

# Gross Earnings in Europe

## Main results of the Structure of Earnings Survey 2002

### Statistics in focus

#### POPULATION AND SOCIAL CONDITIONS

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The European Structure of Earnings Survey (SES) provides detailed information on the level and structure of remuneration of employees, their individual characteristics and the enterprise or local unit to which they belong. It is a 4-yearly survey conducted under Council Regulation 530/1999 and Commission Regulation 1916/2000. The SES outcome represents an uniquely rich data source on gross earnings in Europe which is increasingly important for evidence-based policy making, in particular for monitoring economic growth and social cohesion. Furthermore, the SES data are indispensable for employers and employees as regards the demand and supply of labour.

This *Statistics in Focus* opens a series dealing with results for the recent SES carried out for the reference year 2002. The SES 2002 micro data are available for approximately 7.9 millions employees in enterprises with at least 10 employees in "Industry and services" (sections C to K of the economic activity classification scheme NACE 1.1). By April 2005 Eurostat had received data from 28 countries: 24 out of the current 25 Member States (all except Malta), the Acceding Countries Bulgaria and Romania as well as from Iceland and Norway. The latter belong to the European Economic Area (EEA). The data were collected by the national statistical offices in 2003 and processed during 2004. The only exception are the German data which refer to 2001 and were processed in 2003. The averages referring to EU-25, EU-15 and the NMS (today's EU, "old" EU and new Member States, respectively) as well as to the euro-zone EZ (EU-15 except Denmark, Sweden and the United Kingdom) are weighted averages including only those countries for which national data are available. More information on coverage of the survey, methods, definitions or abbreviations of countries and NACE sections is presented in the Methodological Notes at the end.

This publication aims at taking a first glance at the SES 2002 results available in Eurostat's freely accessible database New Cronos. It presents selected tables and graphs with core results on gross hourly, monthly and annual earnings as well as on hours paid. A multitude of additional graphs are offered through an interactive visualisation tool<sup>1</sup> which provides immediate access to a graphical display of user-defined views on the data, including earnings data expressed in Purchasing Power Standards (PPS).<sup>2</sup>

#### Differences in hourly earnings between economic activities are less pronounced than between countries

Figure 1 presents bar charts for average gross hourly earnings related to employees in "Industry and services" (NACE aggregate C-K) and in the economic activities "Hotels and restaurants" (NACE section H) and "Financial intermediation" (section J) where particularly low and high earnings, respectively, are observed. In each graph, the countries are ordered by decreasing numerical values.<sup>3</sup>

The graph for "Industry and services" shows that average gross hourly earnings in the NMS (2.83 €) and the EU-15 (14.18 €) differ considerably, ranging from 1.52 € in Latvia and 1.77 € in Lithuania to 19.75 € in Denmark and 22.41 € in Norway.<sup>4</sup> The lowest earnings are observed in Bulgaria (0.80 €) and Romania (1.04 €). The graph shows furthermore that average gross hourly earnings for every individual NMS, except Cyprus, are plainly below those observed in any EU-15 country (see also Figure 2a). In C-K, Cyprus ranks above Portugal, Greece and Spain. Slovenia ranks second-best among the NMS, not only for C-K but also for any of the individual economic activities.

<sup>1</sup> The tool is accessible via <http://forum.europa.eu.int/irc/dsis/wages/info/data/index.htm>. This address leads to a virtual library containing an item "Gross earnings in Europe 2002".

<sup>2</sup> Due to space restrictions, this publication predominantly deals with earnings data expressed in euro. PPS represent an artificial currency unit which reflects differences in national price levels that are not taken into account by exchange rates.

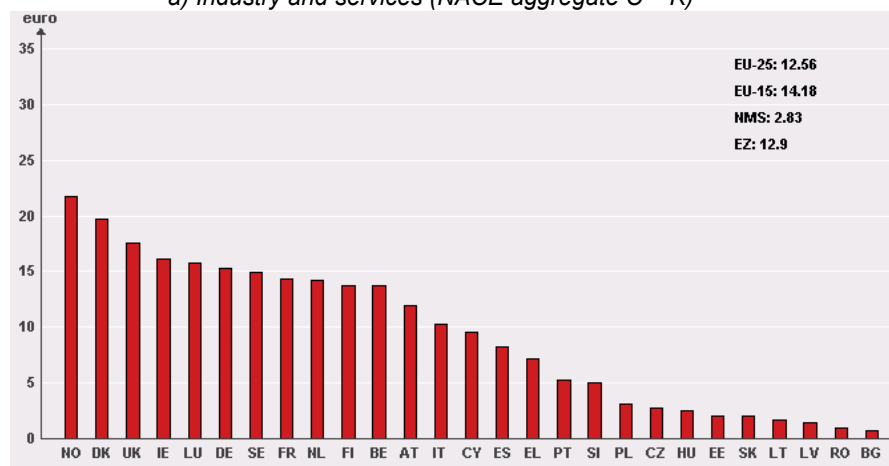
<sup>3</sup> The following Table 1 (page 3) covers all 28 countries participating in the SES 2002. As the Islandic data on earnings only refer to the NACE sections D, F and G, the NACE aggregates C-F, G-K and C-K are not available for Iceland. This explains why Iceland is neither included in Tables 2-4 nor in the graphs of this publication.

<sup>4</sup> The corresponding PPS values are 3.02 and 3.60 for Latvia and Lithuania and 15.34 and 14.95 for Denmark and Norway, respectively. A PPS-based comparison reduces the differences in earnings between the EU-15 and the NMS.

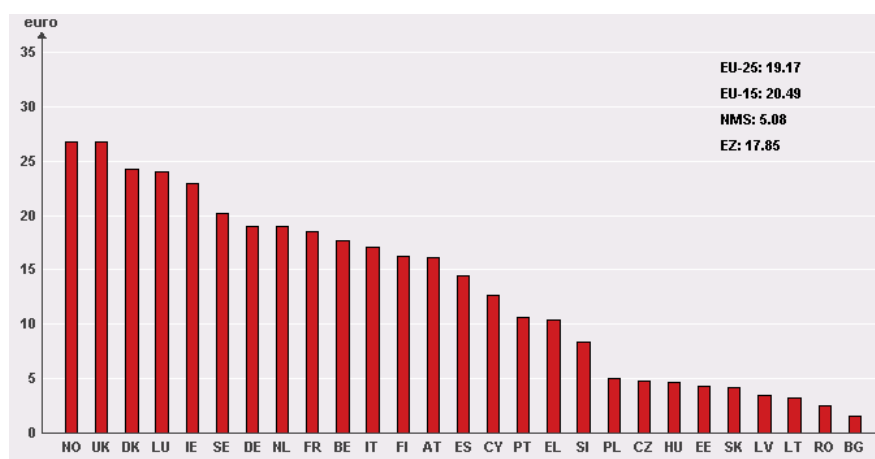


**Figure 1: Gross hourly earnings for 3 economic activities**  
(countries ranked by descending order)

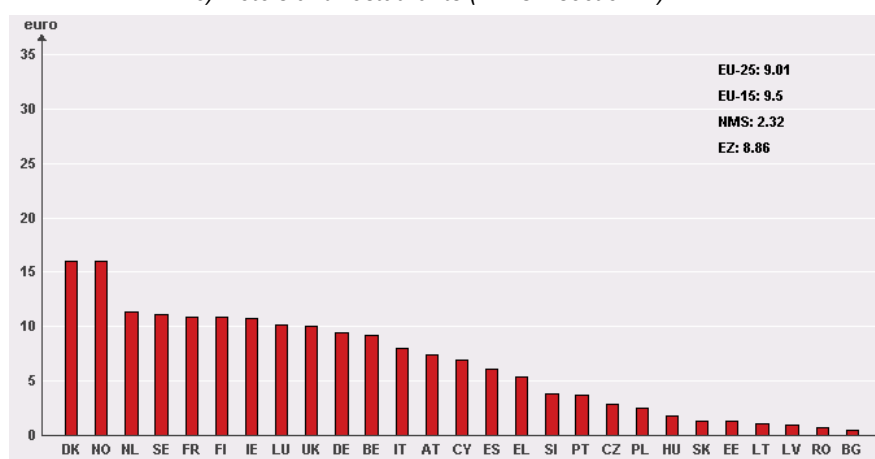
a) Industry and services (NACE aggregate C – K)



b) Financial intermediation (NACE section J)



c) Hotels and restaurants (NACE section H)



The full numerical information on gross hourly earnings in Europe is given in Table 1. The table contains data for all 9 individual NACE sections C to K as well as for the 3 NACE aggregates “Industry” (C – F), “Services” (G – K) and “Industry and services” (C – K). The rows containing figures for the NMS are highlighted by using a shadowed background. The figures for the two Candidate Countries and the EEA countries are displayed separately. In each row of Table 1, the maximum and minimum values are in bold. The distribution of extreme earnings shows very similar patterns in European countries.

The lowest earnings are in all countries, except the Czech Republic and Cyprus, observed in NACE section H, the highest usually in NACE section J (exceptions for Belgium, Denmark, the Netherlands and Austria, see also Figure 3a). The second-lowest earnings are predominantly linked to “Wholesale and retail trade, repair of motor vehicles, personal and household goods” (section G), the second-highest usually either to “Electricity, gas and water supply” (section E) or to “Mining and quarrying” (section C).

**Table 1: Gross hourly earnings, in euro**

Figures in bold / bold italic: maximum / minimum (per row without missing data)  
 NACE or country codes in *Italic*: The corresponding columns and rows are visualized in Figure 1 - 2  
 Data with shadowed background refer to the NMS.  
 Source: Eurostat, SES 2002.

	Economic activity											
	C	D	E	F	G	H	I	J	K	C-F	G-K	C-K
<b>EU-25</b>	10.78	12.42	13.39	11.12	11.04	<b>9.01</b>	11.92	<b>19.17</b>	14.41	12.20	12.85	12.56
<b>EU-15</b>	15.70	14.36	17.47	12.53	12.23	<b>9.50</b>	14.14	<b>20.49</b>	15.64	14.14	14.21	14.18
<b>NMS</b>	4.34	2.64	3.47	2.50	2.47	<b>2.32</b>	2.87	<b>5.08</b>	3.13	2.75	2.93	2.83
<b>EZ</b>	13.68	13.46	16.78	11.10	11.37	<b>8.86</b>	12.75	<b>17.85</b>	13.31	13.15	12.68	12.90
<b>BE</b>	13.80	14.18	<b>19.69</b>	12.51	12.43	<b>9.26</b>	12.98	17.68	14.76	14.01	13.55	13.75
<b>CZ</b>	3.20	2.65	3.06	2.57	<b>2.46</b>	2.91	3.00	<b>4.89</b>	2.94	2.68	3.00	2.82
<b>DK</b>	<b>27.90</b>	21.02	23.78	21.19	16.52	<b>16.07</b>	21.87	24.27	21.05	21.18	18.95	19.76
<b>DE</b>	15.90	16.60	18.79	13.41	13.49	<b>9.53</b>	14.17	<b>19.00</b>	14.78	16.18	14.51	15.40
<b>EE</b>	2.88	2.06	2.40	2.09	1.95	<b>1.33</b>	2.27	<b>4.33</b>	2.26	2.12	2.14	2.13
<b>EL</b>	9.51	6.70	<b>13.63</b>	7.21	5.91	<b>5.48</b>	9.16	10.44	6.83	7.38	7.06	7.19
<b>ES</b>	10.96	8.63	12.71	7.15	7.87	<b>6.19</b>	9.56	<b>14.53</b>	7.46	8.28	8.43	8.36
<b>FR</b>	15.27	14.62	17.33	12.25	12.48	<b>10.91</b>	14.11	<b>18.61</b>	16.44	14.42	14.40	14.41
<b>IE</b>	18.02	16.36	23.54	17.06	12.33	<b>10.76</b>	17.18	<b>23.02</b>	16.99	16.77	15.76	16.20
<b>IT</b>	9.51	9.93	12.84	9.45	9.59	<b>8.02</b>	10.80	<b>17.14</b>	10.10	9.97	10.85	10.38
<b>CY</b>	9.52	7.44	10.80	9.15	<b>6.80</b>	6.96	11.23	<b>12.77</b>	9.83	8.57	10.30	9.67
<b>LV</b>	1.80	1.48	2.30	1.40	1.13	<b>0.99</b>	1.80	<b>3.49</b>	1.68	1.53	1.51	1.52
<b>LT</b>	2.20	1.70	2.48	1.64	1.62	<b>1.13</b>	1.81	<b>3.29</b>	1.85	1.76	1.78	1.77
<b>LU</b>	15.91	15.34	23.13	13.13	12.91	<b>10.26</b>	17.47	<b>24.09</b>	14.34	14.44	16.38	15.88
<b>HU</b>	2.78	2.45	3.03	1.96	2.12	<b>1.82</b>	2.72	<b>4.67</b>	2.80	2.44	2.60	2.51
<b>NL</b>	<b>23.26</b>	15.03	20.83	14.49	11.96	<b>11.43</b>	14.64	19.00	15.00	15.06	13.86	14.22
<b>AT</b>	13.15	12.67	<b>16.51</b>	11.60	10.26	<b>7.46</b>	12.13	16.13	12.95	12.54	11.59	12.01
<b>PL</b>	5.00	2.85	3.88	2.75	2.75	<b>2.52</b>	3.56	<b>5.08</b>	3.44	3.06	3.33	3.18
<b>PT</b>	4.87	4.37	10.06	4.45	5.07	<b>3.73</b>	7.38	<b>10.72</b>	6.64	4.48	6.12	5.26
<b>SI</b>	7.26	4.83	6.77	4.33	4.79	<b>3.93</b>	5.40	<b>8.44</b>	6.26	4.85	5.44	5.10
<b>SK</b>	2.45	1.94	2.84	1.73	2.42	<b>1.34</b>	1.86	<b>4.29</b>	2.38	1.97	2.18	2.08
<b>FI</b>	13.41	14.07	15.31	13.06	12.72	<b>10.89</b>	13.27	<b>16.32</b>	14.97	13.94	13.65	13.80
<b>SE</b>	15.49	14.69	16.72	14.65	14.39	<b>11.16</b>	14.09	<b>20.21</b>	16.39	14.74	15.20	15.00
<b>UK</b>	24.10	17.99	21.43	17.50	13.61	<b>10.14</b>	17.66	<b>26.76</b>	20.42	18.06	17.46	17.64
<b>BG</b>	1.30	0.73	1.29	0.71	0.56	<b>0.53</b>	1.01	<b>1.59</b>	0.71	0.80	0.81	0.80
<b>RO</b>	1.68	0.88	1.47	0.86	0.88	<b>0.75</b>	1.34	<b>2.57</b>	1.03	0.98	1.16	1.04
<b>IS</b>	:	12.92	:	14.01	13.48	:	:	:	:	:	:	:
<b>NO</b>	<b>34.95</b>	21.66	23.23	21.20	19.60	<b>16.05</b>	21.56	26.81	24.92	22.41	21.53	21.83

While Figure 1 visualizes selected *columns* of Table 1, the following Figure 2 presents another view on the same data by graphically displaying selected *rows*. Figure 2a refers to a comparison of gross hourly earnings in the EU-15 and NMS. The ratio "Hourly earnings in the EU-15 / hourly earnings in the NMS" which results by dividing the corresponding rows in Table 1 varies between economic activities from approximately 3.6 in NACE section C to 5.4 for section D<sup>1</sup>.

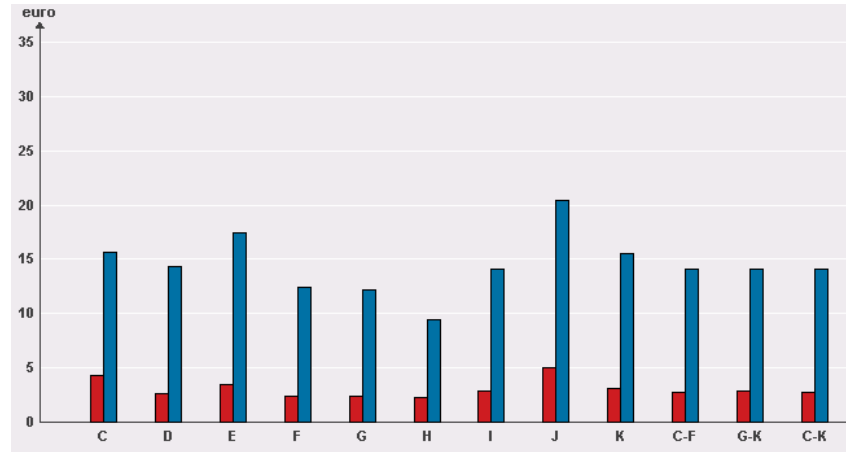
Figure 2b illustrates that the level of this earnings ratio may even be much higher when comparing individual countries. When comparing gross hourly earnings for Denmark and Latvia (EU Member States with particularly high and low levels of earnings, respectively), it varies for example from 7.0 in NACE section J to 16.2 in section H.<sup>2</sup>

<sup>1</sup> For a PPS-based earnings comparison, this ratio shrinks to 2.0 for section C and to 2.9 for section D.

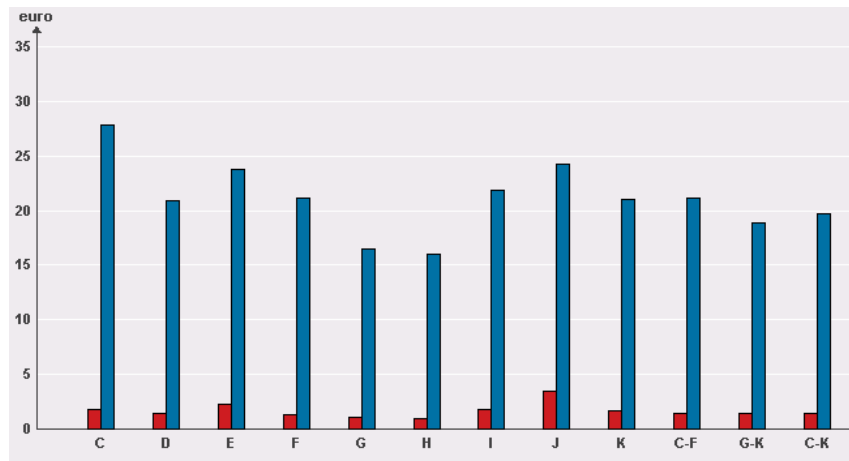
<sup>2</sup> For a PPS-based earnings comparison, the ratio reduces to 2.7 for section J and to 6.3 for section H.

**Figure 2: Gross hourly earnings for 2 countries or country sets, in euro**

a) NMS (left-hand bars) and EU-15 (right-hand bars)



b) Latvia (left-hand bars) and Denmark (right-hand bars)



A more comprehensive presentation of the variability of gross hourly earnings is shown in Figure 3 which uses boxplots<sup>1</sup> instead of bar charts. Figure 3a visualizes for all countries the dispersion of gross hourly earnings between economic activities, i.e. it displays the information contained in the rows of Table 1 referring to all individual countries (except Iceland).

On the one hand, the graph shows again that gross hourly earnings differs considerably as regards its mean level. The highest level of earnings within the set of NMS, except Cyprus, belongs to Slovenia. The median for Slovenia is very close to that of Portugal (see the highlighted boxplot referring to Slovenia). For Cyprus, the median lies slightly above that of Spain and slightly below that of Italy. On the other hand, the graph shows that the distribution of earnings also differs considerably from country to country. The medians for Belgium (13.80 €) and for Finland (13.41 €) are, for example, very close but the variability of earnings between different

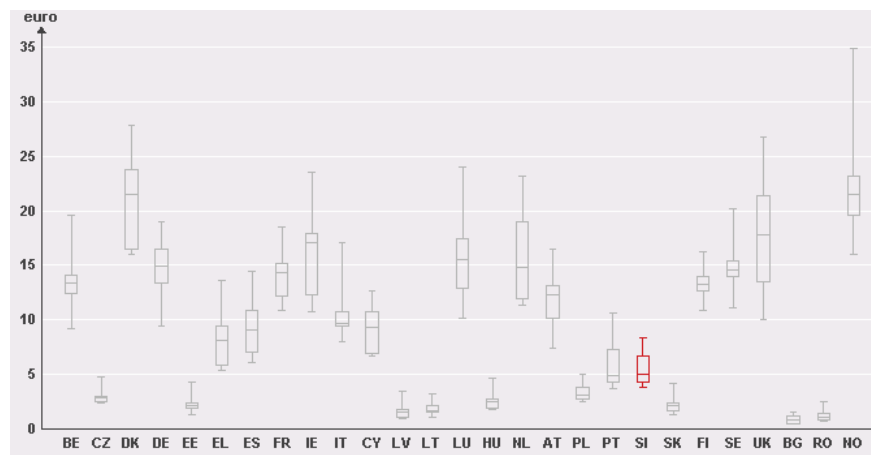
economic activities, represented by the total length of the boxplot, is higher in Belgium.

Figure 3b displays for all NACE categories the variability of gross hourly earnings between countries, i. e. it summarizes the information contained in the columns of Table 1. The variability is particularly high for “Mining and quarrying” (NACE section C) and low for “Hotels and restaurants” (section H). The highest median is connected with “Financial intermediation” (section J) as the highlighted boxplot shows. A comparative glance at both parts of Figure 3 shows that the overall picture of Figure 3b is more homogeneous, i.e. the influence of the country on earnings tends to be stronger than that of the economic activity. The boxplots in Figure 3b for the economic activities H and J are, for example, much more similar than those in Figure 3a belonging to Bulgaria and Norway.

<sup>1</sup> A boxplot summarizes the information contained in a data set by displaying 5 characteristics of the set. It is defined by a box of length  $x_{0.75} - x_{0.25}$  (difference between upper and lower quartile, the so-called interquartile range, defining the “inner 50%” of the data ordered by increasing size), the median  $x_{0.5}$  (marked inside the box) and the extreme values  $x_{\min}$  and  $x_{\max}$ . The latter are connected with the box via lines. The total length of a boxplot represents the range of the data set.

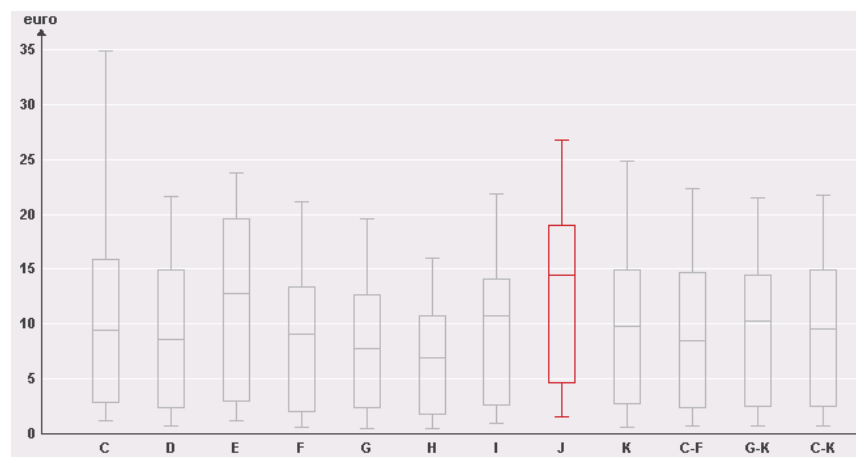
**Figure 3: Dispersion of gross hourly earnings, in euro**

a) Country-by-country comparison (highlighted: Slovenia)



Maximum: NACE section J (exceptions: section C for DK, NL and NO, section E for BE, EL, IE and AT),  
Minimum: NACE section H (exceptions: section G for CZ and CY)

b) Comparison by economic activity (highlighted: financial intermediation)



Maximum: value for NO (exceptions: DK for NACE sections E, H and I), minimum: value for BG (no exceptions)

## Earnings in “Services” tend to be above those in “Industry”

It is of interest to investigate whether the main findings related to gross hourly earnings also apply to gross monthly and annual earnings for which the ranking of countries might be different, due to different working hours or differences in annual bonuses. Furthermore, it is worth comparing earnings in “Industry” (C-F) and “Services” (G-K) where the composition of annual earnings is not necessarily identical.

Table 2 displays average gross hourly, monthly and annual earnings for the aggregates “Industry” and “Services” as well as for “Industry and services” (C-K). A comparison of earnings for C-F and G-K shows that average gross earnings in “Services” tend to be above those observed for “Industry”. In Table 2 earnings in “Services” are highlighted if they exceed the corresponding values observed in “Industry” by at least 10%. By far the highest differences are reported from Portugal where, for example, annual earnings in “Services” amount to 137.6% of annual earnings in “Industry”. For the country sets EU-15 and EU-25 the same percentages are 102.6 and 106.7, respectively. The lowest level for gross annual earnings in “Services”, expressed as a percentage of gross annual

earnings in “Industry”, is 92.7 for Germany and 93.3 for Ireland.

Gross earnings in “Services” or in “Industry” crucially depend on the number of employees working in the individual sections and thus defining the composition of these NACE aggregates. The aggregate “Services” includes for example “Hotels and restaurants” (section H) with low average earnings as well as “Financial intermediation” (section J) with high average earnings. It is obvious that a high number of employees working in section H tends to decrease the average for the service sector whereas a high number of employees attributed to section J has the opposite effect. In Luxembourg, 21.9 % of employees working in “Services” are linked to section J and only 6.2 % to section H, i. e. the ratio of the size of these sections is 3.5 to 1. This partly explains the high Luxembourgish figure for gross annual earnings in “Services”. In Ireland, the shares for section J and section H in “Services” are 19.6 % and 14.2 %, respectively, corresponding to a ratio of only 1.4 to 1.

**Table 2: Earnings, in euro (NACE aggregates C-F, G-K and C-K)**

Figures in bold: Hourly, monthly and annual earnings, respectively, in "Services" exceed those in "Industry" by more than 10 %.  
NACE codes in *Italic*: The corresponding rows are visualized in Figure 4.  
Source: Eurostat, SES 2002.

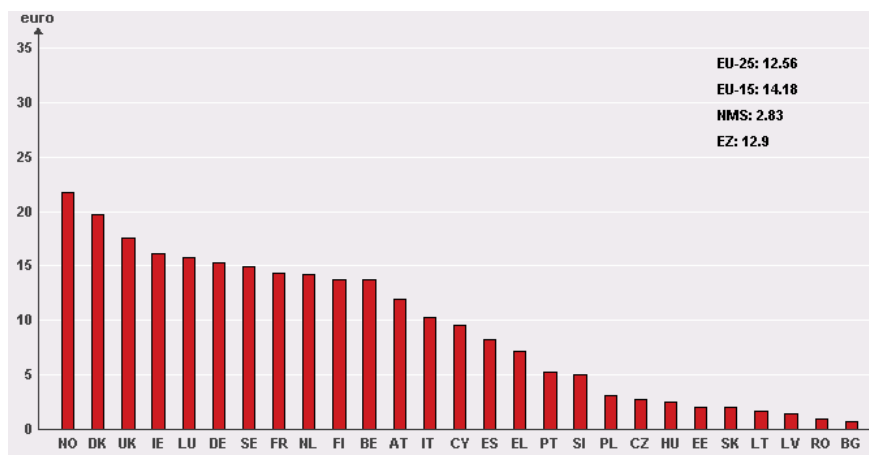
	Gross hourly earnings			Gross earnings in the reference month			Gross annual earnings		
	C-F	G-K	C-K	C-F	G-K	C-K	C-F	G-K	C-K
<b>EU-25</b>	12.20	12.85	12.56	2075	2172	2129	27018	28881	28024
<b>EU-15</b>	14.14	14.21	14.18	2399	2398	2399	31218	32045	31675
<b>NMS</b>	2.75	2.93	2.83	498	526	511	6508	6941	6710
<b>EZ</b>	13.15	12.68	12.90	2211	2139	2173	29613	29365	29485
<b>BE</b>	14.01	13.55	13.75	2506	2390	2441	29823	31378	30694
<b>CZ</b>	2.68	<b>3.00</b>	2.82	457	<b>518</b>	483	6861	<b>7680</b>	7212
<b>DK</b>	21.18	18.95	19.76	3522	3093	3250	41547	41884	41736
<b>DE</b>	16.18	14.51	15.40	2714	2503	2616	35842	33211	34622
<b>EE</b>	2.12	2.14	2.13	393	397	395	4732	5101	4934
<b>EL</b>	7.38	7.06	7.19	1345	1210	1264	19444	18263	18751
<b>ES</b>	8.28	8.43	8.36	1518	1528	1524	20907	21194	21063
<b>FR</b>	14.42	14.40	14.41	2184	2219	2204	28778	29437	29139
<b>IE</b>	16.77	15.76	16.20	2708	2445	2559	34188	31898	32912
<b>IT</b>	9.97	10.85	10.38	1829	1938	1880	24470	27354	25808
<b>CY</b>	8.57	<b>10.30</b>	9.67	1484	<b>1770</b>	1666	19940	<b>23681</b>	22316
<b>LV</b>	1.53	1.51	1.52	284	279	281	3580	3641	3616
<b>LT</b>	1.76	1.78	1.77	323	327	325	3993	4209	4097
<b>LU</b>	14.44	<b>16.38</b>	15.88	2610	<b>2878</b>	2809	33218	<b>39918</b>	38103
<b>HU</b>	2.44	2.60	2.51	454	481	467	5685	6165	5906
<b>NL</b>	15.06	13.86	14.22	2483	2326	2372	33990	33541	33683
<b>AT</b>	12.54	11.59	12.01	2268	2078	2162	33028	31941	32434
<b>PL</b>	3.06	3.33	3.18	573	608	589	6879	7290	7065
<b>PT</b>	4.48	<b>6.12</b>	5.26	762	<b>1032</b>	891	11563	<b>15911</b>	13609
<b>SI</b>	4.85	5.44	5.10	863	<b>968</b>	908	10661	<b>12102</b>	11275
<b>SK</b>	1.97	2.18	2.08	336	378	359	5338	6022	5708
<b>FI</b>	13.94	13.65	13.80	2341	2250	2297	30968	30963	30965
<b>SE</b>	14.74	15.20	15.00	2552	2620	2590	30628	33248	32056
<b>UK</b>	18.06	17.46	17.64	3167	2951	3018	38668	38477	38538
<b>BG</b>	0.80	0.81	0.80	147	149	147	1867	1914	1884
<b>RO</b>	0.98	<b>1.16</b>	1.04	183	<b>211</b>	192	2176	<b>2647</b>	2321
<b>NO</b>	22.41	21.53	21.83	3733	3545	3611	43974	41676	42475

A closer look at Table 2 shows that the ranking of earnings between countries is not identical for hourly earnings, monthly earnings and annual earnings, respectively, but the overall picture does not alter a lot. Figure 4 illustrates this by means of the NACE aggregate "Industry and services". As explained in more detail in the following, the observed changes of rank positions

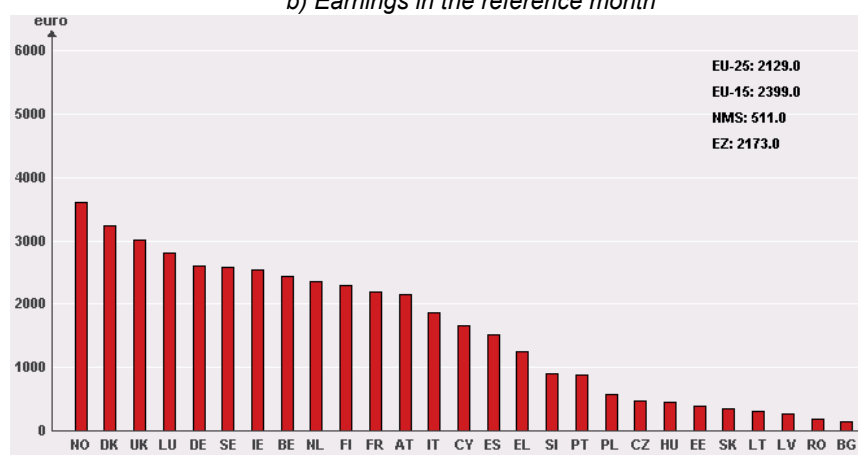
from Figure 4a to Figure 4b are mainly due to differences in hours paid in the reference month whereas the changes from Figure 4b to Figure 4c are mainly caused by differences in payments which do not occur in each pay period (13<sup>th</sup> month payment, non-regular allowances or holiday bonuses).

**Figure 4: Gross earnings, NACE aggregate C-K, in euro**  
(countries ranked by descending order)

a) Hourly earnings

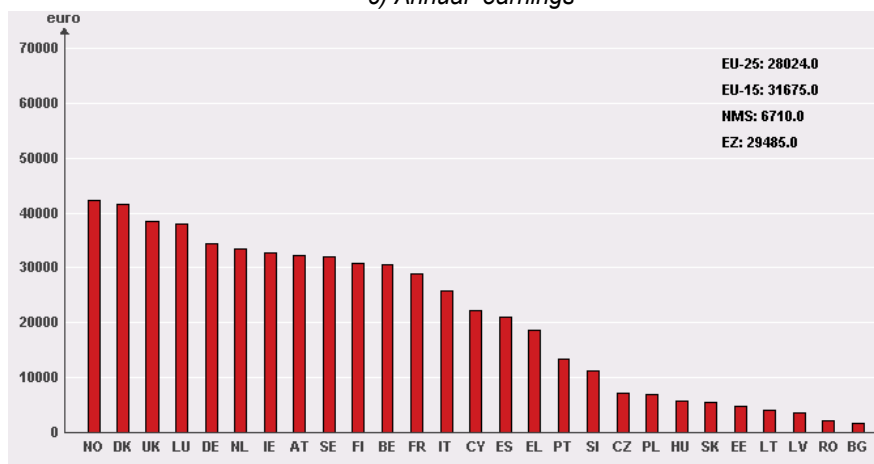


b) Earnings in the reference month



+1 +1 +1 -3 +3 -3 +1 -1 ← rank position changes (compared to part a)

c) Annual earnings



+3 +4 -3 -3 -1 +1 -1 +1 -1 +1 -1 ← rank position changes (compared to b)

### Number of hours paid per month tends to be higher in the NMS

Table 3 presents the numerical information on hours paid in the reference month for "Industry and services" and, in addition, separately for "Industry" and "Services". Furthermore, Table 3 displays data on annual bonuses and, to provide a more complete picture of working conditions in Europe, on annual days of paid holiday leave. The data on annual bonuses contribute to explaining the change of rank positions

from Figure 4b to Figure 4c. In Sweden, for example, the non-regular payments in "Industry and services" are remarkably low (only 1.4 % of total annual earnings) whereas the corresponding values amount in the Netherlands to 9.5 %, in Ireland to 12.3 % and in Austria to 14.7 %. Sweden's rank position in Figure 4c hence declines whereas the rank of Austria considerably improves.

**Table 3: Paid time and annual bonuses, NACE aggregates C-F, G-K and C-K**

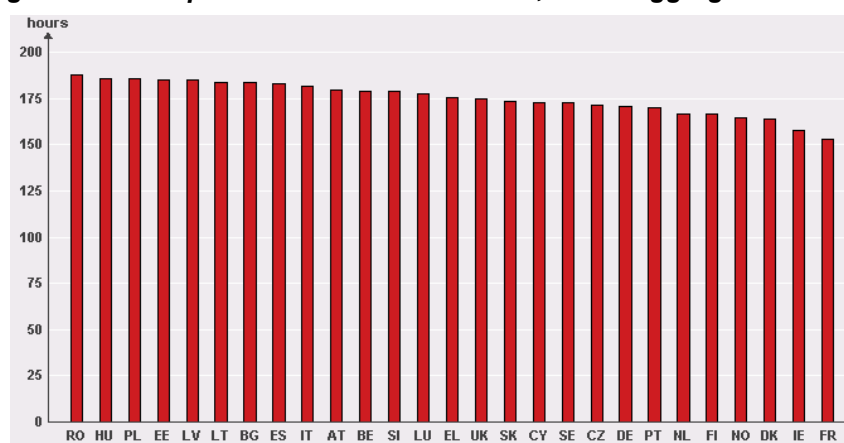
Figures in bold / bold italic: maximum / minimum per column  
 NACE code in *Italic*: The data in this column are visualized in Figure 5.  
 Source: Eurostat, SES 2002

	Hours paid in the reference month			Annual bonuses (in % of total annual earnings)			Annual days of paid holiday leave		
	C-F	G-K	C-K	C-F	G-K	C-K	C-F	G-K	C-K
<b>EU-25</b>	174	173	173	8.5	9.5	9.0	26.2	24.2	25.1
<b>EU-15</b>	172	171	172	8.6	9.6	9.1	26.6	24.3	25.4
<b>NMS</b>	181	181	181	6.8	6.9	6.8	23.8	23.5	23.7
<b>EZ</b>	171	171	171	10.0	10.4	10.2	27.3	25.8	26.5
<b>BE</b>	179	179	179	10.5	11.5	11.1	19.8	19.3	19.5
<b>CZ</b>	171	174	172	<b>18.0</b>	16.8	<b>17.5</b>	22.3	24.0	23.1
<b>DK</b>	166	163	164	2.3	2.1	2.2	25.1	24.8	24.9
<b>DE</b>	169	174	171	9.1	8.6	8.9	29.2	28.3	28.8
<b>EE</b>	186	185	185	3.0	4.4	3.8	20.6	17.3	18.8
<b>EL</b>	181	172	176	15.4	16.0	15.7	22.7	21.5	22.0
<b>ES</b>	184	183	183	15.9	<b>18.2</b>	17.2	23.7	22.1	22.8
<b>FR</b>	<b>152</b>	<b>154</b>	<b>153</b>	12.1	12.4	12.3	<b>31.5</b>	<b>30.3</b>	<b>30.9</b>
<b>IE</b>	162	155	158	4.3	4.2	4.3	21.7	21.1	21.4
<b>IT</b>	184	180	182	6.1	6.2	6.1	26.5	26.0	26.3
<b>CY</b>	173	172	173	10.5	8.4	9.1	21.2	23.0	22.4
<b>LV</b>	185	185	185	4.5	6.2	5.5	15.6	14.3	14.8
<b>LT</b>	183	184	184	1.5	3.1	2.3	<b>16.2</b>	<b>13.6</b>	<b>15.0</b>
<b>LU</b>	181	176	178	6.7	10.7	9.8	27.7	27.2	27.3
<b>HU</b>	187	185	186	2.8	2.5	2.7	26.7	26.4	26.6
<b>NL</b>	165	168	167	9.8	9.3	9.5	24.6	20.6	21.9
<b>AT</b>	181	180	180	14.8	14.6	14.7	25.5	24.0	24.7
<b>PL</b>	188	185	186	<b>0.3</b>	<b>0.8</b>	<b>0.5</b>	25.1	25.0	25.0
<b>PT</b>	170	170	170	14.3	16.1	15.3	21.2	20.7	21.0
<b>SI</b>	179	179	179	11.2	11.4	11.3	23.9	22.9	23.5
<b>SK</b>	173	174	174	14.3	14.8	14.6	25.5	24.4	24.9
<b>FI</b>	168	165	167	7.2	5.7	6.5	23.2	23.1	23.2
<b>SE</b>	174	173	173	1.2	1.6	1.4	:	:	:
<b>UK</b>	178	174	175	4.4	9.0	7.5	23.1	20.2	21.1
<b>BG</b>	184	184	184	3.2	4.7	3.8	25.3	23.9	24.7
<b>RO</b>	<b>188</b>	<b>187</b>	<b>188</b>	6.0	7.8	6.6	25.1	23.5	24.6
<b>NO</b>	166	164	165	1.1	2.1	1.7	23.5	20.3	21.4

Figure 5 visualizes the data in Table 3 referring to hours paid in NACE sections C-K. The graph shows that the number of hours paid in the reference month for “Industry and services” varies considerably across countries. The range goes from 153 in France and 158 in Ireland to 186 in Hungary or Poland and 188 in Bulgaria. In particular, Figure 5 provides an explanation why for France and Ireland, the countries with the lowest figures for monthly hours paid, the rank positions in Figure 4b have declined by 3 rank positions compared to

Figure 4a. Contrary to the situation in Figure 4a, Belgium ranks in Figure 4b not only before France, but also before Finland and the Netherlands and this is coherent with the ranking order displayed in Figure 5. The number of monthly hours paid in Belgium (179) is above the EU-25 average (173) and much higher than in Finland and the Netherlands (both 167). The average hours paid in NACE aggregate C-K amounts to 172 in the EU-15 and to 181 in the NMS.

**Figure 5: Hours paid in the reference month, NACE aggregate C – K**





## A first glance at the gender pay gap

European employment policy is committed to promoting equal opportunities in work for men and women. The SES 2002 data combine detailed information on local units as well as on personal characteristics of employees and hence represent an empirical basis for monitoring political strategies aiming at eliminating gender pay gaps.

Table 4 presents a breakdown of hourly earnings for the NACE aggregates C-F, G-K and C-K by sex. The average

hourly earnings for woman are in all three NACE categories uniformly below male's earnings. For the gender pay gap, expressed as women's earnings in percentages of men's earnings, the lowest percentages observed in "Industry" are 63.9 (Cyprus) and 71.0 (Slovakia), the highest amount to 88.0 (Sweden) and 89.0 (Luxembourg). In "Services", the corresponding extremes are 67.0 (United Kingdom) and 67.5 (Slovakia) on the lower end and 94.1 (Romania) and 94.9 (Bulgaria) on the upper end of the scale.

**Table 4: Gross hourly earnings by sex, NACE aggregates C-F, G-K and C-K**

*Percentages in bold / bold italic: maximum / minimum (per column)*  
*NACE code in Italic: The data in this column are visualized in Figure 6a.*  
*Source: Eurostat. SES 2002.*

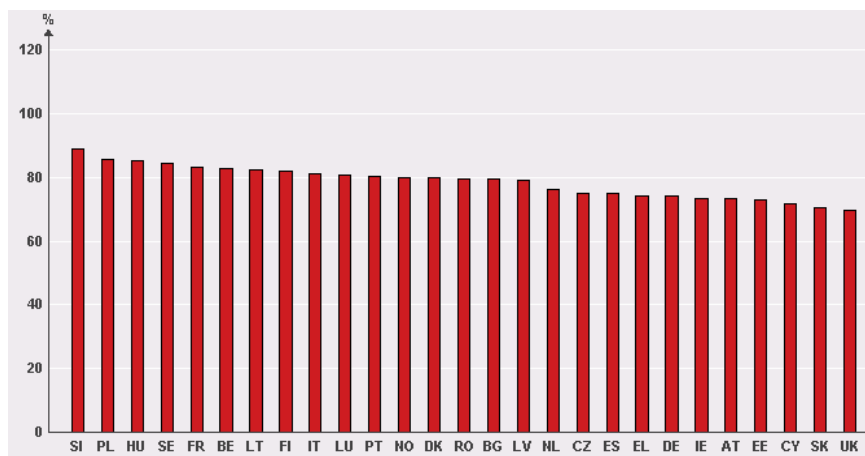
	Men's hourly earnings (in Euro)			Women's hourly earnings (in Euro)			Women's hourly earnings (in % of men's earnings)		
	C-F	G-K	C-K	C-F	G-K	C-K	C-F	G-K	C-K
<b>EU-25</b>	13.08	14.58	13.79	9.62	10.75	10.40	73.6	73.7	75.4
<b>EU-15</b>	14.90	16.06	15.46	11.72	11.93	11.87	78.7	74.3	76.8
<b>NMS</b>	2.98	3.22	3.08	2.27	2.61	2.46	76.0	81.0	79.8
<b>EZ</b>	13.85	14.10	13.96	10.95	10.87	10.90	79.1	77.1	78.1
<b>BE</b>	14.45	14.63	14.54	12.08	12.03	12.05	83.6	82.3	82.9
<b>CZ</b>	2.96	3.37	3.12	2.17	2.54	2.35	73.3	75.5	75.5
<b>DK</b>	22.08	20.89	21.42	18.59	16.65	17.13	84.2	79.7	80.0
<b>DE</b>	17.17	16.48	16.91	13.09	12.28	12.58	76.2	74.6	74.4
<b>EE</b>	2.34	2.52	2.43	1.78	1.78	1.78	76.2	70.7	73.4
<b>EL</b>	7.98	7.96	7.97	5.94	5.94	5.94	74.4	74.6	74.5
<b>ES</b>	8.62	9.65	9.09	6.80	6.83	6.82	78.8	70.8	75.0
<b>FR</b>	14.89	15.74	15.31	12.98	12.68	12.77	87.1	80.6	83.4
<b>IE</b>	18.09	18.50	18.29	13.81	13.32	13.47	76.4	72.0	73.7
<b>IT</b>	10.50	11.80	11.06	8.53	9.33	8.97	81.2	79.1	81.2
<b>CY</b>	9.40	11.88	10.80	6.01	8.32	7.76	<b>63.9</b>	70.0	71.9
<b>LV</b>	1.62	1.75	1.69	1.38	1.31	1.34	85.3	75.1	79.2
<b>LT</b>	1.90	1.93	1.91	1.54	1.61	1.58	80.9	83.7	82.5
<b>LU</b>	14.67	18.06	16.94	13.06	13.82	13.73	<b>89.0</b>	76.5	81.1
<b>HU</b>	2.62	2.74	2.67	2.11	2.43	2.28	80.6	88.7	85.5
<b>NL</b>	15.40	15.56	15.50	13.38	11.58	11.84	86.9	74.5	76.4
<b>AT</b>	13.24	13.29	13.26	10.04	9.66	9.76	75.9	72.7	73.6
<b>PL</b>	3.26	3.51	3.35	2.57	3.12	2.88	79.0	89.0	86.0
<b>PT</b>	4.98	6.65	5.71	3.56	5.47	4.59	71.4	82.4	80.3
<b>SI</b>	5.07	5.80	5.34	4.39	5.06	4.75	86.6	87.2	<b>89.0</b>
<b>SK</b>	2.20	2.63	2.40	1.56	1.78	1.70	71.0	67.5	70.9
<b>FI</b>	14.49	15.30	14.80	12.37	11.99	12.13	85.3	78.4	82.0
<b>SE</b>	15.14	16.58	15.82	13.33	13.43	13.40	88.0	81.0	84.7
<b>UK</b>	19.07	20.62	20.01	14.55	13.82	13.95	76.3	<b>67.0</b>	<b>69.7</b>
<b>BG</b>	0.91	0.83	0.88	0.66	0.78	0.70	72.0	<b>94.9</b>	79.9
<b>RO</b>	1.10	1.19	1.13	0.80	1.12	0.90	72.9	94.1	80.2
<b>NO</b>	23.04	23.73	23.44	19.86	18.54	18.80	86.2	78.1	80.2

Figure 6a visualizes the gender pay gap data presented in Table 4 for “Industry and services” (NACE category C-K). Figure 6b, referring to “Construction” (section F, not covered by Table 4), shows that gender-specific pay differences may

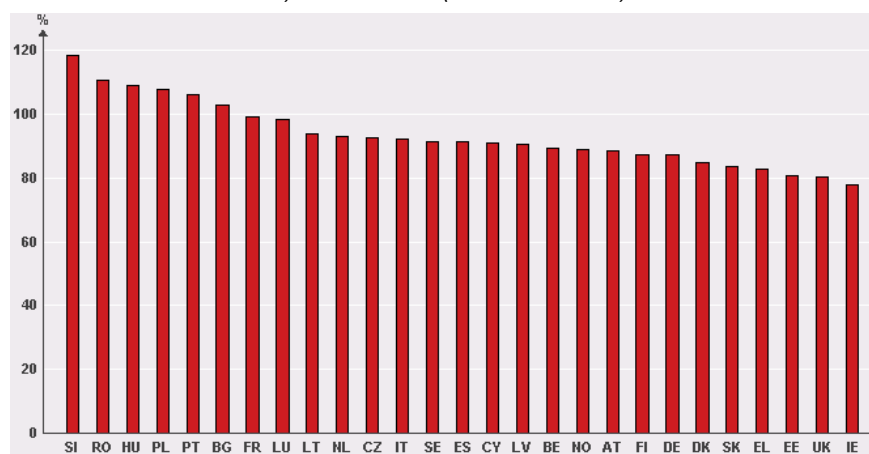
even be more accentuated for individual economic activities<sup>1</sup>. The lowest percentages for section F refer to Ireland (77.7) and the United Kingdom (80.4), the highest to Slovenia (118.6) and Romania (110.6).

**Figure 6: Gender pay gap for gross hourly earnings**  
(countries ranked by descending order)

a) Industry and services (NACE aggregate C-K)



b) Construction (NACE section F)



It should be stressed, however, that Table 4 and Figure 6 do not include any breakdown by personal characteristics of men and women or by variables related to the enterprise. The data in Table 4 only represent a first starting-point for a deeper analysis of gender pay gaps. Figure 6b makes very clear that gender pay data non-adjusted for employee’s characteristics need to be interpreted with great caution. In “Construction”, for example, females are strongly under-represented<sup>2</sup> and usually not involved in manual work. Women’s typical occupations in section F therefore differ from those of men. This explains that in several countries women’s gross hourly earnings for section F lie above that of men. Differences observed in average earnings do not necessarily reflect a gap in pay between women and men occupying the same job with the same level

of seniority. Hence, one has to take a closer look at key determinants of earnings, such as occupation, educational level, work experience or size of the enterprise. Earnings comparisons for men and women working in comparable “job cells” (same or comparable occupation, educational level, working-time arrangements, age, same enterprise) lead to more meaningful adjusted measures for gender-specific earnings inequalities.

<sup>1</sup> The reader may access data on hourly earnings by sex for all NACE sections C to K by using an interactive version of this Statistics in Focus edition (<http://forum.europa.eu.int/irc/dsis/wages/info/data/interactive.htm>).

<sup>2</sup> The percentage of women working in “Industry and services” amounts to 35.7 in the EU-15 and 39.9 in the NMS. For “Construction”, the corresponding percentages are 10.7 and 12.7.

## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

EU-wide harmonised structural data on gross earnings, hours paid and annual days of paid holiday leave are collected every four years in the European Structure of Earnings Survey under Council Regulation (EC) No 530/1999 and Commission Regulation (EC) No 1916/2000. The latest refer to the year 2002, encompassing information from more than 7.9 Mio

employees in all Member States of the EU (except Malta) as well as in the Candidate Countries Bulgaria and Romania and the EEA countries Iceland and Norway. The data for Germany refer to the year 2001. The national surveys were generally conducted on the basis of a two-stage random sampling approach of enterprises or local units (first stage) and employees (second stage).

### Official codes for countries included in this publication

EU Member States				Acceding Countries			
BE	Belgium	IE	Ireland	AT	Austria	BG	Bulgaria
CZ	Czech Republic	IT	Italy	PL	Poland	RO	Romania
DK	Denmark	CY	Cyprus	PT	Portugal		
DE	Germany	LV	Latvia	SI	Slovenia		<b>EEA Countries</b>
EE	Estonia	LT	Lithuania	SK	Slovakia	IS	Iceland
EL	Greece	LU	Luxembourg	FI	Finland	NO	Norway
ES	Spain	HU	Hungary	SE	Sweden		
FR	France	NL	Netherlands	UK	United Kingdom		

### Coverage of the survey and codes for economic activities

The codes below are as defined in the General Industrial Classification of Economic Activities, NACE, Rev 1.1. For the SES 2002, data for NACE sections C to K were mandatory and optional for the sections L to O. Nine

countries provided data for all optional NACE sections. These data are not covered by this publication.

Economic activity	
C	Mining and quarrying
D	Manufacturing
E	Electricity, gas, water supply
F	Construction
G	Wholesale and retail trade, repair of motor vehicles, personal and household goods
H	Hotels and restaurants
I	Transport, storage, communication
J	Financial intermediation
K	Real estate, renting, business activities
L	Public administration and defense; compulsory social security
M	Education
N	Health and social work
O	Other community, social and personal service activities

The SES 2002 data refer to enterprises with at least 10 employees. The inclusion of small enterprises was optional and 14 countries made use of this option.

The national averages on earnings for all economic activities presented in this publication include all sizes of enterprises for which data are available.

### Useful definitions

*Employees* are all persons who have a direct employment contract with the enterprise or local unit and receive remuneration, irrespective of the type of work performed or the number of hours worked.

*Gross earnings* cover remuneration in cash paid directly by the employer, before deductions of tax and social security contributions. All data on earnings presented in this publication cover full-time employees as well as part-time employees. The data for part-time employees are grossed-up to those for full-time employees.

*Monthly earnings* are restricted to gross earnings which are paid in each pay period. *Annual earnings* also include allowances and bonuses which are not paid in each pay period, such as 13<sup>th</sup> month payments or holiday bonuses. Severance payments and payment in kind are not included. *Gross hourly earnings* are defined as gross monthly earnings divided by the number of hours paid in the same month.

*Hours paid* cover normal and overtime hours. Hours not worked but nevertheless paid are also counted as hours paid. Examples are annual holidays or sick leave.

# Further information:

## Databases and weblinks

[SES 2002 data on Eurostat's freely accessible database:](#)



## Interactive visualisation of SES 2002 data:

<http://forum.europa.eu.int/irc/dsis/wages/info/data/index.htm> (item "Gross earnings in Europe 2002")  
<http://forum.europa.eu.int/irc/dsis/wages/info/data/interactive.htm> (interactive version of this publication)

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