

**THE REPORT ON QUALITY FOR STRUCTURAL STATISTICS
ON EARNINGS - SES 2006
POLAND**

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INTRODUCTION

The aim of this report is the evaluation of the quality components in the SES 2006 such as:

- *relevance;*
- *accuracy;*
- *timeliness and punctuality;*
- *accessibility and clarity;*
- *comparability;*
- *coherence;*
- *completeness.*

The SES, that is the subject of this quality report, is a sample survey which has been conducted every 2 years since 1999 (previous surveys on SES were conducted for October 2002 and October 2004). Reference month refers to October. All data for 2006 year regard to full-time employees and part-time employees who work the whole reference month.

The outline of this report is based on the content of Commission Regulation No 698/2006 as regards quality evaluation on structural statistics on earnings.

1. RELEVANCE

Relevance addresses the aspects related to the description of the users, their needs and to which extent the users needs are fulfilled.

1.1 Description of the users

Users of the SES data can be divided on the following groups:

a) internal users:

- government bodies such as Ministry of Economy, Ministry of Labour and Social Policy, Ministry of Financy, Ministry of National Education, Ministry of Health, law courts;
- research centres such as Polish Academy of Science, universities, high schools;

- employers especially employers who want to create new business;
- trade unions;
- students, pupils;
- mass media.

b) *international users*

- European Union bodies – European Council, European Commission, Eurostat;
- international bodies such as International Labour Organization (ILO), OECD, Monetary International Fund;
- foreign employers;
- foreign research centres.

1.2 Description of users needs

Generally, internal users are interested in the level of earnings by occupations and by different socio-demographic characteristics such as: age, sex, level of education, length of service and their impact on the situation of different occupation groups on labour market e.g.

- Ministry of Labour and Social Policy examines the situation of working women and men in occupational groups (ISCO'88) and types of activities (NACE rev.1) and its impact on potential unemployment;
- Ministry of Financy examines mainly earnings by occupations in different type of activities;
- Ministry of National Education examines labour demand in relation to the level of earnings by occupations and by educational level;
- Research centres are interested in analyses of earnings by occupations, besides they conduct international comparisons especially on the level of earnings by occupations and by sex in European Union Countries and Candidate Countries;
- Employers conduct analyses of earnings by occupations by type of activity to carry out adequate, human resources policy in their enterprises;
- Students, postgraduate students and candidate for a doctor's degree use data on structure of earnings in their master and Ph.D. thesis.

1.3 Satisfaction of the users needs

The needs of users are satisfied in professional way. Users obtain all information on structure of earnings that are indispensable for conducting adequate calculations, analyses or policy. Information is available mainly in electronic form by e-mail and in the form of methodological publication, yearbooks of which labour yearbooks.

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The main conclusions on relevance are presented in the table below:

USERS	BASIS ON WHICH USERS NEEDS ARE EXPRESSED	USERS NEEDS	SATISFACTION OF THE USERS NEEDS <i>(changes in variables in the future)</i>
• INTERNAL USERS			
❖ <i>Ministries such as Ministry of Labour and Social Policy, Ministry of Health, law courts</i>	<i>The needs are expressed on the basis of national law.</i>	<i>Ministries are interested in the basic measures of structure of earnings and their impact on labour market i.e. Ministry of Labour and Social Policy examines the relation between earnings in different occupations and in relation to work efficiency, law courts for determining compensations, claims for damages.</i>	<i>Available data on structure of earnings are sufficient to satisfy users needs.</i>
❖ <i>Enterprises</i>	<i>The needs are expressed on the basis of economic and investment policy of enterprises.</i>	<i>Enterprises are interested in comparison of earnings by occupations and by different type of activity, size of units and ownership sector.</i>	<i>Available data on structure of earnings are sufficient to satisfy users needs.</i>
❖ <i>Employers associations</i>	<i>The needs are expressed on the basis of national law and collective agreements.</i>	<i>Employers associations are interested in trends of earnings by occupations.</i>	<i>Available data are sufficient in regard to level of earnings by occupations, type of activity, ownership sectors and size of units. Employers are also interested in projections. Forecasts of earnings by occupations are not conducted by the CSO.</i>

USERS	BASIS ON WHICH USERS NEEDS ARE EXPRESSED	USERS NEEDS	SATISFACTION OF THE USERS NEEDS (changes in variables in the future)
❖ <i>Trade unions</i>	<i>The needs are expressed on the basis of national law and collective agreements.</i>	<i>Trade unions are interested in applying of earnings data in negotiation of collective agreements.</i>	<i>Available data are sufficient in regard to level of earnings by occupations, type of activity, ownership sectors and size of units.</i>
❖ <i>Researchers e.g.:</i> - <i>Polish Academy of Science;</i> - <i>UniversitIES;</i> - <i>Research institutes</i> - <i>students;</i> - <i>candidates for a doctor's degree</i>	<i>Needs are expressed on the basis of surveys programmes prepared by research centres.</i>	<i>Scientists are interested in conducting earnings analyses in cross comparisons with: the level of unemployment, the labour demand, work efficiency. They also conduct international comparisons of earnings in European Union Countries.</i>	<i>Users needs are satisfied in limited range due to limited comparability of data from different sources (differences in methodology surveys of earnings, unemployment, work efficiency). Satisfaction of users needs is expressed in the form of scientific publications.</i>
❖ <i>Mass Media</i>	<i>Needs depend on current socio-economic situation in the country.</i>	<i>Journalists are interested in different publications on labour market.</i>	<i>Users have an access to different statistical publications where structure of earnings data are presented: Yearbooks, Labour Yearbooks edited every 2 years, publication on structure of earnings edited every 2 years. Satisfaction of users needs is expressed in the form of press articles and in radio and TV programmes.</i>

USERS	BASIS ON WHICH USERS NEEDS ARE EXPRESSED	USERS NEEDS	SATISFACTION OF THE USERS NEEDS <i>(changes in variables in the future)</i>
• INTERNATIONAL USERS			
❖ EUROSTAT ❖ OECD ❖ ILO	<i>Needs are expressed on the basis of the European Commissions Regulation No 1916/2000, 1738/2005 and No 698/2006.</i>	<i>Users are interested in requested aggregations and breakdowns of data.</i>	<i>Requested aggregations are constructed to satisfy users needs. When requested aggregations of data are not available, the most similar aggregations or assessments are applied.</i>
❖ <i>Foreign investment agency and enterprises</i>	<i>Needs depend on economic and investment policy of foreign agency.</i>	<i>Foreign investment agencies are interested in levels of earnings in different occupational groups and in different types of activities for the purposes of their own human resources policy.</i>	<i>All requested data are sent by e-mail or by post to foreign enterprises. When requested aggregations of data are not available, the most similar aggregations are applied to satisfy users needs.</i>
❖ <i>Foreign research centres</i>	<i>Needs are expressed on the basis of surveys programmes prepared by research centres.</i>	<i>Scientists are interested in conducting cross analyses between earnings, unemployment and work efficiency.</i>	<i>Satisfaction of users needs is expressed in the form of scientific publications or papers.</i>

2. ACCURACY

Data obtained from sample surveys, such as the structure of earnings survey by occupations, are biased with: sampling and non-sampling errors which determine accuracy of the survey. Thus, limitation and reduction of these errors significantly influences on improvement of data quality and correct interpretation of survey results.

2.1 Sampling errors

Sampling errors are related to the sample size and sampling schemes. Their nature consists in the fact that incomplete information concerning a phenomenon influences on lack of confidence regarding relevance of estimates obtained from a sample survey. Thus, results of a sample survey should be treated as only approximate estimation on a value of an unknown parameter of population. Therefore, on one hand we should be aware of incomplete reliability of results (i.e. differences between values gained from a sample and actual values in population, possible to obtain only from a full survey), while on the other hand we should try to obtain maximum credibility of data through adequate sampling.

Evaluation on sampling errors in the SES 2006 is carried out on the basis of the relative standard error. Standard error determines a range of variation of a sample mean estimator around a real mean in population (standard error square is called variance of estimated mean).

Standard error is a measure of data precision. The lower is standard error the higher is precision and vice versa – the higher is standard error the lower is precision.

The standard error in the SES 2006 is in line with the Commission Regulation No 698/2006 and amounts to less than 3% for the most of variables (for more detailed information please see Annex 1 and Annex 2 on variance analyses).

Generally, sampling errors can be limited through extension of sample size or appliance of more effective sampling frames.

Because the sampling design has the important impact on sampling errors, below is presented detailed description of sampling method in SES.

Two-stage sampling was applied in the SES 2006 as in the previous SES, with stratification on the first stage. The first-stage sampling units constitutes local units, while on the second stage are drawn employees who met particular requirements of the survey i.e. work the whole month in October (all persons from sampled units up to 40 employed participate in the survey without sampling, persons from units employing more than 40 persons are sampled).

a) size of sample

The 13.0 percent sample for the SES 2006 included about 23.5 thousand units. The average unit that gave responses hired 158 employed of which 134 employees. In particular units the survey embraced about 659.9 thousand of sampled employed who worked for the whole month (October 2006). After generalisation, the results are representative for population about 7.2 million of employees (refers to coverage of NACE A+O).

b) sampling scheme

The two stage -sampling was applied. The purpose was gathering information on structure of wages and salaries by occupations for specified populations of the employed. The term „population” should be understood as population of local units and employees defined by:

1 - NACE section

2 - ownership sector (public or private).

There were following exceptions from this rule:

1) in section D populations constituted particular subsections within the sector,

2) in sections J and K populations constituted particular NACE divisions in the given ownership sector. They were following divisions: 65, 66, 67, 70, 71, 72, 73 and 74,

3) in sections M and N populations constituted particular NACE groups in the given ownership sector. They were following groups: 80.1, 80.2, 80.3, 80.4, 85.1, 85.2, 85.3.

➤ Sampling of local units – the first stage sampling.

The first-stage sampling frame was created on the basis of the Business Register - REGON system. All information necessary for the SES purposes concerning entities were transmitted from the REGON system into the sampling frame. Information on the number of employees in a particular local unit was transmitted from results survey on the number of employees. In case of lack of information about a particular local unit in the survey on the number of employees, information on the number of the employed included in REGON was used.

Sampling of local units was carried separately in each population. Within every population local units were divided into strata according to the number of the employed. Table below presents the outline of strata in the SES 2006.

STRATA IN THE SES 2006

<i>Number of strata (h)</i>	<i>Employees from - to</i>	<i>f1_h</i>
<i>1</i>	<i>do 40</i>	<i>0.1</i>
<i>2</i>	<i>41 - 176</i>	<i>0.2</i>
<i>3</i>	<i>177 - 396</i>	<i>0.3</i>
<i>4</i>	<i>397 - 704</i>	<i>0.4</i>
<i>5</i>	<i>705 - 1100</i>	<i>0.5</i>
<i>6</i>	<i>1101 - 1584</i>	<i>1.0</i>
<i>7</i>	<i>1585 - 2156</i>	<i>1.0</i>
<i>8</i>	<i>2157 - 2816</i>	<i>1.0</i>
<i>9</i>	<i>2817 - 3564</i>	<i>1.0</i>
<i>10</i>	<i>3565 - 4400</i>	<i>1.0</i>
<i>11</i>	<i>4401 - 5324</i>	<i>1.0</i>
<i>12</i>	<i>5325 - 6336</i>	<i>1.0</i>
<i>13</i>	<i>6337 - 7436</i>	<i>1.0</i>
<i>14</i>	<i>7437 i w</i>	<i>1.0</i>

The N_{ih} value i.e. the number of reporting units (local units) in h -th stratum of i -th population was determined for every stratum of a given population. According to assumptions a sample in every population should cover about 10per cent of employed persons fulfilling the survey conditions. Thus, sampling fractions on the first and second stages were determined in order to:

$$1) f1_{ih} * f2_{ih} = const$$

Values $f1_{ih}$ and $M2_{ih} = 1/f2_{ih}$. However in strata from 6 up to 14 i.e. in local units with over 1100 employed persons different sampling fractions were allowed i.e. less or more than 10 per cent of the employed. In these strata the first stage sampling was not carried out but all the local units from these strata were counted into a sample. Moreover, in case of discrepancies between an actual number of employees and the figure written in the sampling frame equation (1) was not fulfilled.

In order to sample local units in strata from (1) to (5) value n_{ih} was calculated i.e. the number of units for drawing from h -th stratum of i -th population.

$$(2) n_{ih} = INT [(N_{ih} * f1_{ih}) + e_{ih}]$$

The value e_{ih} in the equation (2) is a random zero-one variable. It was introduced in order to random rounding of the n_{ih} value to the integer number. Then n_{ih} whole numbers from the $[1; N_{ih}]$ interval were sampled without replacement. They matched conventional ranking numbers of units in the sampling frame. In the same way were sampled local units in all strata in subsequent populations.

➤ **Sampling of employed persons in local units – the second stage sampling.**

In the previous surveys on wages by occupations employees were sampled centrally, i.e. in the Central Statistical Office. Random numbers were sent to previously sampled local units. The numbers constituted ranking numbers of employees on specially prepared registers of employees. These registers were a second stage sampling frame. Such approach was not effective because:

- registers with ranking numbers of the sampled employees had to be sent to local units,
- there were significant discrepancies between the numbers of employees written in the sampling frame and the real number of employees meeting survey requirements.

Thus, this problem was solved for SES 1999 and onwards surveys by ensuring sampled local units access via Internet to a special program for sampling employees.

The input parameter of this program was value P_j , i.e. the number of employees in the j -th local unit, who worked the whole October. The program performs following tasks:

- 1) reads in data on employees and sorts records according to 4-digit code ISCO'88 of the performed occupation,
- 2) depending on a given value P_j imputes value $M2$ i.e inversion of sampling fraction and then calculates value mp_j i.e. the number of employees to be sampled in j -th local unit:

$$(3) \quad mp_j = INT \left[P_j / M2 + 1 \right]$$

Relations between P_j and $M2$ for the SES 2006 is given below in table:

P_j	$M2$
41 – 176	2
177 – 396	3
397 – 704	4
705 – 1100	5
1101 – 1584	6
1585 – 2156	7
2157 – 2816	8
2817 – 3564	9
3565 – 4400	10
4401 – 5324	11
5325 – 6336	12
6337 – 7436	13
7437 i więcej	14

3) generates a string of random numbers {No.} according to the following rule:

$$(4) \quad No_{.jk} = a_{jk} + (k - 1) * M2, \quad (k = 1, 2, \dots, mp_j)$$

where: a_{jk} - is a random integer number from interval [1; M2].

Values $No_{.jk}$ are subsequent numbers (ranking numbers) of employees drawn to a sample in j -th local unit. Sampling according to the above program represents stratified random sampling, in which one element is drawn from a stratum of M2 size.

There was specially prepared instruction for sampling of employees for local units which could not use the above program. Sampling according to this instruction represented systematic sampling with interval size M2 and random beginning 1.

2.1.1 Probability sampling

2.1.1.1 Bias

The SES is a difficult and time consuming survey. The most difficulties, which may cause incomplete reliability of results are connected with completed variables by NACE divisions 73, 80, 85, 92 because certain group of sampled employees in these type of activities such as researchers, teachers, doctors, artists has other, specific working conditions than other professional groups with regard to nominal hours, overtime hours, basic wages and salaries, overtime bonuses.

The next difficulties are connected with checking of data in terms of the link between an occupation and adequate education level because in practice people with the long work seniority are employed on the posts where the required level of education is higher than they actually have e.g. managers with the secondary level of education.

The other problem is connected with data confidentiality. It refers to the data collection on earnings by occupations for sampled persons who are the only persons with such occupations in the local units e.g. managers, book-keepers. These persons maintain that their data are easy to identify.

* * *

Estimation of the biases due to the estimation method is not available.

2.1.1.2 Variance

Coefficients of variation is defined as the ratio of the square root of the variance of the estimator to the expected value. It is estimated by the ratio of the square root of the estimate of the sampling variance to the estimated value. Both numerator and denominator are provided, together with the resulting coefficient of variation. The estimation of the sampling variance takes into account the sampling design.

According to the Commission Regulation No698/2006 coefficients of variation refer to monthly and hourly earnings broken down by:

- *full time/part time and sex;*
- *Nace sections;*
- *occupation (ISCO-88 at the 1-digit level);*
- *age band (<= 20 , 20-29, 30-39, 40-49, 50-59, >= 60 years old);*
- *NUTS (optional),*
- *education (ISCED 0 to 6; optional),*
- *and size band of the enterprise (1-9 (if appropriate), 10-49, 50-249, 250-499, 500-999, 1000+).*

Detailed variance analyses are presented in Annex1 (with NACE A, B) and Annex 2 (without NACE A, B) attached to this report.

* * *

Generally the sampling errors for the basic indicators of earnings from SES 2006_were following:

- *monthly gross earnings (aggregation A+O ,October 2006):* - 0,4 %;
- *monthly gross earnings (aggregation C+O ,October 2006) out of:* - 0,4 %;

The highest sampling errors of monthly gross earnings by type of activity (NACE C-O) took place in:

- *hotels and restaurants – 2,5 %;*
- *real estate, renting and business activities – 2,1%;*
- *other community, social and personal service activities – 2,1%.*

The smallest sampling errors of monthly gross earnings by type of activity were in:

- *education - 0,4%;*
- *mining and quarrying - 0,7%;*
- *manufacturing- 0,7%;*
- *health and social work – 0,7%.*

* * *

2.1.2. Non- probability sampling

*Non-probability sampling is not used.
No data from registers have been used, except for the setting up of the frame population.*

2.2. Non -sampling errors

Non-sampling errors, that are the second type of errors in sample surveys, are divided into:

- *coverage errors;*
- *measurement and processing errors;*
- *non-response errors;*
- *model assumption errors.*

2.2.1 Coverage errors

Generally, coverage errors are divided into overcoverage and undercoverage errors. Overcoverage errors relate to units present in the frame and which, in fact, do not belong to the target population or to units not existing in practice (e.g. units that have not been contacted at all, units that are in scope but classified in the wrong sampling strata, duplication in the sampling frame, dead and inactive units).

In the SES 2006 lack of active constituted 2,2% of the selected sample (the ratio of 528 lack of active to the selected sample of 23483 units).

Undercoverage errors refer to units not included in the frame, but which should be (e.g. delays in birth registration, lost registration applications). For these units no information is obtained.

As for methods of limitation and reduction of coverage errors, errors due to lack of answers from the whole unit are eliminated mainly through updating addresses in a sample frame and methods of results weighting described in details in the item 2.2.3. Errors deriving from lack of answers regarding items are limited through an appliance of statistical imputation methods i.e. we can impute mainly data from monthly survey on

employment, earnings and working time for the same units which were sampled in the SES.

** * **

<i>Overall sampling rate (including those units exhaustively covered)</i>	<i>13,0 %</i>
<i>Response rate (including overcoverage – lack of activity)</i>	<i>73,8%</i>
<i>Response rate (excluding overcoverage – lack of activity)</i>	<i>75,5%</i>
<i>Overall final sample size (number of units actually used)</i>	<i>16638 units</i>
<i>Coverage rate</i>	<i>9,2 %</i>

In terms of employees covered by the sample survey their rate amounts about 9% of the number of employees in the units in scope i.e. units the survey embraced about 659,9 thousand of sampled employees who worked for the whole month (October 2006). After generalisation, the results are representative for population about 7,2 million of employees persons (for aggregation A+O).

2.2.2 Measurement and processing errors

Measurement errors:

Measurement errors are divided into: the survey instrument (questionnaire) errors, the respondent errors, the information system and the mode of data collection errors.

As for the survey instrument- questionnaires errors, the questionnaire in the SES is designed in such way to eliminate these types of errors because the detailed explanatory notes are attached to this questionnaire to increase its clarity.

Variables that are corrected very often are following:

- overtime hours;*
- basic wages;*
- prizes and bonuses;*
- annual bonuses that should be given on our form in the amount of 1/12th part of total annual bonuses (they are calculated for October 2006).*

Below are presented variables that were often corrected by following reasons:

Reasons	Type of variables according to Polish methodology
<ul style="list-style-type: none"> • <i>questions with burden</i> 	<p><i>It refers to:</i></p> <ul style="list-style-type: none"> • <i>compiling of components on gross earnings and hours paid especially for such occupation groups as: directors and chief executives (ISCO'88-121), health professionals (ISCO'88-222), teaching professionals (ISCO'88-231;232, 233, 234), writers and creative of performing artists (ISCO'88-245).</i>
<ul style="list-style-type: none"> • <i>questions that were the most difficult</i> 	<p><i>It refers to:</i></p> <ul style="list-style-type: none"> • <i>data obtained from such reporting units as high schools, research institutes, theatres because employees from these units as teachers, artists, scientists (as was indicated above) have different regulation on working conditions than other occupation groups. Below, there is the list of variables that are the most difficult to complete for mentioned persons:</i> • <i>nominal hours;</i> • <i>hours worked in overtime;</i> • <i>direct remuneration;</i> • <i>overtime payments.</i> <p><i>Detailed explanations how should be completed data for these occupation groups are given in briefings and instructions sent to staff of regional statistical offices.</i></p>

The variables that were corrected very seldom refer to: work seniority bonuses, the year of birth, sex, level of education.

Generally, the errors regarding to unclear, illegible questions and explanations were reduced by staff of field statistical offices during the data collection period. Staff of statistical offices obtained detailed briefings what should be done in case of errors.

As for the respondent errors, these errors are connected with misunderstandings of methodological note and misinterpretation. Respondents sometimes give incomplete answers in case of time consuming questions. These type of errors are eliminated during the control phase in field statistical offices. If errors are caused by averse attitudes of respondents, a survey objective is explained once again, together with respondents' role in a survey and clearance of any doubts concerning a survey.

As for the errors of information system, these type of errors are connected with wrong figures that are inserted to the computer system from the paper forms. Thanks to arithmetical and logical control these errors are identified very quickly, explained and corrected.

Our arithmetical and logical controls cover following main assumptions in the SES 2006 (on the basis of the form Z-12). Examples:

- the number of people employed full-time is lower than the number of total employed persons;*
- gross wages and salaries in October should not be less than minimum wages determined by Ministry of Economy and Labour according to national law (in the case of the SES for October 2006 not less than 899,10 PLN);*
- year of birth (two last digits of the year) ranged from 26 to 92;*
- if year of birth (two last digits of the year) is more than 87 than education level is less than tertiary education coded as ISCED 5 or ISCED 6;*
- work seniority bonuses are less than basic wages and salaries;*
- if overtime hours equal to 0 than overtime bonuses equal to 0, if overtime hours more than 0 than overtime bonuses must be completed;*
- Hours paid is the sum of nominal hours and overtime hours. Nominal hours paid should be within intervals 47 hours - 311 hours. Overtime hours should be equal or less than 110 hours. All cases which are out of scope of this control are considered individually.;*
- work seniority in the reporting unit is equal or lower than work seniority total, length of service is within intervals 0,1 – 80,9;*
- the control of relations between occupations and type of activity e.g.:*
 - Occupation codes 111 and 112 (legislators and senior government officials) refer to the type of activity - division 75 (public administration and defence; compulsory social security) according to NACE rev.1.;*
 - occupation code 231 (college, university and higher education teaching professionals) refers to the type of activity 80.3 (higher education) according to NACE rev.1.;*

- *occupations codes: 222 (health professionals except nursing), 322 (modern health associate professionals except nursing), 323(nursing and midwifery associate professionals) refer to division 73(research and development) or division 85 (health and social work) according to NACE rev.1.;*
- *occupation 511 (travel attendants and related workers) refers to division 60 (land transport; transport via pipelines) according to NACE rev.1.;*
- *the control of relations between occupations and level of education requires an elastic approach because are possible situations in which e.g. technicians (ISCO 3) may have elementary education (ISCED 1); craft workers (ISCO 7) may have tertiary education (ISCED 5 or 6).*

As for the mode of data collection errors, the method of data collection in the SES doesn't cause errors because paper forms were sent and returned by the post. All doubts regarding variables and addresses of reporting units were explained and updated during phone calls of respondents with the staff of field statistical offices and during the e-mail contact.

Processing errors:

Processing errors are errors in post-data-collection processes such as data entry, coding, keying, editing, weighting and tabulating.

As for errors deriving from data compiling and processing, there are some problems with coding. The code of occupation is given by reporting units on the basis of the name of performed occupation. Staff of regional offices checks the code of occupation with the corresponding nomenclature but in some cases descriptions given by reporting units are not enough clear to establish the right code. In these cases additional explanations are required. There are not problems with keying, editing, weighting, tabulating because wrong controlling assumption in a computer program or wrong interpretation of the results are removed immediately during the phase control and data are tested again in conducted surveys. It is very difficult to control an occupation with adequate level of education. We apply elastic approach to this matter because in practice, people with the long work seniority have the high position that is not in accordance with their low education level. Sometimes, vocational and elementary education is linked with an occupation ISCO 3 (technicians and associate professionals) or tertiary education is linked with occupations: ISCO 7 (craft and related trades workers), ISCO 8 (plant and machine operators and assemblers), ISCO 9 (elementary occupations). All such cases are checked and explained by the staff of statistical offices.

2.2.3. Non-response errors

Detailed classification of non-response units is following:

- *non-response units consists of 6147 units about 26% of the selected sample by reasons given below:*
- *refusals - 4395 i.e. 18,7 % of the selected sample;*
- *lack of active - 528 i.e. 2,2 % of the selected sample;*
- *lack of contact - 1218 i.e. 5,2% of the selected sample;*
- *other reasons - 6 i.e. 0,03 % of the selected sample.*

Description of the methods used for re-weighting for non-response is closely connected with the creation of generalising ratios in the SES 2006 what is presented below. Ex-post stratification is here used.

➤ Generalization of the results and precision evaluation.

Calculation of generalizing multipliers i.e. weights was necessary in order to generalize results. Weight for employees in j-th local units of h-th stratum of i-th population was calculated according to the rule:

$$(5) W_{ihj} = M2_{ihj} / f1_{ihj},$$

According to the above equation a weight includes sampling fractions on the first and second stages and it can be applied without restrictions if there are no refusals i.e. all sampled local units agreed to participate in a survey. While there are such refusals, it was necessary to adjust above weights through application of ex post stratification. Information on the number of employed persons written in the sampling frame was used. Weights calculated according to the equation (5) were adjusted separately in each stratum¹ according to the rule:

¹ Exceptionally in strata from 6 to 11 weights were adjusted jointly.

$$(6) \quad WS_{ihj} = W_{ihj} * Z_{ih}/\tilde{Z}_{ih}$$

where:

Z_{ih} is the number of employed persons according to the sampling frame in *h*-th stratum of *i*-th population,

\tilde{Z}_{ih} is the number of employed persons according to the sampling frame in *h*-th stratum of *i*-th population estimated on the basis of local units sample.

Weights were adjusted only in cases of non-responses caused by refusals. Such reasons as dead units, inactive units or units not belonging to the population covered by the survey were not considered. Weights calculated according to equation (6) were used for estimation of parameters such as: percentages, means, totals of surveyed variables. For the main estimates on survey parameters relative standard errors were estimated. In order to achieve that goal there were applied equations for estimation on variance of parameters estimates in two-stage sampling with stratification on the first stage.

2.2.4. Model assumption errors

- *A representative month is selected.*
- *NACE Rev.1 Sections A-O of which C to O are fully covered for units with 10 or more employees.*
- *Small local units, in this case local units with less than 10 employees, have not been accounted for. Special cases are included when the number of employees changed after the sampling.*
- *No combinations between survey data and register data have been done. That is, all data come from the survey results.*

3. TIMELINESS AND PUNCTUALITY

Timeliness and punctuality refer mainly to pre-established and factual reference periods of data and publication dates.

a) key data-collection dates in the SES 2006

- *compliance of questionnaire and explanatory note - from April to October 2006;*
 - *sampling – November 2006;*
 - *field work:*
- paper forms are sent by field statistical offices to reporting units - in December 2006;*

- reporting units send compiled forms by mail/post office to field statistical offices – to 31st of March 2007.

b) key dates for the post-collection phase in the SES 2006

- *processing of data*
- *compiled forms are checked and corrected in field statistical offices - up to July 2007;*
- *preliminary data before grossing are available in July 2007;*
- *benchmark data after grossing are available in July 2007.*

c) key publication dates in the SES 2006

- *dissemination of data*
- *publication on earnings structure by occupations as of October 2006 was available in November 2007.*

d) punctuality

- *transmission data to Eurostat*
- *data are transmitted 18 months from the end of the reference period according to Commission Regulation No 1738/2005.*

4. ACCESSIBILITY AND CLARITY

Accessibility and clarity refer to how accessible the statistics on structure of earnings by occupations is.

Data are available in the form of the users desire e.g. graphs , tables, methodological description, main characteristics of earnings by occupations and earnings structure.

Data are well documented in the form of:

- *publications – the SES publication consists of 242 pages, it covers methodological note, characteristics of basic measures on earnings by occupations and earnings structure, information on sampling scheme; the SES publication is disseminated every 2 years;*
- *information service of the Data Dissemination Division – the Data Dissemination Division distributes data on earnings structure by occupations for internal and external users;*
- *chapters on the SES in Yearbooks, Labour Yearbooks published every 2 years.*

5. COMPARABILITY

The comparability component refers to geographical comparability and comparability over time.

5.1. Geographical comparability

- *As for the geographical comparability, definitions of: statistical units, reference population and variables are based on Eurostat recommendation and that is why the results of the SES are comparable on international scale. It is worth to stress that SES 2006 refers only to employees who work the whole month October. The local units refer to units conducting activity in sections A+O of NACE rev.1 (of which C+O that is the coverage of the priority for Eurostat) and employing more than 9 persons. Activity for division 12 doesn't exist in Poland, activity for division 91 is not covered by the survey.*

Applied classifications are in line with international classifications as follows:

- *type of activity in line with NACE rev.1;*
- *type of territorial units in line with NUTS;*
- *occupation classification in line with ISCO'88.*

5.2. Comparability over time

- *As for the comparability over time, we changed the size of units covered by the SES namely:*
- *the SES for October 1999 covered units employing 6 and more persons;*
 - *the SES for October 2001, 2002, 2004 and 2006 cover units employing 10 and more persons.*

Taking into account these circumstances we can state that changes in the size of units have the impact on the employees but they have not significant impact on the level of earnings by occupations and their structure. Thus, we can compare data for October 1999, 2001, 2002, 2004 and 2006 with regard to level of earnings by occupations and earnings structure.

6. COHERENCE

Coherence refers to comparability of data from different domains and sources. In our case SES data are compared with: LFS; data about earnings from annual survey on employment, earnings and working time; Structural Business Statistics and National Accounts Statistics.

6.1 Coherence with the structure employees in the labour force survey for the same reference period

The following table summarises the comparison of both sources.

<i>Specification</i>	<i>Structure of Earnings Survey (SES)</i>	<i>Labour Force Survey (LFS)</i>
<ul style="list-style-type: none"> • <i>Statistical unit</i> 	<ul style="list-style-type: none"> • <i>Local unit</i> 	<ul style="list-style-type: none"> • <i>Household</i>
<ul style="list-style-type: none"> • <i>Activity coverage</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 Sections A÷O</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 Sections A÷O</i>
<ul style="list-style-type: none"> • <i>Variables to be compared as between the two sources</i> 	<ul style="list-style-type: none"> • <i>Number of employees by sex, age, education level, work seniority, occupations;</i> • <i>Wages and salaries of employees by sex, age, education level, work seniority, occupations;</i> • <i>Number of hours paid and works during the reference month.</i> 	<ul style="list-style-type: none"> • <i>Number of hired employees by sex, age, education level, work seniority, occupations;</i> • <i>Wages and salaries of hired employees by sex, age, education level, work seniority, occupations;</i> • <i><u>Data on hours paid are not available.</u> Data refer to number of hours worked per week (converted to hours per month).</i>
<ul style="list-style-type: none"> • <i>Required breakdown by occupation</i> 	<ul style="list-style-type: none"> • <i>ISCO-88 at the 1-digit level.</i> 	<ul style="list-style-type: none"> • <i>ISCO-88 at the 1-digit level.</i>
<ul style="list-style-type: none"> • <i>Required activity breakdown</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 at the Section</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 at the Section</i>
<ul style="list-style-type: none"> • <i>Required regional breakdown</i> 	<ul style="list-style-type: none"> • <i>NUTS, level 1</i> 	<ul style="list-style-type: none"> • <i>NUTS, level 1</i>

These compared two sources of data don't correspond well due to following reasons:

- *differences in coverage - the LFS covers hired employees in section P of Nace rev.1 (private household with employed persons), section Q of Nace rev.1 (extra-territorial organizations and bodies), in military forces and in the hidden economy. Mentioned above category of employees is not included in the SES 2006 (Polish SES is restricted only to employees in sections A-O of which C-O according to recommendations of Eurostat);*

- *differences in method of data collection - LFS collects data by household whereas SES collects data by local units employing 10 and more employed;*
- *differences in reference period - LFS refers to quarterly data (in analysed case IV-th quarter 2006 is taken into consideration) that are calculated as means of results from 13 weeks of a given quarter. SES regards data for October 2006;*
- *limitation of breakdown of data which restricts possibilities of tabular data analyses (available breakdown of employees in LFS is not such detailed as regulation on quality required and which is available from SES). It is worth to stress that the very detailed breakdown by different characteristics in the LFS is available mainly for the total employed including paid employees on the basis of labour contract, employers and own-account workers, contributing family workers. For the analytical purposes of coherence between LFS and SES is necessary to analyse the narrow category of employees based only on labour contract which is investigated in SES 2006. Hence, we have to restrict tabular analyses to the available area which can be compared and which can give some information on the quality. The elastic approach was applied here.*

Mentioned above reasons justify differences between two sources.

Table 1 presented below refers to hired employees from the LFS for IV quarter 2006 and from the SES for October 2006.

Tabl.1. Hired employees in thous. persons by sex and by economic control

<i>Specification</i>	<i>Total</i>		<i>Male</i>		<i>Female</i>	
	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>
<i>LFS - IVth quarter 2006</i>						
<i>Total</i>	<i>11380</i>	<i>100,0</i>	<i>6152</i>	<i>100,0</i>	<i>5227</i>	<i>100,0</i>
<i>Public sector</i>	<i>4320</i>	<i>38,00</i>	<i>1848</i>	<i>30,0</i>	<i>2472</i>	<i>47,3</i>
<i>Private sector</i>	<i>7060</i>	<i>62,00</i>	<i>4304</i>	<i>70,0</i>	<i>2756</i>	<i>52,7</i>
<i>SES - October 2006</i>						
<i>Total</i>	<i>7165,9</i>	<i>100,0</i>	<i>3713,6</i>	<i>100,0</i>	<i>3452,3</i>	<i>100,0</i>
<i>Public sector</i>	<i>2924,6</i>	<i>40,8</i>	<i>1189,4</i>	<i>32,0</i>	<i>1735,2</i>	<i>50,3</i>
<i>Private sector</i>	<i>4241,3</i>	<i>59,2</i>	<i>2524,2</i>	<i>68,0</i>	<i>1717,1</i>	<i>49,7</i>

Remark: LFS covers sections of Nace rev.1 A ≠O, P, Q, military forces and employed in the hidden economy.

SES covers sections of Nace rev.1 A ≠O.

The graphic illustrations of above comparisons are placed in Annex 3.

Tabl.2. Hired employees by sex and by age bands

<i>Specification</i>	<i>Total</i>		<i>Male</i>		<i>Female</i>	
	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>
<i>hired employees from LFS - IVth quarter 2006</i>						
<i>Total</i>	<i>11380</i>	<i>100,0</i>	<i>6152</i>	<i>100,0</i>	<i>5227</i>	<i>100,0</i>
<i>15-24</i>	<i>1204</i>	<i>10,6</i>	<i>688</i>	<i>11,2</i>	<i>516</i>	<i>9,9</i>
<i>25-54</i>	<i>9368</i>	<i>82,3</i>	<i>4937</i>	<i>80,2</i>	<i>4431</i>	<i>84,8</i>
<i>55-64</i>	<i>749</i>	<i>6,6</i>	<i>491</i>	<i>8,0</i>	<i>258</i>	<i>4,9</i>
<i>65 and more</i>	<i>58</i>	<i>0,5</i>	<i>37</i>	<i>0,6</i>	<i>22</i>	<i>0,4</i>
<i>hired employees from SES - October 2006</i>						
<i>Total</i>	<i>7165,9</i>	<i>100,0</i>	<i>3713,6</i>	<i>100,0</i>	<i>3452,3</i>	<i>100,0</i>
<i>15-24</i>	<i>491,6</i>	<i>6,9</i>	<i>282,7</i>	<i>7,6</i>	<i>208,9</i>	<i>6,1</i>
<i>25-54</i>	<i>6031,9</i>	<i>84,2</i>	<i>3005,5</i>	<i>81,0</i>	<i>3026,4</i>	<i>87,7</i>
<i>55-64</i>	<i>590,2</i>	<i>8,2</i>	<i>388</i>	<i>10,4</i>	<i>202,2</i>	<i>5,8</i>
<i>65 and more</i>	<i>52,2</i>	<i>0,7</i>	<i>37,4</i>	<i>1,0</i>	<i>14,8</i>	<i>0,4</i>

Remark: LFS covers sections of Nace rev.1 A+O, P, Q, military forces and employed in the hidden economy.

SES covers sections of Nace rev.1 A+O.

The graphic illustrations of above comparisons are placed in Annex 3.

Tabl.3. Hired employees by sex and by economic activity

<i>Specification</i>	<i>Total</i>		<i>Male</i>		<i>Female</i>	
	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>
<i>hired employees from LFS - IVth quarter 2006</i>						
<i>Total (C+O)</i>	<i>11163</i>	<i>100,0</i>	<i>5992</i>	<i>100,0</i>	<i>5172</i>	<i>100,0</i>
<i>Mining and quarrying (C)</i>	<i>237</i>	<i>2,1</i>	<i>205</i>	<i>3,4</i>	<i>32</i>	<i>0,6</i>
<i>Manufacturing (D)</i>	<i>2826</i>	<i>25,3</i>	<i>1852</i>	<i>30,8</i>	<i>974</i>	<i>18,7</i>
<i>Electricity, gas and water supply (E)</i>	<i>223</i>	<i>2</i>	<i>173</i>	<i>2,9</i>	<i>50</i>	<i>1</i>
<i>Construction (F)</i>	<i>800</i>	<i>7,2</i>	<i>745</i>	<i>12,4</i>	<i>56</i>	<i>1,1</i>
<i>Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)</i>	<i>1597</i>	<i>14,3</i>	<i>699</i>	<i>11,7</i>	<i>898</i>	<i>17,4</i>
<i>Hotels and restaurants (H)</i>	<i>247</i>	<i>2,2</i>	<i>81</i>	<i>1,4</i>	<i>165</i>	<i>3,2</i>
<i>Transport, storage and communication (I)</i>	<i>882</i>	<i>7,9</i>	<i>670</i>	<i>11,2</i>	<i>212</i>	<i>4,1</i>
<i>Financial intermediation (J)</i>	<i>317</i>	<i>2,8</i>	<i>101</i>	<i>1,7</i>	<i>217</i>	<i>4,2</i>
<i>Real estate, renting and business activities (K)</i>	<i>694</i>	<i>6,2</i>	<i>386</i>	<i>6,4</i>	<i>308</i>	<i>6</i>
<i>Public administration and defence; compulsory social security (L)</i>	<i>935</i>	<i>8,4</i>	<i>459</i>	<i>7,7</i>	<i>475</i>	<i>9,2</i>
<i>Education (M)</i>	<i>1135</i>	<i>10,2</i>	<i>250</i>	<i>4,2</i>	<i>885</i>	<i>17,1</i>
<i>Health and social work (N)</i>	<i>822</i>	<i>7,4</i>	<i>150</i>	<i>2,5</i>	<i>673</i>	<i>13</i>
<i>Other community, social and personal service activities (O)</i>	<i>448</i>	<i>4</i>	<i>221</i>	<i>3,7</i>	<i>227</i>	<i>4,4</i>

Remark: Data may not give the sum for total due to rounding

Tabl.3. Hired employees by sex and by economic activity (cont.)

<i>Specification</i>	<i>Total</i>		<i>Male</i>		<i>Female</i>	
	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>
<i>Hired employees from SES - October 2006</i>						
<i>Total (C+O)</i>	<i>7088,2</i>	<i>100,0</i>	<i>3655,5</i>	<i>100,0</i>	<i>3432,7</i>	<i>100,0</i>
<i>Mining and quarrying (C)</i>	<i>147,6</i>	<i>2,1</i>	<i>131,9</i>	<i>3,6</i>	<i>15,7</i>	<i>0,4</i>
<i>Manufacturing (D)</i>	<i>1971,7</i>	<i>27,8</i>	<i>1306,7</i>	<i>35,7</i>	<i>665,0</i>	<i>19,4</i>
<i>Electricity, gas and water supply (E)</i>	<i>185,6</i>	<i>2,6</i>	<i>146,8</i>	<i>4,0</i>	<i>38,8</i>	<i>1,1</i>
<i>Construction (F)</i>	<i>335,3</i>	<i>4,7</i>	<i>294,4</i>	<i>8,1</i>	<i>40,9</i>	<i>1,2</i>
<i>Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)</i>	<i>996,4</i>	<i>14,1</i>	<i>460,0</i>	<i>12,6</i>	<i>536,4</i>	<i>15,6</i>
<i>Hotels and restaurants (H)</i>	<i>100,9</i>	<i>1,4</i>	<i>33,9</i>	<i>0,9</i>	<i>67,0</i>	<i>2,0</i>
<i>Transport, storage and communication (I)</i>	<i>437,6</i>	<i>6,2</i>	<i>298,1</i>	<i>8,2</i>	<i>139,5</i>	<i>4,1</i>
<i>Financial intermediation (J)</i>	<i>213,5</i>	<i>3,0</i>	<i>66,5</i>	<i>1,8</i>	<i>147,0</i>	<i>4,3</i>
<i>Real estate, renting and business activities (K)</i>	<i>548,1</i>	<i>7,7</i>	<i>317,9</i>	<i>8,7</i>	<i>230,2</i>	<i>6,7</i>
<i>Public administration and defence; compulsory social security (L)</i>	<i>423,7</i>	<i>6,0</i>	<i>141,3</i>	<i>3,9</i>	<i>282,4</i>	<i>8,2</i>
<i>Education (M)</i>	<i>957,5</i>	<i>13,5</i>	<i>253,6</i>	<i>6,9</i>	<i>703,9</i>	<i>20,5</i>
<i>Health and social work (N)</i>	<i>594,1</i>	<i>8,4</i>	<i>112,6</i>	<i>3,1</i>	<i>481,5</i>	<i>14,0</i>
<i>Other community, social and personal service activities (O)</i>	<i>176,2</i>	<i>2,5</i>	<i>91,8</i>	<i>2,5</i>	<i>84,4</i>	<i>2,5</i>

Remark: Data may not give the sum for total due to rounding

Tabl.4. Hired employees by sex and by level of education

Specification	Total		Male		Female	
	in thous.	in %	in thous.	in %	in thous.	in %
hired employees from SES - October 2006						
Total	7165,9	100,0	3713,6	100,0	3452,3	100,0
ISCED 0-2	2414	33,7	1630,5	43,9	783,5	22,7
ISCED 3-4	2629,5	36,7	1205,1	32,5	1424,4	41,2
ISCED 5-6	2122,4	29,6	878	23,6	1244,4	36,0
hired employees from LFS - IVth quarter 2006						
Total	11380	100,0	6152	100,0	5227	100,0
ISCED 0-2	3966	34,9	2783	45,2	1182	22,6
ISCED 3-4	4514	39,6	2174	35,3	2340	44,8
ISCED 5-6	2900	25,5	1195	19,4	1706	32,6

Remark: Data may not give the sum for total due to rounding.

Remark: LFS covers sections of Nace rev.1 A ≠O, P, Q, military forces and employed in the hidden economy.

SES covers sections of Nace rev.1 A ≠O.

The graphic illustrations of above comparisons are placed in Annex 3.

Tabl.5. Hired employees by sex and by occupations

<i>Specification</i>	<i>Total</i>		<i>Male</i>		<i>Female</i>	
	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>
<i>hired employees from LFS - IVth quarter 2006</i>						
<i>Total of which¹⁾</i>	<i>11317</i>	<i>100,0</i>	<i>6091</i>	<i>100,0</i>	<i>5224</i>	<i>100,0</i>
<i>Legislators, senior officials and managers (ISCO 1)</i>	<i>578</i>	<i>5,1</i>	<i>357</i>	<i>5,9</i>	<i>220</i>	<i>4,2</i>
<i>Professionals(ISCO2)</i>	<i>2090</i>	<i>18,5</i>	<i>694</i>	<i>11,4</i>	<i>1396</i>	<i>26,7</i>
<i>Technicians and associate professionals (ISCO 3)</i>	<i>1488</i>	<i>13,1</i>	<i>653</i>	<i>10,7</i>	<i>835</i>	<i>16</i>
<i>Clerks (ISCO 4)</i>	<i>1069</i>	<i>9,4</i>	<i>338</i>	<i>5,5</i>	<i>731</i>	<i>14</i>
<i>Service workers and shop and market sales workers (ISCO5)</i>	<i>1394</i>	<i>12,3</i>	<i>484</i>	<i>7,9</i>	<i>910</i>	<i>17,4</i>
<i>Skilled agricultural and fishery workers (ISCO 6)</i>	<i>45</i>	<i>0,4</i>	<i>36</i>	<i>0,6</i>	<i>9</i>	<i>0,2</i>
<i>Craft and related trades workers (ISCO 7)</i>	<i>2106</i>	<i>18,7</i>	<i>1754</i>	<i>28,9</i>	<i>352</i>	<i>6,7</i>
<i>Plant and machine operators and assemblers (ISCO8)</i>	<i>1439</i>	<i>12,7</i>	<i>1255</i>	<i>20,6</i>	<i>183</i>	<i>3,5</i>
<i>Elementary occupations (ISCO 9)</i>	<i>1108</i>	<i>9,8</i>	<i>520</i>	<i>8,5</i>	<i>588</i>	<i>11,3</i>

Remark: 1) The total in the LFS is not equal the sum of ISCO'88 due to army force counted to ISCO 0 that constitutes about 0,5% of total hired employees.

Tabl.5. Hired employees by sex and by occupations (cont.)

<i>Specification</i>	<i>Total</i>		<i>Male</i>		<i>Female</i>	
	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>	<i>in thous.</i>	<i>in %</i>
<i>hired employees from SES - October 2006</i>						
<i>Total</i>	<i>7165,9</i>	<i>100,0</i>	<i>3713,6</i>	<i>100,0</i>	<i>3452,3</i>	<i>100,0</i>
<i>Legislators, senior officials and managers (ISCO 1)</i>	<i>483,1</i>	<i>6,7</i>	<i>287,9</i>	<i>7,8</i>	<i>195,2</i>	<i>5,7</i>
<i>Professionals (ISCO2)</i>	<i>1652,2</i>	<i>23,1</i>	<i>560,4</i>	<i>15,1</i>	<i>1091,8</i>	<i>31,6</i>
<i>Technicians and associate professionals (ISCO 3)</i>	<i>934,1</i>	<i>13,0</i>	<i>374,6</i>	<i>10,1</i>	<i>559,5</i>	<i>16,2</i>
<i>Clerks (ISCO 4)</i>	<i>680,0</i>	<i>9,5</i>	<i>230,9</i>	<i>6,2</i>	<i>449,1</i>	<i>13,0</i>
<i>Service workers and shop and market sales workers (ISCO5)</i>	<i>613,6</i>	<i>8,6</i>	<i>218,3</i>	<i>5,9</i>	<i>395,3</i>	<i>11,5</i>
<i>Skilled agricultural and fishery workers (ISCO 6)</i>	<i>16,1</i>	<i>0,2</i>	<i>12,1</i>	<i>0,3</i>	<i>4,0</i>	<i>0,1</i>
<i>Craft and related trades workers (ISCO 7)</i>	<i>1200,3</i>	<i>16,8</i>	<i>978,6</i>	<i>26,4</i>	<i>221,7</i>	<i>6,4</i>
<i>Plant and machine operators and assemblers (ISCO8)</i>	<i>883,4</i>	<i>12,3</i>	<i>744,5</i>	<i>20,0</i>	<i>138,9</i>	<i>4,0</i>
<i>Elementary occupations (ISCO 9)</i>	<i>703,1</i>	<i>9,8</i>	<i>306,3</i>	<i>8,2</i>	<i>396,8</i>	<i>11,5</i>

The graphic illustrations of above comparisons are placed in Annex 3.

* * *

To sum up of the comparison, the SES and the LFS don't correspond well because of different method of data collection(data are collected by units in SES, data are collected by households in LFS) and differences in methodology.

6.2.Coherence with structural business statistics for the same year

<i>Specification</i>	<i>Structure of Earnings Survey (SES)</i>	<i>Structural Business Survey (SBS)</i>
• <i>Statistical unit</i>	• <i>Local unit</i>	• <i>Local unit</i>
• <i>Activity coverage</i>	• <i>NACE Rev.1 Sections A+O</i>	• <i>NACE Rev.1 selected</i>

		<p>Sections: <i>B,C,D,E,F,G,H,I,K, M, N, O (survey does't cover higher schools, institutions of culture which have legal personality, standalone public institutes of medical care). Thus here are compared only data for NACE C-I, K.</i></p>
<ul style="list-style-type: none"> • <i>Variables to be compared as between the two sources</i> 	<ul style="list-style-type: none"> • <i>Number of local units</i> • <i><u>Total number of full-time and part-time employees in the population in the reference month</u></i> • <i><u>Total gross earnings of full-time and part-time employees refer to the reference month October</u></i> <i>(exclude earnings for persons working abroad and persons involved in public works financed from the Labour Fund)</i> • <i>Annual gross earnings of employees in the reference year.</i> 	<ul style="list-style-type: none"> • <i>Number of local units</i> • <i><u>Number of all employees (full-time and part-time converted into full-time units) in the reference year.</u></i> • <i><u>Total gross monthly average earnings of all employees (full-time and part-time converted into full-time units)</u></i> <i>refer to the reference year (include earnings for persons working abroad and persons involved in public works financed from the Labour Fund).</i> • <i>Wages and salaries of all employees refer to the reference year. They include earnings for persons working abroad and persons involved in public works financed from the Labour Fund</i>
<ul style="list-style-type: none"> • <i>Required activity breakdown</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 at the Section</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 at the Section</i>

- *The comparison of average earnings (in PLN) from the SES (on the monthly basis - October 2006) and the SBS (on the average monthly basis in the reference year) is presented below:*

<i>Selected type of activities according to NACE rev.1</i>	<i>Structure of Earnings Survey (SES)</i>	<i>Structural Business Survey (SBS)</i>
<i>Mining and quarrying (C)</i>	<i>4380,35</i>	<i>4611,5</i>
<i>Manufacturing (D)</i>	<i>2455,30</i>	<i>2403,7</i>
<i>Electricity , gas and water supply (E)</i>	<i>3299, 68</i>	<i>3532,0</i>
<i>Construction (F)</i>	<i>2481,99</i>	<i>2423,6</i>
<i>Trade and repair ^ (G)</i>	<i>2215,61</i>	<i>2359,9</i>
<i>Hotels and restaurants (H)</i>	<i>1775,91</i>	<i>1819,2</i>
<i>Transport, storage and communication (I)</i>	<i>2821,92</i>	<i>2901,7</i>
<i>Real estate and business activities (K)</i>	<i>2652,17</i>	<i>2691,1</i>

Source: Data for SES 2006 come from table 2, page 65-66 of publication of Polish SES 2006, Warsaw 2007.

Data for SBS 2006 come from tabl.18, pages 48-60 of the publication "Economic units by type and place of activity in 2006" the PCSO, Warsaw 2007.

The graphic illustrations of above comparisons are placed in Annex 3.

- *The comparison of annual wages and salaries (in million PLN) from the SES and the SBS is presented below:*

<i>Selected type of activities according to NACE rev.1</i>	<i>Structure of Earnings Survey (SES)</i>	<i>Structural Business Survey (SBS)</i>
<i>Mining and quarrying (C)</i>	<i>7820,3</i>	<i>9981,2</i>
<i>Manufacturing (D)</i>	<i>57024,7</i>	<i>56535,2</i>
<i>Electricity , gas and water supply (E)</i>	<i>7574,7</i>	<i>8469,7</i>
<i>Construction (F)</i>	<i>9589,7</i>	<i>8993,6</i>
<i>Trade and repair ^ (G)</i>	<i>26338,5</i>	<i>22866,1</i>
<i>Hotels and restaurants (H)</i>	<i>2115,5</i>	<i>1557,7</i>
<i>Transport, storage and communication (I)</i>	<i>14878,8</i>	<i>16704,0</i>
<i>Real estate and business activities (K)</i>	<i>17594,2</i>	<i>14041,8</i>

Source:

Annual wages and salaries from SBS 2006 come from tabl. 18, page 48-60 of the publication "Economic units by type and place of activity in 2006" the PCSO, Warsaw 2007.

The graphic illustrations of above comparisons are placed in Annex 3.

6.3. Coherence with national accounts for the same year: national data

The following table summarises the comparison of both sources.

<i>Specification</i>	<i>Structure of Earnings Survey (SES)</i>	<i>National Accounts (NA)</i>
<ul style="list-style-type: none"> • <i>Activity coverage</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 Sections A+O</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 Sections A+O</i>
<ul style="list-style-type: none"> • <i>Variables for comparison between the two sources</i> 	<ul style="list-style-type: none"> • <i>Total number of full-time and part-time employees in the population in the reference month</i> • <i>Total gross annual earnings in the reference year</i> • <i>Total gross annual earnings per one employee in the reference year</i> 	<ul style="list-style-type: none"> • <i>Total number of all employed (full-time and part-time converted into full-time units)</i> • <i>Annual compensation of employees in the reference year</i> • <i>Annual compensation per one employee in the reference year</i>
<ul style="list-style-type: none"> • <i>Required activity breakdown</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 at the Section</i> 	<ul style="list-style-type: none"> • <i>NACE Rev.1 at the Section</i>

These two sources don't correspond well because compensation of employees from the NA are much higher than from the SES. These reasons for differences are connected with:

- ◆ differences in covered population – The NA cover all compensation of employed connected with employment of persons on the basis on different engagements. The SES covers only wages and salaries connected with employment of persons on the basis on full-time and part-time labour contract. Thus, the NA include compensation costs of apprentices, agents, outworkers, people who are not employees of units but they perform tasks for these units on the basis of order agreements. These type of persons are not included in the SES. The most important feature is also that the NA cover compensation costs in the hidden economy which are not included in the SES. The hidden economy has the significant impact on the level of compensation of employees

mainly in such sections as D, F,G,K (the hidden economy constitutes about 10-12% in compensation costs in mentioned sections).

- ◆ **differences in components** – The compensation of employed in NA is the component of gross value added in generation of income account and it covers e.g.: non- personal pays (pays based on the order agreements) for persons who perform tasks for units but they are not employed in units, commission wages and salaries, parliamentary allowances, funded scholarships. The SES wages and salaries don't cover mentioned above components that are counted to the NA.

➤ The comparison of total gross annual wages and salaries (in million PLN) from the SES and compensations from the National Accounts is presented below:

<i>Selected type of activities according to NACE rev.1</i>	<i>Structure of earnings survey (SES - 2006)</i>	<i>National Accounts (NA - 2006) Compensation of employed</i>
<i>Industry (C+D+E)</i>	<i>72419,7</i>	<i>104663</i>
<i>Mining and quarrying (C)</i>	<i>7820,3</i>	<i>13495</i>
<i>Manufacturing (D)</i>	<i>57024,7</i>	<i>79595</i>
<i>Electricity , gas and water supply (E)</i>	<i>7574,7</i>	<i>11573</i>
<i>Construction (F)</i>	<i>9589,7</i>	<i>21217</i>
<i>Trade and repair ^ (G)</i>	<i>26338,5</i>	<i>48934</i>
<i>Hotels and restaurants (H)</i>	<i>2115,5</i>	<i>5144</i>
<i>Transport, storage and communication (I)</i>	<i>14878,8</i>	<i>26266</i>
<i>Financial intermediation (J)</i>	<i>12680,6</i>	<i>15333</i>
<i>Real estate and business activities (K)</i>	<i>17594,2</i>	<i>31423</i>
<i>Education (M)</i>	<i>29767,1</i>	<i>40762</i>
<i>Health and social work (N)</i>	<i>15830,5</i>	<i>20982</i>
<i>Other community, social and personal service activities (O)</i>	<i>5141</i>	<i>15428</i>

Source: Data on national accounts come from table 16, pages 692-693 of Polish Yearbook 2007.

➤ The comparison of total gross annual wages and salaries per one employee (in PLN) from the SES and the National Accounts per one person employed is presented below:

<i>Selected type of activities according to NACE rev.1</i>	<i>Structure of earnings survey (SES - 2006)</i>	<i>National Accounts (NA - 2006) Compensation of employed</i>
<i>Industry (C+D+E)</i>	<i>31423,24</i>	<i>35421,35</i>
<i>Mining and quarrying (C)</i>	<i>52951,74</i>	<i>73342,39</i>
<i>Manufacturing (D)</i>	<i>28925,81</i>	<i>31162,4</i>
<i>Electricity , gas and water</i>	<i>40822,1</i>	

<i>supply (E)</i>		53430,29
<i>Construction (F)</i>	28603,31	30514,89
<i>Trade and repair ^ (G)</i>	26431,86	23012,6
<i>Hotels and restaurants (H)</i>	20985,27	22601,05
<i>Transport, storage and communication (I)</i>	34003,06	35030,67
<i>Financial intermediation (J)</i>	59394,81	48955,94
<i>Real estate and business activities (K)</i>	32095,93	30770,66
<i>Education (M)</i>	31081,18	39417,85
<i>Health and social work (N)</i>	26646,06	27909,02
<i>Other community, social and personal service activities (O)</i>	29174,91	40472,19

The graphic illustration of this comparison is included in Annex 3.

6.4. Coherence with data about earnings from annual survey on employment, earnings and working time for the same year:

The following table summarises the comparison of both sources:

<i>Specification</i>	<i>Structure of Earnings Survey (SES)</i>	<i>Annual survey on employment, earnings and working time</i>
• <i>Activity coverage</i>	• <i>NACE Rev.1 Sections A÷O</i>	• <i>NACE Rev.1 Sections A÷O</i>
• <i>Variables for comparison between the two sources</i>	• <i>Gross annual wages and salaries in the reference year per one employee</i>	• <i>Gross annual earnings of employees in reference year per one employee</i>
• <i>Required activity breakdown</i>	• <i>NACE Rev.1 at the Section</i>	• <i>NACE Rev.1 at the Section (army forces are not covered)</i>

➤ The comparison of total gross annual wages and salaries per one employee from the SES and the Annual survey on employment, earnings and working time is presented below:

<i>Selected type of activities according to NACE rev.1</i>	<i>Structure of earnings survey (SES - 2006)</i>	<i>Annual survey on employment, earnings and working time (questionnaire Z-06)</i>
<i>Industry (C+D+E)</i>	31423,24	29983,6
<i>Mining and quarrying (C)</i>	52951,74	54842,9
<i>Manufacturing (D)</i>	28925,81	26951,4
<i>Electricity, gas and water</i>		

<i>supply (E)</i>	<i>40822,1</i>	<i>41416,4</i>
<i>Construction (F)</i>	<i>28603,31</i>	<i>24494</i>
<i>Trade and repair ^ (G)</i>	<i>26431,86</i>	<i>24170</i>
<i>Hotels and restaurants (H)</i>	<i>20985,27</i>	<i>18711,1</i>
<i>Transport, storage and communication (I)</i>	<i>34003,06</i>	<i>31800,4</i>
<i>Financial intermediation (J)</i>	<i>59394,81</i>	<i>53693,5</i>
<i>Real estate and business activities (K)</i>	<i>32095,93</i>	<i>31351,3</i>
<i>Public administration and defence; compulsory social security (L)</i>	<i>40095,34</i>	<i>38575,9</i>
<i>Education (M)</i>	<i>31081,18</i>	<i>30877,4</i>
<i>Health and social work (N)</i>	<i>26646,06</i>	<i>25221,8</i>
<i>Other community, social and personal service activities (O)</i>	<i>29174,91</i>	<i>28623,4</i>

7. COMPLETENESS

Completeness refers to statistics provided and statistics requested.

1. All mandatory variables are available from Polish SES 2006.

2. Optional variables which are missing in records A describing local units (they are not available from the Polish SES 2006):

- A17 – affiliation of the local unit to a group,*
- Key_B – Key identifying the enterprise.*

3. Optional variables which are missing in records B describing sampled employees in local units (they are not available from the Polish SES 2006):

- B24 - management position/supervisory position,*
- B29 - citizenship,*
- B34 – other annual days of paid absence,*
- B412 – annual payments in kind,*
- B423 – compulsory social contributions and taxes paid by the employer on behalf of the employee,*
- B4231 – compulsory social security contributions,*
- B4232 – taxes.*

4. Lack of possibility to distinguish in variable B25 separately educational levels for ISCED 5A and ISCED 6 (codes 05, 06). To complete data by ISCED level necessary assessments were taken (for people with tertiary education and length of service less than

10 years was selected the code 05-ISCED 5A, for others with tertiary education and length of service more than 10 years was selected the code 06- ISCED 6 in transmitted data).

5. Type of economic activity of NACE which is not covered:

- NACE 12 – Mining of uranium and thorium ores doesn't exist in Poland*
- NACE 91- Activities of membership organizations are not covered by the SES 2006.*

6. Occupation code ISCO'88 0 (army forces) is not covered by the SES 2006.

CONCLUSIONS

This report covers main information on the data quality. It is worth to stress that Polish SES 2006 includes all mandatory variables, thus quality of SES 2006 is accordant with Eurostat's requests.

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 1 A Average monthly gross earnings of employees by status of employee, sections and sex as for October 2006 (coefficients of variation)

Specification - Sections Nace	Total	Men	Women
Total	0.4	0.4	0.3
Full-time employees	0.4	0.5	0.4
Part-time employees	0.9	1.3	0.9
Agriculture, hunting and forestry (A)	2.1	2.2	3.0
Fishing (B)	8.0	7.6	12.0
Mining and quarrying (C)	0.7	0.7	1.9
Manufacturing (D)	0.7	0.7	0.9
Electricity, gas and water supply (E)	1.3	1.2	1.9
Construction (F)	1.8	1.8	3.2
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)	1.4	1.8	1.1
Hotels and restaurants (H)	2.5	3.5	2.4
Transport, storage and communication (I)	1.2	1.4	1.2
Financial intermediation (J)	1.9	2.7	1.4
Real estate, renting and business activities (K)	2.1	2.5	2.2
Public administration and defence; compulsory social security (L)	1.0	1.3	1.0
Education (M)	0.4	0.7	0.3
Health and social work (N)	0.7	1.3	0.6
Other community, social and personal service activities (O)	2.1	2.5	2.2

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 1 B Hourly gross earnings of employees by status of employee, sections and sex as for October 2006 (coefficients of variation)

Total	0.3	0.4	0.3
Full-time employees	0.3	0.5	0.4
Part-time employees	0.8	1.2	0.9
Agriculture, hunting and forestry (A)	2.1	2.2	3.0
Fishing (B)	8.1	7.9	12.0
Mining and quarrying (C)	0.8	0.7	2.0
Manufacturing (D)	0.7	0.7	0.9
Electricity, gas and water supply (E)	1.3	1.2	1.9
Construction (F)	1.8	1.7	3.2
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)	1.4	1.8	1.1
Hotels and restaurants (H)	2.6	3.5	2.6
Transport, storage and communication (I)	1.2	1.4	1.2
Financial intermediation (J)	1.9	2.7	1.4
Real estate, renting and business activities (K)	2.1	2.5	2.2
Public administration and defence; compulsory social security (L)	1.0	1.3	1.0
Education (M)	0.4	0.6	0.5
Health and social work (N)	0.7	1.3	0.7
Other community, social and personal service activities (O)	2.1	2.5	2.2

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 2A Average monthly gross earnings of employees by occupations and sex (1-digit level of ISCO'88) as for October 2006 (coefficients of variation)

Specification - Occupations	Total	Men	Women
Legislators, senior officials and managers (1.)	0.9	1.0	0.9
Professionals (2.)	0.5	0.8	0.4
Technicians and associate professionals (3.)	0.5	0.8	0.5
Clerks (4.) (0.5	0.7	0.5
Service workers and shop and market sales workers (5.)	0.7	1.3	0.6
Skilled agricultural and fishery workers (6.)	3.2	3.7	3.4
Craft and related trades workers (7.)	0.5	0.5	0.9
Plant and machine operators and assemblers (8.)	0.5	0.5	0.9
Elementary occupations (9.)	0.5	0.7	0.5

Remark: Coefficient of variation of monthly gross earnings of employees by occupations refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 2B Hourly gross earnings of employees by occupations and sex (1-digit level of ISCO'88) as for October 2006 (coefficients of variation)

Specification - Occupations	Total	Men	Women
Legislators, senior officials and managers (1.)	0.9	1.0	0.9
Professionals (2.)	0.4	0.6	0.4
Technicians and associate professionals (3.)	0.5	0.8	0.5
Clerks (4.)	0.5	0.7	0.5
Service workers and shop and market sales workers (5.)	0.7	1.3	0.6
Skilled agricultural and fishery workers (6.)	3.1	3.7	3.4
Craft and related trades workers (7.)	0.5	0.5	0.9
Plant and machine operators and assemblers (8.)	0.5	0.5	0.9
Elementary occupations (9.)	0.5	0.7	0.5

Remark: Coefficient of variation of hourly gross earnings of employees by occupations refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

**Tabl. 3A Average monthly gross earnings of employees by age and sex as for October 2006
(coefficients of variation)**

Specification - Age bands	Total	Men	Women
under 20	1.2	1.4	1.8
20-29	0.5	0.5	0.6
30-39	0.5	0.7	0.5
40-49	0.4	0.6	0.4
50-59	0.4	0.6	0.5
60 and more	1.2	1.3	1.9

Remark :Coefficient of variation of monthly gross earnings of employees by age refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

**Tabl. 3B Hourly gross earnings of employees by age and sex as for October 2006
(coefficients of variation)**

Specification - Age bands	Total	Men	Women
under 20	1.1	1.3	1.6
20-29	0.4	0.5	0.6
30-39	0.5	0.7	0.5
40-49	0.4	0.6	0.4
50-59	0.4	0.6	0.5
60 and more	1.2	1.3	1.8

Remark: Coefficient of variation of hourly gross earnings of employees by age refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 4A Average monthly gross earnings of employees by NUTS 1 and sex as for October 2006 (coefficients of variation)

Specification - NUTS 1	Total	Men	Women
PL1	0.9	1.2	0.9
PL2	0.7	0.9	0.7
PL3	0.8	0.9	0.8
PL4	0.8	1.1	0.8
PL5	1.1	1.4	1.1
PL6	0.9	1.2	0.9

Remark :Coefficient of variation of monthly gross earnings of employees by NUTS 1 refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

**Tabl. 4B Hourly gross earnings of employees by NUTS 1 and sex as for October 2006
(coefficients of variation)**

Specification - NUTS 1	Total	Men	Women
PL1	0.9	1.2	0.9
PL2	0.7	0.9	0.8
PL3	0.8	0.9	1.0
PL4	0.8	1.0	1.0
PL5	1.1	1.4	1.2
PL6	0.9	1.2	1.1

Remark :Coefficient of variation of monthly gross earnings of employees by NUTS 1 and sex refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 5A Monthly gross earnings of employees by education (ISCED'97) and sex as for October 2006 (coefficients of variation)

Specification - Education level	Total	Men	Women
<i>ISCED 0 level</i>	0.5	0.6	0.5
<i>ISCED 1 level</i>	2.2	2.6	2.0
<i>ISCED 2 level</i>	0.4	0.4	0.4
<i>ISCED 3 level</i>	0.3	0.4	0.3
<i>ISCED 4 level</i>	0.5	1.0	0.5
<i>ISCED 5 level</i>	0.7	1.0	0.7
<i>ISCED 6 level</i>	0.6	0.9	0.4

Remark: Coefficient of variation of monthly gross earnings of employees by education refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 5B. Hourly gross earnings of employees by education (ISCED'97) and sex as for October 2006 (coefficients of variation)

Specification - Education level	Total	Men	Women
<i>ISCED 0 level</i>	0.5	0.6	0.5
<i>ISCED 1 level</i>	2.2	2.6	2.0
<i>ISCED 2 level</i>	0.4	0.4	0.4
<i>ISCED 3 level</i>	0.3	0.4	0.3
<i>ISCED 4 level</i>	0.5	1.0	0.5
<i>ISCED 5 level</i>	0.7	1.0	0.7
<i>ISCED 6 level</i>	0.6	0.9	0.4

Remark: Coefficient of variation of hourly gross earnings of employees by education refers to coverage of sections A-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 6A. Monthly gross earnings of employees by size of enterprise and sex as for October 2006 (coefficients of variation)

Specification - Size of enterprise	Total	Men	Women
10 - 49	0.7	1.1	0.6
50 - 249	0.7	0.8	0.7
250 - 499	1.4	1.5	1.7
500 - 999	1.5	1.8	1.3
1000 and more	0.5	0.5	0.6

Remark: Coefficient of variation on monthly gross earnings refers to employees by size of enterprise from sections A-O

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 6B. Hourly gross earnings of employees by size of enterprise and sex as for October 2006 (coefficients of variation)

Specification - Size of enterprise	Total	Men	Women
10 - 49	0.7	1.1	0.6
50 - 249	0.7	0.8	0.7
250 - 499	1.4	1.5	1.7
500 - 999	1.5	1.8	1.3
1000 and more	0.5	0.5	0.6

Remark : Coefficient of variation on hourly gross earnings refers to employees by size of enterprise from sections A-O

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 1 A Average monthly gross earnings of employees by status of employee, sections and sex as for October 2006 (coefficients of variation)

Specification - Sections Nace	Total	Men	Women
Total	0.4	0.5	0.3
Full-time employees	0.4	0.5	0.4
Part-time employees	0.9	1.3	0.9
Mining and quarrying (C)	0.7	0.7	1.9
Manufacturing (D)	0.7	0.7	0.9
Electricity, gas and water supply (E)	1.3	1.2	1.9
Construction (F)	1.8	1.8	3.2
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)	1.4	1.8	1.1
Hotels and restaurants (H)	2.5	3.5	2.4
Transport, storage and communication (I)	1.2	1.4	1.2
Financial intermediation (J)	1.9	2.7	1.4
Real estate, renting and business activities (K)	2.1	2.5	2.2
Public administration and defence; compulsory social security (L)	1.0	1.3	1.0
Education (M)	0.4	0.7	0.3
Health and social work (N)	0.7	1.3	0.6
Other community, social and personal service activities (O)	2.1	2.5	2.2

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 1 B Hourly gross earnings of employees by status of employee, sections and sex as for October 2006 (coefficients of variation)

Specification - Sections Nace	Total	Men	Women
Total	0.3	0.4	0.3
Full-time employees	0.4	0.5	0.4
Part-time employees	0.8	1.2	0.9
Mining and quarrying (C)	0.8	0.7	2.0
Manufacturing (D)	0.7	0.7	0.9
Electricity, gas and water supply (E)	1.3	1.2	1.9
Construction (F)	1.8	1.7	3.2
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)	1.4	1.8	1.1
Hotels and restaurants (H)	2.6	3.5	2.6
Transport, storage and communication (I)	1.2	1.4	1.2
Financial intermediation (J)	1.9	2.7	1.4
Real estate, renting and business activities (K)	2.1	2.5	2.2
Public administration and defence; compulsory social security (L)	1.0	1.3	1.0
Education (M)	0.4	0.6	0.5
Health and social work (N)	0.7	1.3	0.7
Other community, social and personal service activities (O)	2.1	2.5	2.2

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 2A Average monthly gross earnings of employees by occupations and sex (1-digit level of ISCO'88) as for October 2006 (coefficients of variation)

Specification - Occupations	Total	Men	Women
Legislators, senior officials and managers (1.)	0.9	1.1	0.9
Professionals (2.)	0.5	0.8	0.4
Technicians and associate professionals (3.)	0.5	0.8	0.5
Clerks (4.) (Pracownicy biurowi)	0.5	0.7	0.5
Service workers and shop and market sales workers (5.)	0.7	1.4	0.6
Skilled agricultural and fishery workers (6.)	4.7	4.2	7.8
Craft and related trades workers (7.)	0.5	0.5	0.9
Plant and machine operators and assemblers (8.)	0.5	0.5	0.9
Elementary occupations (9.)	0.5	0.8	0.5

Remark: Coefficient of variation of monthly gross earnings of employees by occupations refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation EC No 698/2006)

Tabl. 2B Hourly gross earnings of employees by occupations and sex (1-digit level of ISCO'88) as for October 2006 (coefficients of variation)

Specification - Occupations	Total	Men	Women
Legislators, senior officials and managers (1.)	0.9	1.1	0.9
Professionals (2.)	0.4	0.6	0.4
Technicians and associate professionals (3.)	0.5	0.8	0.5
Clerks (4.)	0.5	0.7	0.5
Service workers and shop and market sales workers (5.)	0.7	1.4	0.6
Skilled agricultural and fishery workers (6.)	4.8	4.3	7.8
Craft and related trades workers (7.)	0.5	0.5	0.9
Plant and machine operators and assemblers (8.)	0.5	0.5	0.9
Elementary occupations (9.)	0.5	0.7	0.5

Remark: Coefficient of variation of hourly gross earnings of employees by occupations refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

**Tabl. 3A Average monthly gross earnings of employees by age and sex as for October 2006
(coefficients of variation)**

Specification - Age bands	Total	Men	Women
under 20	1.2	1.4	1.8
20-29	0.5	0.5	0.6
30-39	0.5	0.7	0.5
40-49	0.4	0.6	0.4
50-59	0.4	0.6	0.5
60 and more	1.2	1.3	1.9

Remark :Coefficient of variation of monthly gross earnings of employees by age refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

**Tabl. 3B Hourly gross earnings of employees by age and sex as for October 2006
(coefficients of variation)**

Specification - Age bands	Total	Men	Women
under 20	1.1	1.3	1.6
20-29	0.4	0.5	0.6
30-39	0.5	0.7	0.5
40-49	0.4	0.6	0.4
50-59	0.4	0.6	0.5
60 and more	1.2	1.3	1.8

Remark: Coefficient of variation of hourly gross earnings of employees by age refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 4A Average monthly gross earnings of employees by NUTS 1 and sex as for October 2006 (coefficients of variation)

Specification - NUTS 1	Total	Men	Women
PL1	1.0	1.2	0.9
PL2	0.7	0.9	0.7
PL3	0.8	0.9	0.8
PL4	0.8	1.1	0.8
PL5	1.1	1.4	1.1
PL6	0.9	1.2	0.9

Remark :Coefficient of variation of monthly gross earnings of employees by NUTS 1 refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

**Tabl. 4B Hourly gross earnings of employees by NUTS 1 and sex as for October 2006
(coefficients of variation)**

Specification - NUTS 1	Total	Men	Women
PL1	0.9	1.2	0.9
PL2	0.7	0.9	0.8
PL3	0.8	0.9	1.0
PL4	0.8	1.1	1.0
PL5	1.1	1.4	1.2
PL6	0.9	1.2	1.1

Remark :Coefficient of variation of hourly gross earnings of employees by NUTS 1 and sex refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 5A Monthly gross earnings of employees by education (ISCED'97) and sex as for October 2006 (coefficients of variation)

Specification - Education level	Total	Men	Women
<i>ISCED 0 level</i>	0.5	0.6	0.5
<i>ISCED 1 level</i>	2.2	2.7	2.0
<i>ISCED 2 level</i>	0.4	0.4	0.4
<i>ISCED 3 level</i>	0.3	0.4	0.4
<i>ISCED 4 level</i>	0.5	1.0	0.5
<i>ISCED 5 level</i>	0.7	1.0	0.7
<i>ISCED 6 level</i>	0.6	0.9	0.4

Remark: Coefficient of variation of monthly gross earnings of employees by education refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 5B. Hourly gross earnings of employees by education (ISCED'97) and sex as for October 2006 (coefficients of variation)

<i>Specification - Education level</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>
<i>ISCED 0 level</i>	0.5	0.6	0.5
<i>ISCED 1 level</i>	2.2	2.7	2.0
<i>ISCED 2 level</i>	0.4	0.4	0.4
<i>ISCED 3 level</i>	0.3	0.4	0.4
<i>ISCED 4 level</i>	0.5	1.0	0.5
<i>ISCED 5 level</i>	0.7	1.0	0.7
<i>ISCED 6 level</i>	0.6	0.9	0.4

Remark: Coefficient of variation of hourly gross earnings of employees by education refers to coverage of sections C-O by NACE rev.1

ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 6A. Monthly gross earnings of employees by size of enterprise and sex as for October 2006 (coefficients of variation)

Specification - Size of enterprise	Total	Men	Women
10 - 49	0.8	1.1	0.6
50 - 249	0.7	0.9	0.7
250 - 499	1.4	1.5	1.7
500 - 999	1.5	1.8	1.3
1000 and more	0.5	0.5	0.6

Remark : Coefficient of variation on monthly gross earnings refers to employees by size of enterprise from sections C-O

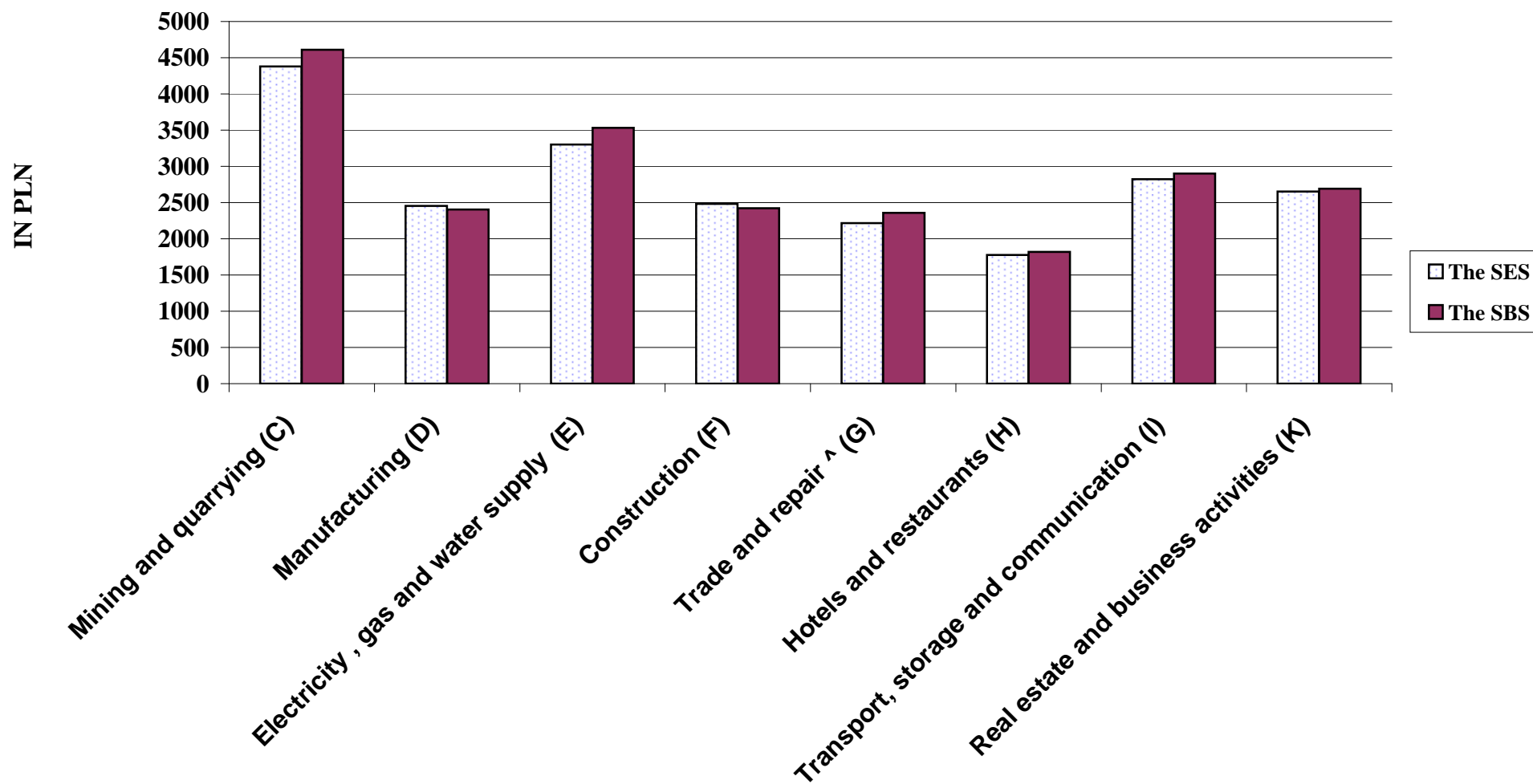
ANNEX 1 - VARIANCE ANALYSES (refers to Commission Regulation No 698/2006)

Tabl. 6B. Hourly gross earnings of employees by size of enterprise and sex as for October 2006 (coefficients of variation)

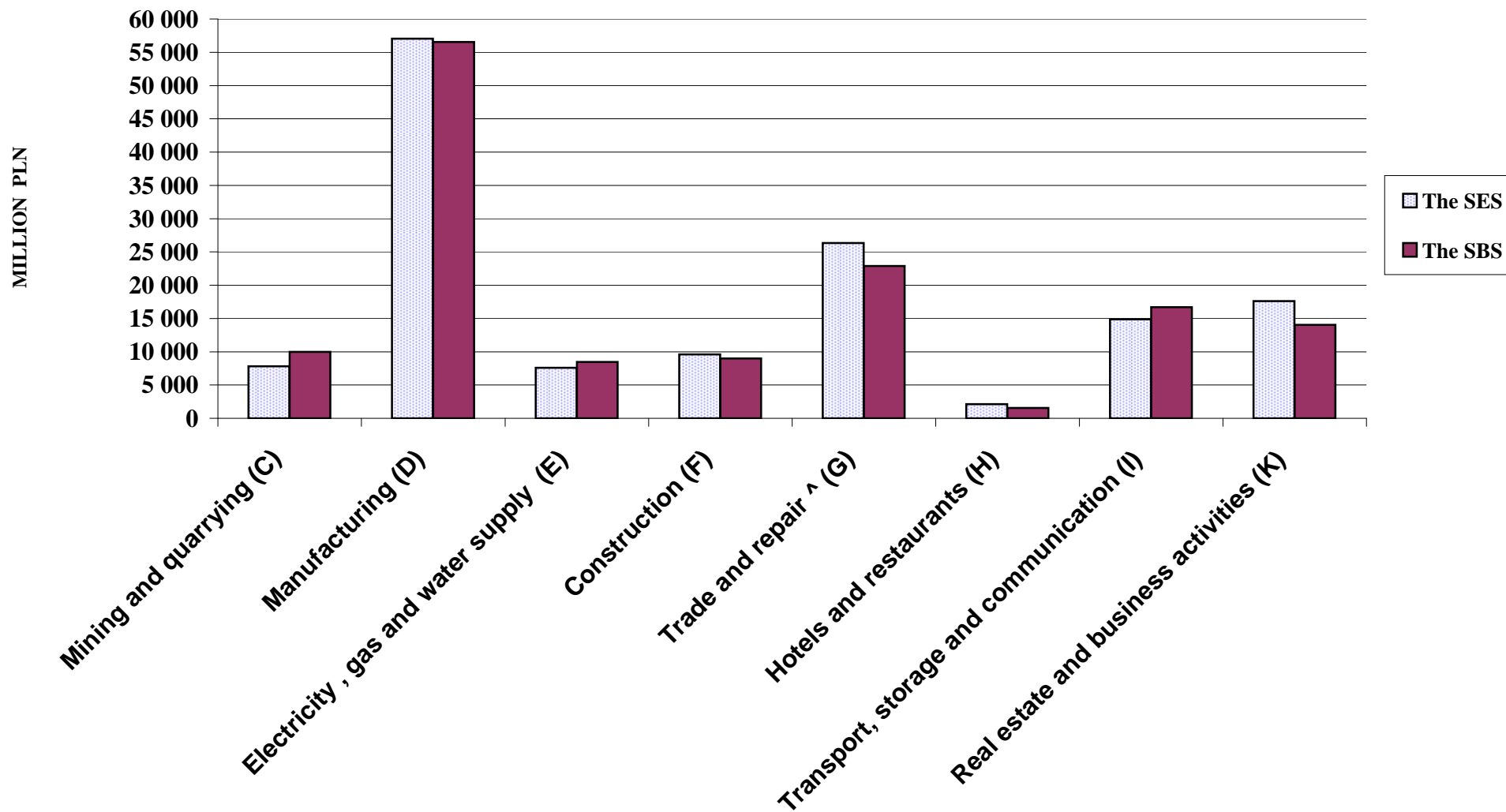
Specification - Size of enterprise	Total	Men	Women
10 - 49	0.8	1.1	0.6
50 - 249	0.7	0.9	0.7
250 - 499	1.4	1.5	1.7
500 - 999	1.5	1.8	1.3
1000 and more	0.5	0.5	0.6

Remark : Coefficient of variation on hourly gross earnings refers to employees by size of enterprise from sections C-O

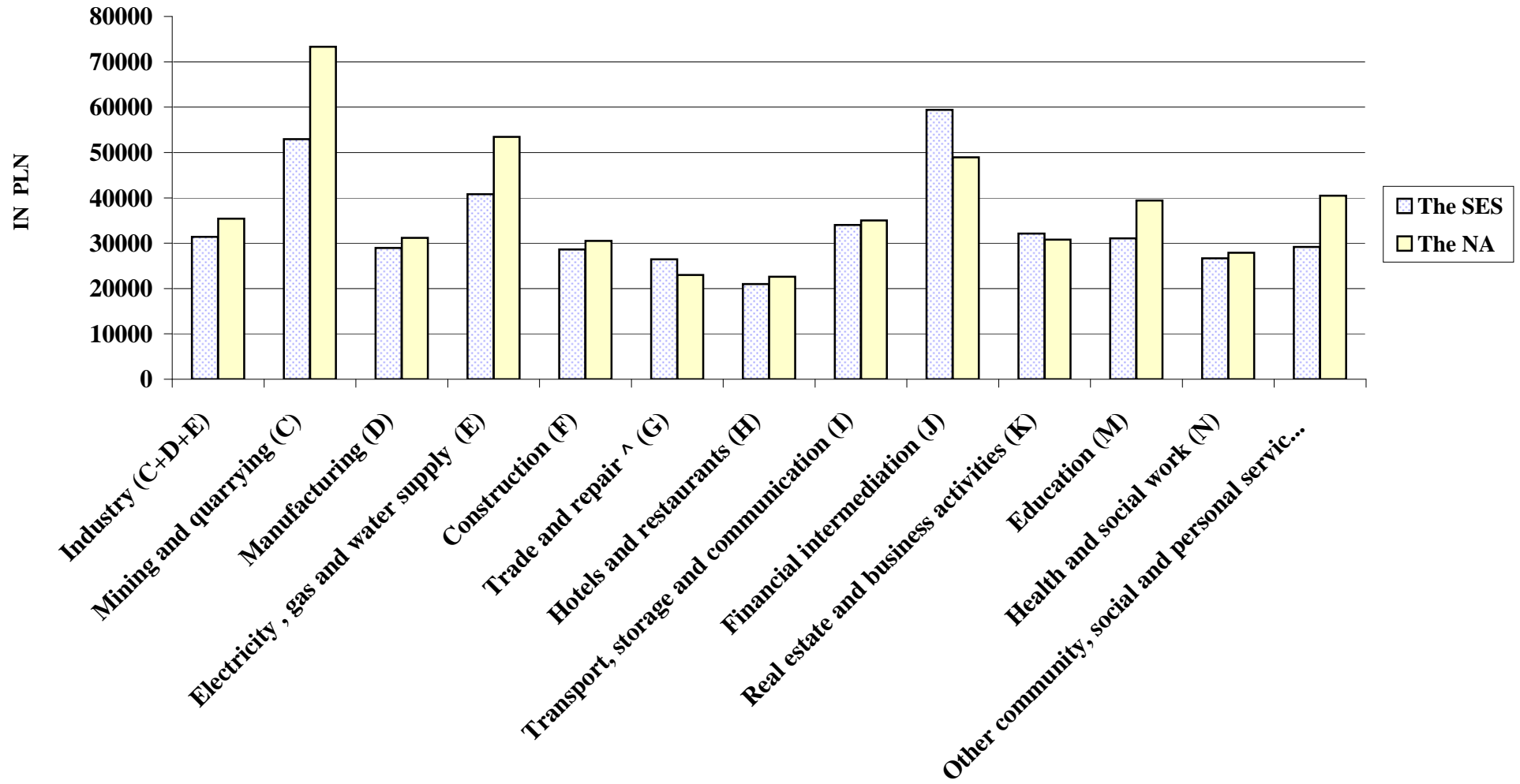
**THE COMPARISON OF AVERAGE EARNINGS FROM THE SES 2006 AND THE SBS 2006
(monthly basis)**



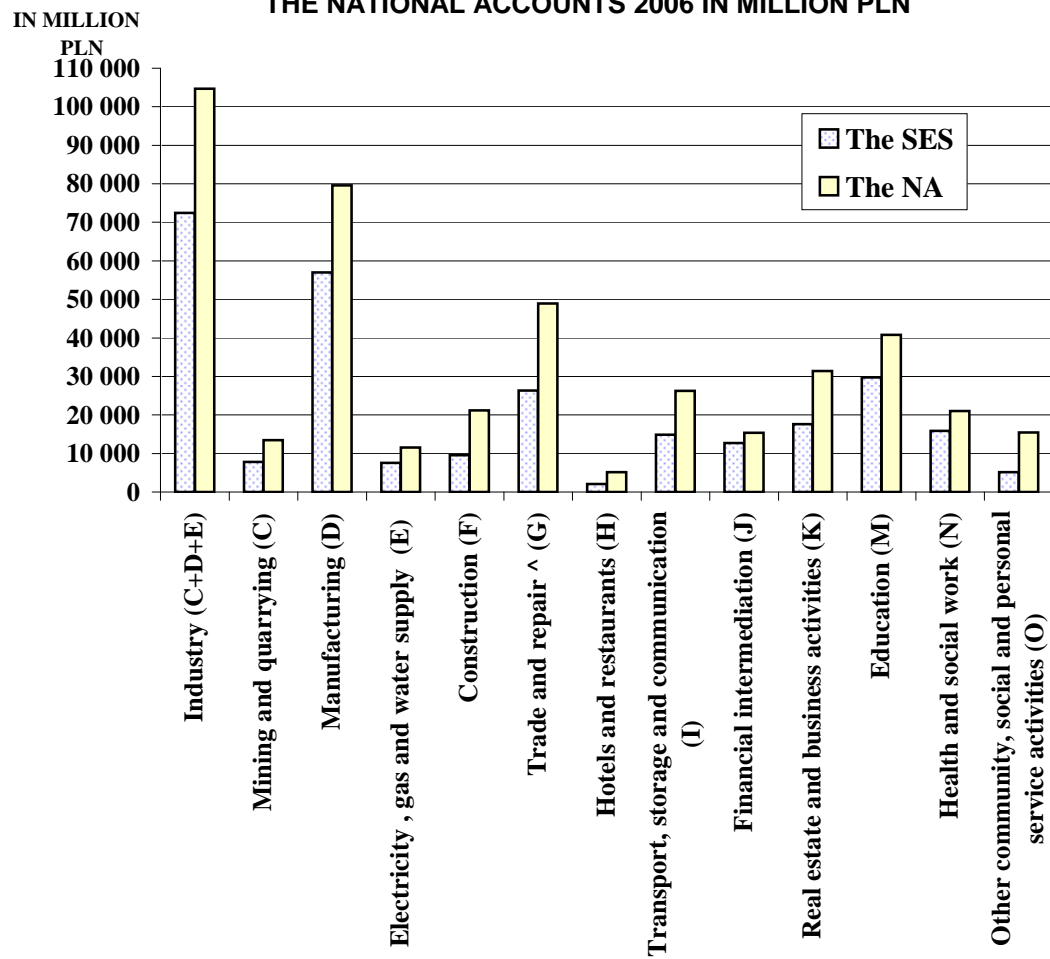
THE COMPARISON OF ANNUAL WAGES AND SALARIES FROM THE SES 2006 AND THE SBS 2006



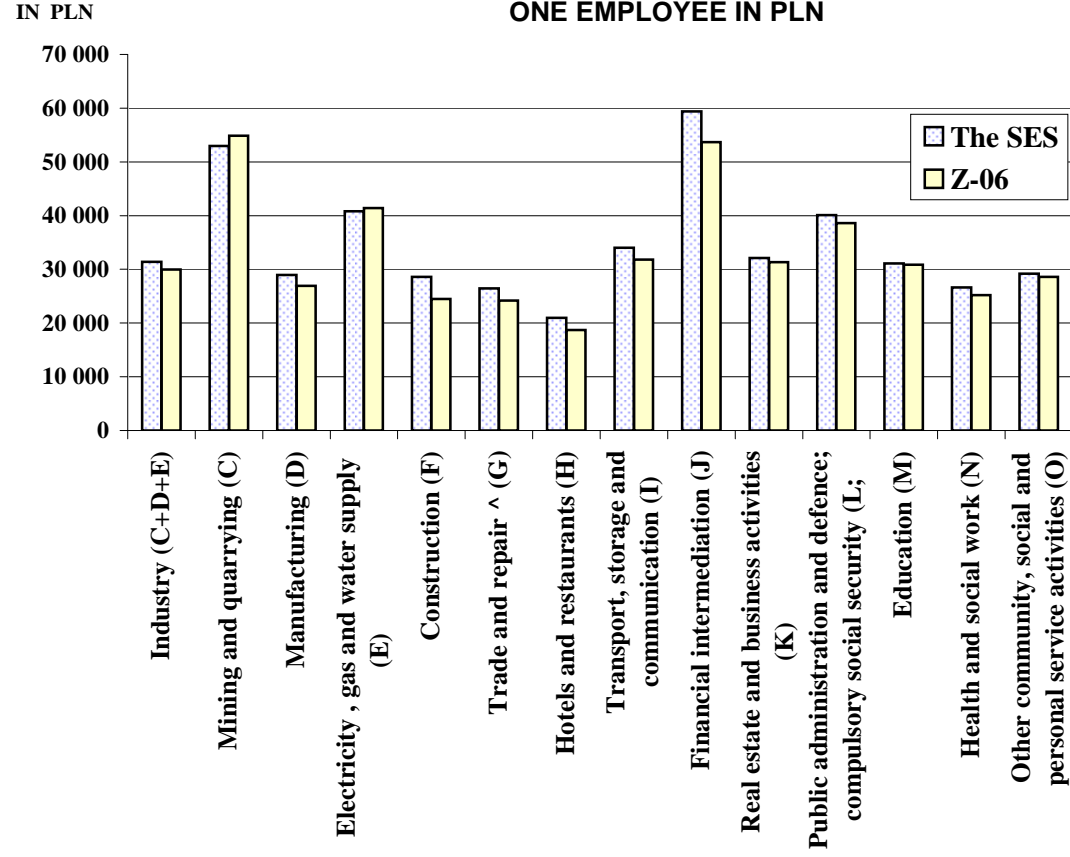
**THE COMPARISON OF ANNUAL WAGES AND SALARIES FROM THE SES 2006 PER ONE EMPLOYEE AND
COMPENSATIONS FROM THE NATIONAL ACCOUNTS 2006 PER ONE PERSON EMPLOYED IN PLN**



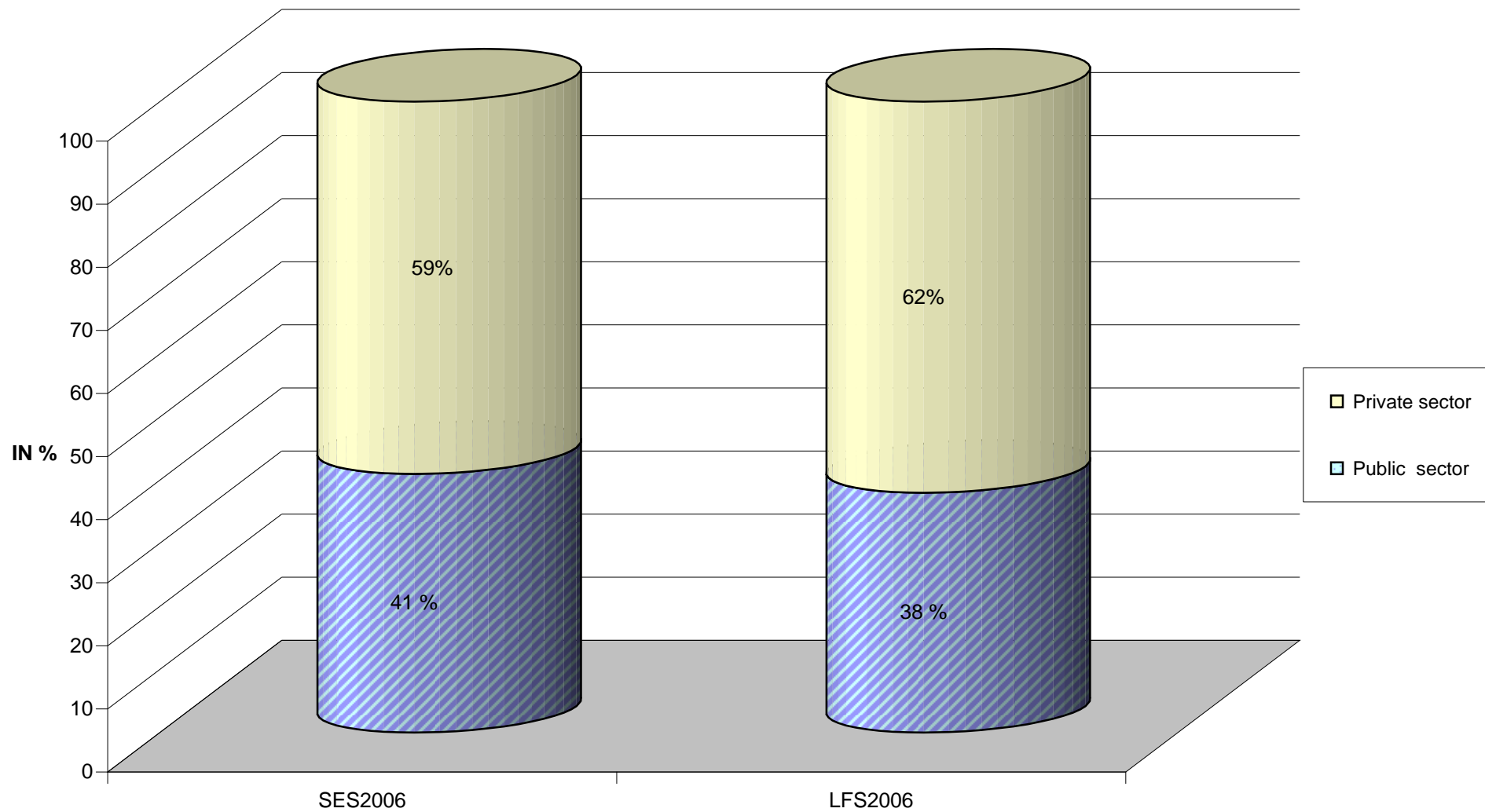
**THE COMPARISON OF ANNUAL WAGES AND SALARIES FROM THE
SES 2006 AND COMPENSATIONS FROM
THE NATIONAL ACCOUNTS 2006 IN MILLION PLN**



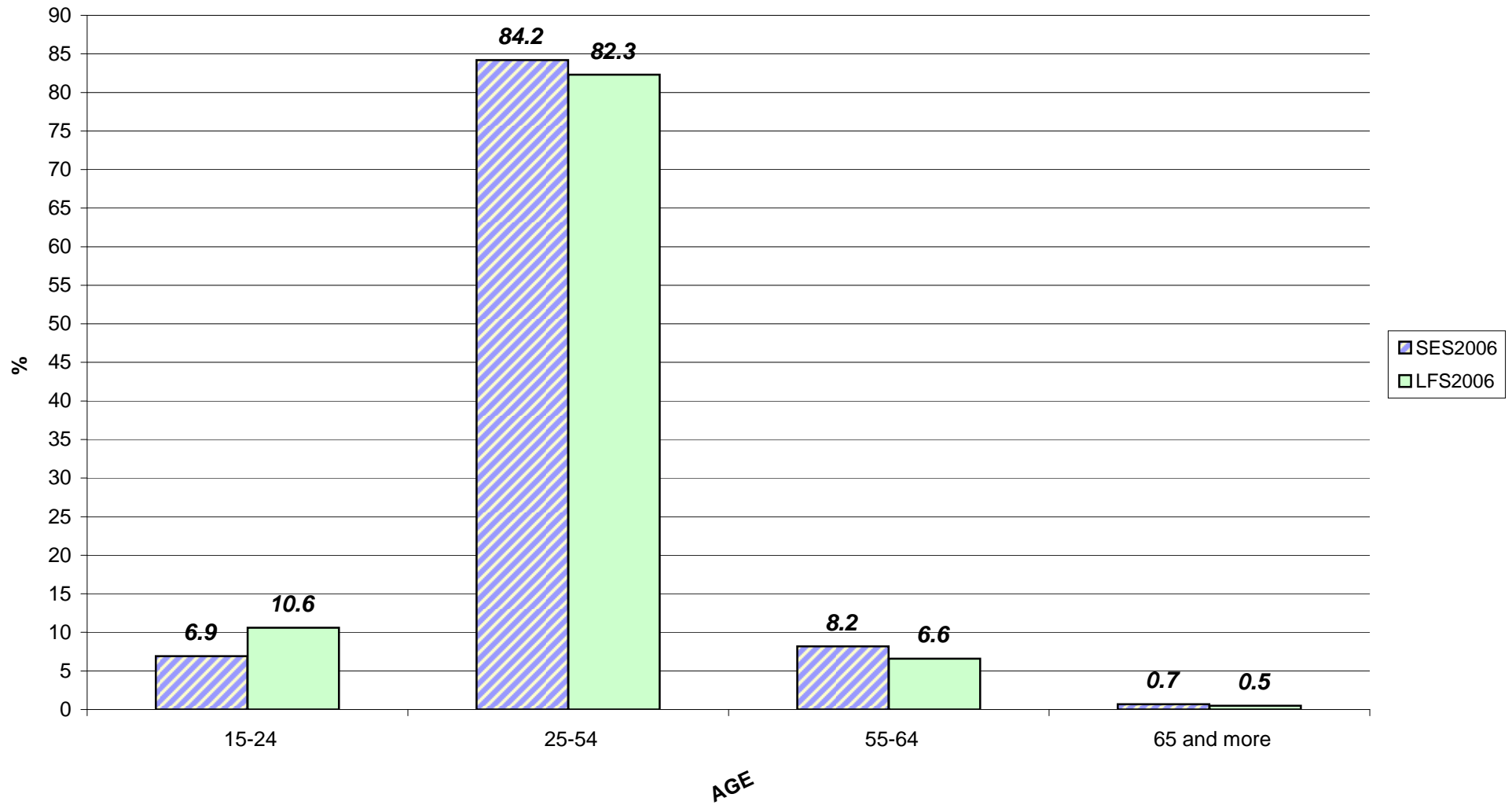
THE COMPARISON OF THE TOTAL GROSS ANNUAL WAGES AND SALARIES FORM THE SES AND EARNINGS FROM ANNUAL SURVEY ON EMPLOYMENT, EARNINGS AND WORKING TIME (Z-06) IN 2006 PER ONE EMPLOYEE IN PLN



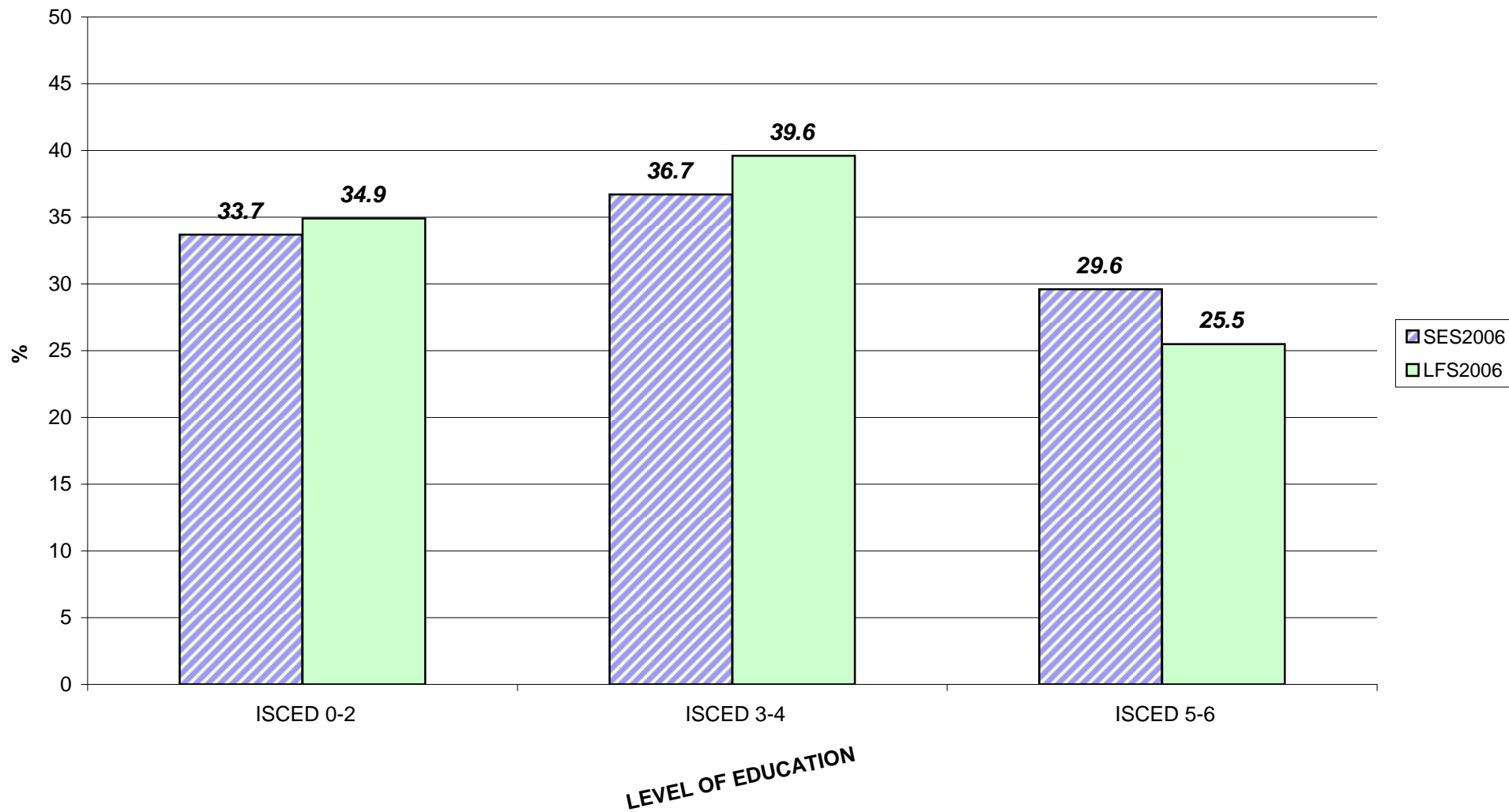
THE STRUCTURE OF EMPLOYEES BY ECONOMIC CONTROL IN SES AND LFS



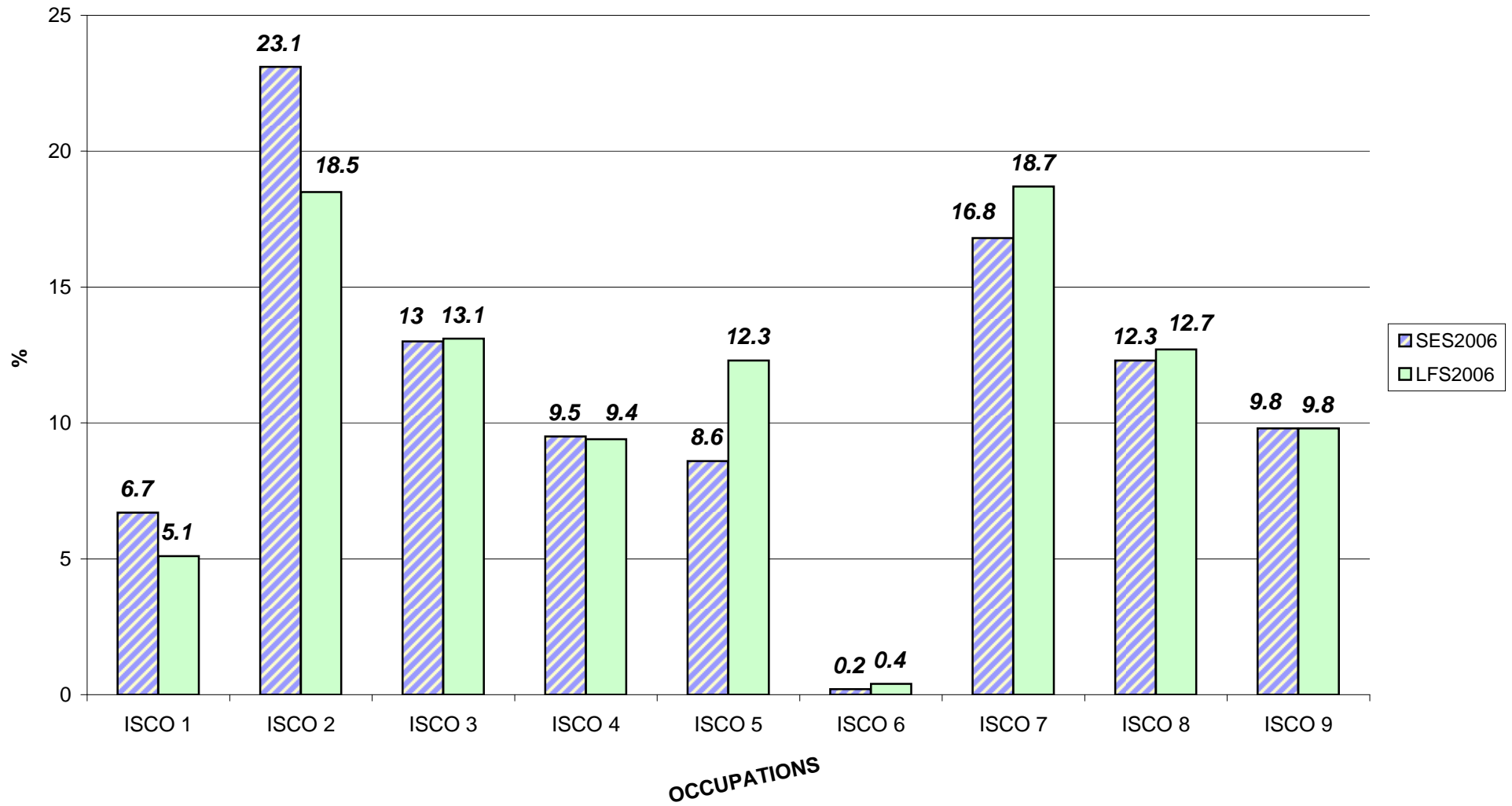
THE STRUCTURE OF HIRED EMPLOYEES BY AGE IN SES AND LFS



THE STRUCTURE OF HIRED EMPLOYEES BY LEVEL OF EDUCATION IN SES AND LFS



THE STRUCTURE OF HIRED EMPLOYEES BY OCCUPATIONS IN SES AND IN LFS





Name and address of the reporting unit	REGON statistical number	Z-12 Report on the structure of earnings by occupations for 2006	Recipient: Statistical Office in
	Code of basic economic activity according to NACE - state on October 31, 2006 [][][][][]		submit/send by March 31, 2007

from the Decree of the Council of Ministers of July 19, 2005 on Program of Statistical Surveys of the Public Statistics for the year 2006 (Journal of Laws No. 178, item 1482, with later amendments).

E-mail of the director/board president secretariat //

Part I. Data concerning the reporting unit - as of the state on October 31, 2006

Earnings determined (please insert appropriate code) in: 1 - over-establishment labour agreement, 2 - establishment related labour agreement, 3 - on the basis of other remuneration regulations	The number of the employed persons	The number of the employees (meeting the survey conditions)	The number of sheets	Sheet No.
A1	A2	A3	A4	A5

Part II. Data on persons selected to the survey

		0	1	2	3	4	5	6	7
The code of the selected employee		B1							
as of the state on October 31, 2006	The name of the performed occupation	B2							
	Code of	performed occupation (4 digits)	B3						
		sex ^{a)}	B4						
		level of completed education ^{b)}	B5						
		type of employment contract ^{c)}	B6						
	Year of birth (insert two last digits of the year)	B7							
	Total work seniority (duration) in which in reporting unit	B8 B9							
For October 2006	The total number of hours paid (by establishment) for October	in hours (with two decimal places)	C1						
	in which worked in		nominal working time	C2					
			overtime	C3					
	Monthly indicator of volume of work (in full-time jobs, with two decimal places)	C4							
	Total gross personal earnings for October	in PLN (with two decimal places)	C5						
	in which		basic earnings	C6					
			payments for overtime	C7					
			bonuses for shift work	C8					
			seniority bonuses	C9					
			prizes and bonuses	C10					
	Fees - treated as employees' remuneration	C11							
For 2006	The total number of hours paid (by establishment)	in hours (with two decimal places)	D1						
	in which for overtime		D2						
	The sum of the monthly indicators of volume of work (in full-time jobs, with two decimal places)	D3							
	Total gross personal earnings	in PLN (with two decimal places)	D4						
	in which		payments for overtime	D5					
			prizes and bonuses	D6					
	Fees - treated as employees' remuneration		D7						
	Additional annual remuneration for the employees of budgetary sphere units	D8							
	Payments due to participation in profit or balance surpluses in cooperatives	D9							
In 2006	The total number of hours not worked	in hours (without decimal places)	D10						
	in which because of		vacation	D11					
			unpaid leave, of hours paid from the Social Insurance Institutions	D12					

a) 1 - man, 2 - woman;
b) 1-tertiary with scientific degree of at least Ph.D. or the title of master, medical doctor or equal,
2 - tertiary with the title of engineer, licentiate, certified economist or equivalent, 3 - postsecondary, 4 - vocational secondary,
5 - general secondary, 6 - basic vocational, 7 - lower secondary (gimnazjum), 8 - primary and incomplete primary;
c) 1 - for indefinite duration 2 - for determined duration, 3 - other.

Part II. Data on persons selected to the survey (cont.)

0			8	9	10	11	12	13	14
The code of the selected employee			B1						
As of the state on October 31, 2006	The name of the performed occupation		B2						
	Code of	performed occupation (4 digits)	B3						
		sex ^{a)}	B4						
		level of completed education ^{b)}	B5						
		type of employment contract ^{c)}	B6						
	Year of birth (insert two last digits of the year)		B7						
	Total work seniority (duration)		in years (with one decimal place)	B8					
	in which in reporting unit			B9					
for October 2006	The number of hours paid (by establishment) for October		in hours (with two decimal places)	C1					
	in which worked in	nominal working time		C2					
		overtime		C3					
	Monthly indicator of volume of work (in full-time jobs, with two decimal places)			C4					
	Total gross personal earnings for October		in PLN (with two decimal places)	C5					
	in which	basic earnings		C6					
		payments for overtime		C7					
		bonuses for shift work		C8					
		seniority bonuses		C9					
		prizes and bonuses		C10					
	Fees - treated as employees' remuneration		C11						
for 2006	The total number of hours paid (by establishment)		in hours (with two decimal places)	D1					
	in which for overtime			D2					
	The sum of the monthly indicators of volume of work (in full-time jobs, with two decimal places)			D3					
	Total gross personal earnings		in PLN (with two decimal places)	D4					
	in which	payments for overtime		D5					
		prizes and bonuses		D6					
		Fees - treated as employees' remuneration		D7					
	Additional annual remuneration for the employees of budgetary sphere units			D8					
	Payments due to participation in profit or balance surpluses in cooperatives			D9					
in 2006	The total number of hours not worked		in hours (without decimal places)	D10					
	in which because of	vacation		D11					
		unpaid leave, of hours paid from the Social Insurance Institutions		D12					

- a) 1 - man, 2 - woman;
 b) 1-tertiary with scientific degree of at least Ph.D. or the title of master, medical doctor or equal, 2 - tertiary with the title of engineer, licentiate, certified economist or equivalent, 3 - postsecondary, 4 - vocational secondary, 5 - general secondary, 6 - basic vocational, 7 - lower secondary (gimnazjum), 8 - primary and incomplete primary;
 c) 1 - for indefinite duration 2 - for determined duration, 3 - other.

E-mail of the person preparing the report //

.....
 (the name, surname and telephone number of the person who prepared the report)

.....
 (place, date)

.....
 (personal stamp and signature of the person acting on behalf of the reporting entity)

EXPLANATORY NOTES FOR Z-12 QUESTIONNAIRE FOR 2006

The survey objective is the determining the structure of earnings by elementary occupational groups (*including demographic and socio-economic features and working time*) of the **full- and part-time employees** in October 2006, and their working time and earnings (*including part-time work*) for 2006.

The statistical data within the scope of the Z-12 Report are recommended to be transmitted in an electronic form together with the accepted printed list of errors instead in a form of a questionnaire.

Programs: Z12_WIN or Z12_LIN (allowing work with operational systems: Microsoft Windows or Linux) for preparation of his report may be downloaded via INTERNET, on the website <http://www.stat.gov.pl/>.

Available programs are used for registration of the data included in the Z-12 questionnaire. The applications can import data files prepared in a particular way and in a particular format in accordance with the described specifics of the import file included in the program documentation. After obtaining data correctness, there is possible to print the report and send it to the Statistical Office on the magnetic disc.

Part I. Data concerning the reporting unit on October 31, 2006

In item A1 should be stated the appropriate **code of over-establishment "1"** or **establishment related "2" – labour agreement** (*concluded for the majority of persons employed in the reporting unit*). For **other** units should be included code: 3.

In item A2 should be stated the number of **persons** employed in the sampled unit irrespective whether these persons are employed in other units (*however, excluding persons employed on the basis of order-agreement contracts and on the basis of a job contract for the purpose of occupational preparation*). Among **the employed are included:**

- 1) persons employed on the basis of employment contract (*i.e. labour contract, call-up, appointment or election*) including seasonal and casual workers;
- 2) employers and persons conducted work on own-account: **a)** owners and co-owners (*including unpaid family workers*) of the units conducting economic activity (*excluding company partners not employed by the company*), *i.e.* establishments, companies, foreign enterprises, etc.; **b)** persons conducting economic activity on their own account;
- 3) agents employed on the basis of agency agreements and order agreements (*including unpaid family workers and persons employed by agents*);
- 4) persons performing outwork;
- 5) members of agricultural production cooperatives, *i.e.* the members of agricultural producer's cooperatives and cooperatives established on their basis of a different production profile subordinate to the cooperative legislature, and also members of of agricultural farmers' co-operatives.

In the item A2 **reporting units give the number of the employed including persons employed in branches, sections without the statistical identification REGON number**. The Groups of Schools prepare the report for: the "Group" and the selected schools (*with the appointed statistical number REGON*) submitted to the Group. Within the Group are reported administrative and auxiliary workers, while in these schools - the teachers. Similarly, in item A3 should be reported

employees.

In item A3 should be stated the number of employees in the reporting unit. As **paid employees** should be considered persons who according to the job contract were employed **full- or part-time obligatory in a particular establishment and for a particular job during the period from 1 October 2006 to 31 October 2006**.

When determining the number of the employees (A3) there should be **excluded persons who in October 2006:**

- a)** had signed an agency contract with the reporting unit or a order agreement contract for maintaining an agency (*i.e. agents with cooperating persons and persons employed by agents*);
- b)** were performing outwork;
- c)** were called to maintain positions by virtue of election in social organizations outside the unit in which they are employed;
- d)** were sent to the full-time schools, doctorate studies, etc.;
- e)** were employed in intervention and public works;
- f)** were at schools or universities and carried out occupational practices;
- g)** stayed on maternity or child-care leaves in order to take care of a child;
- h)** were on unpaid leaves (*for over 10 days*);
- i)** were on prophylactic leaves ;
- j)** were on sickly leaves (*one or more days*);
- k)** were employed abroad (*including also export of works and services*), excluding persons staying abroad on business trips;
- l)** stayed abroad due to the scholarship in the foreign centres, universities, etc. ;
- m)** participated in the working groups organized by other units and were appointed to work in the reporting unit (*e.g. persons serving sentences, members of Labour Corps, soldiers*).

After the above exclusions the number of employees the determined in such a way number should be inserted into the item A3.

Then, the sampling of the employees should be carried out, i.e. the following actions should be performed in the given below order(!):

a) employees from the item A3, should be sorted according to → ascending 4-digit codes of occupations, while within a particular occupation – according to → ascending 1-digit sex codes (firstly there should be reported „1” – i.e. men, then – „2” – women). For example, the management of the unit (with the number of the employed exceeding 9 persons) comprise: director - woman (occupation – 1211, sex – 2), heads of ICT sections (1236) – three men (1) and one women (2) and deputy directors (1212) – two women (2) and two men (1); these employees (9 persons) should be sorted in the following order: 1211→ 2 (occupation→ sex), 1212→ 1, 1212→ 1, 1212→ 2, 1212→ 2, 1236→ 1, 1236→ 1, 1236→ 1, 1236→ 2;

b) the employees sorted out in the above presented order should be appointed successive numbers from „1 to N”;

c) on the such prepared list, should be marked (i.e. selected – depending on the number N in item. A3) the numbers of employees selected to the survey. Therefore, depending on N – the number of employees fulfilling the survey conditions each unit should include in the survey:

all persons → i.e. 1, 2, 3, 4, 5 etc.	$N \leq 40$
every second person → i.e. 1, 3, 5, 7, 9 etc.	$41 \leq N \leq 176$
every third → i.e. 1, 4, 7, 10, 13, 16 etc.	$177 \leq N \leq 396$
every fourth → i.e. 1, 5, 9, 13, 17, 21 etc.	$397 \leq N \leq 704$
every fifth → i.e. 1, 6, 11, 16, 21, 26 etc.	$705 \leq N \leq 1100$
every sixth → i.e. 1, 7, 13, 19, 25, 31 etc.	$1101 \leq N \leq 1584$
every seventh → i.e. 1, 8, 15, 22, 29 etc.	$1585 \leq N \leq 2156$
every eight → i.e. 1, 9, 17, 25, 33, 41 etc.	$2157 \leq N \leq 2816$
every 9-th → i.e. 1, 10, 19, 28, 37, 46 etc.	$2817 \leq N \leq 3564$
every 10-th → i.e. 1, 11, 21, 31, 41, 51 etc.	$3565 \leq N \leq 4400$
every 11-th → i.e. 1, 12, 23, 34, 45, 56 etc.	$4401 \leq N \leq 5324$
every 12-th → i.e. 1, 13, 25, 37, 49, 61 etc.	$5325 \leq N \leq 6336$
every 13-th → i.e. 1, 14, 27, 40, 53, 66 etc.	$6337 \leq N \leq 7436$
every 14-th person → i.e. 1, 15, 29, 43 etc.	$7437 \leq N$

Person with the number 1 (irrespective of the sampling variant) must be included in the report. For example, if the number of the employees meeting the survey conditions $N=113$, then the unit will select – every second person and the survey will cover 57 persons with the numbers: 1, 3, 5, 7, ... , 107, 109, 111, 113.

In case when more than 14 employees are selected, the reserve questionnaires should be used and the successive number of a sheet should be written in item A5, while in item A4 – should be also inserted the combined number of the completed questionnaires (forms).

Part II. Data on the persons selected to the survey

In line B1 should be stated the code of the employee selected do the survey, i.e. – insert successively selected numbers. The codes must be sorted in ascending order and sorted according to → ascending 4-digit codes of occupations, whereas – in a

given occupation by → ascending 1-digit sex codes!

Lines from B2 and B9 refer to the state on October 31, 2006.

In line B2 should be written the name of elementary occupational group from the „Classification of occupations and specialisations” introduced by the Decree of the Minister of Economy and Labour of 8 December 2004 on Classification of Occupations and Specialities for the Need of the Labour Market and the Scope of their Appliance (Journal of Laws No. 265, item. 2644). The inserted name of the performed occupation must correspond with the 4-digit code of occupation inserted in line B3.

In line B3 should be inserted the code of the performed occupation. From „Classification of occupations and specialisations”; from the 6-digit code (i.e. specialisations) should be inserted the first 4 digits (i.e. the code of the elementary group of occupations).

Lines B4÷B6 should be filled with the respective codes: sex, the level of attained education, the kind of a job contract. The codes are placed in the bottom part of the Z-12 questionnaire.

In line B7 should be stated two last digits of the year of birth.

In line B8 should be stated the combined number of years (with 1 decimal number) of the total duration of work seniority worked in all periods when this person was employed as a paid employee with all employers or was self-employed. Among the work seniority (duration) are included all periods for which there was deducted the social security tax or the retirement provision fee excluding the periods of employment on the basis of a job contract for occupational preparation or order agreement. The years of work duration (seniority) in lines B8 and B9 are given with one decimal place changing the number of months from a vulgar fraction into a decimal one, e.g. a) 4 months= $4/12=0.3$ years or b) 2 years and 7 months = $(2+7/12)=2+0.6=2.6$ years.

In line B9 should be stated the number of years (with 1 decimal number) of the so-called establishment duration of work (work seniority), i.e. – worked by the employee in the reporting unit

Lines from C1 to C11 concern October 2006.

In lines C1, C2, C3 and D1, D2 the respective working time should be included in hours, with 2 decimal places, while in lines D10÷D12 – in full hours, without decimal places. Working hours given with 2 decimal places – the number of minutes is changed from a vulgar fraction into a decimal one, e.g. a) 44 minutes= $44/60=0,73$ hours or b) 155 hours and 19 minutes= $(155+19/60)=155+0,32=155,32$ hours.

In line C1 should be stated the total number of hours paid by the employer - in October 2006, i.e. time worked (in both: nominal and overtime hours); as well as the time not worked but paid by establishment (e.g. vacation, occasional leaves, business trips, paid work stoppages). According to the Teacher’s Card, as vacation should be treated – the period of winter and summer holiday.

In lines C1÷C3 should not be included the hours from the previous months worked in October.

In line C2 should be stated the number of hours paid by the employer for the nominal working time. Nominal working time obligatory in the reporting unit, means the working time

that the employees should work according to the working time norms obligatory in the reporting unit or norms determined for particular groups of employees (e.g. *shortened working time for juvenile (under-aged) employees or employees working in the conditions hazardous for health*); there should be also taken into account: **a)** shortened working time – respective to the labour agreements including additional time off, etc. and **b)** extension – by extending the working time of persons employed in watch jobs.

Employees absent because of vacation, occasional leaves, training, health care leaves (*teachers*), business trips, paid stoppages of work – should be treated equally to those who worked the whole month in October 2006

For the reporting purposes it should be assumed that the monthly nominal full working time amounts for: *a)* an academic teacher – 156 hours, *b)* a principal (director) and a deputy principals (directors) (*including all types of schools*) – amounts to no less than 174 hours, which respectively amounts weekly to about 36 hours and about 40 hours. In case of employees whose nominal working time is calculated quarterly, the average nominal time in a quarter is assumed. Such duration should also be included in lines **D1, D2** and **D10÷D12**.

In line C3 should be stated the number of hours paid for overtime. **Overtime work** means work performed outside the obligatory norms of working time and on Sundays and holidays, as well as other (*holiday or additional*) free according to law days for which the employee does not receive a day off, whereas he/she receives additional pay. Overtime hours are divided into the ones worked during continuous (permanent) process of work and outside permanent (continuous) process of work. Continuous process of work hours comprise hours constituting extended working time (e.g. *on Saturdays*) and these hours of continuous process of work that in case of shortage of staff for all shifts are due on Sundays and holidays.

Hours of establishment duty shifts and casualty hours of the health care employees and overtime hours of teachers should be treated as overtime hours .

In lines C3 and D2 among the overtime hours **should not be included** working time due to the separate employment contract, i.e. **additional part-time employment**.

In lines C5÷C11, D4÷D9 should be applied the detailed “**Range of Elements of Earnings in National Economy Obligatory since January 1, 2000**” (*updated in 2003*), comprising the annex to the explanatory notes on employment and earning statistics (e.g. *the CSO survey with the Z-03 or Z-06 code*).

The data on earnings should be stated **as gross figures** (*zlotys PLN and groszes*), **without** deduction of obligatory retirement and disability pension fees paid by the insured person and deductions paid towards income tax from natural persons. Gross personal earnings should be included irrespectively from the sources of their financing, i.e. from both: the own means as well as the refunded means, e.g. from the Labour Fund, the Fund of Rehabilitation of Disabled Persons.

In line C4 should be stated the **monthly indicator of working time volume** of the selected employee (*with 2decimal places*) obligatory in October in a given establishment or a particular work post and concerning only the time paid from the fund of personal wages and salaries (*lines C1 and C5*), **i.e. excluding periods paid from the Social Insurance Institution or unpaid leaves**. For example, a person employed full-time in

October in 2006 (*i.e. 22 days*8 hours =176 hours*) had in this month 4 days of unpaid leave. In such case, in line C4 should **not** be included **the number 1.00**, as the correct working time indicator amounted **0.82 full-time** = $1.00-(4*8/176)= =1,00-4/22=1-0,18$.

In line C5 should be stated gross **personal earnings** for October 2006 which comprise the sum of remuneration and provisions due to work in cash or in kind (*respectively recalculated into one month*), i.e. payments of basic wages and salaries paid to the employees, permanent and temporary additional payments, payments for overtime work, periodical and non-periodical prizes and bonuses (e.g. *annual bonuses for teachers paid on the National Education Commission Day, bonuses and prizes paid to the employees in different months*), while:

a) among these payments (**lines C5÷C10**) **should be also** included the sums paid after 31 October 2006 due to compensations of remuneration for October 2006, but should not be included the amounts paid in October due to compensation of remuneration for the previous months;

b) among personal earnings (**lines C5÷C10**) **should not be** included one-time or sporadic payments, i.e. jubilee premiums, gratification, compensations paid at retirement, compensations for leaves not taken and additional annual remuneration for the employees of the budgetary sphere units or payments due to participation in profit or balance surpluses in cooperatives, and fees.

In line C6 should be stated gross **basic earnings** for October 2006 precisely determined on the basis of the obligatory rate of pay for a work unit (*respectively to the remuneration system, form of payment*) and nominal working time (*stated in line C2*) obligatory in the unit in October 2006!

In line C7 should be stated gross **earnings for overtime work** in October 2006 which should be determined on the basis of the number of hours worked during overtime (*stated in line C3*) and the rate of basic pay, including appropriate additional provisions.

In line C8 should be stated gross **additional pay (bonus) for shift work** in October 2006. **Shift work** means performing work according to the determined timetable assuming the change in the start and end of a working day by particular employees after the particular number of hours, days or weeks; allowed in each system of working time arrangements. There should not be included payments for the incidental work (*e.g. proxy work*).

In line C9 should be a stated gross **seniority bonus** in October 2006. Seniority bonus should refer to work seniority stated in lines B8 or B9.

In line C10 should be stated the sum of periodical bonuses and prizes recalculated into 1 month and the gross sum of non-periodical ones paid for October 2006 (*i.a. 1/12of the annual bonus of teachers paid on the National Education Commission Day and bonuses and prizes paid to employees in different months, e.g. 1/3 of bonuses or prizes for the IV quarter of 2006*).

In line C11 should be stated earnings paid from the **Fees Fund** for October 2006 to some groups of employees for work in accordance with labour contract. Among these remuneration **should be** also included amounts paid after October 31, 2006 due to compensations of remuneration for October 2006, but there should not be included amounts paid in October due to

compensation of remuneration for the previous months.

Lines from D1 and D11 refer to the year 2006.

In line D1 should be stated the summed up number (with 2 decimal places) of **hours paid by the employer** from the personal remuneration fund for 2006 (fund stated in line D4), to the person reported in line B1. The line covers hours worked and hours not worked (e.g. short sickly leaves (up to 33 days) paid by the establishment – excluding days-off, vacation, training leave, occasional leave, health care leave for teachers, business trips). In this line **should not be included a period of: maternity leave, sickly leave – paid from the means of the Social Insurance Institution or unpaid leaves.**

In line D2 should be stated the summed up number (with 2 decimal places) of **hours paid for overtime work** in 2006.

In line D3 should be stated the sum of monthly indicators of volume of work (in full-time jobs, with 2 decimal places) in 2006 for the person stated in line B1 for the periods paid only from the personal remuneration fund (lines D1 and D4), thus **without the period paid exclusively from the means of the Social Insurance Institution or unpaid leaves.**

For example, a person employed full-time during the entire 2006 year went on a sickly leave paid from the Social Insurance Institution in the period from 16 May to 30 June and in November had an unpaid leave of 20. In this case, in line D3 **should not be included the value 12.00**, as the correctly determined indicator of working time volume amounted **9.83 of the full-time** and it comprises the **sum of the following components:**

$9(\text{months}) * 1,00(\text{full-time}) + 1(\text{May}) * 0,50(\text{full-time}) + 1(\text{June}) * 0,00(\text{full-time}) + 1(\text{November}) * 0,33(\text{full-time})$.

In line D4 should be stated the sum of gross **personal earnings** paid for 2006. The line includes payments for hours worked, sickly leaves (up to 33 days) paid by establishments, vacation, training leaves and occasional leaves. Among these earnings (**lines D4-D6**) should be also included those that were paid after 31 December 2006, but were due in 2006. **Should not be included amounts** paid in 2006 – due in the previous year, i.e. 2005. **Moreover** (similarly to calculation of personal earnings for October X 2006 —line C5), in personal earnings **should not be included** one-time or sporadic payments, i.e. jubilee premiums, gratification, compensations paid at retirement, compensations for leaves not taken. **Moreover, in lines C5 and D4 should not be included:** payments from the Social Insurance Institution means and additional annual remuneration for the employees of the budgetary sphere units or payments due to participation in profit or balance surpluses in cooperatives, and fees.

In line D5 should be stated the sum of earnings for gross overtime hours determined on the basis of the hours worked overtime (stated in line D2) and rates of pay of basic remuneration, including respective additional payments paid for 2006, **without recalculation** into 1 month .

In line D6 should be stated the sum of gross **periodical and non-periodical prizes and bonuses** paid for 2006, **without recalculation** into 1 month .

In line D7 should be stated the sum of these **fees** for the year 2006 which were paid to some groups of own employees for work in accordance with the labour contract, **without recalculation** into 1 month. Among these earnings should also be

included amounts that were paid after 31 December 2006, but were due for 2006. There should not be included the sums paid in 2006 but due for the previous year, i.e. 2005.

In line D8 should be stated **additional annual remuneration** for 2006 exclusively for the employees of the budgetary sphere units without recalculation into 1 month. Among the earnings should also be included amounts that were paid after 31 December 2006, but were due for 2006. There should not be included the sums paid in 2006 but due for the previous year, i.e. 2005.

In line D9 should be stated the sum of payments due to participation in profit or balance surpluses in cooperatives (made also in a form of bonds and shares) respective to 2006, **without recalculation** into 1 month. In this line **should not be included** payments for employees from the premium fund created from the personal remuneration fund – these payments should be included in lines C5 and C10 and D4 and D6. Among earnings should also be included amounts that were paid after 31 December 2006, but were due for 2006. There should not be included the sums paid in 2006 but due for the previous year, i.e. 2005.

In lines D10-D12 the respective working time should be stated only in full hours, **without decimal places**.

In line D10 should be stated the summed up number of hours not worked (paid, including those paid from the Social Insurance Institution means and unpaid) in 2006 irrespective of the reason (e.g. sickly leave, vacation, maternity and prophylactic leaves, training leaves, occasional leaves, health-care leaves for teachers and unpaid leaves). Days-off should not be reported. For the registering purposes it should be assumed that a weekly full-time work amounts e.g. for an academic teacher – 36 hours, while for a principal (director) and deputy principals (directors) and (including all kinds of schools) – 40 hours .

In line D11 should be stated the summed up number of hours absent from work in 2006 due to vacation. As vacation should be treated in accordance with the Teacher's Card – the period of winter and summer holidays. In this item should also be included leaves (vacation) due for 2005, but taken in 2006.

In line D12 should be stated the summed up number hours of absence from work in 2006 due to long-term sickly leave or paid maternity leave – paid only from the means of the Social Insurance Institution or unpaid leaves.

