

# The measurement of employment and wages in Europe by Official Statistics. The Eurostat Structure of Earning Survey in Italy.

Stefania Cardinaleschi, Vincenzo Spinelli, Istituto Nazionale di Statistica, Italy

Key words: Employment and wages, record linkage, administrative registers.

Statistics on employment and wages are important components of a broad range of macroeconomic statistics that are collected to monitor trends in the economy. In Europe, these statistics are usually collected by national statistical offices, so they are classified using classification systems that are structured according to the type of economic activity. Statistics on earnings and labor costs describe the price dimension of labor input, making available information that support EU level policies in the fields of employment.

In this context, the *Structure of Earnings Survey* (SES) 2006, is the second of a series of four-yearly earnings surveys to be conducted under the Council Regulation 530/1999 and latter Regulation. The objective of this survey is to provide accurate and harmonized data on earnings in EU Member States, taking into account job-related factors, such as *working hours, size of the enterprises and location, and individual characteristics* of employees such as *gender, age, occupation, and education*. SES 2006 covers NACE rev.1.1 section range [C, O] for private enterprises with at least ten employees, and, for the first time, we provided data for public sector. In particular we evaluated the *Education* (R80) and *Health* (R85) sectors by the integration of both Administrative sources and Statistical ones; this allows supplying Official Statistics for these public sectors without using ad hoc surveys. The joint use of administrative and statistical sources means (a) the best definitions of the Census for R80 and R85, and (b) the determination of all the mandatory variables as requested by SES.

The use of administrative data is being increasingly pursued by Official Statistics, not least because of continuing budgetary pressures to find less expensive ways of collecting data, but also as a way to improve the statistical data production. We have considered three main administrative sources: *770 Form tax register* by "Agenzia delle Entrate", the data sets by *Cineca*, a non profit Consortium, and the Payroll data sets by "Ministero dell'Istruzione, dell'Università e della Ricerca".

The definition of the census of units included in the R80 domain is mainly based on these three sources, while for R85 we used the so-called S13 list i.e. the list of units included by Istat ([www.istat.it](http://www.istat.it)) in the S13 domain that is the "General government" institutional sector in *European System of National and Regional Accounts*. Finally, these data sets were integrated with those ones coming from two important surveys: *Labor Force Survey*, and *EU-SILC Panel Survey*.

The aggregated indicators of the European survey may be found at the Chronos web-site ([http://www.esds.ac.uk/international/support/user\\_guides/eurostat/cronos.asp](http://www.esds.ac.uk/international/support/user_guides/eurostat/cronos.asp)), and the "Classification system and Conformity with Official Standards" are based on three main points of view:

1. *Economic activity* is broken down at the division level, i.e. NACE Rev.1.1.
2. Five *size categories* are distinguished: 10 to 49 employees, 50 to 249 employees, 250 to 499 employees, 500 to 999 employees and units having at least 1 000 employees.
3. The *regional breakdown* is based on the Nomenclature of Territorial Units for Statistics (NUTS). Any regional breakdown is shown only at NUTS-1 level.