

***Estimation of the volume of labour :  
comments by Belgium on the resolution proposed for the 18<sup>th</sup> International  
Conference of Labour Statisticians***

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Being based on Belgian experience on this subject, our comments on the draft resolution concerning the working time statistics are concentrated on the selection and use of information sources, depending on the purpose for which the labour volume statistics are used.

### **1. Available information sources**

For the estimation of hours worked, Belgium's main sources are the findings of a household survey - the Labour Force Survey (LFS) – and an administrative source – the social security data. There is also a business survey - Prodcum – but it is confined to the industrial sector and therefore cannot be used for analysing the economy as a whole.

Both of these main sources have advantages and disadvantages.

#### **1.1 Social security data**

##### ADVANTAGES

- The administrative data can be linked to a list of production units based on a business register. Since the other national accounts variables (employment, wages, value added, etc.) are also linked to that list, the hours can be calculated consistently with those variables.
- The calculation of employees' hours is largely exhaustive, since almost all employees are registered with the social security authorities.
- The administrative data are available quarterly and therefore permit regular monitoring of developments.

##### DISADVANTAGES

- The concept of overtime is not properly assessed.
- It is only possible to calculate the hours worked by paid employees.

#### **1.2 The Labour Force Survey**

##### ADVANTAGES

- The various concepts concerning hours worked (contractual hours, standard hours, overtime, etc.) can be separated.
- The hours worked by self-employed persons can be estimated.

##### DISADVANTAGE

- The observed developments, particularly in the short term, are volatile owing to the sampling errors inherent in any survey.

## **2. Use of these sources to estimate the volume of labour**

### **2.1 Current use of the administrative data from social security**

The National Accounts Institute (NAI) has opted to give preference in the first instance to the administrative data obtained from social security because they are exhaustive (for employees) and consistent with the other national accounts aggregates.

Consequently, only the hours worked by employees are estimated for the time being. That is the first limitation concerning the current estimate of the volume of labour in Belgium.

A second limitation concerns the concept of the volume of labour being measured. By definition, the hours actually worked correspond to the contractual hours plus overtime and minus absences from work. In the social security data, the hours reported correspond to the contractual hours minus certain absences from work. It is therefore necessary to add the overtime and subtract the absences not taken into account by social security. In the case of absences, the adjustments concern workers with the status of non-manual employees (as opposed to manual workers), and are based on information concerning the number of working days and the contractual leave days. However, unpaid overtime and short periods of absence on health grounds cannot be taken into account on the basis of the administrative data.

In view of these two limitations, which are significant in the context of the national accounts and their use for the purpose of analysing labour costs and productivity, the NAI is trying to improve the current method.

### **2.2 Use of the LFS data to supplement the current estimate of the volume of labour**

In order to correspond to international concepts concerning the volume of labour, the administrative data obtained from social security need to be supplemented by information on overtime and absences. The only available option is to use the LFS. The whole problem lies precisely in the combination of the two information sources.

The statistics on the volume of labour are essentially used in two ways:

- to analyse the *change* in labour costs or productivity within a country;
- to compare the *level* of labour costs or productivity between different countries.

The statistical requirements differ according to the objective:

- In terms of the change within a country, it is primarily the concept of overtime *actually* worked that is relevant. However, owing to their volatility, the results of the LFS for Belgium cannot be used as such to measure the short-term change (quarterly or annual) in the volume of labour.
- In terms of the level within various countries, the concept of overtime *usually* worked is sufficient.

In the Belgian national accounts, the work aimed at combining the administrative data and the results of surveys is geared towards a concept of overtime *usually* worked, which would be estimated via the smoothing of data obtained from the LFS, in order to supplement the administrative data. This solution is entirely satisfactory in relation to the objective of international comparison of *levels*. It constitutes a proxy in terms of the actual *change* in the volume of labour which, in this case, leaving aside the smoothed change in overtime obtained from the LFS, is probably influenced mainly by the observed changes in the administrative data on the total number of workers, the proportion of part-timers, and the average working time of part-time and full-time workers.

### **3. Proposal for a resolution**

The Belgian statisticians are certainly not alone in facing problems concerning the optimum use of survey data and administrative data sources. Examples of good practice in this regard would probably be worth including in the resolution on the estimation of the volume of labour.