good standing" and may be slow to remove those who have left or no longer pay their contributions. Unions may include people who no longer consider themselves as members. Comparison with survey data suggests that some overstatement in reported membership is general but, in most cases, small.

2. Union density and labour force statistics

As a measurement of relative rather than absolute size, union density rates are better suited to making comparisons, especially across countries, than absolute membership figures. Union density expresses union membership as a proportion of the eligible workforce [3]. However, as Chang and Sorrentino (1991)[4] rightly observe, the eligibility to join a union shifts over time and across countries, and the strict application of such a criterion for calculating union density rates would make comparison across countries extremely difficult if not impossible.
Therefore, a common denominator is applied to permit comparison. Given the definition of a trade union, and the self-declared purpose and domain of most unions, this common denominator is defined as all people who earn their living on wages and salaries, including those who are employed in the public sector or work in government service. Normally, union density rates are

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[1] Adopted by the Fifteenth International Conference of Labour Statisticians held in Geneva in 1993.

[2] ILO, Bureau of statistics, Statistics of trade union membership, March 2009

[3] LIO, Bureau of statistics, cit

[4] C. Chang and C. Sorrentino: "Union membership statistics in 12 countries", in *Monthly Labor Review* (Washington, D.C., Department of Labor), Dec. 1991, pp. 46-53.

standardized by calculation union membership as a proportion of the wage and salary earners in the same year (preferably on the basis of some annual average, or en-of-year data). Such data is directly comparable with household or labour force survey data. Although many unions, at least in Europe, retain membership of unemployed workers and those that have retired from the labour force (i.e. through reduced contribution rates or by offering special benefits), the calculation of standardized density rates requires their number to be subtracted from the "active membership". This is possible, mostly with the help of surveys, financial data or on the basis of estimates.
In the European context in which the Social Dialogue project is applied, data on employment and retired workers are provided while trade union own reliable data base. Anyhow it s useful to recall methodological remark raised by the ILO si that a clear picture is understood. In order to broaden the orbits of comparison, two more baselines for the calculation of union density rates are presented. One is connected to the concept of the non-agricultural labour force, the other to the formal wage sector.
The non-agricultural labour force is often regarded as the unions' main domain. As a rule, the number of union members in agriculture should be subtracted before union density rates are calculated. However, as it is rare for unions to organize any significant number of farm workers, this calculation has not been performed. Unionized farm workers are found only where there is a plantation system or where unions have established a tradition of providing social security benefits. In the few countries where union density in agriculture is very high, for instance in the Scandinavian countries, the agricultural wage sector becomes so small (less than 5% of overall employment) that their number in the aggregate is ignored, without comparability being impaired.
The main advantage of using the non-agricultural labour force as the denominator for calculating union density rates is that data is available for almost all countries. The disadvantage is that many groups (such as the self-employed and unpaid family workers, especially in construction and in commercial, personal and household services) which do not belong to the target population of trade unions are also part of the non-agricultural labour force. The number of wage earners is generally much smaller than the whole non-agricultural labour force - also because the latter includes the unemployed in industry and services.
Aforementioned discussion can be useful to decide what criteria is adopted by both Professional Associations and Trade Union in the Social Dialogue Project for the sustainability of Professionals firms.

3. Membership and coverage

To recap, information about membership can stem from different sources. The association or union involved can provide data on its own members, but this data is biased by the self-interests as above pointed out.
For official government statistics on union membership, the primary source of information is the national's Labour Force Survey (LFS). In UK for instance, analyses of trade union membership are published by the publication of an annual National Statistics report [5]. The annual report contains estimates of trade union membership from the LFS for autumn 2005, for both employees and all those who are in employment. Estimates are presented for the number and proportion of people in employment who are trade union members in both the UK and Great Britain, and for employees whose pay and conditions are affected by collective agreements. The report also provides trade union densities by age, sex, ethnicity, income, major occupation, industry, full and part-time employment, sector, nation and region. Additionally, information is provided on collective agreement coverage and trade union presence.
The question that asks whether any of the people at the respondent's place of work, namely the professional firm, are members of a trade union or staff association is designed to measure trade union presence. As for Professions Associations the same rule should be applied.
First information refers to the presence, following the related membership: two different realms. The usual survey poses te question as below: at your place of work, are there any unions, staff association or group of unions?
For the professionals it should be: in your profession, are there any association or group of association?

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[5] D. Bird, Indicators to measure trade union membership, Economic & Labour Market Review, Vol 1, No 9, Sept 2007.

Second information level is the following: are you a member of a trade union or staff association?
For the professionals: are you a member of a professional association?
Third level covers collective agreement:
are your pay and conditions of employment directly affected by agreements between your employer and any trade union(s) or staff association?
For professionals:
are pay and conditions of your employees directly affected by agreements between your professional association and any trade union or staff union?

Table 1 Social Dialogue Indicators

		Question for Union/Association Membership	
		Employees	**Professionals**
Informative Levels	Presence of Representatives	At your place of work, are there any unions, staff association or group of unions?	In your profession, are there any association or group of association?
	Membership	Are you a member of a trade union or staff association?	Are you a member of a professional association?
	Collective agreement Coverage	Are your pay and conditions of employment directly affected by agreements between your employer and any trade union(s) or staff association?	Are pay and conditions of your employees directly affected by agreements between your professional association and any trade union or staff unio
		Indicator 1 Membership Rate = Members/Total workers x 100)	Indicator 2 Coverage Rate (net) = Members covered by Collective Agreement / Members
		Coverage Rate (gross) = Indicator 1 x Indicator 2	

Data on unionization can be collected from a number of sources. Statistics on trade union membership and coverage of collective agreements are often obtained from administrative records, such as registries kept by Labour Ministries or by trade unions themselves. In other cases, the source of data is an establishment survey. However, the preferred source for these statistics is a Labour Force Survey. A Labour Force Survey has a number of advantages over other sources when it comes to the production of social dialogue indicators. It provides data with comprehensive coverage, or at least with greater coverage than administrative records and establishment surveys. Indeed, Labour Force Surveys usually target a wider population, apply to all sectors of the economy and tend to have larger geographical coverage, mostly national. The other sources mentioned tend to concentrate on a specific sector (private or public), some economic activities (generally non-agricultural), some groups of workers (e.g. only employees), and some regions (e.g. only urban areas). The use of a Labour Force Survey reduces the likelihood of the double-counting and miscounting of union members. In a Labour Force Survey, every person can only be counted once. Administrative records on the other hand often reflect inaccuracies:
(i) members who have left a union or have died are not removed from the registry;
(ii) persons switching from one union to another may be counted as members of both unions for a certain period;
(iii) where registries are not centralised, persons who are members in more than one union may be counted more than once.
The use of Labour Force Surveys as a source of data on union membership could facilitate comparisons between countries, since the methodologies applied in these surveys differ less from country to country than those of administrative records and establishment surveys.

The treatment of data from a Labour Force Survey is usually more cautious than that from other sources, generally including a more thorough data cleaning process and several quality checks. This increases the reliability of social dialogue indicators derived from data collected through a Labour Force Survey.
A Labour Force Survey collects other labour market information that can be analysed together with trade union membership, such as whether the person works in the formal or informal economy.
For data to be robust and comparable, they need to be based on a common understanding of what it is we are measuring. A methodological framework for collecting and computing statistics on trade union density and collective bargaining (2013) was discussed by the 19th International Conference of Labour Statisticians , below reported.

Table 2 Forms of work (ILO, 2013)

Intended destination of production	*for own final use*		*for use by others*					
Forms of work	**Own-use production work**		**Employment** (work for pay or profit)	**Unpaid trainee work**	**Other work activities**	**Volunteer work**		
	of services	of goods				in market and non-market units	in households producing goods	in households producing services
Relation to 2008 SNA		*Activities within the SNA production boundary*						
		Activities inside the SNA General production boundary						

The International Conference of Labour Statisticians (October 2013) approved the following social dialogue Indicators.

Table 3 Social Dialogue Indicators (ILO 2013)

Social dialogue domain	Statistics and indicators
Associational structure	• Centralization • Concentration • Trade union membership • Trade union density • Employers' organization density
Tripartism	• Composite index - participation in public policy
Collective bargaining	• Collective bargaining coverage • Wage coordination • Level of bargaining
Worker participation	• Composite index - institutionalized worker representation at firm level

According to the ILO [6], trade union density is distinguished between comprehensive density rate (CDR) and narrow density rate (NDR)[7]. As for Collective bargaining coverage, two indicators are used: Narrow Collective Bargaining Coverage Rate (NCBCR) and the Comprehensive Collective Bargaining Coverage Rate (CCBCR) [8].

Table 4 Narrow Density Rate

Trade union density as a proportion of employees: Narrow density rate

$$\textbf{Narrow density rate} = \frac{union\ \ members\ \ in\ \ paid\ \ employment}{total\ \ number\ \ of\ \ employees} \times 100$$

or

$$\textbf{Narrow density rate} = \frac{total\ union\ members}{total\ number\ of\ employees} \times 100$$

Table 5 Comprehensive Density Rate

Trade union density as a proportion of total employment: Comprehensive density rate

$$\textbf{Comprehensive density rate} = \frac{union members}{total\ employment} \times 100$$

[6] S. Hayter, V.Stoevska, Social Dialogue Indicators, Technical Brief, ILO, Geneva, 2011.

[7] CDR = Union members/ total employment x 100;
NDR = total Union members/total Number of Employees x 100;

[8] NCBCR= workers in paid employment covered/total number of employees x 100
CCBCR= workers covered/ total employment

Table 6 Narrow Collective Bargaining Coverage

Collective bargaining coverage as a proportion of employees: Narrow CBC rate

$$\textbf{Narrow CBC rate} = \frac{workers\ in\ paid\ employment\ covered}{total\ number\ of\ employees} \times 100$$

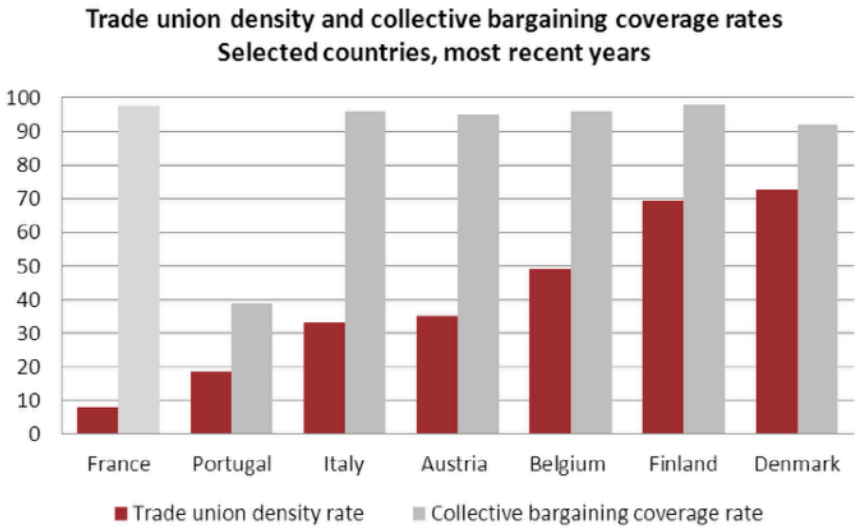
Table 7 Comprehensive Collective Bargaining Coverage

Collective bargaining coverage as a proportion of total employment: Comprehensive CBC rate

$$\textbf{Comprehensive CBC rate} = \frac{workers\ covered}{total\ employment} \times 100$$

Countries with multiemployer bargaining systems and extension mechanisms have higher collective bargaining coverage rates. Indeed in countries such as Austria, Belgium, Denmark, France, Finland, Italy and Portugal, collective bargaining coverage is not only significant, but also substantially higher than the union density rate as a result of multi-employer bargaining and the extension of collective agreements. Table below show the difference.

Table 8 Relation between Collective bargaining and membership density



4. Validity and reliability

Industrial relations and Social Dialogue depend on validity and reliability of data provided by social partners.
Reliability refers to the repeatability of findings. If the study were to be done a second time, would it yield the same results? If so, the data are reliable. If more than one person is observing behavior or some event, all observers should agree on what is being recorded in order to claim that the data are reliable. Reliability also applies to individual measures. When people take a vocabulary test two times, their scores on the two occasions should be very similar. If so, the test can then be described as reliable. To be reliable, an inventory measuring self-esteem should give the same result if given twice to the same person within a short period of time. IQ tests should not give different results over time (as intelligence is assumed to be a stable characteristic [9].
In its turn, validity refers to the credibility or believability of the research. Are the findings genuine? Is hand strength a valid measure of intelligence? Almost certainly the answer is "No, it is not." Is score on the SAT a valid predictor of GPA during the first year of college? The answer depends on the amount of research support for such a relationship.
In general internal validity is distinguished from external validity. In Internal validity, the instruments or procedures used in the research measured what they were supposed to measure. Example: As part of a stress experiment, people are shown photos of war atrocities. After the study, they are asked how the pictures made them feel, and they respond that the pictures were very upsetting. In this study, the photos have good internal validity as stress producers.
In external validity, the results can be generalized beyond the immediate study. In order to have external validity, the claim that spaced study (studying in several sessions ahead of time) is better than cramming for exams should apply to more than one subject (e.g., to math as well as history). It should also apply to people beyond the sample in the study.
Different methods vary with regard to these two aspects of validity. Experiments, because they tend to be structured and controlled, are often high on internal validity. However, their strength with regard to structure and control, may result in low external validity. The results may be so limited as to prevent generalizing to other situations. In contrast, observational research may have high external validity (generalizability) because it has taken place in the real world. However, the presence of so many uncontrolled variables may lead to low internal validity in that we can't be sure which variables are affecting the observed behaviors.
If data are valid, they must be reliable. If people receive very different scores on a test every time they take it, the test is not likely to predict anything. However, if a test is reliable, that does **not** mean that it is valid. For example, we can measure strength of grip very reliably, but that does not make it a valid measure of intelligence or even of mechanical ability. Reliability is a necessary, but not sufficient, condition for validity.
Aforementioned review of validity and reliability highlights the importance of the accuracy in providing data so that the social dialogue process and related negotiation procedure are reported in robust information framework.

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[9] Taken from: http://psc.dss.ucdavis.edu/sommerb/sommerdemo/intro/validity.htm