

ROMÂNIA



INSTITUTUL NAȚIONAL DE STATISTICĂ

**QUALITY REPORT  
ON THE ORGANISATION AND RESULTS OF  
STRUCTURE OF EARNINGS SURVEY  
(SES 2002)**

Quality report on the organisation and results of  
**Structure of Earnings Survey**  
**(SES 2002)**

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## STRUCTURE OF EARNINGS SURVEY 2002 QUALITY REPORT

### 1. RELEVANCE

#### 1.1. Users' description

Main users of SES data may be grouped as following:

**(i) internal users:**

- governmental bodies: Ministry of Labour, Social Solidarity and Family, Ministry of Public Finance, National Commission for Prognosis, National Agency for Employment, Ministry of Education, National Council for Adult Education and Training, Ministry of Health;
- territorial statistical offices;
- 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, doctorants.

**(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

**(i) internal users:**

The outcomes of SES provide to the users important data on hourly, monthly and annually earnings and the structure of earnings, with multiple breakdowns by demo-socio-economical characteristics of the employees.

It is the first and 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?*

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- *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?*

The outcomes of SES (also in relation with the information provided by other surveys) are used by policy makers 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, Social Solidarity and Family and Ministry of Public Finance are interested in the structure of earnings and in the level of hourly, monthly and annually earnings by different categories of employees in relation to the financial and social protection policies.
- ✓ Same Ministries together with the National Commission for Prognosis are paying a special attention to the structure and level of earnings. Several strategies have been under discussion 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, Social Solidarity and Family 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).
- ✓ 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. Results of SES are key elements for negotiation of collective agreements in relation not only for the direct remuneration but of share of payments in kind and other advantages, pension scheme, social and health insurance, programs for vocational training (reconversion of the redundant employees, improvement of level of qualification etc.).

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- ✓ Employers (enterprises), employers' associations and professional associations are carrying out several comparative analysis 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 (candidates and 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 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) but, in order to ensure the objective, transparent and scientific, character of the methodologies, indicators and classifications used in statistics, the Council of Co-ordinating the Statistical Activity is 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 are meeting quarterly or more frequent when is necessary in working groups by statistical fields. During these meetings National Institute for Statistics is receiving 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 survey' tools and launching any survey on earnings and labour costs, INS usually consults with its main users of the results (Ministry of Labour, Social Solidarity and Family, Ministry of Public Finance and National Commission for Prognosis, research

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institutes and universities etc.) and ask for methodological approval given by the “Commission of Methodological Approval”.

Thus, the SES questionnaire, explanatory notes and annexes with classification needed were sent to be studied by the users and advisors. After few weeks agreed in advance meetings were held and each item was discussed. Based on their comments and observations some changes (variables added, breakdowns of some variables, updates of the legislation entered into force etc.) were operated before drafting the final version of the questionnaire.

**(ii) external users:**

- ✓ European Union and international organisations: survey tools were designed by respecting the recommendations stated in the Commission Regulation no. 1726/1999; data were sent to Eurostat according to the format requested; 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;
- ✓ Foreign employers (investors): most of their requests are satisfied by the available data.

**2. ACCURACY**

**2.1. Sampling errors**

**2.1.1. Probability sampling**

**2.1.1.1. Bias (*optional*)**

**2.1.1.2. Variance**

The coefficients of variations requested through the “Commission Regulation No. 72/2002” are presented into the Annex 2. The computations of CVs have been produced using the variance programme CLAN, a SAS macro provided by Swedish statistics.

**2.1.2. Non-probability sampling**

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 2002. 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 3.70% of surveyed enterprises reported a number of employees less than the

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limit threshold for including criteria in the reference population (at least 10 employees) but the stability of activity is at high level (over 90%). In the meantime it encounters the existence of a 2.42% of unidentified enterprises. In the adjustment procedure the unidentified enterprises were assimilated to the non-response units.

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

**Table 1: Misclassification by NACE (section level)**

- % -

NACE Rev1, Section level contained in sampling frame	NACE Rev1, Section level – reported value (during the data collection )															Grand Total
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
<b>A</b>	<b>98.71</b>	0.00	0.00	0.21	0.00	0.21	0.64	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	<b>100.00</b>
<b>B</b>	0.00	<b>100.00</b>	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	<b>100.00</b>
<b>C</b>	0.00	0.00	<b>97.17</b>	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	<b>100.00</b>
<b>D</b>	0.15	0.00	0.00	<b>98.71</b>	0.03	0.29	0.50	0.03	0.12	0.00	0.06	0.03	0.00	0.00	0.09	<b>100.00</b>
<b>E</b>	0.00	0.00	0.46	0.46	<b>97.22</b>	0.46	0.93	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	<b>100.00</b>
<b>F</b>	0.00	0.00	0.00	0.96	0.12	<b>97.97</b>	0.36	0.00	0.12	0.00	0.36	0.00	0.00	0.00	0.12	<b>100.00</b>
<b>G</b>	0.16	0.00	0.00	2.70	0.00	0.66	<b>93.69</b>	0.57	0.90	0.08	0.90	0.00	0.00	0.16	0.16	<b>100.00</b>
<b>H</b>	0.00	0.00	0.00	1.20	0.00	0.00	0.60	<b>97.01</b>	0.00	0.00	1.20	0.00	0.00	0.00	0.00	<b>100.00</b>
<b>I</b>	0.25	0.00	0.00	0.76	0.00	0.00	1.02	0.25	<b>97.46</b>	0.00	0.25	0.00	0.00	0.00	0.00	<b>100.00</b>
<b>J</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	<b>99.45</b>	0.00	0.00	0.00	0.00	0.00	<b>100.00</b>
<b>K</b>	0.28	0.00	0.00	1.96	0.00	0.84	1.12	0.00	0.00	0.14	<b>95.25</b>	0.14	0.14	0.14	0.00	<b>100.00</b>
<b>L</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>99.70</b>	0.00	0.20	0.10	<b>100.00</b>
<b>M</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	<b>99.17</b>	0.00	0.00	<b>100.00</b>
<b>N</b>	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	<b>100.00</b>	0.00	<b>100.00</b>
<b>O</b>	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.32	0.00	0.00	1.62	0.00	0.00	0.00	<b>97.73</b>	<b>100.00</b>
<b>Grand Total</b>	<b>5.02</b>	<b>0.29</b>	<b>1.11</b>	<b>36.75</b>	<b>2.27</b>	<b>9.03</b>	<b>12.62</b>	<b>1.84</b>	<b>4.28</b>	<b>1.95</b>	<b>7.55</b>	<b>10.50</b>	<b>1.29</b>	<b>2.18</b>	<b>3.31</b>	<b>100.00</b>

**Table 2: Misclassification by size classes**

- % -

Size class contained in the sampling frame	Size class reported during the data collection				Grand Total
	9 and less	10-49	50-249	250 and over	
10-49	8.72	<b>87.01</b>	4.19	0.08	<b>100.00</b>
50-249	1.43	10.38	<b>85.41</b>	2.78	<b>100.00</b>
250 and over	0.20	0.73	8.78	<b>90.28</b>	<b>100.00</b>
<b>Grand Total</b>	<b>3.70</b>	<b>34.95</b>	<b>39.31</b>	<b>22.04</b>	<b>100.00</b>

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### **2.2.2. Measurement errors**

The SES questionnaire was structured by 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** – demographic characteristics of the employees, **B2** – the working time and the gross amounts corresponding to month October 2002, **B3** – the working time and the gross amounts corresponding to whole year 2002.

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 (4 digit level) and the classification of educational level (1 digit level).

As first survey collecting the information at employee level some difficulties for the respondents in filling in the questionnaire occurred. 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 electronic, by e-mail (using a standard Excel file provided by INS). The majority of the respondents (90%) 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 to perform the data entry and the validation at each county level (42 counties in total – NUTS3 level). One procedure was created: logic control (checking) of data files.

The IT solution at **central level** contained beside the alternatives of procedures 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 survey on earnings”, “Distribution of earnings by occupations for month October”, “Annual survey on labour cost”);
- tabulation of non-weighted data;
- adjustment and weighting;
- tabulation of the results (weighted data);
- automatic codification of the national variables into the EUROSTAT ones (created later).



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After validation, data were analysed and corrected where necessary. In order to provide 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  $\pm 20\%$  difference was accepted.

Basic salaries were compared with the minimum wage guaranteed by legislation in force. Values of the basic salary below the minimum wage were not accepted for the 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; differences more than  $\pm 20\%$  were not accepted.

For the cases above or below these limits, the respondent units were contacted for explanations. The gross monthly earnings could differ from a month to another due to different financial and working conditions (i.e. slack 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 economic and financial control of the enterprises were compared with the same indicator from other two surveys – Annual survey on labour costs 2002, Monthly survey on earnings for month October 2002. For differences more than  $\pm 20\%$  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.

### **2.2.3. Processing errors**

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

More 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). As the procedure of selecting a sample of employees was requested for the first time, even if illustrative calculation examples were given, still lots of errors occurred.

149 logical tests and correlations were performed for data checking.

Logic 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,

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monthly gross amounts paid, individual contributions (for unemployment, social insurance and health insurance)<sup>1</sup>, annual gross amounts paid, number of annual days of absence (holidays, sick leave, vocational training).

The correlations were focussed on:

- different indicators from the same chapter (e.g. occupation – level of education, date of birth – level of education, gross amounts paid for overtime – number of overtime hours, etc.);
- similar indicators from different chapters (ex. gross amounts paid monthly and annually, bonuses paid monthly and annually, etc.);
- common indicators from different surveys (total number of employees at the end of the month, the distribution of employees by occupation groups, etc.).

**Same tests were conducted at local level (territorial statistical offices) as well as at central level (INS). The largest part of the errors found was solved at local level.** The figures were corrected after recontacting the corresponding respondents.

The questionnaire design, quite detailed explanatory notes and 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 first level of checking at local level are not available.

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

Most frequent errors that occurred during data checking period:

- 6.7% of errors coded A79 (in Romanian Logic tests); the test was checking if the individual contribution for unemployment calculated from the basic salary belonged to interval of percentage [0.9; 1.1]; the legal percentage is equal to 1;
- 5.5% of errors coded A82; the test was checking if the total gross amounts paid for month October was equal with the sum of the basic salary, bonuses, payments for shift work, overtime, length in work, amounts from the net profit, other amounts paid;
- 5.1% of errors coded A92; the test was checking the correlation between the annual gross amounts paid and the monthly gross amount multiplied with the period of time worked during the year;
- 4.4% of errors coded A71; the test was checking the correlation between the basic salary and the minimum wage (according to the legislation in force);
- 4.2% of errors coded A70; the test was checking the correlation between number of hours paid and the working program;
- 3.7% of errors coded A66; the test was checking if the normal duration of working week was below 59 hours;

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<sup>1</sup> Variables supplementary introduced for national purposes

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- 3.7% of errors coded A80; the test was checking if the individual contribution for social insurance calculated from the monthly gross amounts belonged to interval of percentage [10, 13]; the legal percentage is equal to 11,67;
- 3.5% of errors coded A81; the test was checking if the individual contribution for health insurance calculated from the monthly gross amounts belonged to interval of percentage [6.5, 7.5]; the legal percentage is equal to 7;
- 2.7% of errors coded A83; the test was checking if the taxes corresponding to the monthly gross amount were below 40 (according to the legislation in force).
- 2.4% of errors coded A64; the test was checking the correlation between the occupation code and managerial/supervisory position;
- 2.3% of errors coded A62; the test was checking the correlation between the occupation code and the level of education code;
- 1.9% of errors coded A100; the test was checking the correlation between the gross amounts paid from the insurance schemes and the annual days of sick leave not paid by the employer;
- 1.5% of errors coded A101 and A102; the tests were checking the correlation between the monthly gross amounts paid from net profit or insurance schemes and the corresponding gross amounts paid annually.

The percentage of cases that needed to be corrected, for most of the variables asked for in the Romanian SES are presented in the following table:

**Table 3: Percentage of cases corrected**

Variables		%
code	Label	of cases corrected
<b>1. Information relating the local unit to which the sampled employees are attached</b>		
	Total number of employees in the enterprise	0.1
	Distribution of employees by occupation groups	1.2
	Distribution of employees by sex and occupation groups	1.3
	Distribution of employees by working program	0.2
1.1	Region of the local unit	0.5
1.3	Economic activity	0.8
1.4	Form of economic and financial control	0.5
1.5	Existence of the collective pay agreements	0.1
1.6	Total number of employees in the local unit	1.4
1.7	Principal market of the enterprises' products	0.1
<b>2. Information relating to each employee in the sample</b>		
	Unique number of employee	0.6
2.1	Sex	1.9
	Date of birth	0.2
	Local unit to which belongs	3.1

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*continued*

Variables		% of cases corrected
code	Label	
2.3	Occupation	2.3
2.4	Management/supervisory position	2.4
2.5	Highest completed level of education	1.7
	Date of starting the activity in the enterprise	0.8
	Date of closing the activity in the enterprise	0.1
2.7	Whether full-time or part-time	0.0
2.7.1	Share of full-time	0.4
2.8	Type of contract	0.5
2.9	Citizenship	2.0
2.11	Years of career break in the current enterprise	0.2
<b>3. Information concerning earnings, hours paid and days not worked</b>		
	Basic salary	4.4
3.1	Total gross amounts for a representative month	5.5
3.1.1	Earnings related to the overtime	0.9
3.1.2	Special payments for shift work	0.5
	Payments for length of work	2.5
	Monthly amounts from the net profit	0.8
	Monthly amounts from other funds (including payments in kind)	0.1
	Monthly amounts from the insurance schemes	0.2
	Individual contribution for unemployment	6.7
	Individual contribution for social insurance	3.7
	Individual contribution for health insurance	3.5
	Taxes	2.7
3.2	Total gross annual earnings	5.1
3.2.2.1	Regular bonuses	4.3
3.2.2.2	Annual bonuses based on productivity	1.4
3.2.3	Annual premiums related to profit-sharing	1.5
	Annual amounts from other funds	1.5
	Annual amounts from the insurance schemes	1.5
	Severance payments	0.2
3.4	Number of hours paid during the reference month	4.2
3.4.1	Number of overtime paid in the reference month	1.5
	Normal duration of working week	3.7
	Payment period	0.2
3.5.1	Annual days of holiday leave	1.2
3.5.2	Annual days of sick leave	1.3
3.5.2.1	Annual days of sick leave paid by the employer	1.9
3.5.2.2	Annual days of sick leave not paid by the employer	1.3
3.5.3	Annual days of vocational training	0.1
3.6	Annual estimation for payment in kind	0.3

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**2.2.4. 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	Type of response used in the non-response adjustment procedure	Percentage
Response	Response	82.99%
Refusal	Non-response	5.37%
Unidentified	Non-response	2.42%
Out of scope units	Model assumption	3.70%
Units whose the contact was not established (non-contacted)	Non-response	1.15%
Dormant unit	Response	3.86%
Ceased unit	Non-response	0.52%
<b>Grand Total</b>	-	<b>100.00%</b>

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.

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 13.22%.

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.

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- 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.

### 2.2.5. 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.

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

## 3. TIMELINESS AND PUNCTUALITY

The activities for 2002 SES were carried out over a period of about 24 months in total as it is shown in the table below:

**Table 5 : Program of activities of Romanian 2002 SES**

No	ACTIVITIES	ACTIVITIES DESCRIPTION	DEAD- LINES
1.	Program of survey activities and study of documentation	1.1. Identification of the activities and operations which has to be carried out in order to run successfully SES 1.2. Study the documentation - national (changes in legislation, collective agreements, labour code etc.) - European (Council and Commission regulations, working documents etc.) - results of SES pilot survey carried out in March 2002 (in order to test survey tools, the selection method of employees, data collection and transmission)	<div style="text-align: center;">15.07.2002</div> <div style="text-align: center;">15.07.2002</div>

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<b>No</b>	<b>ACTIVITIES</b>	<b>ACTIVITIES DESCRIPTION</b>	<b>DEAD-LINES</b>
2.	Designing of survey tools	2.1.Designing of survey tools (questionnaires, explanatory notes, annexes with classifications)	01.08.2002
		2.2. Sending the survey tools for comments and observations to main users (Ministry of Labour, Social Solidarity and Family, Ministry of Public Finance, National Commission for Prognosis)	01.08.2002
		2.3.Meetings for discussions on changes proposed with the experts from the ministries – main users – to which the survey questionnaires and explanatory notes were sent	01.09.2002
		2.4.Receiving comments and observations from the main users to which the survey questionnaires and explanatory notes were sent	15.09.2002
		2.5.Changes operated based on pertinent comments and observation formulated and redesigning of final version of survey tools	01.10.2002
		2.6. Presenting the survey tools for approval to the “Commission for Methodological Approval”	10.10.2002
		2.7.Approval of final version of questionnaires and explanatory notes for the survey	15.10.2002
	Dispatch survey tools in the territory	2.8. Selection of the enterprises	15.11.2002
		2.9.Printing of survey tools according to the number of selected enterprises	30.11.2002
		2.10.Sending the nomenclature (list) of selected enterprises to each territorial statistical office for checking	20.11.2002
2.11.Updating of the nomenclature based on modifications received from territory on the list of enterprises (organisational changes, identified/not-identified, change of activity, size etc.)		30.11.2002	
3. IT solutions	3.1.Preparing logic test to be performed at the data entry level	01.02.2003	
	3.2.Preparing logic conditions for checking, correction and validation of the data	01.02.2003	
	3.3. Testing of IT solution at territorial statistical offices level	01.03.2003	
	3.4. Testing of IT solution at central level (INS)	01.03.2003	
	3.5. Preparing of IT solution for data tabulation	15.12.2003	
	3.6. Testing of IT solution for centralise the final data at central level (INS)	31.12.2003	



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No	ACTIVITIES	ACTIVITIES DESCRIPTION	DEAD-LINES
4.	Field work and data checking	4.1.Planning and organisation of field work activities	31.12.2002
		4.2.Data collection from enterprises	31.03.2003
		4.3.Data entry, data checking and validation at territorial statistical offices level	30.04.2003
		4.4.Reception of data files and lists with accepted errors from the territorial statistical offices	30.04.2003
		4.5.Validation and data processing of the data files received from territory	31.07.2003
		4.6.Checkings and correlations with other data sources	30.09.2003
		4.7. Transmission of corrected data files from territorial statistical offices	31.12.2003
		4.8.Tabulation and checking of non-weighted data	31.01.2004
		4.9 Final corrections and validations of data	15.02.2004
		4.10.Weighting data	15.03.2004
		4.11. Validation of weighted data	01.04.2004
		4.12.Tabulation of weighted data	01.05.2004
		4.13.Analysis of the final data obtained	15.06.2004
5.	Dissemination of survey results	5.1.Preparation of a detailed publication (available only in Romanian)	31.07.2004
		5.2.Codification and transmission of the micro data files through Genedi to EUROSTAT	15.07.2004

Since not all enterprises respected the deadlines requested a high proportion of number of questionnaires reached with delay the territorial statistical offices. Further on, 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 – headquarters also.

The deadline for receiving the files from territorial statistical offices was **30 April 2003**.

Only the information on the delays encountered in receiving the data files from territory is available.

Below is presented the proportion of the enterprises and the dates when data files were received at the INS headquarters:

- before 15 May: 42.9%
- 15 - 31 May: 26.2%
- 01 - 15 June: 23.8%
- 15 - 30 June: 7.1%

The transmission to Eurostat of microdata files was done at **mid July 2004**.



#### 4. ACCESSIBILITY AND CLARITY

The publication “*Salary disparities: factors of influence*”, containing the results of 2002 SES is available only in Romanian language.

It is structured in three parts:

- *I. The methodology and the organisation of 2002 SES*: providing information on the objectives of the survey, coverage, unit of observation, periodicity and reference period, sampling design, concepts and definitions of the collected and derived indicators, classifications used;
- *II. The results of the 2002 SES*: 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. Annexes with 20002 SES results*: containing detailed tables with the main indicators by demo-socio-economical characteristics.

The publication was disseminated and distributed to about 100 users from:

- Presidency of Romania;
- Parliament of Romania (including several Commissions oriented on labour, social protection policies, budget and financial policies);
- governmental bodies: Ministry of Labour, Social Solidarity and Family, Ministry of Public Finance, Ministry of Economy and Trade, Ministry of Transport, Constructions and Tourism, National Commission for Prognosis, National Agency for Employment, Ministry of Industry and Commerce, Ministry of Internal Affairs, Ministry of Education, Ministry of Health, Ministry of Foreign Affairs, Ministry of Defence, Ministry of Agriculture 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.

The publication is also available in INS library and can be bought by the interested users from INS data shop.

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

## **5. COMPARABILITY**

### **5.1. Geographical comparability**

The Business Register set up in National Institute of Statistics from Romania was designed and implemented having as a main data sources the administrative files and statistical sources in addition. As the administrative files, the main source of data for the REGIS is the Fiscal Register. The Trade Register is used as a consultation source of data for improving the quality of the register data. Other files used as source of data for the REGIS in Romania are:

- Balance Sheet files
- VAT files
- an exclusively REGIS survey for the new enterprises regarding their main activity and size
- feedback from other surveys, and so on

The Register is updated every semester, according with previous main provider of information. The information received from different data sources (surveys carried out by NIS in Romania) is also complemented.

According to the Council Regulations, REGIS contains the following kind of statistical units: legal unit, enterprise, and local unit. All the enterprises having the main activity in the section A to Q of NACE rev 1, whatever their size (number of employees or turnover) are covered.

So, 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 Jo and the collaboration with a lot of administration institutions.

### **5.2. Comparability over time**

Not applicable since SES 2002 was conducted for the first time.

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**6. COHERENCE**

**6.1. Coherence with the structure of employees in the Labour Force Survey**

The comparisons for the structure of employees by common variables is made for **total number of employees** and not separately for full-time and part-time. This is due to the negligible proportion of part-timers in total number of employees, which was of 0.8% in SES and 0.7% in LFS.

For data comparability, the structure of employees is taking into account **NACE sections A -K, M - O**.

The age bands used for comparisons are: **15 – 24, 25 – 54, 55 – 64** years. The number of employees with 65 and more years old is negligible (0.2% in SES and 0.1% in LFS).

**Cross-tabulation by sex, age and economic activity (NACE sections A-K, M-O)**

**Table 6: Total number of employees FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>7.7</b>	<b>88.5</b>	<b>3.8</b>	<b>100.0</b>	<b>10.3</b>	<b>86.5</b>	<b>3.2</b>	<b>100.0</b>
<b>A</b>	4.6	89.7	5.7	<b>100.0</b>	7.9	87.8	4.3	<b>100.0</b>
<b>B</b>	3.6	93.0	3.4	<b>100.0</b>	0.0	100.0	0.0	<b>100.0</b>
<b>C</b>	2.2	94.8	3.0	<b>100.0</b>	7.5	91.0	1.5	<b>100.0</b>
<b>D</b>	9.7	88.5	1.8	<b>100.0</b>	11.6	86.6	1.8	<b>100.0</b>
<b>E</b>	2.4	92.8	4.8	<b>100.0</b>	3.5	93.2	3.3	<b>100.0</b>
<b>F</b>	7.7	88.0	4.3	<b>100.0</b>	11.3	85.1	3.6	<b>100.0</b>
<b>G</b>	15.1	82.5	2.4	<b>100.0</b>	16.7	81.4	1.9	<b>100.0</b>
<b>H</b>	14.4	81.8	3.8	<b>100.0</b>	18.2	79.3	2.5	<b>100.0</b>
<b>I</b>	3.4	94.0	2.6	<b>100.0</b>	5.0	91.4	3.6	<b>100.0</b>
<b>J</b>	3.7	93.7	2.6	<b>100.0</b>	4.3	94.5	1.2	<b>100.0</b>
<b>K</b>	10.4	84.6	5.0	<b>100.0</b>	8.6	86.1	5.3	<b>100.0</b>
<b>M</b>	3.8	85.3	10.9	<b>100.0</b>	7.1	84.0	8.9	<b>100.0</b>
<b>N</b>	2.8	91.0	6.2	<b>100.0</b>	5.2	89.6	5.2	<b>100.0</b>
<b>O</b>	9.5	85.5	5.0	<b>100.0</b>	10.4	85.2	4.4	<b>100.0</b>

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**Table 7: Men FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>7.0</b>	<b>88.2</b>	<b>4.8</b>	<b>100.0</b>	<b>9.3</b>	<b>86.5</b>	<b>4.2</b>	<b>100.0</b>
<b>A</b>	4.9	88.2	6.9	<b>100.0</b>	8.0	87.0	5.0	<b>100.0</b>
<b>B</b>	3.9	92.0	4.1	<b>100.0</b>	0.0	100.0	0.0	<b>100.0</b>
<b>C</b>	2.1	94.6	3.3	<b>100.0</b>	8.3	90.1	1.6	<b>100.0</b>
<b>D</b>	7.5	89.7	2.8	<b>100.0</b>	10.1	87.3	2.6	<b>100.0</b>
<b>E</b>	2.5	91.9	5.6	<b>100.0</b>	3.8	91.9	4.3	<b>100.0</b>
<b>F</b>	8.1	87.4	4.5	<b>100.0</b>	12.0	84.1	3.9	<b>100.0</b>
<b>G</b>	15.7	80.9	3.4	<b>100.0</b>	15.4	81.2	3.4	<b>100.0</b>
<b>H</b>	17.9	76.1	6.0	<b>100.0</b>	22.1	75.0	2.9	<b>100.0</b>
<b>I</b>	3.2	93.7	3.1	<b>100.0</b>	5.1	91.0	3.9	<b>100.0</b>
<b>J</b>	4.8	89.8	5.4	<b>100.0</b>	2.2	95.6	2.2	<b>100.0</b>
<b>K</b>	11.5	82.7	5.8	<b>100.0</b>	8.6	84.6	6.8	<b>100.0</b>
<b>M</b>	2.8	78.3	18.9	<b>100.0</b>	2.8	79.4	17.8	<b>100.0</b>
<b>N</b>	2.6	86.1	11.3	<b>100.0</b>	3.8	86.6	9.6	<b>100.0</b>
<b>O</b>	9.1	83.4	7.5	<b>100.0</b>	11.3	83.7	5.0	<b>100.0</b>

**Table 8: Women FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>8.6</b>	<b>88.8</b>	<b>2.6</b>	<b>100.0</b>	<b>11.4</b>	<b>86.6</b>	<b>2.0</b>	<b>100.0</b>
<b>A</b>	3.8	94.0	2.2	<b>100.0</b>	7.2	91.3	1.5	<b>100.0</b>
<b>B</b>	2.0	98.0	0.0	<b>100.0</b>	0.0	100.0	0.0	<b>100.0</b>
<b>C</b>	2.7	95.8	1.5	<b>100.0</b>	1.5	97.8	0.7	<b>100.0</b>
<b>D</b>	12.0	87.3	0.7	<b>100.0</b>	13.2	85.8	1.0	<b>100.0</b>
<b>E</b>	2.0	95.8	2.2	<b>100.0</b>	2.5	97.5	0.0	<b>100.0</b>
<b>F</b>	5.6	91.3	3.1	<b>100.0</b>	5.7	93.6	0.7	<b>100.0</b>
<b>G</b>	14.4	84.3	1.3	<b>100.0</b>	17.6	81.5	0.9	<b>100.0</b>
<b>H</b>	12.3	85.3	2.4	<b>100.0</b>	16.5	81.2	2.3	<b>100.0</b>
<b>I</b>	3.7	94.7	1.6	<b>100.0</b>	4.9	92.5	2.6	<b>100.0</b>
<b>J</b>	3.2	95.3	1.5	<b>100.0</b>	5.4	94.0	0.6	<b>100.0</b>
<b>K</b>	8.1	88.4	3.5	<b>100.0</b>	8.6	88.3	3.1	<b>100.0</b>
<b>M</b>	4.2	88.3	7.5	<b>100.0</b>	8.7	86.0	5.3	<b>100.0</b>
<b>N</b>	2.9	92.2	4.9	<b>100.0</b>	5.6	90.5	3.9	<b>100.0</b>
<b>O</b>	9.9	87.2	2.9	<b>100.0</b>	9.3	87.0	3.7	<b>100.0</b>

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Cross-tabulation by sex, age and educational level (ISCED 0 to 6)

**Table 9: Total number of employees FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>7.7</b>	<b>88.5</b>	<b>3.8</b>	<b>100.0</b>	<b>10.3</b>	<b>86.5</b>	<b>3.2</b>	<b>100.0</b>
<b>code 0 = 01</b>	8.3	83.1	8.6	<b>100.0</b>	23.1	63.5	13.4	<b>100.0</b>
<b>code 1 = 02</b>	9.7	86.3	4.0	<b>100.0</b>	17.5	77.4	5.1	<b>100.0</b>
<b>code 2 = 03</b>	9.0	89.1	1.9	<b>100.0</b>	11.0	87.4	1.6	<b>100.0</b>
<b>code 3 = 08</b>	4.0	88.8	7.2	<b>100.0</b>	5.4	87.8	6.8	<b>100.0</b>
<b>code 4 = 09</b>	5.9	87.5	6.6	<b>100.0</b>	9.3	85.1	5.6	<b>100.0</b>
<b>code 5 = 10</b>	3.4	88.3	8.3	<b>100.0</b>	3.2	89.4	7.4	<b>100.0</b>
<b>code 6 = 11</b>	0.0	62.8	37.2	<b>100.0</b>	0.0	70.7	29.3	<b>100.0</b>

**Table 10: Men FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>7.0</b>	<b>88.2</b>	<b>4.8</b>	<b>100.0</b>	<b>9.3</b>	<b>86.5</b>	<b>4.2</b>	<b>100.0</b>
<b>code 0 = 01</b>	8.4	81.3	10.3	<b>100.0</b>	32.0	58.6	9.4	<b>100.0</b>
<b>code 1 = 02</b>	9.6	84.9	5.5	<b>100.0</b>	18.8	74.5	6.7	<b>100.0</b>
<b>code 2 = 03</b>	8.0	89.5	2.5	<b>100.0</b>	9.8	88.1	2.1	<b>100.0</b>
<b>code 3 = 08</b>	2.4	86.6	11.0	<b>100.0</b>	1.9	87.3	10.8	<b>100.0</b>
<b>code 4 = 09</b>	5.1	87.6	7.3	<b>100.0</b>	8.1	84.1	7.8	<b>100.0</b>
<b>code 5 = 10</b>	2.8	86.2	11.0	<b>100.0</b>	1.8	87.7	10.5	<b>100.0</b>
<b>code 6 = 11</b>	0.0	58.6	41.4	<b>100.0</b>	0.0	48.7	51.3	<b>100.0</b>

**Table 11: Women FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>8.6</b>	<b>88.8</b>	<b>2.6</b>	<b>100.0</b>	<b>11.4</b>	<b>86.6</b>	<b>2.0</b>	<b>100.0</b>
<b>code 0 = 01</b>	8.0	86.8	5.2	<b>100.0</b>	5.6	73.0	21.4	<b>100.0</b>
<b>code 1 = 02</b>	9.8	88.1	2.1	<b>100.0</b>	16.3	80.1	3.6	<b>100.0</b>
<b>code 2 = 03</b>	10.3	88.5	1.2	<b>100.0</b>	12.4	86.6	1.0	<b>100.0</b>
<b>code 3 = 08</b>	5.4	90.8	3.8	<b>100.0</b>	8.5	88.3	3.2	<b>100.0</b>
<b>code 4 = 09</b>	6.7	87.4	5.9	<b>100.0</b>	10.6	86.3	3.1	<b>100.0</b>
<b>code 5 = 10</b>	3.9	90.2	5.9	<b>100.0</b>	4.7	91.1	4.2	<b>100.0</b>
<b>code 6 = 11</b>	0.0	69.4	30.6	<b>100.0</b>	0.0	71.6	28.4	<b>100.0</b>

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**Cross-tabulation by sex, age and occupation (ISCO-88 at 1 digit level)**

**Table 12: Total number of employees FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>7.7</b>	<b>88.5</b>	<b>3.8</b>	<b>100.0</b>	<b>10.3</b>	<b>86.5</b>	<b>3.2</b>	<b>100.0</b>
<b>MG1</b>	1.0	88.0	11.0	<b>100.0</b>	2.6	88.2	9.2	<b>100.0</b>
<b>MG2</b>	3.7	87.4	8.9	<b>100.0</b>	3.8	88.4	7.8	<b>100.0</b>
<b>MG3</b>	5.3	89.2	5.5	<b>100.0</b>	7.6	87.6	4.8	<b>100.0</b>
<b>MG4</b>	7.3	89.8	2.9	<b>100.0</b>	8.4	89.1	2.5	<b>100.0</b>
<b>MG5</b>	13.4	84.5	2.1	<b>100.0</b>	16.3	81.6	2.1	<b>100.0</b>
<b>MG6</b>	4.5	91.7	3.8	<b>100.0</b>	17.2	81.1	1.7	<b>100.0</b>
<b>MG7</b>	7.4	90.5	2.1	<b>100.0</b>	11.3	86.9	1.8	<b>100.0</b>
<b>MG8</b>	7.6	90.6	1.8	<b>100.0</b>	10.0	88.3	1.7	<b>100.0</b>
<b>MG9</b>	15.9	81.4	2.7	<b>100.0</b>	14.9	82.2	2.9	<b>100.0</b>

**Table 13: Men FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>7.0</b>	<b>88.2</b>	<b>4.8</b>	<b>100.0</b>	<b>9.3</b>	<b>86.5</b>	<b>4.2</b>	<b>100.0</b>
<b>MG1</b>	0.9	85.3	13.8	<b>100.0</b>	2.4	84.4	13.2	<b>100.0</b>
<b>MG2</b>	3.4	85.2	11.4	<b>100.0</b>	2.4	87.2	10.4	<b>100.0</b>
<b>MG3</b>	5.1	86.5	8.4	<b>100.0</b>	5.7	85.0	9.3	<b>100.0</b>
<b>MG4</b>	9.0	85.0	6.0	<b>100.0</b>	9.7	85.7	4.6	<b>100.0</b>
<b>MG5</b>	15.7	81.4	2.9	<b>100.0</b>	14.9	82.5	2.6	<b>100.0</b>
<b>MG6</b>	5.4	89.9	4.7	<b>100.0</b>	18.1	79.9	2.0	<b>100.0</b>
<b>MG7</b>	5.9	91.4	2.7	<b>100.0</b>	9.8	88.1	2.1	<b>100.0</b>
<b>MG8</b>	5.2	92.3	2.5	<b>100.0</b>	8.5	89.3	2.2	<b>100.0</b>
<b>MG9</b>	17.4	79.3	3.3	<b>100.0</b>	18.6	78.0	3.4	<b>100.0</b>

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**Table 14: Women FT+PT**

- % -

	SES				LFS			
	15-24	25-54	55-64	TOTAL 15-64	15-24	25-54	55-64	TOTAL 15-64
<b>TOTAL FT+PT</b>	<b>8.6</b>	<b>88.8</b>	<b>2.6</b>	<b>100.0</b>	<b>11.4</b>	<b>86.6</b>	<b>2.0</b>	<b>100.0</b>
<b>MG1</b>	1.3	92.9	5.8	<b>100.0</b>	3.0	94.6	2.4	<b>100.0</b>
<b>MG2</b>	4.0	89.0	7.0	<b>100.0</b>	5.4	89.5	5.1	<b>100.0</b>
<b>MG3</b>	5.4	91.0	3.6	<b>100.0</b>	8.6	89.2	2.2	<b>100.0</b>
<b>MG4</b>	6.6	91.7	1.7	<b>100.0</b>	7.9	90.4	1.7	<b>100.0</b>
<b>MG5</b>	12.0	86.4	1.6	<b>100.0</b>	16.8	81.3	1.9	<b>100.0</b>
<b>MG6</b>	2.2	96.5	1.3	<b>100.0</b>	15.2	83.7	1.1	<b>100.0</b>
<b>MG7</b>	10.7	88.8	0.5	<b>100.0</b>	14.6	84.4	1.0	<b>100.0</b>
<b>MG8</b>	11.6	88.0	0.4	<b>100.0</b>	13.8	85.8	0.4	<b>100.0</b>
<b>MG9</b>	14.0	84.1	1.9	<b>100.0</b>	9.8	88.0	2.2	<b>100.0</b>

From the tables above can be seen some differences between SES and LFS mainly due to:

- **coverage:**

- in SES are covered:
  - all employees with a formal working contract;
  - enterprises with 10 employees and over;
- in LFS are covered:
  - employees with and without a formal contract of employment, including here the underground sector. In Romania there still is a high proportion of informal sector and black market;
  - employees belonging to enterprises irrespective of their size, including the smallest enterprises (less than 10 employees). The employees working in the underground economy are frequently met in the small enterprises.

- **period of reference:**

- in SES - month October 2002;
- in LFS – year 2002.

- **data collection:**

- in SES – by paper questionnaire from the enterprises' registers;
- in LFS – by paper questionnaire, through interviewers based on self declaration of the respondents

Employees without a formal contract of employment, covered only by LFS, are particularly more predominant for younger people (15 – 24 years old) working in economic activities as agriculture and forestry (A), manufacturing (D), construction (F), retail (G), hotels and restaurants (H), transport and storage (I), health and social assistance (N), other activities (O). These are also the main activities with predominant seasonal character and enterprises with less than 10 employees.

This category of employees (without a formal contract of employment, 15-24 years old) includes persons without education or with primary (ISCED 0) and lower secondary education (ISCED 2) or with technical education (ISCED 4). They mainly belong to

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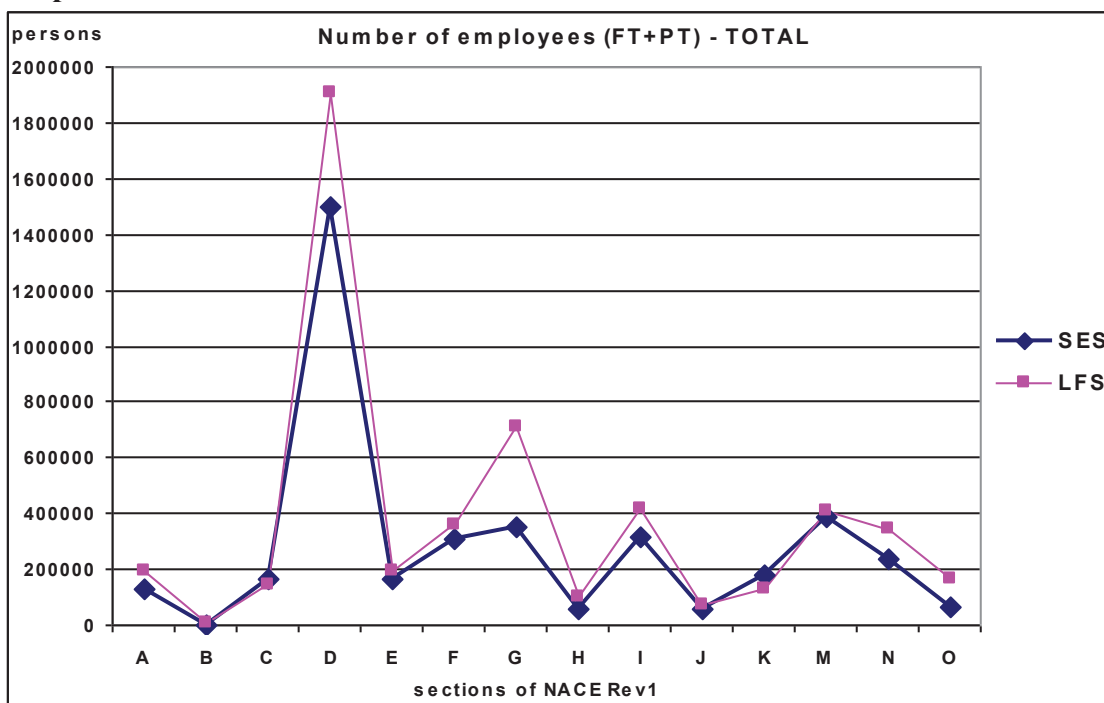
occupation groups as technicians, foremen and assimilated (MG 3), workers in services and trade (MG 5), farmers and skilled workers in agriculture, forestry and fishing (MG 6), artisans and skilled workers in handicraft, machinery and equipment regulation and maintenance (MG 7).

The differences for the other two age groups (25-54 and 55-64 years old) are small between SES and LFS, being more homogeneous groups, with higher employment rates and stability on the labour market.

**6.2. Coherence with absolute figures from Labour Force Survey**

**Comparison of the number of employees (FT+PT) by sex and sections of NACE (A-K, M-O)**

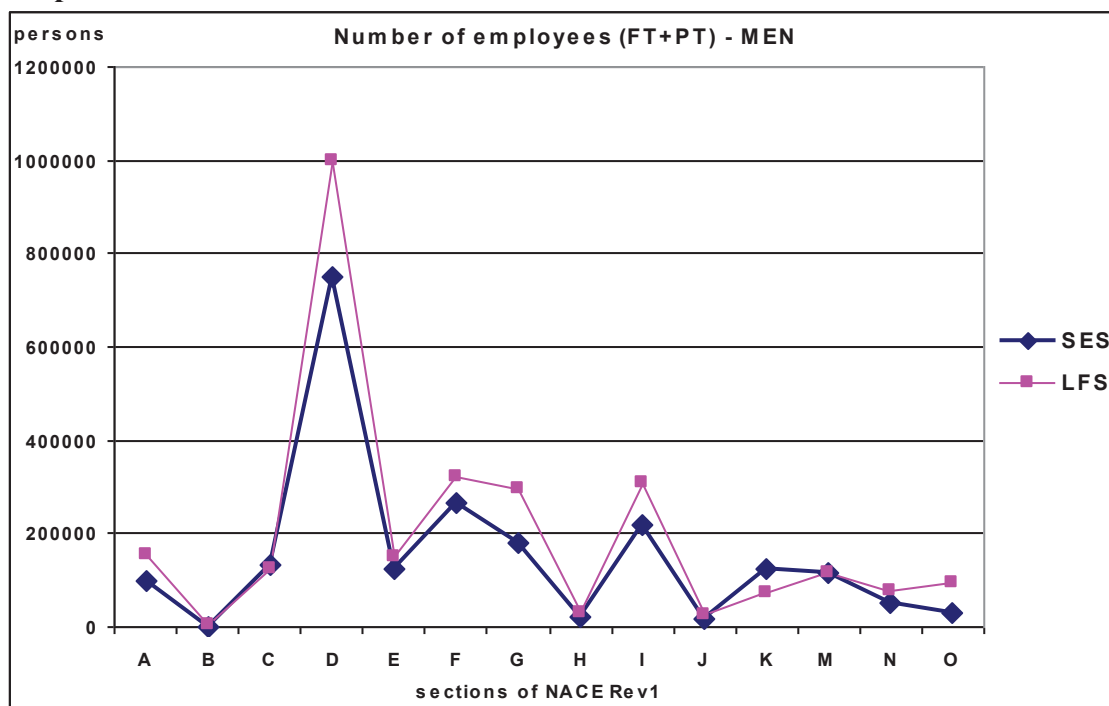
**Graph 1:**



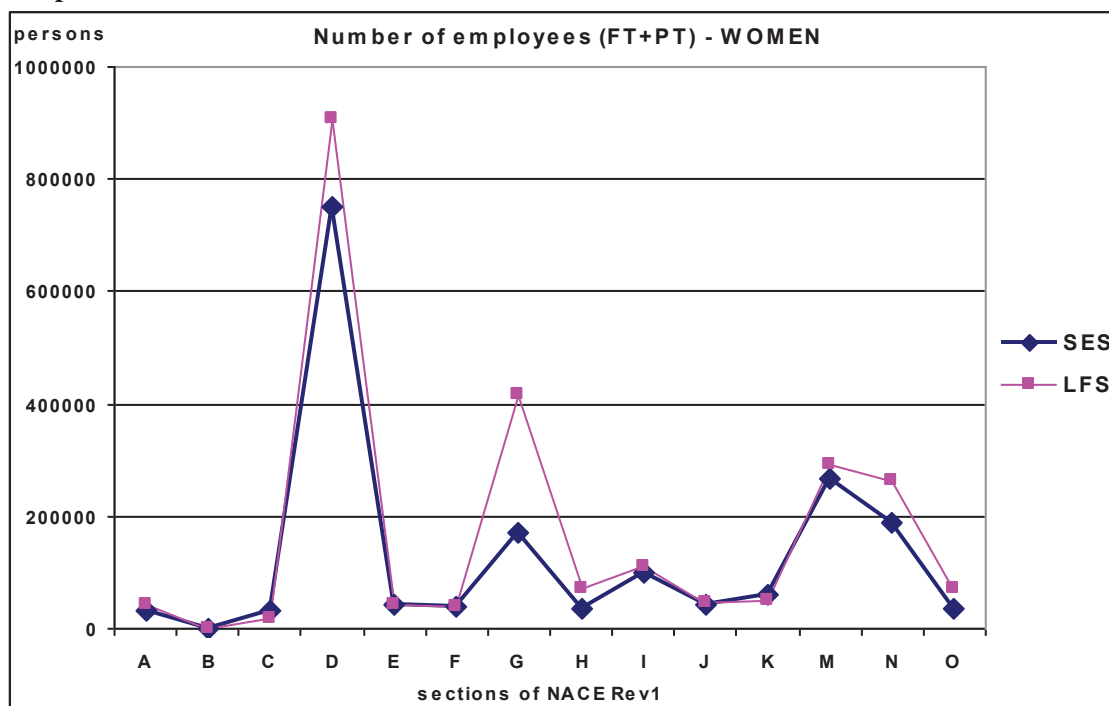


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**Graph 2:**



**Graph 3:**

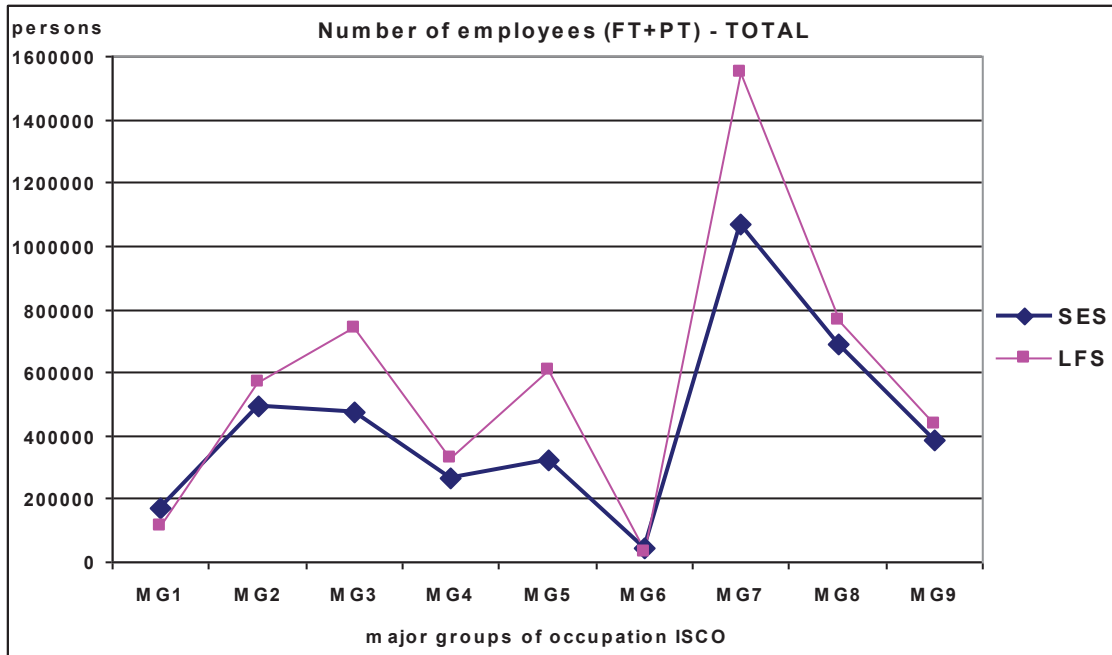


By economic activities, either for total number of employees or by sex, differences between SES and LFS are mainly due to the small enterprises, with less than 10 employees, predominant in manufacturing (D), retail (G), health and social assistance (N).

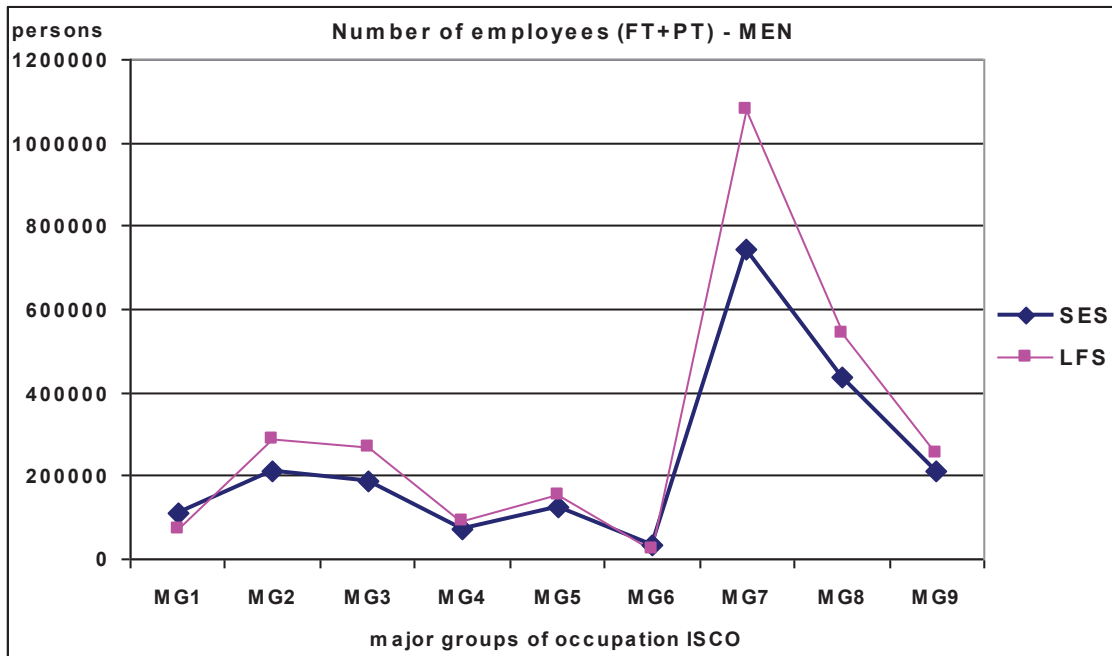
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**Comparison of the number of employees (FT+PT) by sex and ISCO (1 digit level)**

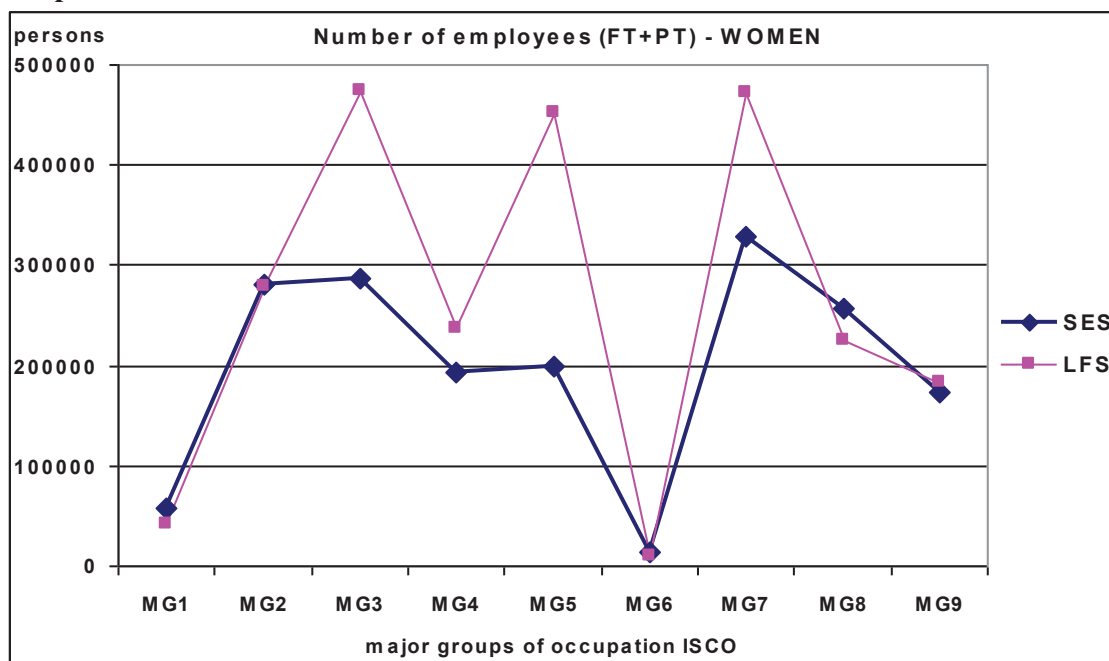
**Graph 4:**



**Graph 5:**



**Graph 6:**



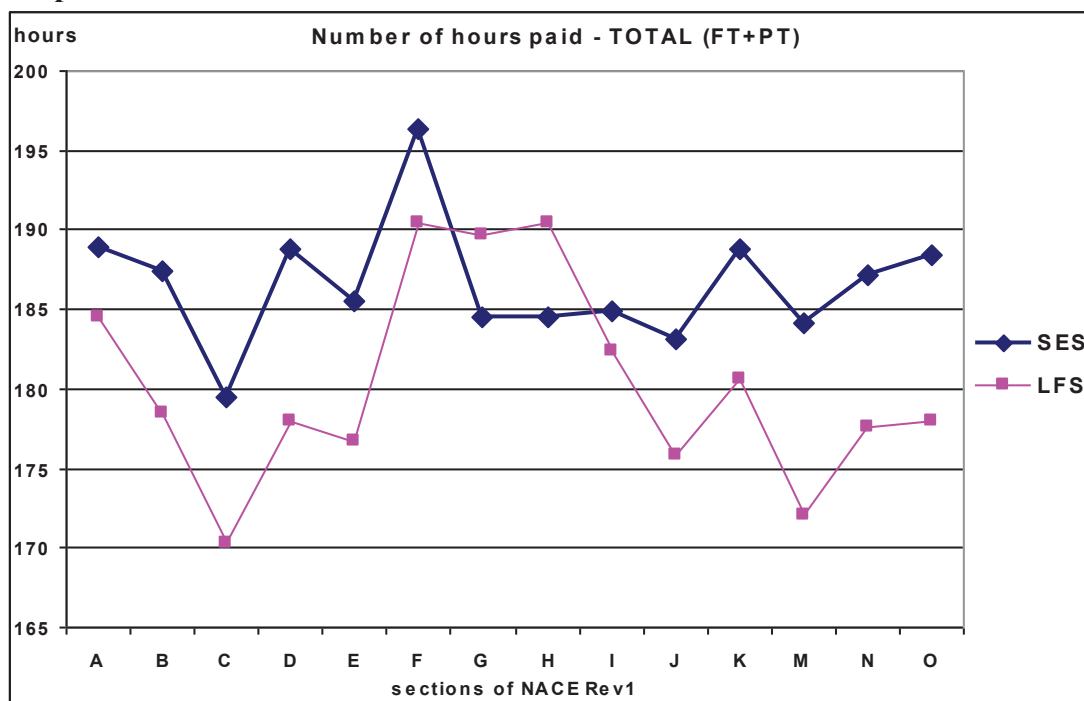
By groups of occupation, for the total number of employees and by sex (especially for women), differences between SES and LFS are due to the small enterprises and underground sector mainly for occupations as: technicians, foremen and assimilated (MG 3), workers in services and trade (MG 5), artisans and skilled workers in handicraft, machinery and equipment regulation and maintenance (MG 7).

Comparison of the number of hours paid in the representative month (FT+PT) by sex and sections of NACE (A-K, M-O)

For data comparability:

- for SES are taken into account the number of hours paid (including overtime) in the representative month (this is the collected variable);
- for LFS are taken into account the average usual duration of working week converted to hours per month (this indicator is an average of the whole year).

**Graph 7:**



Differences from the above graph are due to the coverage of the indicator compared.

In SES was collected the number of hours paid in the reference month. This includes hours work during the reference month, according to the contract of employment plus overtime plus hours paid, but worked in other months (as remaining payments).

From LFS the average usual duration of working week converted for a month is used. This implies an annual average, without major influences of seasonal activities.

The hours paid (from SES) are usually higher than the ones usual worked (from LFS), the bigger differences being in manufacturing (D) and education (M). In manufacturing, especially in case of new orders, employees are working more overtime and are paid consequentially. The annual average usual duration on work in education (from LFS) is influenced by vacations when are compared with month October (representative month from SES), which is a full working month.

The only economic activities where the hours from LFS are higher than in SES are retail (G) and hotels and restaurants (H). These are activities with a strong seasonal influence, with big differences between hours worked in summer and in winter (LFS). The reference month for SES is October, a month out of season for these two activities.

### 6.3. Coherence with Structural Business Statistics for the same year: regional data

Regional breakdown NUTS level 1 is for Romania equal with NUTS level 0 (country level), thus the comparisons are made only for total country.

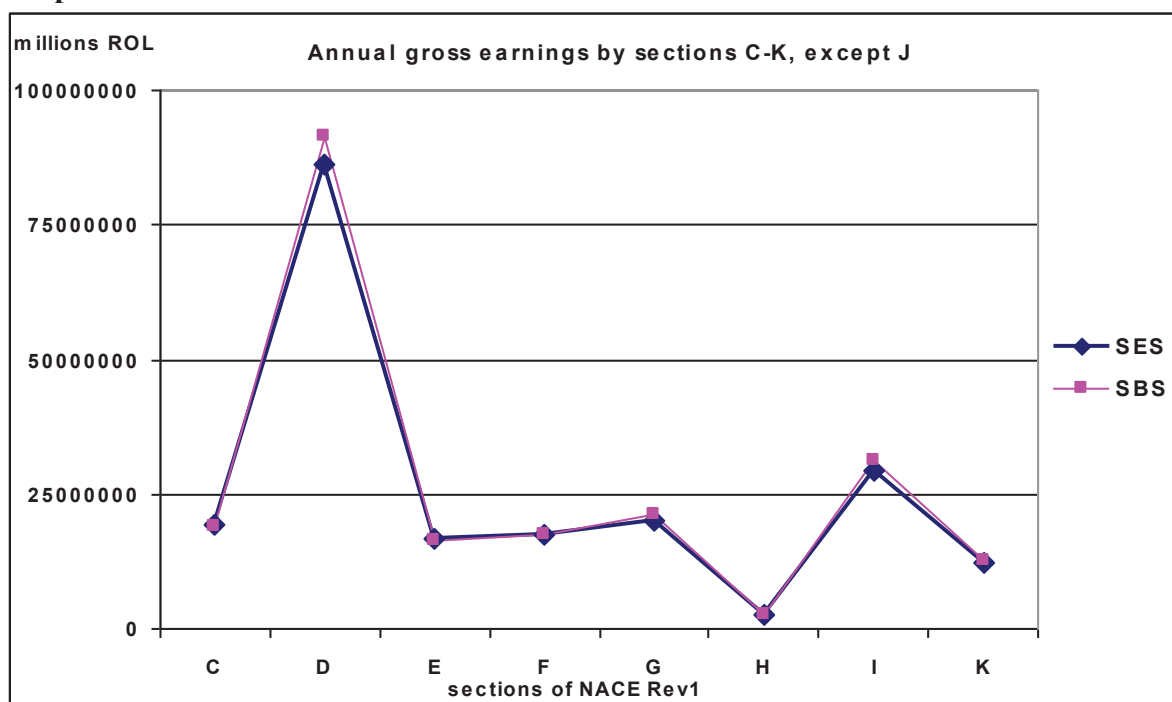
For data comparability:

- section J of NACE Rev1. was excluded from SES;
- enterprises with less than 10 employees were excluded from SBS.

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The figures on annual gross earnings in 2002 from the two data sources, represented below, correspond well.

**Graph 8:**



Very little differences (more than  $\pm 5\%$ ) between SES and SBS can be seen in the annual gross earnings for sections H (-7.3%), D (-5.9%), G (-5.5%) and I (-5.2%).

**6.4. Coherence with Structural Business Statistics for the same year: national data by size class of enterprise**

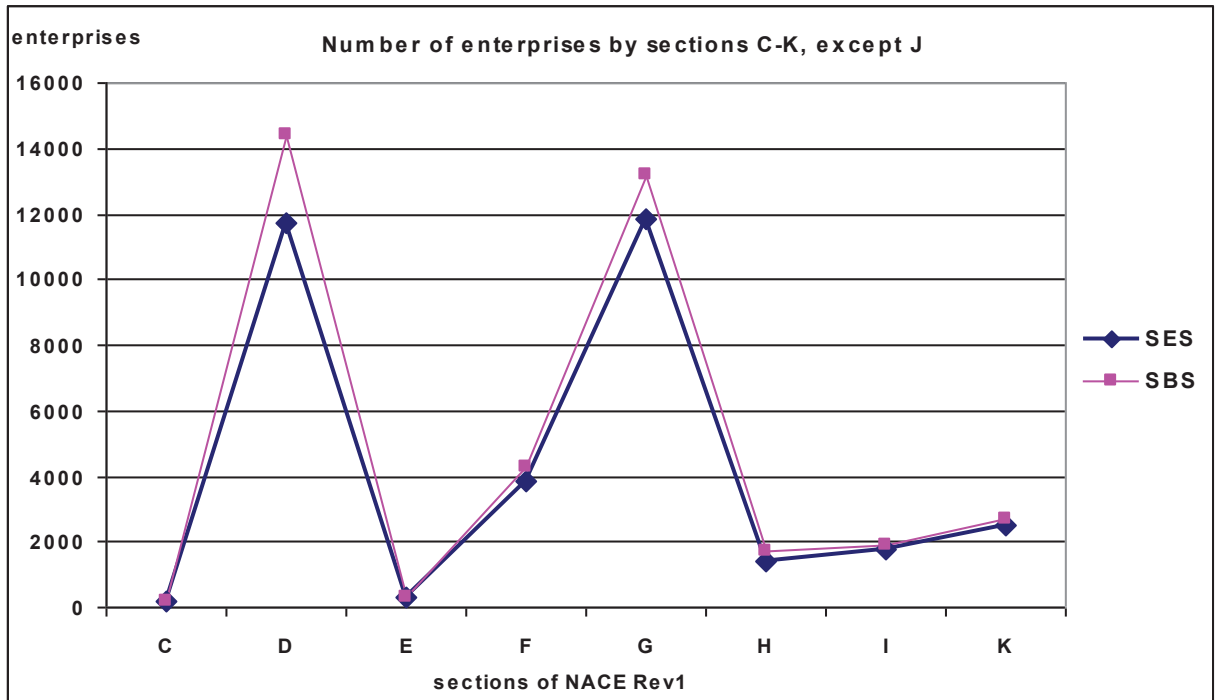
For data comparability:

- section J of NACE Rev1. was excluded from SES;
- enterprises with less than 10 employees were excluded from SBS.

**Comparison for the number of enterprises in the population by economic activity and size class:**

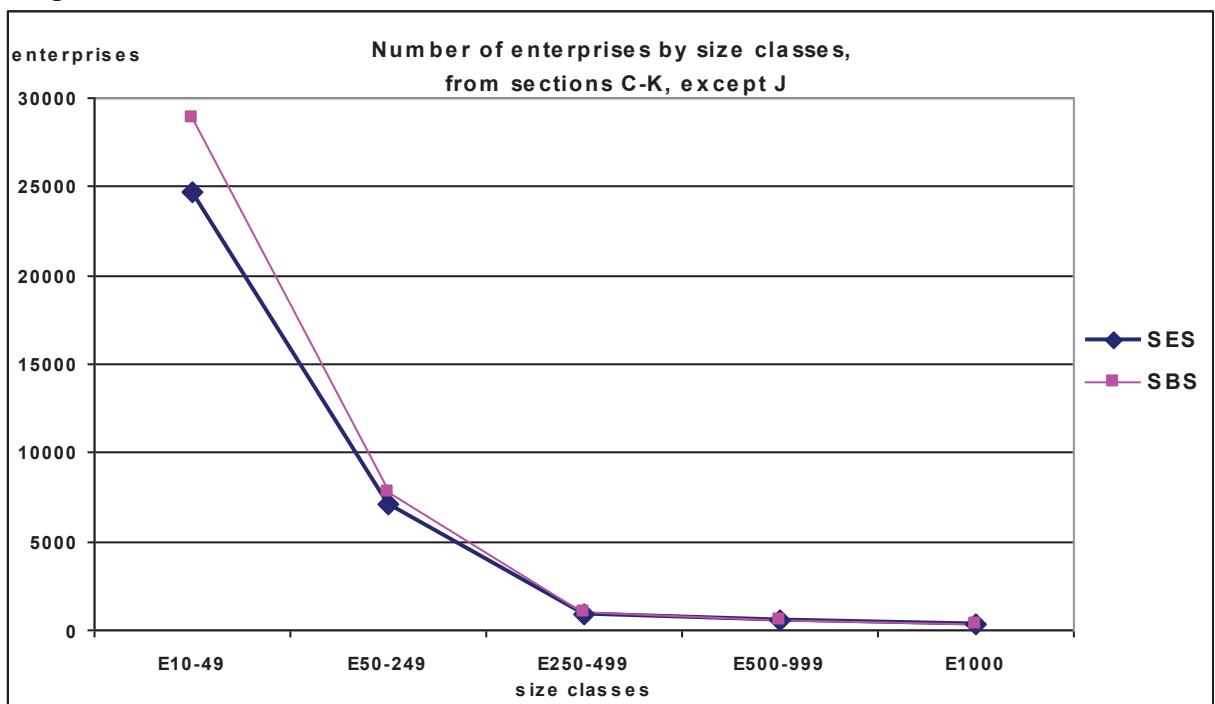
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**Graph 9:**



The total number of enterprises in the population (from sections C-K, except J and with 10 employees and over) is lower in SES (-13.1%) comparing with SBS. The biggest differences in the number of enterprises (in relative figures) occurred for section D (-18.8%) and G (-9.9%). The reason is that for SBS the sample selected had to assure the representativeness at 4 digit of NACE Rev1 whereas for SES at 2 digit of NACE Rev1.

**Graph 10:**



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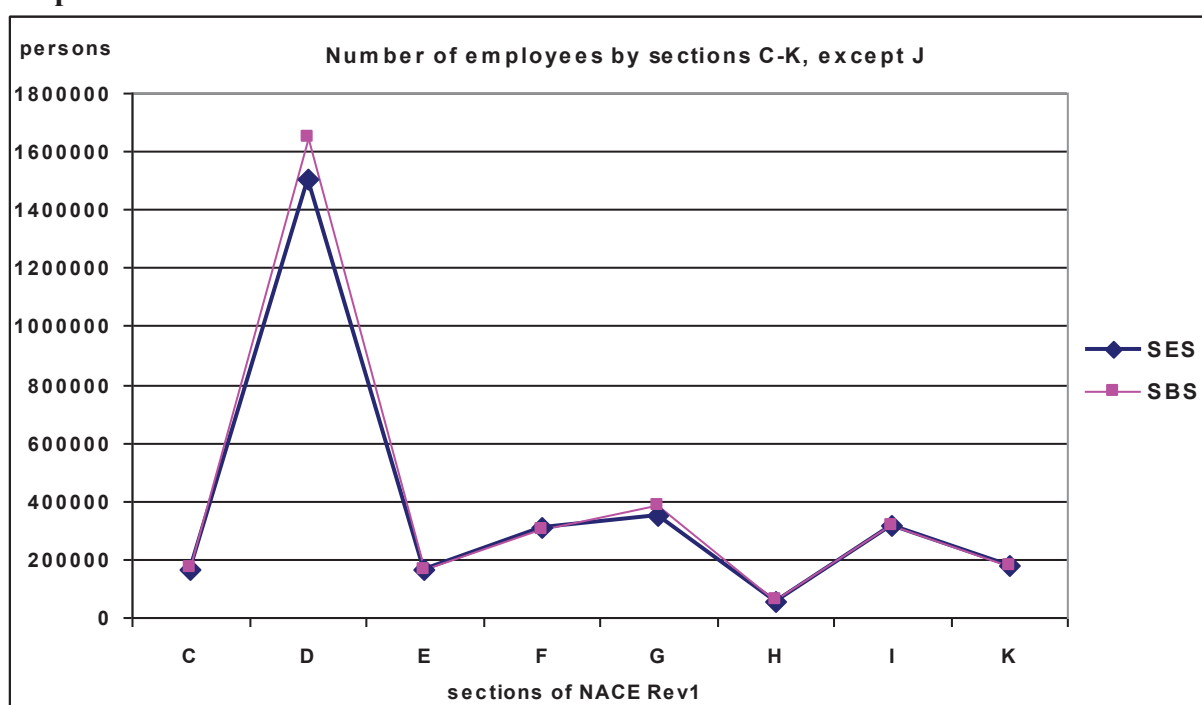
The coverage of the enterprises, by size classes is different in the two surveys:

- in SES, enterprises with 250 employees and more were exhaustively surveyed,
- in SBS enterprises with 50 employees and more were exhaustively surveyed.

The biggest difference between the total number of enterprises in the population (from sections C-K, except J and with more than 10 employees) from SES and SBS are in the first size classes E10-49 (-14.5%) and E50-249 (-9.2%). The differences occurred due to the representativeness at 4 digit level (for SBS) of the sections D, G, which cover the largest part of the small enterprises.

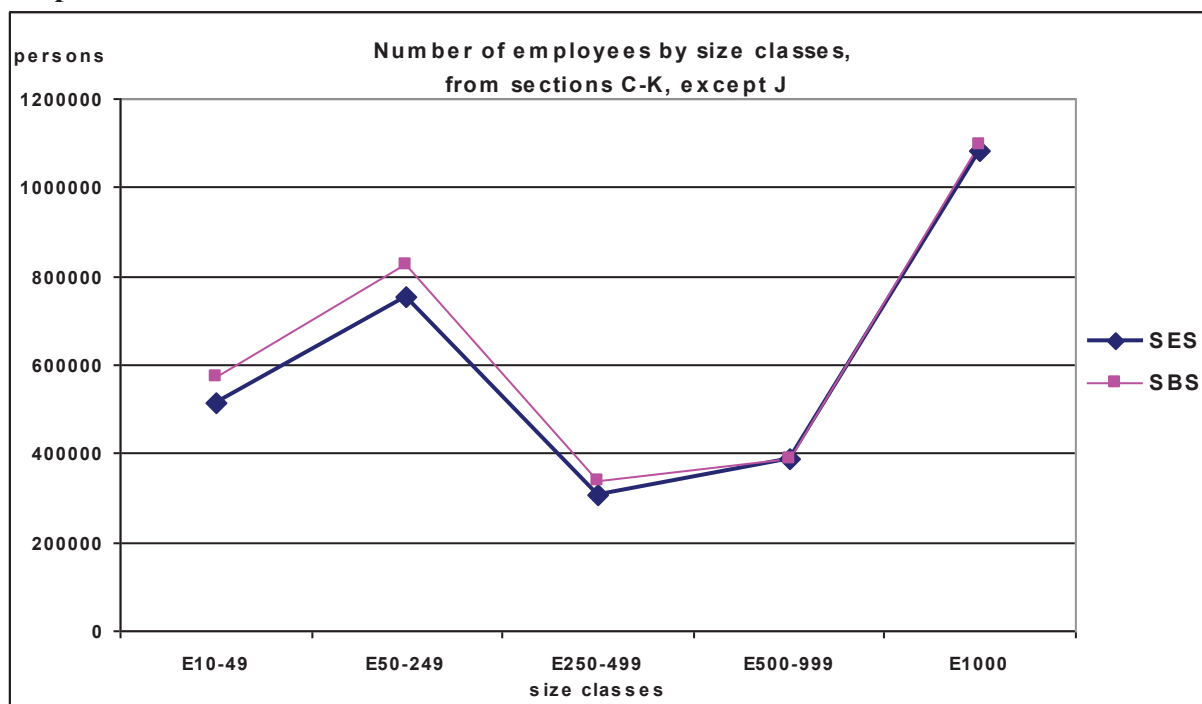
**Comparison for the number of employees by economic activity and size class:**

**Graph 11:**



The number of employees from both sources are very similar by economic activities C-K (except J). Only little differences occurred for section D (9.1% less employees in SES), H (8.8% less employees in SES) and G (8.0% less employees in SES). Comparing the total number of employees from SES and SBS, for the analysed sections, in SES there were only 5.7% employees less than in SBS.

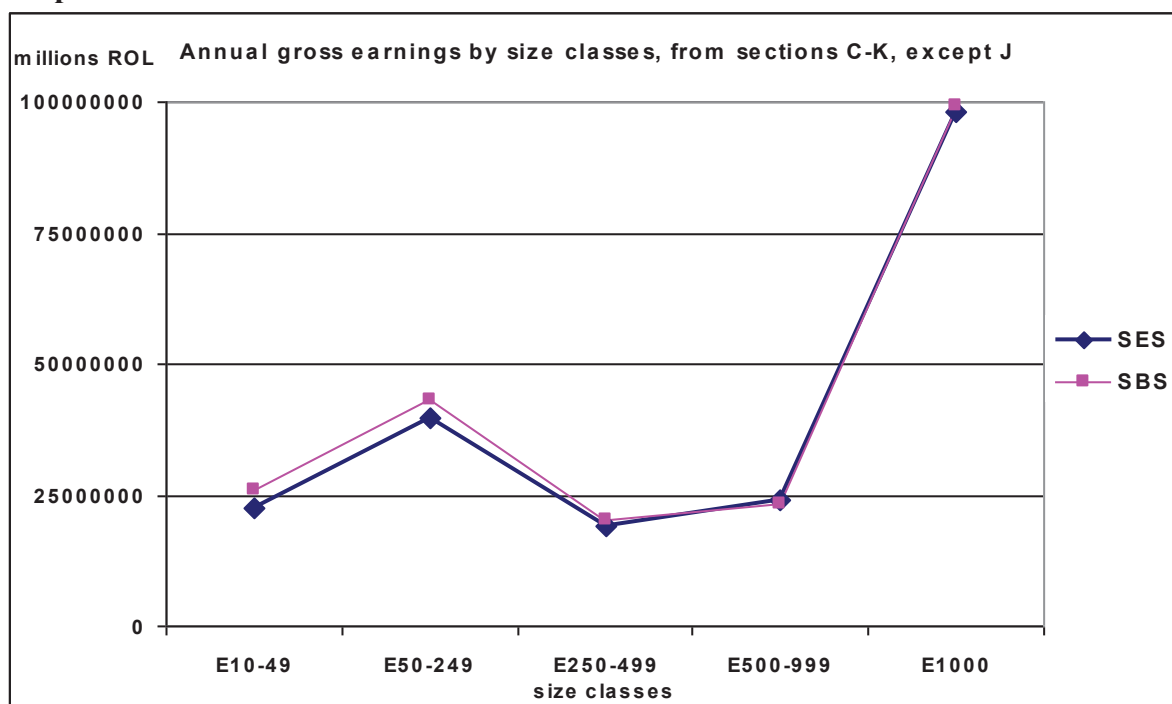
**Graph 12:**



Analysing the distribution of the number of employees by size classes of the enterprises, the largest difference between SES and SBS registered for the smallest group of enterprises (E10-49, 10.9% less employees in SES).

**Comparison for the annual gross earnings by size class:**

**Graph 13:**





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The annual gross earnings differ for the enterprises with 10–49 employees and 50-249 employees, lower in SES than in SBS (with -13.8% and -7.8%).

For the other size classes the annual gross earnings are very similar.

### **6.3. Coherence with National Accounts**

Information on the number of employees is not available in National Accounts.

Data on wages and salaries provided by National Accounts are provisional for 2002.

Main data sources for wages and salaries from National Accounts are the following:

- NACE sections:
  - Balance sheets of financial and non-financial units;
  - Consolidated budget of public administration;
- NACE divisions:
  - Structural Business Survey;
  - Labour Cost Survey;
  - Components of remuneration by economic activities from consolidated budget;
  - Balance sheets of financial units;
  - Balance sheets of non-profit institutions serving households;
  - Monthly earnings by economic activities and the number of handicraftsmen.

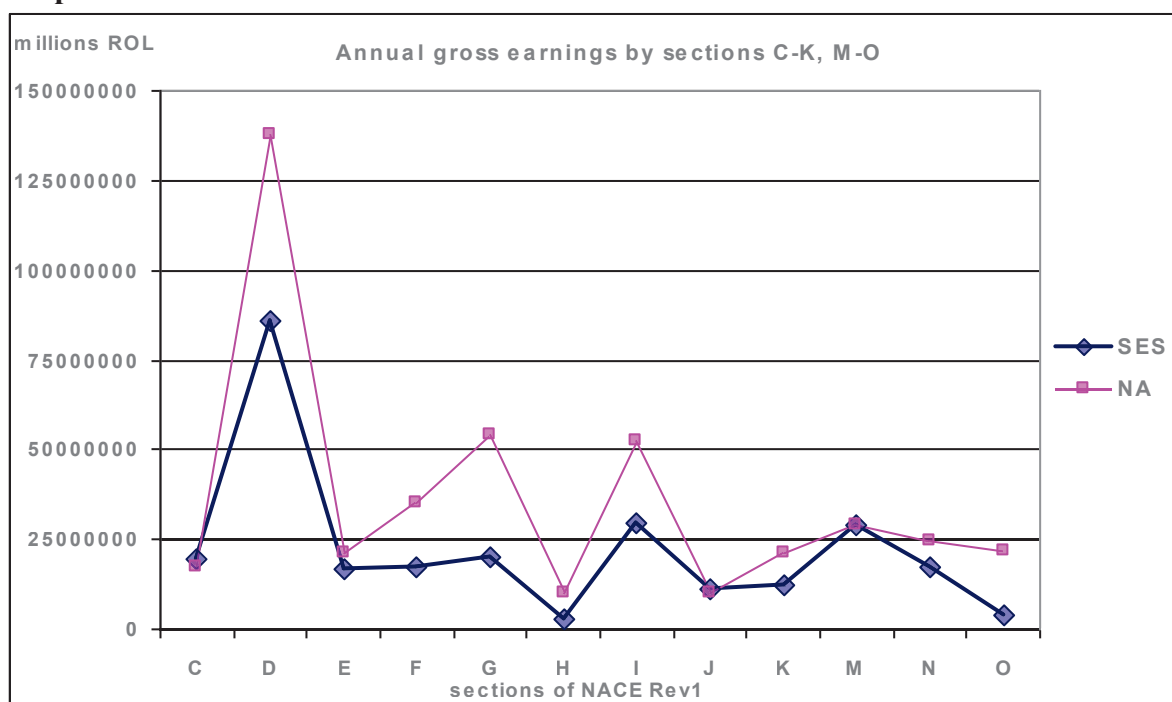
Total value of sections is equal with total value of divisions.

In comparison with SES, Section O includes in NA data on trade unions, political parties, non-profit institutions serving households etc.

For data comparability:

- section A, B and L of NACE Rev1. were excluded from SES.

**Graph 14:**



Differences between SES and NA for annual gross earnings occur due to the coverage of the two data sources. In SES enterprises with less than 10 employees are excluded, while NA contain information about these small enterprise, too. In can be seen in the graph above that the biggest differences are registered exactly for the economic activities with a higher number of small enterprises: manufacturing (D), construction (F), retail (G), transport and storage (I), real estate, renting and business activities (K) and other activities (O).

## 7. COMPLETENESS

According to the Commission Regulation no. 1916/2000, member and candidate state had to conduct the structure of earnings survey in 2002, collecting and providing to Eurostat a number of 46 variables (mandatory and optional).

Romania collected and provided *all mandatory variables* (27) and *a larger part of the optional variables* (13).

From the optional variables not collected some have no significant relevance according to the Romanian legislation (i.e. governmental schemes designed to promote employment) or were collected monthly instead of annually (i.e. social contributions and taxes).

Apart from the variables requested by the CR, Romania introduced a number of variables for national purposes (i.e. basic salary, payments for length of work, monthly and annually amounts from the net profit, from other funds, including payments in kind, from the insurance schemes, individual contributions for unemployment, social insurance and health insurance, taxes, normal duration of working week, payment period).

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Variables collected and provided by Romania answered to Eurostat requests for data tabulation by ***all classifications and breakdowns***: NACE Rev1 (A-O), ISCO-88, ISCED, size class of the enterprises, economic control, collective pay agreement, sex, age groups, length of service, working program (FT/PT), employment contract.

Furthermore, 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, 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 the SES was a complex survey, considered by the respondent units a burden, since a lot of detailed and complex information for each selected employee were asked, the response rate was rather high (about 83%).

**Deviations from CR**

Information for apprentices were not collected through 2002 SES, those not being included into survey population. The reason was that, according to the Romanian legislation in force in 2002, apprentices were part of Initial Vocational Training (educational system), special types of contracts for apprenticeship did not exist in Romanian enterprises at that time.

**Improvements for next survey**

- ✓ Apprentices will be covered for 2006 SES because the Romanian legislation changed since 2002, their status is now stipulated by law.
- ✓ More detailed and illustrated explanatory notes will be provided to the respondent units in order to minimise the ambiguities, misunderstandings and response timeliness and punctuality.
- ✓ For 2006 SES all mandatory variables and relevant optional variables will be collected and provided to Eurostat, according to the new Commission Regulation which will enter into force by then.

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ANNEX 1

**STRUCTURE OF EARNINGS SURVEY: GROSSED UP RESULTS:  
 TABULAR ANALYSES**

- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by band of **hourly gross earnings and by sex**

a) number of full-time employees

Band of hourly gross earnings	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<= 1 EUR	63.8	59.5	68.6
1 - 2 EUR	27.6	29.9	24.9
2 - 3 EUR	5.3	6.4	4.0
3 - 4 EUR	1.7	2.1	1.4
4 - 5 EUR	0.8	1.0	0.5
5 - 10 EUR	0.7	1.0	0.5
> 10 EUR	0.1	0.1	0.1
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (euro)	1.05	1.13	0.95
Median value (euro)	0.70	0.75	0.66

b) number of part-time employees

Band of hourly gross earnings	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<= 1 EUR	68.7	75.8	63.9
1 - 2 EUR	23.2	18.3	26.6
2 - 3 EUR	4.6	2.8	5.8
3 - 4 EUR	2.3	0.9	3.2
4 - 5 EUR	1.0	1.9	0.4
5 - 10 EUR	0.2	0.3	0.1
> 10 EUR	0.0	0.0	0.0
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (euro)	0.95	0.87	1.00
Median value (euro)	0.61	0.58	0.63

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by band of **monthly gross earnings and by sex**

a) number of full-time employees

Band of monthly gross earnings	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<= 50 EUR	0.6	0.4	0.8
50 - 100 EUR	26.5	23.6	29.8
100 - 150 EUR	23.4	21.4	25.7
150 - 200 EUR	16.1	16.7	15.4
200 - 300 EUR	18.3	20.0	16.4
300 - 400 EUR	7.8	9.1	6.4
400 - 500 EUR	3.1	3.8	2.3
500 - 1000 EUR	3.5	4.1	2.7
> 1000 EUR	0.7	0.9	0.5
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (euro)	195.28	210.73	177.59
Median value (euro)	132.78	142.53	123.54

b) number of part-time employees

Band of monthly gross earnings	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<= 50 EUR	31.6	33.9	30.1
50 - 100 EUR	37.7	38.8	36.9
100 - 150 EUR	17.9	16.5	18.9
150 - 200 EUR	4.8	3.9	5.3
200 - 300 EUR	4.8	3.9	5.2
300 - 400 EUR	2.2	1.3	2.8
400 - 500 EUR	1.0	1.5	0.6
500 - 1000 EUR	0.0	0.2	0.1
> 1000 EUR	0.0	0.0	0.1
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (euro)	92.66	88.58	95.42
Median value (euro)	56.02	55.96	57.72

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by band of **annual gross earnings and by sex**

a) number of full-time employees

Band of annual gross earnings	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<= 500 EUR	3.2	2.9	3.5
500 - 1000 EUR	19.9	17.9	22.1
1000 - 1500 EUR	21.5	19.2	24.2
1500 - 2000 EUR	15.7	15.7	15.7
2000 - 2500 EUR	11.1	11.6	10.6
2500 - 5000 EUR	22.4	25.2	19.2
5000 - 10000 EUR	5.1	6.1	3.9
> 10000 EUR	1.1	1.4	0.8
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (euro)	2228.04	2412.3	2019.97
Median value (euro)	1471.95	1566.15	1372.59

b) number of part-time employees

Band of annual gross earnings	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<= 500 EUR	29.5	30.1	29.0
500 - 1000 EUR	32.1	32.9	31.6
1000 - 1500 EUR	22.0	21.2	22.4
1500 - 2000 EUR	8.0	7.7	8.2
2000 - 2500 EUR	2.6	3.0	2.3
2500 - 5000 EUR	5.4	4.2	6.3
5000 - 10000 EUR	0.4	0.9	0.1
> 10000 EUR	0.0	0.0	0.1
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (euro)	1007.94	983.40	1024.59
Median value (euro)	652.43	638.74	671.57

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by band of **annual holidays and by sex**

a) number of full-time employees

Band of annual holidays	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
< 10 days	4.5	4.3	4.7
10 - 19 days	12.7	12.5	13.0
20 - 24 days	28.8	27.0	30.7
25 - 29 days	29.7	29.3	30.1
30 - 34 days	16.2	19.9	12.1
>= 35 days	8.1	7.0	9.4
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (days)	25.6	25.2	26.0
Median value (days)	24	25	24

b) number of part-time employees

Band of annual holidays	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
< 10 days	22.9	22.4	23.2
10 - 19 days	56.1	60.3	53.2
20 - 24 days	3.4	2.7	3.9
25 - 29 days	5.6	6.3	5.2
30 - 34 days	3.6	4.3	3.2
>= 35 days	8.4	4.0	11.3
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (days)	16.9	14.9	18.3
Median value (days)	12	12	12

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by band of **monthly hours paid and by sex**

a) number of full-time employees

Band of monthly hours paid	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
< 130 hours	0.4	0.4	0.4
130 - 139 hours	0.8	1.2	0.3
140 - 149 hours	0.4	0.4	0.3
150 - 159 hours	0.3	0.4	0.2
160 - 169 hours	1.6	1.4	1.7
170 - 179 hours	2.0	1.7	2.5
>= 180 hours	94.5	94.5	94.6
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (hours)	188.2	189.0	187.2
Median value (hours)	184	184	184

b) number of part-time employees

Band of monthly hours paid	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
< 130 hours	81.5	74.4	86.2
130 - 139 hours	11.2	17.5	7.0
140 - 149 hours	1.9	2.1	1.7
150 - 159 hours	0.1	0.1	0.1
160 - 169 hours	0.7	0.2	1.1
170 - 179 hours	2.8	4.1	2.0
>= 180 hours	1.8	1.6	1.9
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (hours)	100.6	104.8	97.8
Median value (hours)	92	92	92



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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **NACE Rev1 sections and by NUTS level 1<sup>\*)</sup>**

NACE Rev.1 sections	TOTAL Romania	TOTAL Romania
	a) number of full-time employees	b) number of part-time employees
	Frequency (%)	Frequency (%)
A	3.1	2.9
B	0.1	0.0
C	4.0	0.1
D	36.4	11.8
E	4.0	0.6
F	7.4	3.1
G	8.4	14.7
H	1.3	2.4
I	7.5	16.7
J	1.4	3.1
K	4.4	3.8
L	5.7	2.0
M	9.1	29.6
N	5.7	7.6
O	1.5	1.6
Overall frequency	100.0	100.0
Total number of employees	4119574	32608

\*) NUTS level 1 is equal with NUTS level 0 (country level)

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **NACE Rev1 sections and by sex**

a) number of full-time employees

NACE Rev.1 sections	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
A	3.1	4.3	1.7
B	0.1	0.1	0.0
C	4.0	6.1	1.6
D	36.4	34.1	39.0
E	4.0	5.6	2.1
F	7.4	12.1	2.0
G	8.4	8.1	8.8
H	1.3	0.9	1.8
I	7.5	9.8	5.0
J	1.4	0.8	2.2
K	4.4	5.6	3.0
L	5.7	3.8	7.8
M	9.1	5.2	13.6
N	5.7	2.2	9.6
O	1.5	1.3	1.8
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106

b) number of part-time employees

NACE Rev.1 sections	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
A	2.9	5.7	0.9
B	0.0	0.0	0.0
C	0.1	0.3	0.0
D	11.8	15.6	9.2
E	0.6	1.5	0.1
F	3.1	5.5	1.4
G	14.7	15.9	13.9
H	2.4	2.7	2.3
I	16.7	22.6	12.7
J	3.1	1.4	4.3
K	3.8	4.6	3.3
L	2.0	2.2	1.9
M	29.6	16.1	38.6
N	7.6	4.5	9.7
O	1.6	1.4	1.7
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **ISCO-88 1-digit level and by sex**

a) number of full-time employees

ISCO_88 1-digit level	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
MG1	4.6	5.6	3.4
MG2	13.0	10.4	15.9
MG3	12.3	8.9	16.2
MG4	7.3	3.6	11.4
MG5	8.9	6.0	12.3
MG6	1.2	1.6	0.8
MG7	26.1	33.9	17.2
MG8	16.9	20.0	13.4
MG9	9.7	10	9.4
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106

b) number of part-time employees

ISCO_88 1-digit level	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
MG1	0.7	1.0	0.5
MG2	20.5	18.5	21.7
MG3	16.1	10.6	19.9
MG4	17.9	18.8	17.3
MG5	13.5	9.6	16.2
MG6	1.0	1.7	0.5
MG7	7.9	15.2	3.0
MG8	3.5	5.6	2.1
MG9	18.9	19.0	18.8
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **ISCED and by sex**

a) number of full-time employees

ISCED	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
code 01	1.0	1.1	0.9
code 02	10.3	10.2	10.4
code 03	63.5	66.1	60.5
code 08	6.6	5.7	7.5
code 09	1.7	1.6	1.9
code 10	16.4	14.7	18.4
code 11	0.5	0.6	0.4
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106

b) number of part-time employees

ISCED	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
code 01	0.6	1.0	0.2
code 02	13.1	9.4	15.7
code 03	52.6	55.8	50.5
code 08	10.7	11.6	10.1
code 09	2.7	3.5	2.1
code 10	19.5	17.6	20.8
code 11	0.8	1.1	0.6
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **age band and by sex**

a) number of full-time employees

Age band	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
15 - 24 years	7.5	6.8	8.2
25 - 54 years	88.3	87.9	88.8
54 - 64 years	3.9	5.0	2.7
>= 65 years	0.3	0.3	0.3
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (years)	38.9	39.4	38.4
Median value (years)	39	40	38

b) number of part-time employees

Age band	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
15 - 24 years	11.1	11.7	10.6
25 - 54 years	77.0	71.4	80.8
54 - 64 years	10.1	13.8	7.7
>= 65 years	1.8	3.1	0.9
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (years)	39.4	39.8	39.1
Median value (years)	38	39	38

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **length of service in the enterprise and by sex**

a) number of full-time employees

Band of length of service in the enterprise	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<10 years	62.2	62.5	62.0
10 - 19 years	20.9	20.4	21.4
20 - 29 years	13.3	13.1	13.6
30 - 39 years	3.5	3.9	3.0
>=40 years	0.1	0.1	0.0
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (years)	9.1	9.1	9.1
Median value (years)	4	4	4

b) number of part-time employees

Band of length of service in the enterprise	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
<10 years	72.8	75.6	70.9
10 - 19 years	17.1	13.6	19.5
20 - 29 years	7.8	7.3	8.2
30 - 39 years	2.1	3.0	1.4
>=40 years	0.2	0.5	0.0
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (years)	6.7	6.4	6.9
Median value (years)	2	2	2

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- Frequency distributions and the associated arithmetic means and medians for
  - a) number of full-time employees
  - b) number of part-time employees
 broken down by **size of enterprise and by sex**

a) number of full-time employees

Size of enterprise	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
E10 - 49	15.0	15.7	14.2
E50 - 249	21.8	22.9	20.5
E250 - 499	9.0	9.3	8.7
E500 - 999	11.4	11.1	11.7
E1000	42.8	41.0	44.9
Overall frequency	100.0	100.0	100.0
Total number of employees	4119574	2199468	1920106
Overall mean (size class)	E250 - 499	E250 - 499	E250 - 499
Median value (size class)	E50 - 249	E50 - 249	E50 - 249

b) number of part-time employees

Size of enterprise	TOTAL (Men+women)	Men only	Women only
	Frequency (%)		
E10 - 49	24.5	29.0	21.5
E50 - 249	10.3	16.2	6.2
E250 - 499	2.8	2.1	3.3
E500 - 999	4.0	6.1	2.6
E1000	58.4	46.6	66.4
Overall frequency	100.0	100.0	100.0
Total number of employees	32608	13184	19424
Overall mean (size class)	E250 - 499	E250 - 499	E250 - 499
Median value (size class)	E50 - 249	E50 - 249	E50 - 249

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ANNEX 2

**COEFFICIENTS OF VARIATION**

**Table 1: Coefficient of variation concerning total gross earnings broken down by whether full times or shares of part- time, NACE Rev1 section and by sex:**

Nace Rev 1 Section level	Sex	Full / Part time	Hourly earnings	Monthly earnings	Total gross earnings	Monthly hours
A	F	FT	2.68%	2.71%	2.56%	2.93%
A	F	PT	44.57%	44.26%	44.03%	41.68%
A	M	FT	1.84%	1.98%	1.93%	2.22%
A	M	PT	11.72%	9.75%	8.93%	12.40%
B	F	FT	7.18%	7.01%	7.40%	9.08%
B	M	FT	6.13%	6.04%	6.16%	5.81%
C	F	FT	0.12%	0.13%	0.10%	0.19%
C	F	PT	27.62%	25.69%	25.81%	26.62%
C	M	FT	0.09%	0.09%	0.08%	0.14%
C	M	PT	0.91%	0.69%	0.68%	0.74%
D	F	FT	0.64%	0.65%	0.59%	0.79%
D	F	PT	18.72%	16.79%	15.94%	10.51%
D	M	FT	0.53%	0.54%	0.53%	0.61%
D	M	PT	11.59%	8.56%	9.12%	9.61%
E	F	FT	0.42%	0.43%	0.45%	0.57%
E	F	PT	55.46%	55.46%	51.11%	61.99%
E	M	FT	0.30%	0.30%	0.30%	0.46%
E	M	PT	22.39%	18.96%	21.43%	16.04%
F	F	FT	2.05%	1.99%	2.03%	1.90%
F	F	PT	19.52%	20.99%	18.47%	24.72%
F	M	FT	1.78%	1.74%	1.72%	1.57%
F	M	PT	14.62%	14.50%	13.03%	20.91%
G	F	FT	3.20%	3.18%	3.26%	2.24%
G	F	PT	11.59%	10.83%	11.49%	12.71%
G	M	FT	5.03%	4.99%	5.26%	2.45%
G	M	PT	16.50%	16.86%	18.06%	16.94%
H	F	FT	4.37%	4.41%	4.45%	4.24%
H	F	PT	28.92%	21.78%	17.72%	16.13%
H	M	FT	4.42%	4.45%	4.67%	5.08%
H	M	PT	43.41%	33.97%	41.40%	21.73%
I	F	FT	1.78%	1.80%	1.56%	1.20%
I	F	PT	6.43%	4.11%	3.77%	2.31%
I	M	FT	1.46%	1.46%	1.31%	1.31%
I	M	PT	9.24%	7.66%	7.83%	10.02%



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<b>Nace Rev 1 Section level</b>	<b>Sex</b>	<b>Full / Part time</b>	<b>Hourly earnings</b>	<b>Monthly earnings</b>	<b>Total gross earnings</b>	<b>Monthly hours</b>
<b>J</b>	F	FT	0.52%	0.52%	0.48%	1.26%
<b>J</b>	F	PT	0.02%	0.02%	0.01%	0.05%
<b>J</b>	M	FT	1.00%	1.00%	0.80%	0.60%
<b>J</b>	M	PT	4.06%	4.06%	2.17%	2.54%
<b>K</b>	F	FT	5.64%	5.67%	4.95%	4.71%
<b>K</b>	F	PT	33.71%	27.83%	31.76%	21.02%
<b>K</b>	M	FT	3.58%	3.60%	3.52%	2.97%
<b>K</b>	M	PT	30.12%	26.50%	28.16%	12.81%
<b>L</b>	F	FT	0.83%	0.83%	0.81%	1.54%
<b>L</b>	F	PT	9.39%	6.58%	7.05%	14.97%
<b>L</b>	M	FT	0.82%	0.81%	0.79%	1.38%
<b>L</b>	M	PT	26.74%	23.48%	23.93%	35.24%
<b>M</b>	F	FT	0.04%	0.04%	0.04%	0.04%
<b>M</b>	F	PT	0.00%	0.00%	0.00%	0.00%
<b>M</b>	M	FT	0.07%	0.07%	0.08%	0.11%
<b>M</b>	M	PT	0.00%	0.00%	0.00%	0.00%
<b>N</b>	F	FT	0.10%	0.10%	0.10%	0.19%
<b>N</b>	F	PT	2.89%	4.34%	3.76%	3.21%
<b>N</b>	M	FT	0.18%	0.17%	0.15%	0.37%
<b>N</b>	M	PT	2.16%	2.84%	1.52%	5.37%
<b>O</b>	F	FT	3.31%	3.78%	3.13%	6.38%
<b>O</b>	F	PT	4.03%	3.99%	3.21%	11.33%
<b>O</b>	M	FT	3.76%	3.88%	3.74%	3.24%
<b>O</b>	M	PT	0.00%	0.00%	0.00%	0.00%

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**Table 2: Coefficient of variation concerning total gross earnings broken down by whether full times or shares of part- time, occupation (ISCO-88 at 1-digit level) and by sex.**

Occupation	Sex	Full / Part time	Hourly earnings	Monthly earnings	Total gross earnings	Monthly hours
MG 1	F	FT	1.12%	1.11%	1.03%	0.98%
MG 1	F	PT	58.43%	52.02%	55.12%	27.88%
MG 1	M	FT	1.10%	1.09%	1.11%	0.79%
MG 1	M	PT	53.58%	56.04%	60.55%	36.54%
MG 2	F	FT	0.69%	0.69%	0.64%	0.44%
MG 2	F	PT	2.09%	2.03%	2.28%	3.18%
MG 2	M	FT	1.23%	1.22%	1.21%	0.77%
MG 2	M	PT	8.73%	7.69%	8.57%	7.78%
MG 3	F	FT	0.59%	0.58%	0.59%	0.68%
MG 3	F	PT	5.73%	5.74%	5.10%	3.88%
MG 3	M	FT	2.17%	2.16%	2.19%	0.93%
MG 3	M	PT	7.65%	6.93%	7.46%	10.00%
MG 4	F	FT	0.83%	0.84%	0.83%	0.75%
MG 4	F	PT	2.85%	2.42%	2.31%	2.79%
MG 4	M	FT	1.82%	1.82%	1.81%	1.53%
MG 4	M	PT	4.77%	3.50%	3.45%	3.37%
MG 5	F	FT	1.63%	1.61%	1.56%	1.63%
MG 5	F	PT	6.93%	6.10%	6.12%	9.59%
MG 5	M	FT	2.16%	2.31%	1.67%	2.81%
MG 5	M	PT	16.91%	15.48%	16.21%	17.06%
MG 6	F	FT	2.98%	3.06%	2.99%	3.60%
MG 6	F	PT	57.68%	57.62%	57.29%	58.95%
MG 6	M	FT	2.87%	3.00%	2.91%	3.47%
MG 6	M	PT	12.72%	8.82%	5.95%	17.75%
MG 7	F	FT	0.89%	0.90%	0.84%	1.12%
MG 7	F	PT	17.07%	15.30%	14.78%	14.87%
MG 7	M	FT	0.52%	0.54%	0.51%	0.66%
MG 7	M	PT	10.72%	8.44%	9.13%	10.43%
MG 8	F	FT	1.04%	1.03%	0.87%	1.41%
MG 8	F	PT	5.05%	5.02%	3.09%	15.16%
MG 8	M	FT	0.55%	0.56%	0.54%	0.71%
MG 8	M	PT	12.56%	9.98%	11.04%	14.32%
MG 9	F	FT	1.83%	1.91%	1.64%	2.37%
MG 9	F	PT	3.72%	3.51%	3.12%	3.20%
MG 9	M	FT	1.34%	1.34%	1.28%	1.37%
MG 9	M	PT	5.76%	5.75%	5.47%	8.27%

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**Table 3: Coefficient of variation concerning total gross earnings broken down by whether full times or shares of part- time, age band (15-24, 25-54, 55-64, >=65 years old), and by sex.**

Age	Sex	Full/ Part time	Hourly earnings	Monthly earnings	Total gross earnings	Monthly hours
15-24	F	FT	1.67%	1.69%	1.64%	1.62%
15-24	F	PT	6.75%	5.83%	6.46%	5.66%
15-24	M	FT	1.92%	1.89%	1.60%	1.78%
15-24	M	PT	7.11%	6.83%	7.15%	11.62%
25-54	F	FT	0.38%	0.38%	0.36%	0.40%
25-54	F	PT	2.78%	2.38%	2.36%	2.40%
25-54	M	FT	0.52%	0.52%	0.53%	0.39%
25-54	M	PT	4.85%	4.14%	4.23%	4.68%
55-64	F	FT	0.84%	0.83%	0.82%	1.13%
55-64	F	PT	6.28%	4.85%	5.45%	5.64%
55-64	M	FT	0.76%	0.75%	0.72%	0.90%
55-64	M	PT	7.34%	5.50%	6.76%	6.30%
>=65	F	FT	5.12%	5.07%	5.12%	7.40%
>=65	F	PT	8.29%	8.00%	9.13%	20.64%
>=65	M	FT	3.57%	3.52%	3.56%	4.60%
>=65	M	PT	21.00%	19.10%	19.46%	19.71%

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**Table 4: Coefficient of variation concerning total gross earnings broken down by whether full times or shares of part-time and by NACE Rev1 section.**

<b>Nace Rev 1 Section level</b>	<b>Full/ Part time</b>	<b>Hourly earnings</b>	<b>Monthly earnings</b>	<b>Total gross earnings</b>	<b>Monthly hours</b>
A	FT	0.97%	1.12%	1.10%	1.08%
A	PT	12.03%	10.17%	9.32%	12.17%
B	FT	0.00%	0.00%	0.00%	0.00%
C	FT	0.06%	0.06%	0.06%	0.05%
C	PT	7.39%	5.13%	5.08%	4.84%
D	FT	0.29%	0.29%	0.27%	0.30%
D	PT	10.76%	8.98%	8.63%	6.98%
E	FT	0.10%	0.10%	0.12%	0.00%
E	PT	21.92%	18.58%	21.15%	15.52%
F	FT	1.34%	1.33%	1.30%	1.09%
F	PT	12.02%	12.22%	10.97%	16.59%
G	FT	2.88%	2.86%	3.04%	0.47%
G	PT	9.58%	9.38%	10.10%	10.03%
H	FT	0.29%	0.40%	0.82%	0.00%
H	PT	26.35%	20.03%	19.46%	12.79%
I	FT	1.00%	1.01%	0.89%	0.67%
I	PT	5.44%	4.14%	4.15%	5.49%
J	FT	0.34%	0.34%	0.29%	0.76%
J	PT	1.24%	1.23%	0.69%	0.46%
K	FT	2.35%	2.37%	2.15%	1.97%
K	PT	22.80%	19.26%	21.26%	12.13%
L	FT	0.00%	0.00%	0.00%	0.00%
L	PT	10.74%	8.07%	9.08%	16.31%
M	FT	0.03%	0.03%	0.03%	0.00%
M	PT	0.00%	0.00%	0.00%	0.00%
N	FT	0.00%	0.00%	0.00%	0.00%
N	PT	2.06%	3.06%	2.70%	2.57%
O	FT	1.92%	2.16%	1.92%	3.03%
O	PT	2.34%	2.31%	2.10%	7.13%

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**Table 5: Coefficient of variation concerning total gross earnings broken down by whether full times or shares of part- time, education (ISCED 0 to 6) and by sex.**

<b>Education</b>	<b>Sex</b>	<b>Full/ Part time</b>	<b>Hourly earnings</b>	<b>Monthly earnings</b>	<b>Total gross earnings</b>	<b>Monthly hours</b>
<b>Code 1</b>	F	FT	4.14%	4.07%	4.02%	6.19%
<b>Code 1</b>	F	PT	70.25%	70.05%	69.04%	73.44%
<b>Code 1</b>	M	FT	1.71%	1.81%	1.78%	2.94%
<b>Code 1</b>	M	PT	48.07%	47.05%	43.74%	54.80%
<b>Code 2</b>	F	FT	0.99%	0.98%	0.93%	1.31%
<b>Code 2</b>	F	PT	3.84%	3.47%	3.30%	4.58%
<b>Code 2</b>	M	FT	0.79%	0.81%	0.75%	1.12%
<b>Code 2</b>	M	PT	9.08%	7.95%	7.79%	12.11%
<b>Code 3</b>	F	FT	0.44%	0.45%	0.41%	0.59%
<b>Code 3</b>	F	PT	2.54%	2.38%	2.13%	3.45%
<b>Code 3</b>	M	FT	0.44%	0.45%	0.45%	0.49%
<b>Code 3</b>	M	PT	5.06%	4.25%	4.45%	5.43%
<b>Code 8</b>	F	FT	0.79%	0.79%	0.78%	0.77%
<b>Code 8</b>	F	PT	5.31%	3.81%	3.92%	2.71%
<b>Code 8</b>	M	FT	0.70%	0.70%	0.66%	0.89%
<b>Code 8</b>	M	PT	6.74%	4.82%	4.77%	4.31%
<b>Code 9</b>	F	FT	2.32%	2.29%	2.49%	1.56%
<b>Code 9</b>	F	PT	9.67%	8.03%	10.22%	15.46%
<b>Code 9</b>	M	FT	7.30%	7.22%	7.06%	2.29%
<b>Code 9</b>	M	PT	31.14%	30.34%	31.38%	38.33%
<b>Code 10</b>	F	FT	0.78%	0.77%	0.71%	0.44%
<b>Code 10</b>	F	PT	6.45%	5.59%	6.35%	3.59%
<b>Code 10</b>	M	FT	1.16%	1.15%	1.15%	0.71%
<b>Code 10</b>	M	PT	8.93%	7.95%	8.68%	4.53%
<b>Code 11</b>	F	FT	0.98%	0.98%	0.90%	0.87%
<b>Code 11</b>	F	PT	3.30%	3.97%	2.88%	8.07%
<b>Code 11</b>	M	FT	1.30%	1.30%	1.28%	1.03%
<b>Code 11</b>	M	PT	5.06%	3.93%	4.85%	8.17%