



**NATIONAL INSTITUTE OF STATISTICS
ROMANIA**

**QUALITY REPORT ON
STRUCTURE OF
EARNINGS SURVEY
2010**

NATIONAL INSTITUTE OF STATISTICS - ROMANIA
Quality Report On Structure Of Earnings Survey 2010

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1. RELEVANCE

1.1. Summary of core users

The main Structure of Earnings Survey data users may be grouped as following:

(i) internal users:

- **governmental bodies:** Ministry of Labour, Family and Social Protection, Ministry of Public Finances, National Commission for Prognosis, National Agency for Employment, Ministry of Education, Research, Youth and Sports, National Council for Adult Education and Training, Ministry of Public Health;
- **employers and employers' associations;**
- **trade unions;**
- **professional associations;**
- **research institutes and universities:** Research Institute of National Economy, Research Institute for Labour Force, Research Institute for Education, Romanian Academy, Academy for Economic Studies etc.
- **mass-media;**
- **students, doctorates.**

(ii) external users:

- European Union and international organisations: Eurostat, ILO, OECD, UNDP, World Bank, IMF;
- foreign research institutes;
- foreign employers.

1.2. Description of users needs

The Structure of Earnings Survey (SES) provides to the users important data on hourly, monthly and annually earnings, on working time, as well as on the structure of earnings. The survey results are available by multiple breakdowns on demo-socio-economical characteristics of the employees: gender, age groups, occupational groups, level of education, length in the enterprise, type and duration of the working time, economic activities, size classes of the enterprise, ownership forms.

SES is the only survey conducted at employee level, providing such amount of complex information.

Through the SES results the users can find the answers to diverse questions such as:

- *Which is the level of the hourly, monthly and annually earnings by occupation groups, sex, age groups or level of education?*
- *How is the distribution of employees by sex, working program (full-time, part-time), age groups or occupation groups?*
- *How many employees are working in small, medium or big enterprises from a certain economic activity?*
- *What type of collective pay agreements covers the employees employed in an enterprise?*
- *Which is the level of the earnings from a certain economic activity comparing with the average?*

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(i) internal users:

The SES outcomes, in relation with the information provided by other surveys, are used by policy makers at national level in establishing the actions and measures for economic development strategies as well as for implementing programs on active measures aimed to improve the employability and as for setting up the policies on wages and salaries.

- ✓ Ministry of Labour, Family and Social Protection and Ministry of Public Finances are interested in the structure of earnings and the level of hourly, monthly and annually earnings by different categories of employees in relation to the financial and social protection policies.
- ✓ Ministry of Labour, Family and Social Protection, Ministry of Public Finances and National Commission for Prognosis are paying a special attention to the structure and level of earnings. Several strategies, presently on going, are focused on:
 - equal chances for women and men in terms of remuneration and work conditions;
 - policies of the employment and qualification of labour force, especially for unfavourable groups such as young (15 – 24 years) and elderly (55 – 64 years);
 - the settlement upon the part-time work in order to adjust the working relationships to the demands of the labour market;
 - remuneration policies;
 - stimulation of employers in creating and increasing the number of new jobs.
- ✓ Based on the SES results, Ministry of Labour, Family and Social Protection and National Agency for Employment are developing and implementing special programs with the aim of unemployment decreasing by offering special reductions on taxation and providing subsidies to the enterprises that would employ unemployed persons.
- ✓ Special advantages were offered to the employers who were employing graduates (legal acts entered into force proposed by Ministry of Education, Research, Youth and Sports).
- ✓ National Council for Adult Education and Training has a high interest on the employees' qualification, skills and vocational training (i.e. the actual time spent by employees for vocational training during a year). The aim is to reach a higher qualification of the existing labour force (instead of employing directly high educated personnel), adequate to the high technologies and innovations.
- ✓ The level and structure of earnings are of a big interest when negotiations with trade unions are held. SES results are key elements for negotiation of collective agreements in relation not only for the direct remuneration, but also for the share of payments in kind and other advantages, pension scheme, social and health insurance, programs for vocational training (improvement of level of qualification etc.).
- ✓ Employers (enterprises), employers' associations and professional associations are carrying out several comparative analyses of the monthly earnings among economic activities, economic and financial control, occupations or levels of education.
- ✓ Research institutes and universities are interested in and are producing analysis on the level and structure of earnings among economic activities, economic and financial control, occupations or levels of education, comparisons with other countries (either EU or non-EU member states).

(ii) external users:

- ✓ European Union and international organisations: are usually expressing their needs by specific regulations and agreements and through the working groups held with a given

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periodicity (EUROSTAT) and through international meetings and regular (for updating of databases) and ad hoc requests sent to INS (ILO, OECD, World Bank);

- ✓ Foreign research institutes: are formulating their needs through the requests sent to INS, data being provided upon availability;
- ✓ Foreign employers (investors) are interested in the level of earnings among economic activities for public and private sectors; upon request different levels of aggregated data can be disseminated.

1.3. Satisfaction of the users needs

(i) internal users:

In Romania, official statistics is under the responsibility of National Institute for Statistics (INS). In order to ensure the objective and the transparent and scientific character of the methodologies, indicators and classifications used in statistics, the Council of Co-ordinating the Statistical Activity was set-up.

The Council is composed of representatives of:

- Romanian Academy,
- specialised higher education system and research,
- ministries and other specialised bodies sub-ordinate to the Government,
- Romanian National Bank,
- trade unions,
- employers' associations,
- mass-media,
- professional associations.

The representatives of the Council meet quarterly or more frequently when is necessary, in working groups by statistical fields. During these meetings INS receives a strong feed-back from the users in terms of the results already disseminated (including the level of details, breakdowns etc.) and the requests for further needed information to be included in next statistical inquiries.

Before finalising the survey tools and launching any survey on wages and labour costs, INS usually consults its main users (Ministry of Labour, Family and Social Protection, Ministry of Public Finances, National Commission for Prognosis, research institutes and universities etc.) and asks for methodological approval given by the "Commission of Methodological Approval".

The SES questionnaire, explanatory notes and annexes with classification were submitted for approval when first launched in 2002. Because no major changes occurred for the 2006 and 2010 surveys, no other methodological approval was needed.

(ii) external users:

- ✓ European Union and international organisations: survey tools were designed by respecting the recommendations stated in the Commission Regulation no 1738/2005 amending Regulation (EC) no 1916/2000 as regards the definition and transmission of information on the structure of earnings; when different levels of aggregations are asked, if it is possible, data are processed accordingly or, if not, the most appropriate are given with the needed explanations;
- ✓ Foreign research institutes: depending on the request, either data are sent in the available format either are prepared to reach as much as possible their needs;

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✓ Foreign employers (investors): most of their requests are satisfied by the available data.

1.4. Completeness

According to the Commission Regulation no 1738/2005 amending Regulation (EC) no 1916/2000, all UE member states had to conduct the Structure of Earnings Survey in 2010, collecting and providing to Eurostat a number of 34 variables (mandatory and optional).

Romania collected and provided **26 mandatory variables (100%** mandatory variables) and **7 optional variables (88%** from all optional variables), meaning **97%** of all variables requested by the Commission Regulation. The only optional variable not collected was “1.7 Affiliation of the local unit to a group of enterprises”.

Apart from the variables requested by the CR, Romania introduced a number of variables for national purposes:

- basic salary,
- monthly and annually gross amounts from the net profit,
- monthly and annually gross amounts from other funds, including payments in kind,
- monthly and annually gross amounts from the insurance schemes,
- normal duration of working month,
- payment period,
- annual number of days paid for sick leave (total, paid by the employer),
- annual number of days paid but not worked due to special events,
- annual number of days for vocational training.

Information collected and provided by Romania answered to Eurostat requests in terms of *classifications and breakdowns*:

- *geographical location* - **NUTS-1 level**;
- *principal economic activity* - **NACE Rev.2** - all sections **A-S** (coded at division level **01-96**), including the sections A (not requested by the regulation) and section O (optional according to the regulation);
- *size class of the enterprise* – all mandatory size classes **10-49, 50-249, 250-499, 500-999, 1000 and more employees**;
- *form of economic and financial control* – all categories “**public control**” and “**private control**”;
- *collective pay agreement* – all categories “**national level**”, “**industry level**”, “**individual industries level**”, “**enterprise or single-employer level**”, “**local unit level**”, “**other type**”, “**no agreement**”;
- *occupation* – **ISCO-08** – all occupation coded at two digit level, except major group 0 (armed forces) that are not covered by any Romanian survey;
- *level of education and training* - **ISCED 97** – all levels “**pre-primary**”, “**lower and upper secondary**”, “**first and second stage of tertiary education**”;
- *contractual working time* – “**full-time**” and “**part-time**” employees;
- *type of employment contract* - “**indefinite duration**”, “**temporary/fixed duration**”, “**apprentice**”.

The variables collected and provided by Romania answer to all Commission Regulation requirements, for data transmission:

- *country level* and *macro-region level*: **NUTS-0** and **NUTS-1** level;
- *economic activities*: section level **A-S** (1-digit);
- *size class of the enterprises*: **10-49, 50-249, 250-499, 500-999, 1000 and more employees**;

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- *categories of variables:*
 - Information about the local unit to which the sampled employees are attached (**1-variables**),
 - Information on individual characteristics of each employee in the sample relating to the reference month (**2-variables**),
 - Information on working periods for each employee in the sample (**3-variables**),
 - Information on earnings for each employee in the sample (**4-variables**),
 - Grossing-up factors (**5-variables**)
- *categories of employees: employees and apprentices¹.*

No compulsory breakdown, in terms of **economic activities** or **size classes**, is missing from the Structure of Earnings Survey 2010.

Furthermore, data for NACE Rev.2 section A (which is not requested by the regulation) and for section O (which continues to be optional according to the regulation) were collected and provided by Romania.

The selection of the employees in the sample was complex, done by each enterprise according to the rule recommended by INS of respecting the proportionality by sex, major groups of occupation and working program of the total number of employees of the enterprise. Thus, a clearer image of the distribution of employees from the whole enterprise was reflected by the selected sample.

Even though SES is a complex survey, considered by the respondent units a burden, since a lot of detailed and complex information for each selected employee was asked, the response rate² was rather high (89.20%, refusal rate 6.57%).

2. ACCURACY

2.1. Sampling errors

The coefficients of variations requested through the Commission Regulation No. 698/2006 are presented into the Annex. The computations of CVs were produced using the variance programme CLAN, a SAS macro provided by Swedish statistics.

The coefficients of variation for the key variables for the **total population** are:

- gross earnings for in the reference month (B42): 0.016698
- gross hourly earnings in the reference month (B43): 0.019147

Except for the setting-up of the frame population, no data from registers were used.

2.2. Non-sampling errors

2.2.1. Coverage errors

The sampling frame used to draw the sample was built using the Romanian Business Register and contained the statistical information related to the reference period, namely the calendar year of **2010**. As consequence the main over/under coverage problems are related to the information quality concerning size class of enterprises by number of employees.

A percentage of 1.67% of surveyed enterprises reported a number of employees less than the limit threshold for including criteria in the reference population (at least 10 employees) but

¹ Compared with 2002, in 2006 and 2010 apprentices were covered by national legislation in force

² Including: units that responded, dormant units, other unit responded and other events

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the stability of activity is at high level (over 90%). In the meantime it encounters the existence of a 2.20% of unidentified enterprises. In the adjustment procedure the unidentified enterprises were assimilated to the non-response units.

In the weighting and adjustment process the unidentified units were assimilated to that of the non-respondent units. The weighting procedures applied at enterprise level was done in order to compensate the total non-response, together with the calibration procedures applied at NACE Rev. 2 division and with information on active enterprise in 2010. The auxiliary variable used for calibration was the number of persons employed (variable 16110 according to Structural Business Survey). The calibration was produced also with the routine of the CLAN programme provided by Swedish statistics.

In the tables below (**Table 1** and **Table 2**) are presented the measure of misclassifications by size classes by number of employees and NACE Rev.2 category to 1-digit level (section):

Table 1: Misclassification by size classes

- % -

Size class contained in the sampling frame	Size class reported during the data collection				Total
	less than 10 employees	10-49 employees	50-249 employees	250 employees and over	
10-49 employees	3.41	92.69	3.89	0.02	100.00
50-249 employees	0.64	9.07	87.82	2.48	100.00
250 employees and over	0.32	0.55	6.46	92.68	100.00
Total	1.91	47.57	33.54	16.99	100.00

Table 2: Misclassification by NACE Rev.2 (section level)

- % -

NACE Rev.2, Section level contained in sampling frame	NACE Rev.2, Section level – reported value (during the data collection)																			Total
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
A	98.97	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	100.00
B	0.00	97.81	0.00	0.00	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
C	0.04	0.04	99.56	0.00	0.00	0.00	0.18	0.00	0.04	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.04	100.00
D	0.00	0.00	0.65	98.70	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
E	0.35	0.00	0.00	0.00	98.96	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	100.00
F	0.00	0.00	0.15	0.00	0.15	99.25	0.15	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
G	0.11	0.00	0.28	0.00	0.00	0.28	99.00	0.00	0.11	0.06	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00	0.06	100.00
H	0.00	0.23	0.00	0.00	0.00	0.00	0.23	99.31	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	100.00
I	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	99.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
J	0.26	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.51	98.21	0.00	0.26	0.00	0.26	0.00	0.00	0.00	0.00	0.00	100.00
K	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.07	0.00	0.31	0.31	0.31	0.00	0.00	0.00	0.00	100.00
L	0.00	0.00	3.37	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	94.38	0.00	1.12	0.00	0.00	0.00	0.00	0.00	100.00
M	0.74	0.00	0.59	0.00	0.00	0.30	0.00	0.15	0.15	0.00	0.00	0.00	97.63	0.30	0.15	0.00	0.00	0.00	0.00	100.00
N	0.17	0.00	0.00	0.00	0.17	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.17	98.66	0.00	0.00	0.17	0.00	0.34	100.00
O	0.24	0.00	0.05	0.00	0.00	0.10	0.00	0.05	0.00	0.00	0.05	0.10	0.29	0.24	98.53	0.05	0.10	0.15	0.05	100.00
P	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	98.99	0.00	0.51	0.00	100.00
Q	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.36	0.00	0.18	0.55	98.36	0.00	0.00	100.00
R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	1.37	0.00	0.00	98.43	0.00	100.00
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	99.54	100.00
Total	3.22	1.10	22.10	1.23	2.32	5.43	14.41	3.51	1.82	3.10	2.60	0.70	5.41	4.89	16.30	1.61	4.39	4.09	1.78	100.00

2.2.2. Measurement and processing errors

The SES questionnaire was structured in *two parts*:

Part A – information related to the enterprise (and where applicable, to the local units) and

Part B – information relating to each employee in the sample. The variables in Part B were grouped into *three chapters*:

B1 – demo-economic characteristics of the employees,

B2 – the working time and the gross amounts corresponding to month October 2010,

B3 – the working time and the gross amounts corresponding to whole year 2010.

Detailed explanatory notes were annexed, containing: the scheme needed for the selection of the sample of employees, the definitions of the variables, the classifications of occupations (ISCO08 - 4 digit level) and the classification of educational level (ISCED - 1 digit level).

The SES is the only Romanian survey collecting the information at employee level. Generally, the respondents were guided by the statisticians from the territorial statistical offices and in some cases, even assisted by them in how to fill in the questionnaires.

Data collection was made by post or e-mail. Electronic questionnaire, designed in Microsoft Excel were also provided by INS to the respondent units, by request. But, the majority of the respondents (80%) preferred to answer by post, using paper questionnaires.

The next step was data entry and validation, for which an IT application was used to find all errors and non-correlations, occurred during data collection and data entry. The IT solution for Romanian SES was accomplished using Visual Fox and divided into two components:

- IT solution at local level – territorial statistical offices;
- IT solution at central level – INS headquarters (Bucharest).

The IT solution at *local level* allowed the data entry and validation at each county level (42 counties in total – NUTS3 level). The IT solution at *central level* contained the IT programs for:

- integrity checking (identification data of the selected units and of the respondent units were checked – unique code of the respondent unit, fiscal code, address, NACE activity, ownership type, etc.);
- printing the code of errors occurred and the non-correlation of the variables within same chapter or between chapters;
- solving the errors;
- comparisons with other surveys for the common respondent units and indicators (“Monthly wages and salaries survey”, “Wages and salaries for month October”, “Job vacancy survey”, “Labour cost survey”);
- tabulation of non-weighted data;
- adjustment and weighting;
- tabulation of the results (weighted data) as Excel pivot tables;
- automatic codification of the national variables into the standard format.

After validation, data were analysed and corrected where necessary. In order to provide more accurate and reliable data comparisons among variables and/or with other data sources were made.

Individual hourly, monthly and annually earnings were compared by occupations, levels of education, age and length of service within the selected employees of the same enterprise. No more than $\pm 30\%$ difference was accepted. In cases above or below limits, the respondent units were contacted and asked for explanations.

Basic salaries were compared with the minimum wage guaranteed by the national legislation in force. The basic salaries which were below the minimum wage were not accepted for the

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employees working full-time or the corresponding proportion from the minimum wage for the employees working part-time.

Monthly and annually earnings were correlated for each employee. An estimation of the annual earnings was made, taking into account the period worked during the year. This estimation was compared with the reported annual data.

The gross monthly earnings could differ from a month to another due to different financial and working conditions (i.e. break off work for technical or economic reasons, cancellation or new orders, plant breakdowns or raw materials shortage, financial difficulties or technical reasons etc.), which implies annual earnings much different than the one earned in the representative month (October) multiplied by the number of months actually worked.

The average monthly earnings aggregated by economic activities and by ownership type and financial control of the enterprises were compared with the same indicator from other two surveys – Labour costs survey 2010, Monthly wages and salaries survey (for month October 2010). For differences more than $\pm 30\%$ data were analysed starting from the employee level and corrected upon case.

The average monthly earnings were calculated taking into account the working program of the employees (full-time/part-time). The average annual earnings were calculated taking into account the working program of the employees (full-time/part-time) and the period actually worked during the year.

The distribution of employees by major groups of occupation was compared, for the common respondent units, with the same distribution from the Job vacancy survey for 1st quarter 2011 (when the new ISCO-08 was implemented).

In the explanatory notes provided to the respondents there were references for all collected variables.

Some problems were caused by the manner of sample selection of the employees by the respondent units. The problems occurred not for the sample size, but for the rule of respecting as much as possible the distribution of the employees of the sample (by sex, occupation groups and working program), as the distribution of the total number of employees of the respondent unit (by sex, occupation groups and working program).

About 200 logical tests and correlations were performed for data checking.

Logical tests were focussed on key variables such as: sex, date of birth, occupation, management/supervisory position, education level, type of contract, number of hours paid, monthly gross amounts paid, individual contributions, annual gross amounts paid, number of annual days of absence (holidays, sick leave, special events, vocational training).

The correlations were focussed on:

- ***different indicators from the same chapter*** (e.g. occupation – level of education, year of birth – level of education or length of service, gross amounts paid for overtime – number of overtime hours, etc.);
- ***similar indicators by different reported periods*** (ex. gross amounts paid monthly and annually, bonuses paid monthly and annually, etc.);
- ***common indicators from other surveys in the domain*** (total number of employees at the end of the month, the distribution of employees by occupation groups, etc.).

Also, the checks focused on:

- the plausibility between contractual hours, number of hours in a standard working month and the number of hours actually paid,

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- plausibility between the number of overtime hours and the payments for overtime and also the number of weeks to which the gross earnings relate, for employees starting in 2010.

Same tests were conducted at local level (territorial statistical offices) as well as at central level (INS). The largest part (about 75%) of the errors found was solved at local level. The figures were corrected after re-contacting the corresponding respondents.

The questionnaire design, the detailed explanatory notes, the annexes and the IT solutions developed had as result complete and of good quality data. Items of partial non-response were sent back to the respondent units for filling in the whole information.

The information given below refers **only to the errors and cases corrected at central level (INS)**, after the data files were received from all over the country. Statistics on the first level of checking (local level) are not available.

One error might need several variables to be corrected or, if the figures correspond to reality due to unusual phenomena, figures were accepted as such and no changes were operated.

Most frequent errors that occurred during data checking period:

- **8.64%** of errors coded A113 (in Romanian Logic tests); the *employee* contribution for unemployment insurance should fall between 0.2% – 0.8% of the monthly gross payments related to direct remuneration;
- **8.09%** of error coded A114; the *employee* contribution for statutory social security should fall between 8.0% – 12.0% of the monthly gross payments related to direct remuneration;
- **7.85%** of errors coded A91-A93; the correlation among working program, period of payment and number of hours paid;
- **7.73%** of errors coded A123-A126; the correlation between the annual gross amounts paid and the monthly gross amounts multiplied with the period of time worked during the year;
- **6.58%** of errors coded A105-A108; the correlation among working program, period of payment and basic salary;
- **5.50%** of errors coded A101-A102; the correlation between the basic salary and the minimum wage (according to the national legislation in force);
- **5.48%** of errors coded A340; the correlation between number of overtime hours paid and the gross amounts paid for the overtime;
- **5.25%** of errors coded A115; the *employee* contribution for health insurance should fall between 4.5% – 6.5% from the monthly gross payments related to direct remuneration;
- **4.79%** of errors coded A116; the *employee* taxes should fall between 0.1% – 16% from the monthly gross payments related to direct remuneration (excluding the individual contributions to unemployment, social security and health insurance);
- **4.59%** of errors coded A79; if the enterprise has the economic activity of public administration, education or health and social insurance, and the employee has a managerial/supervisory position, then the occupation codes have to be from the 1st major group of ISCO-08, specific for these activities;
- **3.45%** of errors coded A83-A84; the correlation between the occupation code and managerial/supervisory position;
- **3.10%** of errors coded A80 and A338; the correlation between the occupation code and the level of education code;
- **2.88%** of error coded A147-A148; the annual of days paid but not worked due to special events;
- **1.43%** of errors coded A138; the correlation between the gross amounts paid from the insurance schemes and the annual days of sick leave;

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- **1.25%** of errors coded A144-A145; the correlation between the annual number of holidays and the number of months worked.

The number of cases needed to be corrected was not so significant to have an impact on the accuracy of the final results. In the table below are estimated the percentages of cases corrected at central level, by collected variables.

Table 3: Percentage of cases corrected

Variables		% of cases corrected
code	Label	
1. Information relating the local unit to which the sampled employees are attached		
	Total number of employees in the enterprise	0.3
	Distribution of employees by occupation groups	3.3
	Distribution of employees by sex and occupation groups	3.0
	Distribution of employees by working program	0.3
1.1	Geographical location of the local unit	0.2
1.3	Principal economic activity of the local unit	1.0
1.4	Form of economic and financial control	0.3
1.5	Collective pay agreements	0.1
1.6	Total number of employees in the local unit in the reference month	1.2
2. Information relating to each employee in the sample		
	Unique number of employee	0.5
2.1	Sex	0.2
	Year of birth	0.2
	Local unit to which belongs	1.2
2.3	Occupation	6.8
2.4	Management or supervisory position	2.1
2.5	Highest completed level of education	2.5
	Date (year, month) of starting the activity in the enterprise	0.3
	Date (year, month) of closing the activity in the enterprise	0.6
2.7	Contractual working time	0.5
2.7.1	Share of a full-timer's normal hours	0.8
2.8	Type of employment contract	0.6
2.9	Citizenship	0.0
3. Information on working periods for each employee in the sample		
3.1	Number of weeks in the reference year to which the gross annual earnings relate	5.9
3.2	Number of hours paid during the reference month	2.8
3.2.1	Number of overtime paid in the reference month	2.3
3.3	Annual days of holiday leave	1.3
	Annual days of sick leave	1.1
	Annual days of sick leave paid by the employer	0.7
	Annual free days for special events	2.6
	Annual days of vocational training	0.3
	Normal duration of working week	2.1
	Payment period	1.3
4. Information on earnings for each employee in the sample		
4.1	Gross annual earnings in the reference year	3.9
4.1.1.	Annual bonuses and allowances not paid in each pay period	2.5
4.1.2.	Annual payments in kind	2.7
	Annual amounts from the net profit	2.5
	Annual amounts from other funds	2.1
	Annual amounts from the insurance schemes	1.0
4.2	Gross earnings in the reference month	4.6
4.2.1.	Earnings related to overtime	2.3

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4.2.2	Special payments for shift work	0.8
4.2.3	Compulsory social contributions and taxes paid by the employer on behalf of the employee	6.0
4.2.3.1	Compulsory social-security contributions	6.1
4.2.3.2	Taxes	5.3
	Basic salary	4.3
	Monthly bonuses and allowances not paid in each pay period	4.5
	Monthly payments in kind	2.1
	Monthly amounts from the net profit	1.1
	Monthly amounts from other funds (including payments in kind)	0.8
	Monthly amounts from the insurance schemes	1.0
	Total cases corrected at central level	100.0

For the microdata transmitted to Eurostat the plausibility checks were applied and different inconsistencies explained.

The Structure of Earnings Survey is based on a stratified sample of enterprises instead of local units due to the fact that the Business Register is not built at local unit level. The sample of employees was selected from local units belonging to the selected enterprises according to the algorithm of selection indicated in the methodological notes, part of the survey tools.

Not all the “plausibility checks” were fulfilled, but the number of these cases is not significant (representing about 1.5% from all records):

- ✓ the cases for which the condition if $\text{var.2.7}=\text{FT}$, then $130 \text{ hours} < (\text{var.3.2}-\text{var.3.2.1})$ is not fulfilled, are accepted due to the fact that there are contracts with stipulated working time of 6 hours/day.
- ✓ the cases for which the condition if $\text{var.2.7}=\text{FT}$, then $(\text{var.3.2}-\text{var.3.2.1}) > 215$ is not fulfilled, are accepted due to the fact that, for certain cases and occupations, the contractual working was more than 8 hours/day. All hours are paid in the reference month, but not considered overtime.
- ✓ the cases for which the condition $\text{var.3.2.1} < 0.65 * (\text{var.3.2}-\text{var.3.2.1})$ is not fulfilled, are accepted due to the fact that, for certain cases and occupations, the number of overtime hours paid are higher than 65% of the normal number of hours paid (but not over 90%).
- ✓ the cases for which the condition $\text{var.4.1} > (\text{var.4.2}-\text{var.4.2.1}) * 0.7 * \text{var.3.1} / (4.345238)$ is not fulfilled, are accepted due to different economical development of certain enterprises during the year (production or receipts depending on orders and contracts, seasonality) and consequently different remuneration (either higher gross amounts paid in October or lower payments according to volume of work performed in other months).
- ✓ the cases for which the condition $\text{var.4.1.2} < 0.2 * \text{var.4.1}$ is not fulfilled, are accepted due to fact that the employees were rewarded significant payments in kind when the enterprise encountered financial difficulties. Also, there are cases where different payments in kind are stipulated in the pay agreements.
- ✓ the cases for which the condition $\text{var.4.2} > \text{var.4.2.3}$ and $\text{var.4.2.3} < \text{var.4.2}$ is not fulfilled, are accepted due to fact that the monthly gross earnings exclude the occasional bonuses, net profit and payments in kind. The compulsory social contribution and taxes paid by the employer on behalf of the employee are calculated to all gross amounts paid to the employee in month October (including occasional bonuses, net profit and payments in kind). For these cases the plausibility check is not relevant because the amounts paid for irregular bonuses and payments in kind were so significant that the relation is no longer true.

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- ✓ the cases for which the condition $\text{If } \text{var. } 3.2.1 > 0 \text{ and } \text{var. } 4.2.1 > 0 \text{ then } (\text{var. } 4.2.1 / \text{var. } 3.2.1) \geq (\text{var. } 4.2 - \text{var. } 4.2.1) / (\text{var. } 3.2 - \text{var. } 3.2.1) * 0.60$ is not fulfilled, are accepted due to fact that the payments related to overtime are calculated in relation with the basic salary and not with the actual earnings. Also, there are different rates for the overtime payments.
- ✓ the cases for which the condition $\text{var. } 4.2.3.1 < \text{var. } 4.2 - (\text{var. } 4.2.1 + \text{var. } 4.2.2)$ is not fulfilled, are accepted due to fact that the monthly gross earnings exclude the occasional bonuses, net profit and payments in kind. The compulsory social contribution and taxes paid by the employer on behalf of the employee are calculated to all gross amounts paid to the employee in month October (including occasional bonuses, net profit and payments in kind). For these cases the plausibility check is not relevant because the amounts paid for irregular bonuses and payments in kind were so significant that the relation is no longer true.
- ✓ the cases for which the condition $\text{var. } 4.2.3.2 < \text{var. } 4.2 - (\text{var. } 4.2.1 + \text{var. } 4.2.2)$ is not fulfilled, are accepted due to fact that the monthly gross earnings exclude the occasional bonuses, net profit and payments in kind. The compulsory social contribution and taxes paid by the employer on behalf of the employee are calculated to all gross amounts paid to the employee in month October (including occasional bonuses, net profit and payments in kind). For these cases the plausibility check is not relevant because the amounts paid for irregular bonuses and payments in kind were so significant that the relation is no longer true.

2.2.3. Non-response errors

The treatment of non-response is performed only for the first sampling phase (i.e. to the primary sampling unit level which is the enterprise) and is regarding to the survey status of enterprises and its response. The non-response type used to the collection data phase is:

Table 4: Non-response type

Type of response used during the data collection (response code)	Type of response used in the non-response adjustment procedure	Percentage (%)
Response (1)	Response	85.89
Refusal (2)	Non-response	6.57
Unidentified (3)	Non-response	2.20
Out of scope units (4)	Model assumption	1.67
Units unable to be contacted (non-contacted) (5)	Non-response	0.08
Dormant unit (6)	Response	2.36
Ceased unit (7)	Non-response	0.28
Other unit responded (8)	Response	0.80
Other events (9)	Response	0.15
Grand Total	-	100.00

The enterprises that reported 9 employees or less were considered out of scope units. To perform the adjustments of out of scope units by weighting procedure a model assumption was used. These assumptions are made for each stratum (to first sampling phase level) and are:

- The out of scope units' rate among the respondents is the same as among the non-respondents.
- The number of out of scope enterprises in the frame is the same as the number of in scope units but not included in the sampling frame.
- The mean value of any variable of interest is the same in the accessible part of the target population as in the inaccessible part.

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The non-response rates broken down by economic activity (NACE Rev.2 division and section level) and by size classes are presented in Table 5 and Table 6.

Table 5: Non-response rates by NACE Rev.2 divisions and size classes

- % -

NACE. Rev.2 (2 digit level)	Size classes					Total
	10-49 employees	50-249 employees	250-499 employees	500-999 employees	1000+ employees	
1	3.3	1.2	4.5	5.9	0.0	2.8
2	10.8	0.0	0.0	0.0	0.0	5.5
3	13.9	0.0	-	-	-	11.9
5	0.0	25.0	0.0	0.0	0.0	4.0
6	0.0	0.0	-	-	0.0	0.0
7	0.0	0.0	0.0	-	0.0	0.0
8	5.4	4.5	0.0	0.0	0.0	4.7
9	15.8	7.7	0.0	0.0	0.0	10.0
10	4.6	8.3	7.6	3.2	0.0	6.2
11	0.0	11.1	8.3	33.3	14.3	10.8
12	33.3	0.0	-	0.0	-	11.1
13	12.3	7.9	5.0	0.0	-	9.4
14	14.3	8.5	9.6	2.4	0.0	8.7
15	22.6	9.4	5.4	9.1	0.0	12.9
16	3.1	5.8	0.0	0.0	0.0	3.7
17	13.2	14.3	0.0	0.0	-	12.5
18	16.1	12.1	0.0	-	-	13.5
19	25.0	0.0	0.0	0.0	0.0	13.0
20	4.3	7.5	18.2	0.0	0.0	5.9
21	4.3	9.5	0.0	0.0	0.0	5.6
22	5.0	14.8	0.0	0.0	0.0	8.1
23	11.9	3.9	8.3	0.0	0.0	8.0
24	18.2	5.0	0.0	0.0	0.0	5.0
25	11.9	3.3	6.5	12.5	0.0	8.1
26	3.7	9.1	0.0	0.0	0.0	2.8
27	4.3	2.1	6.3	18.2	0.0	4.7
28	14.9	3.1	0.0	0.0	0.0	7.0
29	3.2	9.4	6.3	0.0	0.0	3.8
30	11.4	8.0	0.0	0.0	0.0	7.1
31	10.1	7.7	0.0	0.0	0.0	6.7
32	8.1	18.9	0.0	0.0	-	11.4
33	7.9	3.2	8.3	0.0	0.0	5.6
35	13.6	0.0	0.0	0.0	0.0	4.3
36	7.9	2.7	3.4	0.0	0.0	3.9
37	0.0	0.0	0.0	-	-	0.0
38	10.0	10.5	16.7	0.0	0.0	5.9
39	0.0	0.0	-	-	-	0.0
41	18.4	8.3	3.3	0.0	0.0	11.1
42	12.7	5.2	2.3	3.4	0.0	6.4
43	14.2	18.1	22.2	0.0	0.0	15.3
45	16.2	11.5	0.0	0.0	-	12.9
46	15.4	10.5	16.4	12.5	0.0	13.3
47	13.7	6.5	10.8	5.3	22.7	11.9
49	15.4	13.3	9.4	9.5	3.4	12.2
50	10.7	7.7	0.0	0.0	-	9.3
51	10.0	100.0	0.0	0.0	0.0	11.1
52	7.0	7.7	5.9	0.0	0.0	6.3
53	25.6	11.1	33.3	0.0	0.0	19.4
55	11.3	8.2	25.0	25.0	100.0	12.6
56	12.5	7.5	33.3	50.0	0.0	11.5
58	20.3	12.5	50.0	100.0	-	20.9

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NACE. Rev.2 (2 digit level)	Size classes					Total
	10-49 employees	50-249 employees	250-499 employees	500-999 employees	1000+ employees	
59	22.6	30.8	50.0	0.0	-	25.0
60	17.6	4.5	-	33.3	0.0	13.9
61	19.0	3.6	37.5	33.3	0.0	16.8
62	16.3	12.8	33.3	25.0	0.0	16.4
63	29.4	15.0	0.0	-	-	24.3
64	19.2	19.7	30.8	0.0	0.0	17.8
65	10.0	22.2	100.0	0.0	0.0	17.6
66	7.1	37.0	0.0	-	0.0	13.4
68	20.3	4.7	40.0	0.0	0.0	15.1
69	13.6	8.3	0.0	-	0.0	11.9
70	22.6	12.1	11.1	-	100.0	18.9
71	13.9	3.7	6.3	0.0	0.0	8.1
72	8.1	8.6	11.1	0.0	-	8.2
73	24.0	10.5	0.0	0.0	-	19.8
74	9.3	22.2	-	-	0.0	10.2
75	5.3	4.3	0.0	-	-	4.5
77	19.0	21.4	-	-	-	19.6
78	14.5	21.7	45.5	25.0	66.7	21.3
79	16.4	46.2	-	-	-	22.1
80	26.8	12.3	16.9	17.4	16.7	18.1
81	23.2	11.3	11.1	0.0	0.0	15.9
82	14.0	15.8	33.3	60.0	33.3	17.0
84	0.4	0.2	0.8	1.6	4.8	0.4
85	11.5	8.3	9.1	0.0	0.0	6.8
86	7.7	9.9	17.2	22.7	2.4	10.1
87	1.6	5.7	0.0	0.0	0.0	2.1
88	8.3	0.0	0.0	0.0	0.0	1.8
90	11.6	3.8	0.0	0.0	-	7.6
91	2.0	1.4	0.0	-	-	1.7
92	11.5	17.2	50.0	33.3	0.0	17.0
93	9.8	12.0	-	-	-	10.1
94	3.0	50.0	0.0	0.0	0.0	2.2
95	12.0	22.2	0.0	-	-	13.1
96	26.3	7.3	0.0	-	0.0	17.8
Total	10.9	7.3	9.1	6.1	4.7	9.1

Table 6: Non-response rates by NACE Rev.2 sections and size classes

- % -

NACE. Rev.2 (1 digit)	Size classes					Total
	10-49 employees	50-249 employees	250-499 employees	500-999 employees	1000+ employees	
A	7.1	0.8	2.4	4.2	0.0	4.5
B	6.5	6.5	0.0	0.0	0.0	5.4
C	9.7	7.4	5.7	3.7	1.0	7.6
D	13.6	0.0	0.0	0.0	0.0	4.3
E	7.1	1.0	5.4	3.0	7.1	4.4
F	15.5	10.6	5.8	2.0	0.0	11.2
G	14.8	9.7	12.2	7.5	16.7	12.8
H	14.3	10.1	10.5	9.4	1.9	11.2
I	12.1	7.8	20.0	27.3	66.7	12.0
J	20.7	11.8	37.5	20.0	23.1	18.9
K	13.4	24.5	41.2	0.0	0.0	16.4
L	20.3	4.7	40.0	0.0	0.0	15.1
M	14.2	7.4	7.3	16.7	0.0	11.3
N	18.1	16.9	20.6	21.1	30.4	18.5

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NACE. Rev.2 (1 digit)	Size classes					Total
	10-49 employees	50-249 employees	250-499 employees	500-999 employees	1000+ employees	
O	0.4	0.2	0.8	1.6	4.8	0.4
P	11.5	8.3	9.1	0.0	0.0	6.8
Q	5.6	7.8	15.2	10.2	1.5	7.5
R	8.3	5.8	26.7	25.0	0.0	8.0
S	13.5	7.2	50.0	0.0	0.0	11.1
Total	10.9	7.3	9.1	6.1	4.7	9.1

The estimation procedure is performed in two phases, corresponding to the two sampling phases:

- i. To the first sampling phase (i.e. to the primary sampling unit level which is the enterprise)

The estimation procedure involves the multiplying of the value for each sampled business (y_i) by a combination of weights, one being outlier weight (w_{ih}), one resulting from the sample design (a_{ih}) and one being the non-response adjustment (nr_{ih}). An outlier weight is computed as a Windsor weight. The normal score used to set the outlier units is computed taking into account the stratification used in sample design corresponding to the first sampling phase. The adjustment of the non-response is performed by the inverse of response probability and taking into account the stratification used in the sampling design. The overall **non-response rate** is about **11%**.

So, for each response primary unit the final weigh is

$$weight_{ih} = w_{ih} \cdot a_{ih} \cdot nr_{ih}$$

where “i” is the primary sampling unit index and “h” the stratum index.

- ii. To the second sampling phase (i.e. to the secondary sampling unit level which is the employee)

The final weight of the employee is given by multiplying the inverse of selection probability of the employee (b^j), computed separately by gender (men and women), with the enterprise final weight ($weight_{ih}$).

$$\text{So, } weight_{ih}^j = weight_{ih} \cdot b^j$$

where j is the employee index.

2.2.4. Model assumption errors

In Romania fiscal year fully corresponds to calendar year. No adjustment of this kind was necessary to be made.

Romanian Structure of Earnings Statistics covered all enterprises irrespective of the economic activity performed and having 10 employees and over. According to Eurostat arrangements for implementing the Council Regulation no.530/1999 and the Commission Regulation no. 1738/2005, Romania provided data for:

1. **Table A** (local unit table) - data refer to enterprises with 10 or more employees (micro data file);
2. **Table B** (employee table) - data refer to all surveyed (micro data file).

No combinations between survey data and register data have been undertaken. All data are obtained from the survey.

3. PUNCTUALITY AND TIMELINESS

3.1. Punctuality

The **data collection period** for SES 2010 was lasted 3.5 months:

- 2 months for enterprises to fill in the questionnaires and to send them to the territorial statistical offices (February – March 2011);
- 1.5 months for the territorial statistical offices to perform data entry, data checking and to send data files to central level (April - mid-May 2011).

Thus, the deadline for receiving the files from territorial statistical offices was **16th May 2011**.

Since not all enterprises respected the deadline requested, a high proportion of questionnaires were received with delay by the territorial statistical offices. Furthermore, due to the recalls necessary for additional information and corrections of the variables filled in by the enterprises, delays occurred in sending the data files to INS.

Only the information on the delays encountered in receiving the data files from the territorial statistical offices to INS is available. Below are presented information on the proportion of data files sent from the territorial statistical offices and the dates when INS received them:

- 16 – 20 May: 76.2%
- 21 - 31 May: 16.7%
- 1 – 15 June: 7.1%

Thus, for the first transmission a delay of 30 days was registered between the scheduled and actual data files transmission.

Also, due to several data corrections and delayed respondent units, the files from the territorial statistical offices were remanded several times. The last transmission registered was on 24.01.2012.

Even so, no delays were registered into the data transmission to Eurostat or data dissemination at national level.

The transmission to Eurostat of the micro data files was in accordance with the legal requirements, as Gesmes files, via eDAMIS, on the 13th of June 2012 (the deadline stipulated by the Council Regulation no. 530/1999 was 30 June 2012). Also, some explanatory notes were transmitted in order to justify the plausibility checks that failed for certain records.

3.2. Timeliness

All the activities carried out by INS during a year are scheduled through the Activity Plan with several months in advance. Annually, INS issues for the users a catalogue of statistical products and services containing the names, periodicity, short descriptions and release dates for all publications.

The length period of preparing, carrying out and publishing of the final results for SES 2010 lasted about **26 months** (from September 2010 to the end October 2012), as described in the table below:

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Table 7: Program of activities of Romanian SES 2010

No	ACTIVITIES	ACTIVITIES DESCRIPTION	DEAD-LINES
1.	Program of survey activities and study of documentation	1.1. Identification of the activities and operations to be carried out in order to successfully run the SES 2010	11.10.2010
		1.2. Documentation study: - national level (changes in legislation, collective agreements, labour code etc.) - European level (Council and Commission regulations, working group documents etc.)	30.11.2010
2.	Redesigning of survey tools	2.1. Redesigning first version of survey tools (questionnaires, explanatory notes, classifications)	10.12.2010
		2.2. Sending the survey tools for comments and observations to main users (Ministry of Labour, Family and Social Protection, Ministry of Public Finances, National Commission for Prognosis) and to some statistical territorial offices	15.12.2010
		2.3. Meetings with the main users (experts from ministries) for discussing the proposed changes in the survey methodology	20.12.2010
		2.4. Receiving comments and observations from the statistical territorial offices	28.12.2010
		2.5. Operating the changes based on comments and observation received and redesigning the final version of survey tools	30.12.2010
		2.6. Approval of the final version of survey tools	05.01.2011
	Dispatching survey tools in the territory	2.7. Sample selection of enterprises	17.12.2010
		2.8. Sending for checking the samples selected to each territorial statistical office	30.12.2010
		2.9. Printing the survey tools according to the number of selected enterprises	25.01.2011
		2.10. Updating the samples based on the updates received from the territorial statistical offices (organisational changes, identified / not - identified, activity changed etc.)	20.01.2011
		2.11. Dispatching survey tools to the territorial statistical offices according to the renewed list of enterprises	27.01.2011
3.	IT solutions	3.1. Designing the logical tests for data entry (including the electronic questionnaire)	28.01.2011
		3.2. Designing the logical tests for data checking, correction and validation	15.02.2011
		3.3. Testing the IT solution at local level	01.03.2011
		3.4. Testing the IT solution at central level	01.03.2011
		3.5. Designing of IT solution for centralising the final data at INS level	14.10.2011
4.	Field work and data checking	4.1. Planning and organisation of field work activities	30.12.2010
		4.2. Data collection	31.03.2011
		4.3. Data entry, checking and validation at local level	16.05.2011
		4.4. Data files reception and listing of occurred errors	16.05.2011
		4.5. Transmission of last corrected data files from territorial statistical offices	24.01.2012
		4.6. Data checking and errors correction	05.04.2012
		4.7. Checking, correlations and coherence with other data sources	05.04.2012

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		4.8. Tabulation and checking of non-weighted data	20.04.2012
		4.9. Final data corrections and validations	20.04.2012
		4.10. Data weighting	24.04.2012
		4.11. Validation of weighted data	11.05.2012
		4.12. Tabulation of weighted data	16.07.2012
		4.13. Analysis of final results	16.08.2012
5.	Dissemination of survey results	5.1. Codification and transmission of the micro data files through eDAMIS to EUROSTAT	13.06.2012
		5.2. Press release on SES 2010 results (available on INS web-site both in Romanian and English)	26.09.2012
		5.3. Release of the 4-yearly publication on SES 2010 results (available only in Romanian)	19.10.2012
6.	Quality evaluation	6.1. Quality report on SES2010	November 2012

4. ACCESSIBILITY AND CLARITY

The SES 2010 data are disseminated through a press release, containing the main results, conclusions and also relevant methodological explanations (definition of the main indicators, classification used, and response rate). The press release is available on INS web-site (both in Romanian and English) for all interested users.

The main publication of Structure of Earnings Survey results is called „*Wage disparities – influences*”, available only in Romanian language, structured into three parts:

- **I. Survey methodology and organisation of SES 2010:** providing information on the survey objectives, coverage, unit of observation, periodicity and reference period, sampling design, concepts and definitions of the collected and derived indicators, classifications used;
- **II. Data analysis of SES 2010:** containing tables, graphs and analysis of the main indicators obtained – number of employees, hourly, monthly and annually earnings, working time – by demo-socio-economical characteristics (sex, age, educational level, occupation, length in the enterprise, economic activity, economic and financial control of the enterprise, size class of the enterprise);
- **III. SES 2010 results:** containing annexes with detailed tables of the main indicators (number of employees, hourly, monthly and annually earnings, working time) by demo-socio-economical characteristics (sex, age, educational level, occupation, length in the enterprise, economic activity, economic and financial control of the enterprise, size class of the enterprise).

The publication is available in the INS library and can be bought by all interested users from the INS bookshop.

Also, the publication is disseminated and distributed to the main users:

- Presidency of Romania;
- Parliament of Romania (including several Commissions oriented on labour, social protection policies, budget and financial policies);
- governmental bodies: Ministry of Labour, Family and Social Protection, Ministry of Public Finances, National Commission for Prognosis, National Agency for Employment, Ministry of Economy, Trade and the Business Environment, Ministry of Administration and Interior, Ministry of Education, Research, Youth

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and Sports, Ministry of Health, Ministry of Foreign Affairs, Ministry of Defence, Ministry of Agriculture and Rural Development etc.;

- main departments of INS and all territorial statistical offices;
- research institutes and universities: Research Institute of National Economy, Research Institute for Labour Force, Research Institute for Education, Romanian Academy, Academy for Economic Studies etc.
- employers and employers' associations;
- trade unions;
- professional associations.

Upon request, data are provided to a very large number of other users (internal and international).

5. COMPARABILITY

5.1. Geographical comparability

Comparability between national and European concepts on:

- **Definition of statistical units - There is no deviation from European concepts:**
 - The **unit of selection** was the **enterprise** defined according to the communautaire rules for enterprises statistics as: „the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit”.
 - The sampled enterprises provided data for their employees belonging to different local units.
- **Populations - There is no deviation from European concepts:**
 - The Romanian Business Register was designed and implemented based on the administrative files (REGIS, which is the Fiscal Register, updated annually) and statistical sources in addition (Trade Register, Balance Sheet files, VAT files, feedback from other surveys, used as consultation data sources for improving the quality of the register data).
 - According to the Council Regulations, REGIS contains the following types of statistical units: legal unit, enterprise, and local unit. All the enterprises having the main activity in the section A to S of NACE Rev.2, whatever their size (number of employees or turnover) are covered.
 - The Romanian Business Register contains all enterprises, authorities and organisations as well as their local units in Romania that carry out any economic activity irrespective of their size or if they belong to the private or public sector. There are covered the following institutional sectors:
 - Non-financial corporate and quasi-corporate enterprises
 - Central and local administration
 - Social security institutions and private non-profit institutions serving households

In respect to the budgetary institutions and public administration REGIS is the most complete register in Romania, based on Official Journal and the collaboration with many administration institutions.

- **Reference times - There is no deviation from European concepts:**

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- The statistics on the structure of earnings are produced for the reference month **October** and for **calendar year 2010**, with a four-yearly periodicity.
- **Classifications - There is no deviation from European concepts:**
 - The national classification of economic activities is covered by CAEN Rev.2 fully harmonized with NACE Rev.2.;
 - The national classification of occupations is covered by COR-2008 harmonized with ISCO-08;
 - The size classes of enterprises correspond to the size classes described in the Council Regulation no. 530/1999 concerning structural statistics on earnings and labour costs;
 - NUTS1 level corresponds to macro-region level.
- **Definitions of variables - There is no deviations from European concepts:**
 - The definitions of SES 2010 variables were developed and adopted in accordance with European standards (Commission Regulation (EC) no 1738/2005 amending Regulation (EC) No 1916/2000 as regards the definition and transmission of information on the structure of earnings), but also taking into account the national features.

5.2. Comparability over time

The Romanian SES was carried out for the third time (with 2002, 2006 and 2010 as reference years). No significant changes in definitions, coverage or classifications used since the previous survey. The improvements made in comparison with year 2006 refer only to more detailed methodological notes accompanying the survey questionnaire

The tables below are an illustrating example on data series continuity over the years. Due to strong inflation registered in Romania the last table shows the trends of power of purchasing expressed as the ratio of nominal earnings index divided by consumer prices index (CPI).

Table 8a: Hourly gross earnings, by economic activities (NACE Rev.1.1) and gender
RON / employee

	2002			2006		
	Male	Female	Total	Male	Female	Total
Total	3.52	2.98	3.27	7.10	6.63	6.88
<i>A: Agriculture</i>	2.50	2.39	2.47	5.02	4.98	5.01
<i>B: Sylviculture, forestry and hunting</i>	1.77	*	1.79	3.93	4.56	4.11
<i>C: Mining and quarrying</i>	5.48	4.34	5.27	11.39	10.12	11.15
<i>D: Manufacturing</i>	3.16	2.33	2.74	6.19	4.65	5.41
<i>E: Electric and thermal energy. gas and water</i>	4.75	4.10	4.59	9.84	9.42	9.73
<i>F: Construction</i>	2.65	2.94	2.69	5.90	6.55	5.99
<i>G: Trade</i>	3.17	2.30	2.75	6.39	5.39	5.93
<i>H: Hotels and restaurants</i>	2.67	2.17	2.36	4.92	4.28	4.55
<i>I: Transport. storage and communications</i>	4.14	4.27	4.18	7.66	7.79	7.7
<i>J: Financial. banking and insurance activities</i>	9.54	7.44	8.03	17.81	16.32	16.79
<i>K: Real estate and other services</i>	3.11	3.49	3.23	6.62	8.18	7.13
<i>L: Public administration¹⁾</i>	3.69	2.98	3.24	8.50	8.52	8.51
<i>M: Education</i>	4.02	3.59	3.72	9.07	8.13	8.43
<i>N: Health and social assistance</i>	3.87	3.35	3.46	8.63	7.58	7.81
<i>O: Other activities</i>	3.39	2.48	2.90	6.69	6.07	6.39

* not reliable data due to the small number of observed units

¹⁾ excluding armed forces and assimilated

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Table 8b: Hourly gross earnings, by economic activities (NACE Rev.2) and gender

RON / employee

	2010		
	Male	Female	Total
Total	11.89	10.83	11.39
<i>A: Agriculture, forestry and fishing</i>	8.72	8.23	8.60
<i>B: Mining and quarrying</i>	20.64	22.07	20.89
<i>C: Manufacturing</i>	10.99	8.44	9.77
<i>D: Electricity, gas, steam and air conditioning supply</i>	20.97	20.82	20.94
<i>E: Water supply; sewerage, waste management and remediation activities</i>	10.28	10.85	10.44
<i>F: Construction</i>	9.74	11.52	10.00
<i>G: Wholesale and retail trade; repair of motor vehicles and motorcycles</i>	11.41	9.87	10.69
<i>H: Transportation and storage</i>	12.49	12.35	12.45
<i>I: Accommodation and food service activities</i>	7.28	6.76	6.97
<i>J: Information and communication</i>	22.27	20.16	21.40
<i>K: Financial and insurance activities</i>	32.00	26.12	27.87
<i>L: Real estate activities</i>	11.02	9.72	10.42
<i>M: Professional, scientific and technical activities</i>	19.08	19.52	19.29
<i>N: Administrative and support service activities</i>	6.66	8.35	7.15
<i>O: Public administration and defence; compulsory social¹⁾</i>	10.66	10.67	10.67
<i>P: Education</i>	11.73	10.40	10.81
<i>Q: Human health and social work activities</i>	11.00	9.97	10.20
<i>R: Arts, entertainment and recreation</i>	8.61	8.22	8.39
<i>S: Other service activities</i>	8.64	6.12	7.23

¹⁾ excluding armed forces and assimilated

Table 9a: Monthly gross earnings, by economic activities (NACE Rev.1.1) and gender

RON / employee

	2002			2006		
	Male	Female	Total	Male	Female	Total
Total	658.5	555.4	610.4	1268	1176	1225
<i>A: Agriculture</i>	473.0	445.3	466.0	895	882	892
<i>B: Sylviculture, forestry and hunting</i>	331.2	*	335.0	695	804	727
<i>C: Mining and quarrying</i>	947.8	791.7	918.7	1948	1786	1917
<i>D: Manufacturing</i>	595.8	436.8	516.4	1116	835	974
<i>E: Electric and thermal energy, gas and water</i>	880.0	754.7	848.5	1751	1668	1731
<i>F: Construction</i>	525.4	559.0	529.7	1075	1151	1084
<i>G: Trade</i>	588.2	426.3	509.7	1126	940	1041
<i>H: Hotels and restaurants</i>	495.6	403.0	437.9	859	745	793
<i>I: Transport, storage and communications</i>	772.8	782.2	775.7	1361	1353	1358
<i>J: Financial, banking and insurance activities</i>	1760.9	1379.2	1487.0	3125	2866	2948
<i>K: Real estate and other services</i>	583.3	640.9	601.9	1175	1428	1258
<i>L: Public administration¹⁾</i>	683.0	550.4	598.0	1528	1537	1533
<i>M: Education</i>	765.8	677.0	703.8	1625	1447	1503
<i>N: Health and social assistance</i>	725.1	625.6	646.6	1513	1324	1366
<i>O: Other activities</i>	636.3	463.1	542.3	1191	1065	1130

* not reliable data due to the small number of observed units

¹⁾ excluding armed forces and assimilated

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Table 9b: Monthly gross earnings, by economic activities (NACE Rev.2) and gender
RON / employee

	2010		
	Male	Female	Total
Total	2014	1820	1922
<i>A: Agriculture, forestry and fishing</i>	1489	1385	1464
<i>B: Mining and quarrying</i>	3463	3747	3513
<i>C: Manufacturing</i>	1906	1458	1691
<i>D: Electricity, gas, steam and air conditioning supply</i>	3551	3505	3541
<i>E: Water supply; sewerage, waste management and remediation activities</i>	1743	1827	1767
<i>F: Construction</i>	1662	1889	1694
<i>G: Wholesale and retail trade; repair of motor vehicles and motorcycles</i>	1908	1636	1780
<i>H: Transportation and storage</i>	2099	2051	2086
<i>I: Accommodation and food service activities</i>	1198	1110	1147
<i>J: Information and communication</i>	3735	3374	3586
<i>K: Financial and insurance activities</i>	5367	4378	4672
<i>L: Real estate activities</i>	1815	1607	1719
<i>M: Professional, scientific and technical activities</i>	3192	3177	3185
<i>N: Administrative and support service activities</i>	1126	1390	1203
<i>O: Public administration and defence; compulsory social¹⁾</i>	1789	1792	1790
<i>P: Education</i>	1984	1762	1831
<i>Q: Human health and social work activities</i>	1815	1664	1697
<i>R: Arts, entertainment and recreation</i>	1318	1298	1307
<i>S: Other service activities</i>	1434	982	1181

¹⁾ excluding armed forces and assimilated

Table 10a: Annual gross earnings, by economic activities (NACE Rev.1.1) and gender
RON / employee

	2002			2006		
	Male	Female	Total	Male	Female	Total
Total	7870.0	6538.1	7246.9	14510	13569	14072
<i>A: Agriculture</i>	5665.6	5235.7	5556.7	9926	9780	9888
<i>B: Sylviculture, forestry and hunting</i>	3943.7	*	3980.6	7829	9345	8272
<i>C: Mining and quarrying</i>	12388.6	10856.6	12100.5	23892	22143	23556
<i>D: Manufacturing</i>	6916.8	5006.6	5965.2	12678	9349	10997
<i>E: Electric and thermal energy, gas and water</i>	10831.0	9271.4	10440.8	21671	20868	21475
<i>F: Construction</i>	5981.3	6396.6	6034.9	11166	12810	11370
<i>G: Trade</i>	7107.1	5081.3	6112.9	12424	10439	11518
<i>H: Hotels and restaurants</i>	5835.2	4698.1	5123.6	9605	8406	8914
<i>I: Transport, storage and communications</i>	9508.2	9848.3	9613.8	16277	15768	16126
<i>J: Financial, banking and insurance activities</i>	22609.1	17862.2	19194.6	39084	35821	36853
<i>K: Real estate and other services</i>	6982.3	7495.2	7150.1	13067	16100	14060
<i>L: Public administration¹⁾</i>	7973.0	6445.3	6994.7	17458	17455	17456
<i>M: Education</i>	8558.7	7648.2	7924.5	19464	17226	17927
<i>N: Health and social assistance</i>	8350.3	7157.7	7408.2	17415	15424	15864
<i>O: Other activities</i>	7592.2	5595.4	6509.2	13553	12213	12904

* not reliable data due to the small number of observed units

¹⁾ excluding armed forces and assimilated

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Table 10b: Annual gross earnings, by economic activities (NACE Rev.2) and gender
 RON / employee

	2010		
	Male	Female	Total
Total	24264	22772	23561
<i>A: Agriculture, forestry and fishing</i>	17307	16733	17166
<i>B: Mining and quarrying</i>	43611	50144	44759
<i>C: Manufacturing</i>	16121	14053	15002
<i>D: Electricity, gas, steam and air conditioning supply</i>	43564	42032	43216
<i>E: Water supply; sewerage, waste management and remediation activities</i>	21025	21938	21279
<i>F: Construction</i>	18553	21803	19016
<i>G: Wholesale and retail trade; repair of motor vehicles and motorcycles</i>	22076	19008	20629
<i>H: Transportation and storage</i>	25133	24470	24950
<i>I: Accommodation and food service activities</i>	13803	12679	13143
<i>J: Information and communication</i>	44173	39378	42183
<i>K: Financial and insurance activities</i>	68601	56488	60089
<i>L: Real estate activities</i>	21122	18792	20045
<i>M: Professional, scientific and technical activities</i>	38196	37468	37848
<i>N: Administrative and support service activities</i>	12494	14939	13207
<i>O: Public administration and defence; compulsory social¹⁾</i>	25643	25647	25646
<i>P: Education</i>	27497	24305	25293
<i>Q: Human health and social work activities</i>	24505	22374	22833
<i>R: Arts, entertainment and recreation</i>	17229	16822	17000
<i>S: Other service activities</i>	17120	11618	14045

¹⁾ excluding armed forces and assimilated

Table 11: Ratio of nominal earnings index and consumer price index

	(%)																					
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1990	100.0	81.5	70.8	58.9	59.1	66.5	72.7	56.2	58.4	57.0	59.4	62.4	63.9	70.8	78.3	89.5	97.4	111.8	130.3	128.3	123.6	121.3
1991		100.0	86.9	72.3	72.5	81.6	89.3	68.9	71.7	69.9	72.9	76.6	78.4	86.9	96.0	109.8	119.6	137.3	159.9	157.4	151.7	148.8
1992			100.0	83.2	83.4	93.9	102.7	79.3	82.5	80.5	83.9	88.1	90.2	100.0	110.5	126.4	137.7	158.0	184.0	181.2	174.6	171.3
1993				100.0	100.3	112.9	123.5	95.4	99.1	96.7	100.9	105.9	108.5	120.2	132.9	151.9	165.5	189.9	221.2	217.8	209.8	205.9
1994					100.0	112.5	123.1	95.1	98.8	96.4	100.6	105.6	108.1	119.8	132.5	151.4	165.0	189.3	220.5	217.2	209.2	205.3
1995						100.0	109.4	84.5	87.8	85.7	89.4	93.8	96.1	106.4	117.7	134.5	146.5	168.2	195.9	192.9	185.8	182.4
1996							100.0	77.2	80.3	78.3	81.7	85.8	87.8	97.3	107.6	123.0	134.0	153.8	179.1	176.4	169.9	166.8
1997								100.0	104.0	101.4	105.8	111.0	113.7	126.0	139.3	159.3	173.5	199.1	232.0	228.4	220.0	215.9
1998									100.0	97.5	101.8	106.8	109.4	121.2	134.1	153.2	166.9	191.6	223.2	219.7	211.7	207.7
1999										100.0	104.3	109.5	112.2	124.3	137.4	157.1	171.1	196.4	228.7	225.2	217.0	212.9
2000											100.0	105.0	107.5	119.1	131.7	150.5	164.0	188.2	219.2	215.9	208.0	204.1
2001												100.0	102.4	113.4	125.5	143.4	156.2	179.3	208.9	205.6	198.1	194.4
2002													100.0	110.8	122.5	140.0	152.5	175.1	204.0	200.8	193.5	189.9
2003														100.0	110.5	126.3	137.7	158.0	184.1	181.2	174.6	171.4
2004															100.0	114.3	124.6	143.0	166.5	163.9	158.0	155.0
2005																100.0	109.0	125.0	145.7	143.4	138.2	135.6
2006																	100.0	114.7	133.7	131.7	126.8	124.4
2007																		100.0	116.5	114.7	110.5	108.4
2008																			100.0	98.5	94.9	93.1
2009																				100.0	96.3	94.5
2010																					100.0	98.1

6. COHERENCE

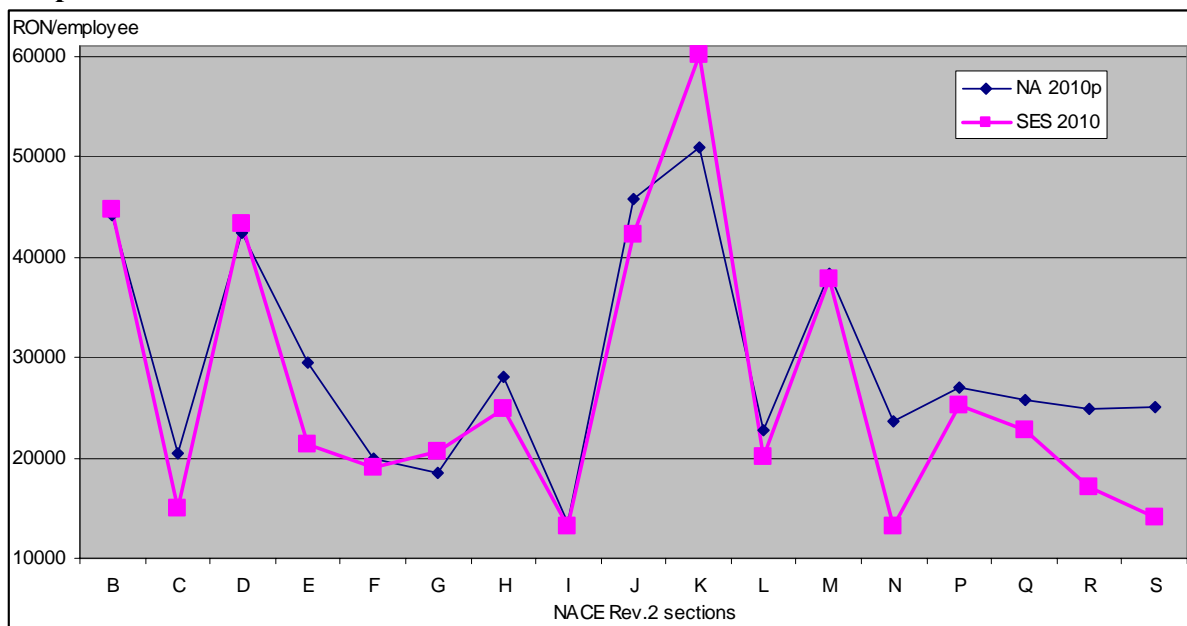
Coherence with National Accounts

The comparison between the gross annual earnings in the reference year, expressed per employee, shows some differences between Structure of Earnings Survey and National Account (NA), mainly due to the different coverage of the two data sources. In SES, enterprises with less than 10 employees are excluded, while NA contains information also, for small enterprises and hidden economy.

Main data sources for the National Accounts, by NACE Rev 2 sections are:

- Accounting statements of financial and non-financial units,
- Accounting statements of non-profit institutions serving households,
- Execution of state budget,
- Structural Business Survey ,
- Labour Cost Survey,
- Household Budget Survey,
- Labour Force Survey (for employment data only),
- Declaration on global income of self-employed persons and family associations,
- Balance of payments.

Graph 1:



For better data comparability:

- Sections A and O of NACE Rev.2 were excluded from SES.

Compared with SES, for section K, the NA include persons with other kind of contracts (i.e. insurance agents, field agents), that are not paid from the salary funds. Also, sections N and R include in NA data on small enterprises and hidden economy. Section S include in NA accounting and financial data (i.e. wages and salaries) on trade unions, political parties and other kinds of non-profit institutions serving households etc.

The NA data used to obtain gross annual earnings in 2010 are provisional data and might be modified in the final version.

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7. ANNEX - COEFFICIENTS OF VARIATION

Table 1a: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by NACE Rev.2 sections

NACE Rev.2 Section level	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
A	0.032618	0.032320
B	0.048727	0.047628
C	0.015871	0.016002
D	0.016764	0.016782
E	0.020834	0.020892
F	0.026669	0.026177
G	0.014692	0.014630
H	0.028308	0.027650
I	0.045157	0.045145
J	0.057729	0.057693
K	0.023395	0.023156
L	0.109644	0.107441
M	0.162911	0.183008
N	0.019846	0.019492
O	0.005971	0.005968
P	0.029541	0.029570
Q	0.019081	0.021311
R	0.028698	0.027530
S	0.078750	0.077821

Table 1b: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by FT/PT employees

Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
FT	0.009147	0.009216
PT	0.050424	0.053460

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Table 1c: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by FT/PT employees and NACE Rev.2 sections

NACE Rev.2 Section level	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
A	FT	0.032865	0.032717
B	FT	0.048779	0.047816
C	FT	0.015971	0.016143
D	FT	0.016696	0.016743
E	FT	0.020920	0.021063
F	FT	0.027312	0.027324
G	FT	0.014988	0.015042
H	FT	0.028979	0.028820
I	FT	0.045798	0.045903
J	FT	0.058679	0.058828
K	FT	0.023419	0.023391
L	FT	0.113530	0.113590
M	FT	0.162660	0.162815
N	FT	0.020293	0.020307
O	FT	0.005975	0.005976
P	FT	0.030085	0.030676
Q	FT	0.019048	0.019115
R	FT	0.029256	0.029343
S	FT	0.081436	0.081473
A	PT	0.234028	0.207450
B	PT	0.311384	0.278439
C	PT	0.130257	0.119653
D	PT	0.152765	0.283382
E	PT	0.143114	0.163512
F	PT	0.089683	0.087112
G	PT	0.059321	0.061863
H	PT	0.093493	0.092331
I	PT	0.223037	0.233317
J	PT	0.238539	0.282818
K	PT	0.120052	0.114371
L	PT	0.282824	0.273082
M	PT	0.795147	0.787316
N	PT	0.056592	0.063101
O	PT	0.110041	0.111684
P	PT	0.045300	0.039086
Q	PT	0.173632	0.188343
R	PT	0.114559	0.074046
S	PT	0.288150	0.257964

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Table 1d: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by FT/PT employees, sex and NACE Rev.2 sections

NACE Rev.2 Section level	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
A	F	FT	0.058650	0.058722
B	F	FT	0.139450	0.139179
C	F	FT	0.024667	0.024859
D	F	FT	0.035428	0.035357
E	F	FT	0.034952	0.034901
F	F	FT	0.077942	0.078187
G	F	FT	0.023278	0.023371
H	F	FT	0.056414	0.055551
I	F	FT	0.060721	0.060871
J	F	FT	0.085112	0.085319
K	F	FT	0.027651	0.027569
L	F	FT	0.143800	0.143852
M	F	FT	0.193987	0.194189
N	F	FT	0.038493	0.038524
O	F	FT	0.007536	0.007536
P	F	FT	0.039301	0.040071
Q	F	FT	0.023028	0.023103
R	F	FT	0.037798	0.037913
S	F	FT	0.102863	0.102902
A	F	PT	0.250517	0.227429
B	F	PT	0.474152	0.426887
C	F	PT	0.196300	0.184333
D	F	PT	0.243146	0.352937
E	F	PT	0.260820	0.302331
F	F	PT	0.167983	0.177028
G	F	PT	0.078550	0.082352
H	F	PT	0.217379	0.203842
I	F	PT	0.217305	0.280081
J	F	PT	0.298150	0.308479
K	F	PT	0.138934	0.133758
L	F	PT	0.454583	0.458041
M	F	PT	0.857108	0.848187
N	F	PT	0.091150	0.111643
O	F	PT	0.154641	0.155343
P	F	PT	0.054851	0.049423
Q	F	PT	0.211036	0.154209
R	F	PT	0.105186	0.091187
S	F	PT	0.305365	0.270784
A	M	FT	0.058650	0.038445
B	M	FT	0.139450	0.048640
C	M	FT	0.024667	0.020153

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NACE Rev.2 Section level	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
D	M	FT	0.035428	0.018937
E	M	FT	0.034952	0.025716
F	M	FT	0.077942	0.028513
G	M	FT	0.023278	0.019089
H	M	FT	0.056414	0.033387
I	M	FT	0.060721	0.069836
J	M	FT	0.085112	0.080213
K	M	FT	0.027651	0.043077
L	M	FT	0.143800	0.170915
M	M	FT	0.193987	0.235751
N	M	FT	0.038493	0.023721
O	M	FT	0.007536	0.009678
P	M	FT	0.039301	0.044055
Q	M	FT	0.023028	0.029767
R	M	FT	0.037798	0.046134
S	M	FT	0.102863	0.098005
A	M	PT	0.250517	0.305957
B	M	PT	0.474152	0.162391
C	M	PT	0.196300	0.098464
D	M	PT	0.243146	0.455675
E	M	PT	0.260820	0.165884
F	M	PT	0.167983	0.098673
G	M	PT	0.078550	0.091214
H	M	PT	0.217379	0.101114
I	M	PT	0.217305	0.417773
J	M	PT	0.298150	0.407129
K	M	PT	0.138934	0.212303
L	M	PT	0.454583	0.277161
M	M	PT	0.857108	0.484063
N	M	PT	0.091150	0.075636
O	M	PT	0.154641	0.159233
P	M	FT	0.054851	0.063624
Q	M	FT	0.211036	0.378583
R	M	FT	0.105186	0.114183
S	M	FT	0.305365	0.165049

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Table 2a: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by ISCO major groups

ISCO major groups	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
MG1	0.075838	0.096415
MG2	0.041324	0.039998
MG3	0.022321	0.022942
MG4	0.093285	0.091097
MG5	0.022518	0.022399
MG6	0.091050	0.102823
MG7	0.017971	0.018036
MG8	0.024012	0.023597
MG9	0.022503	0.022603

Table 2b: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by FT/PT employees, sex and ISCO major groups

ISCO major groups	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
MG1	F	FT	0.063994	0.064150
MG2	F	FT	0.053869	0.054155
MG3	F	FT	0.034544	0.034548
MG4	F	FT	0.078989	0.079333
MG5	F	FT	0.029726	0.029873
MG6	F	FT	0.133298	0.130335
MG7	F	FT	0.036909	0.036910
MG8	F	FT	0.052542	0.053324
MG9	F	FT	0.037298	0.037511
MG1	F	PT	0.902739	0.874721
MG2	F	PT	0.141682	0.131271
MG3	F	PT	0.137341	0.137375
MG4	F	PT	0.236658	0.234484
MG5	F	PT	0.095125	0.106376
MG6	F	PT	0.000000	0.000000
MG7	F	PT	0.149282	0.148644
MG8	F	PT	0.543863	0.531016
MG9	F	PT	0.179242	0.146164
MG1	M	FT	0.100285	0.100703
MG2	M	FT	0.066034	0.066366
MG3	M	FT	0.029701	0.029829
MG4	M	FT	0.224880	0.226166
MG5	M	FT	0.036163	0.036482
MG6	M	FT	0.109648	0.109959
MG7	M	FT	0.020783	0.020906

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ISCO major groups	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
MG8	M	FT	0.026691	0.026133
MG9	M	FT	0.028234	0.028403
MG1	M	PT	0.180062	0.188162
MG2	M	PT	0.133063	0.117873
MG3	M	PT	0.187124	0.236084
MG4	M	PT	0.191919	0.228075
MG5	M	PT	0.103664	0.144977
MG6	M	PT	0.000000	0.000000
MG7	M	PT	0.155928	0.149252
MG8	M	PT	0.105738	0.098045
MG9	M	PT	0.217072	0.196418

Table 3a: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by age bands

Age band (years)	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
<20	0.117833	0.114979
20 – 29	0.027550	0.027406
30 – 39	0.026404	0.040973
40 – 49	0.029495	0.029189
50 – 59	0.052409	0.051461
60+	0.066238	0.063161

Table 3b: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by FT/PT employees, sex and age bands

Age band (years)	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
<20	F	FT	0.194295	0.196612
20 – 29	F	FT	0.031759	0.031871
30 – 39	F	FT	0.028812	0.028985
40 – 49	F	FT	0.046665	0.047024
50 – 59	F	FT	0.036234	0.036439
60+	F	FT	0.126365	0.126651
<20	F	PT	0.563634	0.391883
20 – 29	F	PT	0.156832	0.148150
30 – 39	F	PT	0.719255	0.663349
40 – 49	F	PT	0.129180	0.127197
50 – 59	F	PT	0.150660	0.141051
60+	F	PT	0.213547	0.232369
<20	M	FT	0.151343	0.153257
20 – 29	M	FT	0.042642	0.042958
30 – 39	M	FT	0.024895	0.024985

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Age band (years)	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
40 – 49	M	FT	0.038626	0.039049
50 – 59	M	FT	0.081012	0.081872
60+	M	FT	0.082391	0.082885
<20	M	PT	0.355879	0.343343
20 – 29	M	PT	0.177478	0.165083
30 – 39	M	PT	0.107302	0.107694
40 – 49	M	PT	0.110832	0.109931
50 – 59	M	PT	0.118037	0.140972
60+	M	PT	0.190867	0.168104

Table 4a: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by level of education (ISCED)

ISCED	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
1	0.148122	0.150422
2	0.031158	0.032348
3	0.011293	0.011236
4	0.063215	0.061962
5	0.044934	0.051725
6	0.040613	0.040779

Table 4b: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” by FT/PT employees, sex and level of education (ISCED)

ISCED	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
1	F	FT	0.263039	0.266715
2	F	FT	0.054309	0.054747
3	F	FT	0.020705	0.020852
4	F	FT	0.098051	0.098351
5	F	FT	0.043018	0.043177
6	F	FT	0.059875	0.060410
1	F	PT	0.905461	0.852415
2	F	PT	0.212796	0.212673
3	F	PT	0.077953	0.081997
4	F	PT	0.157736	0.179416
5	F	PT	0.591283	0.531116
6	F	PT	0.201400	0.220784
1	M	FT	0.181057	0.184691
2	M	FT	0.038205	0.038631
3	M	FT	0.012835	0.012821
4	M	FT	0.082910	0.083258

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ISCED	Sex	Full time/ Part time employees	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
5	M	FT	0.068409	0.068689
6	M	FT	0.055745	0.056535
1	M	PT	0.316514	0.378460
2	M	PT	0.311779	0.290967
3	M	PT	0.064829	0.064657
4	M	PT	0.271945	0.270344
5	M	PT	0.116660	0.111373
6	M	PT	0.297408	0.297305

Table 5a: Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” size classes of the enterprise

Size classes of the enterprise	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
E1000	0.005902	0.005870
E10_49	0.028759	0.032590
E250_499	0.012011	0.012155
E500_999	0.009966	0.010148
E50_249	0.015022	0.015250

Table 5b Coefficients of variation for variables “gross earnings in the reference month (B42)” and “average gross hourly earnings in the reference month (B43)” NACE Rev.2 sections and size classes of the enterprise

NACE Rev.2 Section level	Size classes of the enterprise	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
A	E1000	0.045380	0.046213
A	E10_49	0.039970	0.039402
A	E250_499	0.016351	0.016228
A	E500_999	0.022400	0.022678
A	E50_249	0.068433	0.069644
B	E1000	0.048572	0.046439
B	E10_49	0.174446	0.171336
B	E250_499	0.042082	0.042876
B	E500_999	0.160076	0.161304
B	E50_249	0.029020	0.029211
C	E1000	0.009336	0.009281
C	E10_49	0.027028	0.026756
C	E250_499	0.015292	0.015540
C	E500_999	0.009052	0.009256
C	E50_249	0.026086	0.026329
D	E1000	0.013190	0.013261
D	E10_49	0.047082	0.046198
D	E250_499	0.016934	0.016875
D	E500_999	0.053820	0.054184

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NACE Rev.2 Section level	Size classes of the enterprise	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
D	E50_249	0.024166	0.024312
E	E1000	0.023577	0.023593
E	E10_49	0.050977	0.050456
E	E250_499	0.016755	0.016823
E	E500_999	0.016660	0.016760
E	E50_249	0.054186	0.054817
F	E1000	0.021117	0.021293
F	E10_49	0.031861	0.030660
F	E250_499	0.015173	0.015496
F	E500_999	0.020437	0.020923
F	E50_249	0.040561	0.041761
G	E1000	0.022275	0.022152
G	E10_49	0.016723	0.016523
G	E250_499	0.055901	0.054742
G	E500_999	0.031623	0.031777
G	E50_249	0.038236	0.038724
H	E1000	0.013444	0.013521
H	E10_49	0.044556	0.042770
H	E250_499	0.021726	0.022152
H	E500_999	0.015205	0.015292
H	E50_249	0.072011	0.070585
I	E1000	0.049852	0.043923
I	E10_49	0.048073	0.047930
I	E250_499	0.189874	0.189134
I	E500_999	0.063415	0.063492
I	E50_249	0.080340	0.083530
J	E1000	0.029439	0.029445
J	E10_49	0.109039	0.107301
J	E250_499	0.062272	0.062148
J	E500_999	0.085304	0.085117
J	E50_249	0.075457	0.083734
K	E1000	0.024192	0.024077
K	E10_49	0.078238	0.075372
K	E250_499	0.041792	0.041733
K	E500_999	0.063645	0.063108
K	E50_249	0.033383	0.033675
L	E1000	0.045783	0.046525
L	E10_49	0.121962	0.119207
L	E250_499	0.086188	0.091771
L	E50_249	0.063493	0.067406
M	E1000	0.032579	0.032588
M	E10_49	0.196197	0.217619
M	E250_499	0.054528	0.054799
M	E500_999	0.057685	0.057206
M	E50_249	0.048349	0.050376
N	E1000	0.040616	0.040681

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NACE Rev.2 Section level	Size classes of the enterprise	Gross earnings in the reference month (B42)	Average gross hourly earnings in the reference month (B43)
N	E10_49	0.052476	0.051199
N	E250_499	0.048096	0.047628
N	E500_999	0.024582	0.024808
N	E50_249	0.029371	0.028382
O	E1000	0.028551	0.028463
O	E10_49	0.009164	0.009154
O	E250_499	0.015436	0.015435
O	E500_999	0.020330	0.020323
O	E50_249	0.008515	0.008514
P	E1000	0.009816	0.009646
P	E10_49	0.215725	0.208223
P	E250_499	0.035400	0.030208
P	E500_999	0.059002	0.059593
P	E50_249	0.045822	0.045200
Q	E1000	0.012047	0.012322
Q	E10_49	0.112305	0.114694
Q	E250_499	0.026593	0.027037
Q	E500_999	0.017923	0.020098
Q	E50_249	0.052337	0.052217
R	E1000	0.063991	0.030801
R	E10_49	0.052982	0.050956
R	E250_499	0.098934	0.099900
R	E500_999	0.037785	0.042084
R	E50_249	0.037833	0.038347
S	E1000	0.060738	0.060824
S	E10_49	0.096386	0.094345
S	E250_499	0.042228	0.041853
S	E500_999	0.076230	0.076230
S	E50_249	0.034125	0.035307