



# STATISTICS IN FOCUS

## Population and social conditions

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### HOW EVENLY ARE EARNINGS DISTRIBUTED?

Statistics on the Structure of Earnings in all the 15 Member States of the European Union were collected for the first time for the year 1995. This note is the first in a series each presenting the results for a group of Member States. Among the main points which emerge from the results for Spain, France, Sweden and the United Kingdom, are:

- The average gross annual earnings (including overtime and bonuses) of full-time employees on adult rates were about ECU 19 600 (ESP 3 191 600) in Spain, ECU 24 500 (FRF 161 600) in France, ECU 25 600 (SEK 238 800) in Sweden and ECU 22 800 (GBP 18 900) in the United Kingdom.
- The hourly earnings of women, including both full-time and part-time workers and excluding overtime payments, were 84% those of men in Sweden, 73% in France, 73% in Spain and 64% in the UK. The differences are most noticeable in management earnings. If the different structure of men's and women's employment is discounted (different occupations, industries and educational levels), their earnings still remain well below 90% of male earnings in all four countries.
- Part-time workers earn considerably less than full-time workers, even when calculated on an hourly basis (85% as much in Sweden, 71% in France, 69% in Spain, 60% in UK).
- French employees with a third-level educational qualification receive 57% higher earnings than those who have completed secondary school, whereas the difference in UK is 40%, in Spain 32% and in Sweden 25%.
- Managers are the best-paid occupational group; in Sweden and the UK they earn about one and a half times the national average, whereas in France and Spain they earn twice the national average.
- Financial intermediation is the branch of the economy with the highest average earnings, except in UK where they are slightly higher in mining and quarrying. The lowest-paid workers on average are those employed in hotels and restaurants.
- In the younger age-groups, earnings rise sharply with age. There is a falling-off in the earnings of the oldest workers, except in France, where they are the age-group with the highest average earnings.

**Note:** These statistics are valuable primarily for the insight they give into the relative distribution of earnings in the Member States. Caution should be exercised in comparing the levels of earnings in different countries; apart from differences in living costs, an employee's gross earnings are subject to deductions, which vary according to national systems of taxation and social security. For further technical details, see pages 7 and 8.

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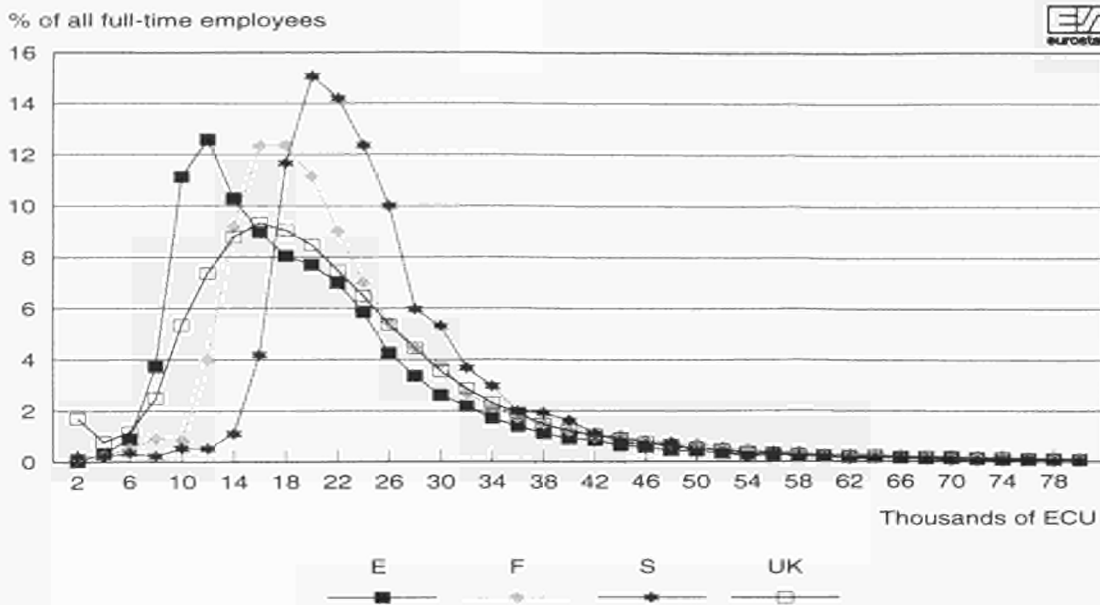
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**Figure 1:**  
Distribution of gross annual earnings



**The distribution of earnings**

The distribution of earnings of full-time employees in each of the four countries shows that beginning with the lowest-paid workers on the left there is a steep rise to a 'peak' just below the average earnings, and a long 'tail' to the right consisting of high earners who boost the average (Figure 1). As an example, about 4% of Spanish workers earn about ECU 8 000, about 13% of them earn about ECU 12 000 and about 2% earn about ECU 32 000. The 'peak' is relatively high and narrow for Sweden, indicating relative equality of earnings. The distribution for the other countries shows greater disparity, with more employees further (in both directions) from the centre of the peak, with the widest distribution in the UK.

The relative annual earnings differentials may also be expressed as a comparison of the 'highest decile' earnings, that is the figure achieved or exceeded by the best-paid 10% of employees, with the 'lowest decile' figure, below which the lowest-paid 10% fall (80% of workers therefore earn between these two figures). In Sweden the upper decile figure is 1.95 times the lower decile figure; in France the ratio between these two figures is 3.11; in Spain 3.68 and in UK 3.94.

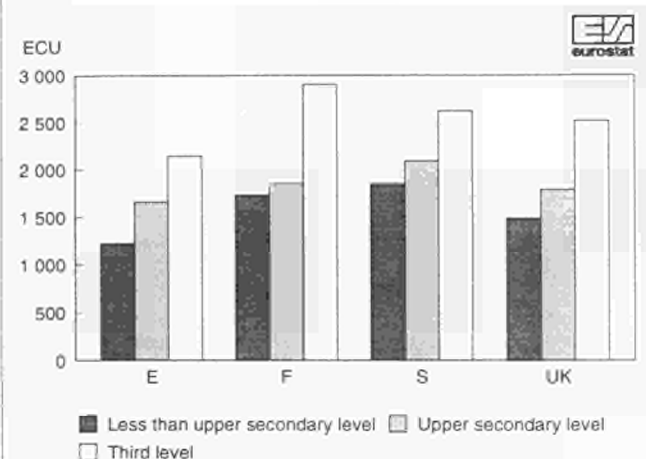
In two of the countries covered, a statutory national minimum wage was in force during the period covered; in France this amounted to ECU 913 (FRF 6 010) per month and in Spain to ECU 385 (ESP 62 700).

**The effect of educational level**

To take account of differences between national educational systems, the population can be divided into three

broad groups: those whose education finished at a lower level of secondary school (or earlier), those who successfully completed upper secondary school education, and those who have received some form of higher education (university or otherwise). The difference between average earnings in the first and second groups is greatest in Spain at 28%, compared with 20% in the UK, 13% in Sweden, and only 7% in France. In France, however, remuneration is very much higher for those who have obtained a third-level qualification, who earn on average 57% more than those who have completed upper secondary school; this compares with 40% more in the UK, 32% more in Spain and 25% more in Sweden (Figure 2).

**Figure 2:**  
Gross monthly earnings by education



### How earnings compare in different occupations

The employees covered by these figures can be divided into eight main occupational groups (Figure 3). The group with the highest average earnings in every country, as might be expected, consists mostly of managers. They earn considerably more than the next highest-paid major group, comprising professional people such as doctors, lawyers and teachers. The third highest-paid group contains technicians and associate professionals, working mostly in scientific and professional occupations. There are three other groups which tend to receive approximately similar average earnings : clerks; craft and related trades workers; and plant and machine operators and assemblers. The two groups where earnings are lowest, are : service workers and shop and market sales workers; and finally those in elementary occupations (usually involving unskilled manual work).

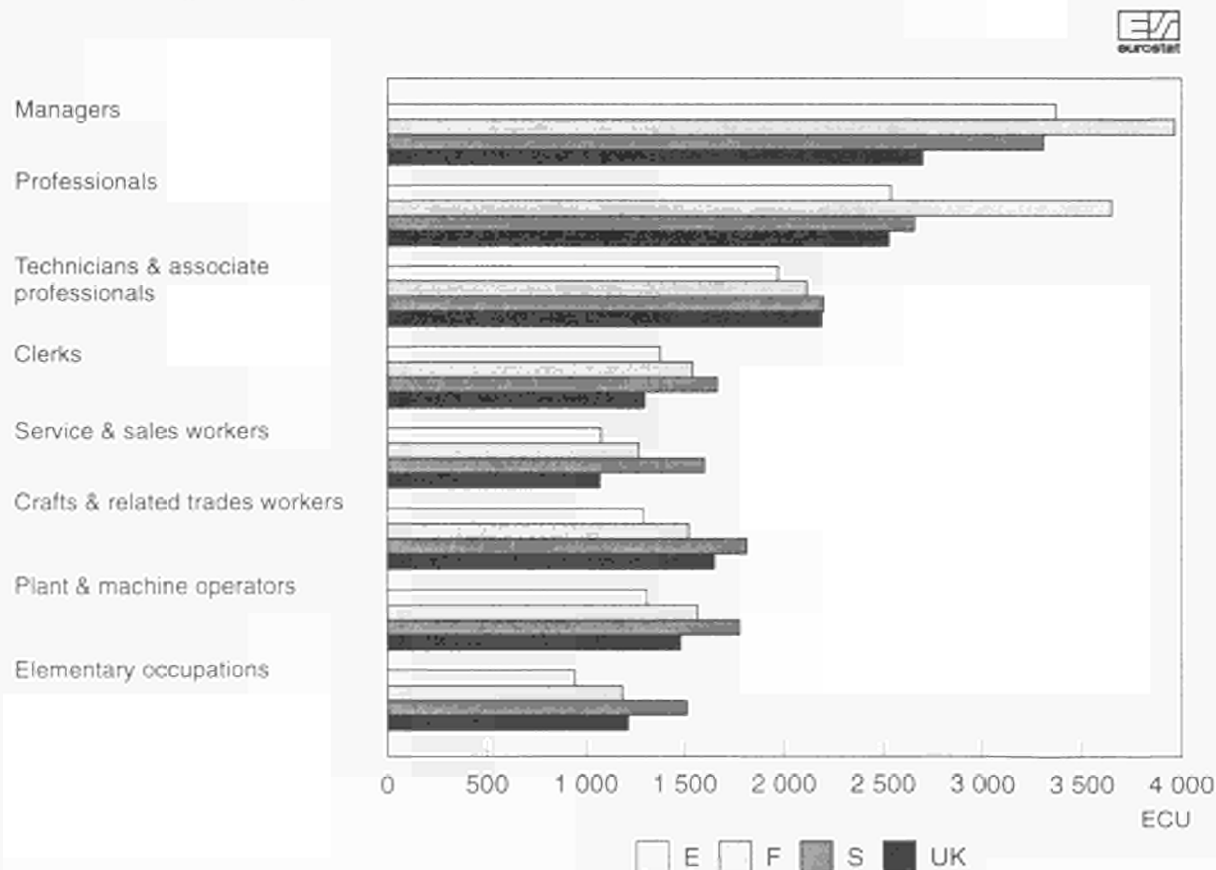
It is not easy to establish exactly how much more pay managers receive than other employees, due to the different national classification practices; in the UK 17% of all employees are classified as managers, compared with about 8% in Sweden and France and only 4% in Spain.

The difference in definitions may partly account for the variation in differentials; managers receive about twice as much as the average employee in France and Spain, while managers in Sweden and the United Kingdom receive only about one and a half times the average national earnings.

The average earnings of French managers are considerably higher than those in the other three countries, and this difference is even more marked among professionals. In fact the average earnings for French professionals are even higher than those of managers in the other three Member States.

In all the other occupational groups, the highest average earnings recorded are those in Sweden. In Spain, France, and Sweden, employees in elementary occupations are on average the lowest-paid of these eight major groups, whereas in the UK it is service workers, shop and market sales workers who occupy the bottom of the earnings scale. Workers in elementary occupations in Sweden are paid on average about 46% as much as the highest-paid occupational group (that is, managers); in the UK, the lowest-paid group average only 40% as much as managers, while in France and Spain the corresponding figure is about 30%.

**Figure 3:**  
Gross monthly earnings by occupation (ISCO-88 (COM) classification)



### How earnings vary in the different activities

Another factor influencing an employee's earnings is the type of activity in which his or her employer is mainly engaged (Figure 4), but the differences which are observed are generally less striking than the differences between occupations.

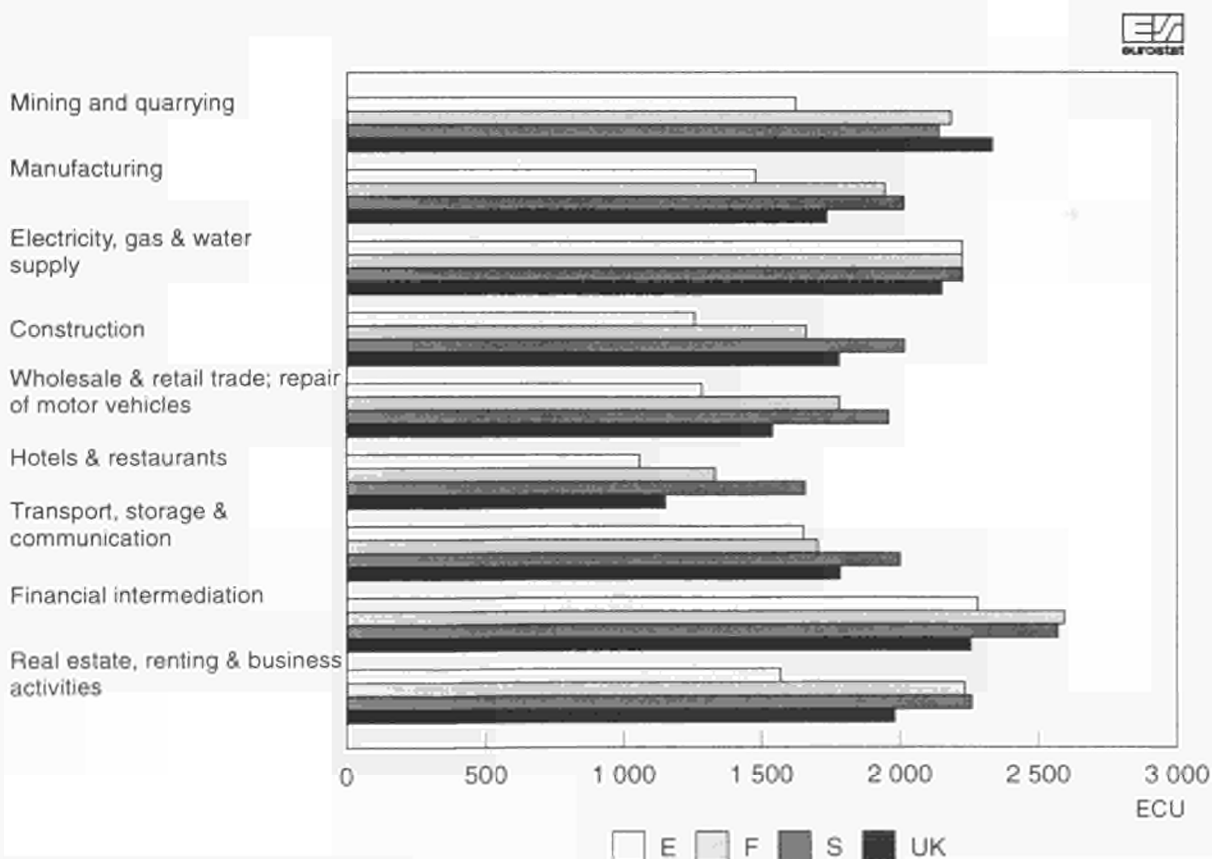
As far as industrial workers are concerned, those engaged in the supply of electricity, gas and water receive the highest average earnings in three of the countries, with the UK as an exception due to a higher average in mining and quarrying.

Both of these are however relatively small sections of the economy; most industrial workers are engaged in manufacturing, where average earnings are considerably lower. In France and Spain, earnings are lower still in the construction industry; in Sweden and the United Kingdom, by contrast, construction workers are on average better paid than in manufacturing.

In all the countries average earnings are slightly higher in services than in industry, with financial intermediation the most remunerative branch of services, followed by real estate, renting and business activities. Financial intermediation is the highest-paid branch of the economy, except in the UK where average earnings do not quite reach those in mining and quarrying.

The branch of the whole economy with the lowest average earnings is the hotel and restaurant trade, where they are about half of those in the highest-paid branches. In the UK, employees in hotels and restaurants earn on average 49% as much as those in mining and quarrying; in the other three Member States, where financial intermediation is the highest-paid branch, they earn 54% as much in Spain, 51% in France, and 66% in Sweden. The distribution of earnings between industries, like the distribution between occupational groups, can therefore also be said to be most even in Sweden.

**Figure 4:**  
Gross monthly earnings by economic activity (NACE Rev.1 classification)

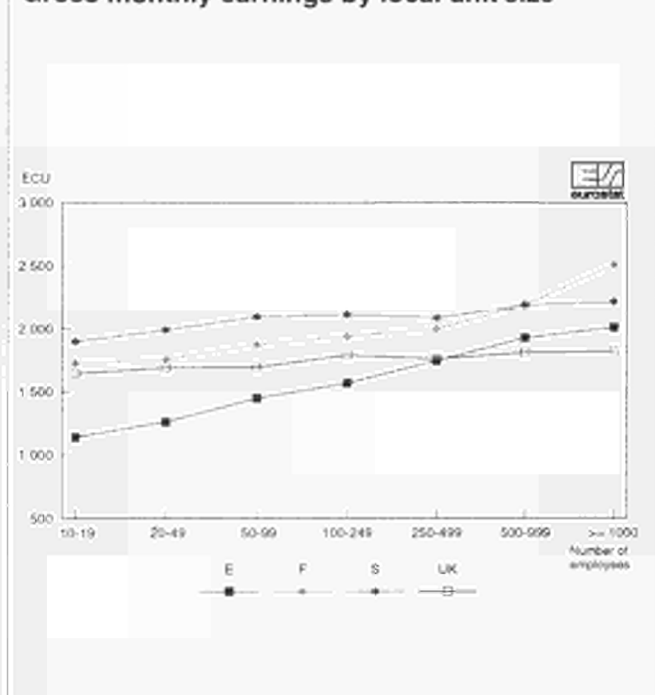




### Employees working in large units are better paid

The place where a group of persons work for the same enterprise in the same location is referred to as the local unit. There is a tendency for employees to be better paid if they work in a large local unit. The actual amount of the difference is not very considerable in Sweden or the UK, but in France it plays an important rôle particularly in the largest local units while in Spain there is a steady improvement in remuneration as the size of the local unit increases (Figure 5).

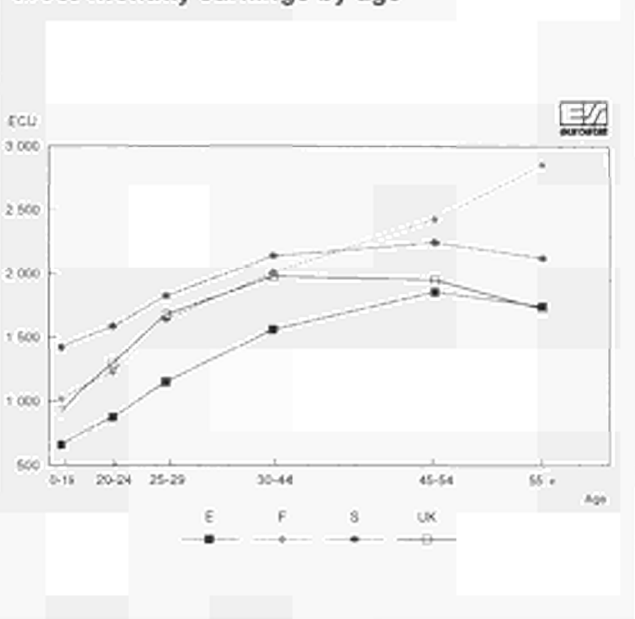
Figure 5:  
Gross monthly earnings by local unit size



### Differences between earnings of French and UK employees are mostly in the older age-groups

The figures suggest that an employee's earnings tend to rise fairly steeply through his or her twenties and thirties as more work experience is acquired, this rise being roughly parallel in the four Member States (Figure 6). France is exceptional in that the oldest employees are the highest paid (mainly due to a small number of individuals with very high earnings). In the other three Member States, especially the UK, there is a tendency for employees near the end of their working lives to earn less. In the age-groups up to the age of 45, average earnings in France and the UK are very similar but then they diverge remarkably.

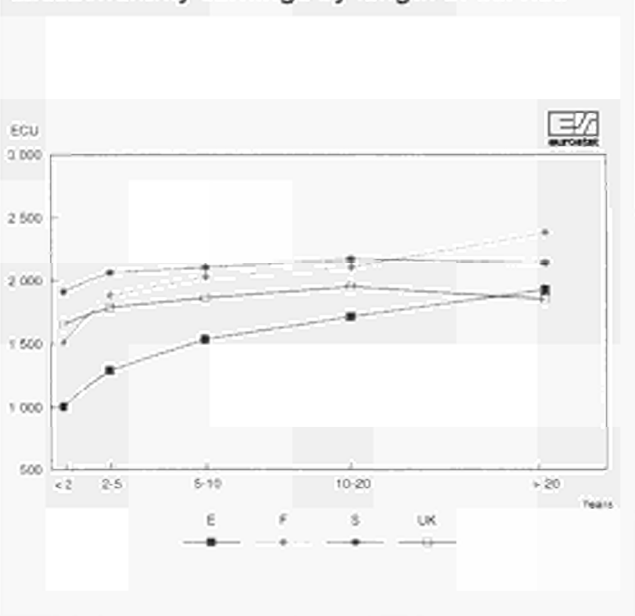
Figure 6:  
Gross monthly earnings by age



### Company loyalty is best rewarded in France and Spain

The longer a person has been employed by his company, the more he or she tends to earn. Even allowing for the fact that workers often change employers, there is obviously a correlation between age and length of service, so it is not surprising to find that it is in France, where older workers are best paid, that long-serving employees receive the highest average earnings. Company loyalty is also well rewarded in Spain, whereas in Sweden and the UK it plays a less important rôle (Figure 7).

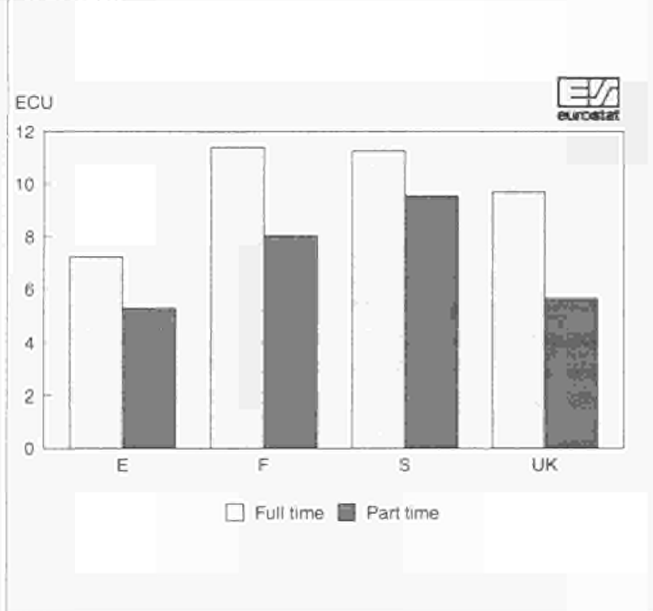
Figure 7:  
Gross monthly earnings by length of service



## The effect of working part-time

The figures which have been discussed so far relate only to full-time workers. An increasing number of employees, however, work part-time, either because they are unable to find full-time work or in order to fulfil other obligations such as family commitments. Their earnings can best be compared with those of full-time workers in terms of basic hourly rates (Figure 8). The earnings per hour of part-time workers in Sweden are only 85% of those of full-time workers; the difference is greater in France at 71% and Spain at 69% and it is even more striking in the UK at 60%. These disparities between full-time and part-time workers are connected with the fact that most part-time workers are in low-paid occupations, and most are women (67% in Spain, 68% in France, 69% in Sweden, 81% in the UK).

**Figure 8:**  
Gross hourly earnings by full time / part time workers



## Overtime payments received mostly by men

The full-time employees covered by these statistics are paid for just under forty hours a week of 'normal' work (about 37.4 hours in France, 38.4 in the United Kingdom, 39.4 in Sweden and 39.6 in Spain). However, in the United Kingdom the average employee also works almost three hours of paid overtime, whereas the figures are much lower in the other countries (about one hour in Sweden and less than half an hour in France and Spain). Overtime remains largely a male preserve; three times as much paid overtime is done by men as by women in the United Kingdom, and twice as much in the other three countries. Full-time workers in Sweden receive rates about 88% above their normal pay when they work overtime; in Spain they receive about 50% more and in France and the United Kingdom only about 25% more.

## Hourly rates of men compared with women

Because of the differences which have already been noted in the patterns of full-time and part-time work of men and women, and in overtime work, a comparison of male and female earnings is best carried out on the basis of hourly rates, excluding bonuses and overtime payments. On this basis, Sweden is the country which comes nearest of the four to equal remuneration for men and women; the average earnings for women are 84% of those for men, compared with 73% in Spain and France and 64% in the UK (Table 1).

In three of these Member States it is female managers who are the worst remunerated **occupational group** in comparison with their male counterparts. In the fourth Member State, the UK, they actually come off even worse in this comparison, with only two-thirds of male earnings, but women employed in craft and related trades in the UK gain an even smaller percentage of male earnings. Women in the lower-paid non-manual occupations (clerks; and service workers, shop and market sales workers) come nearest to male earnings in the same occupations.

If the employer's **economic activity** is considered, it is again among the highest-paid workers (in this case, those employed in financial intermediation) that women's earnings usually fall most short of men's; Spain is the exception in this case, with lower percentages in the wholesale and retail trade and in real estate.

There is a noticeable trend which is remarkably consistent in all four countries, that the older the **age-group** of women considered, the further they fall short of the average earnings of their male contemporaries.

Similarly the most highly-qualified women, those who have third-level **education**, though they receive more pay than women with lower qualifications, actually earn a smaller percentage of male earnings.

The gap between men's and women's earnings may partly be accounted for by the fact that women are more likely than men to be found in certain types of job which are poorly remunerated, and the age and educational qualifications of women are different. It is possible to try to discount this effect by applying the distribution of male employees (by educational qualification, occupation and industry) to the earnings of women in each of the same category. When women's earnings are recalculated to remove these structural effects, they come closer to men's, but there still remains an hourly **earnings difference between a man and a woman with a comparable educational background in the same occupation and industry, of 13% in Sweden, 22% in Spain, 23% in France and almost 25% in the UK.**

**Table 1:**  
**Hourly earnings of women as percent of men**  
**Full time and part time workers, excluding bonuses and overtime**



	E	F	S	UK
<b>OCCUPATION</b>				
Managers	69.7	70.2	80.1	65.8
Professionals	77.4	78.9	87.7	82.9
Technicians & associate professionals	82.7	86.1	84.6	68.9
Clerks	76.4	92.5	95.5	89.8
Service & sales workers	79.1	70.5	96.2	80.7
Craft & related trades workers	70.6	67.0	88.7	61.3
Plant & machine operators	73.5	76.3	92.0	74.5
Elementary occupations	83.9	76.2	87.4	73.6
<b>ECONOMIC ACTIVITY</b>				
Mining and quarrying	66.7	57.9	78.8	75.3
Manufacturing	69.7	72.1	85.2	66.3
Electricity, gas & water supply	82.6	72.1	77.5	76.1
Construction	94.8	93.0	78.2	74.5
<b>Total industry</b>	<b>73.6</b>	<b>74.1</b>	<b>84.3</b>	<b>67.4</b>
Wholesale&retail trade; repair of motor vehicles	70.7	61.0	84.3	62.4
Hotels & restaurants	79.4	61.1	79.7	75.7
Transport, storage & communication	85.9	92.4	93.6	82.3
Financial intermediation	75.5	63.1	64.2	51.4
Real estate, renting & business activities	69.4	68.5	76.4	62.8
<b>Total services</b>	<b>71.1</b>	<b>70.6</b>	<b>82.1</b>	<b>62.6</b>
<b>AGE</b>				
Less than 20 years	92.9	98.0	90.7	91.0
Between 20 and 24 years	86.6	94.1	94.5	82.6
Between 25 and 29 years	86.5	88.4	88.4	79.7
Between 30 and 44 years	77.8	77.1	86.1	63.1
Between 45 and 54 years	74.4	69.3	79.8	53.6
55 years and more	70.6	64.5	77.4	58.1
<b>EDUCATION</b>				
Less than upper secondary level	73.8	73.8	87.3	70.9
Upper secondary level	74.2	78.7	82.1	70.8
Third level (university or otherwise)	64.9	66.5	80.4	68.4
<b>TOTAL</b>	<b>72.7</b>	<b>72.9</b>	<b>84.0</b>	<b>64.4</b>
<b>After discounting main structural effects</b> (occupation, economic activity, education)	<b>78.2</b>	<b>76.6</b>	<b>86.8</b>	<b>75.4</b>

## THE STRUCTURE OF EARNINGS STATISTICS (SES)

Structure of Earnings statistics relating to the year 1995 were collected during 1996 in every Member State of the European Union, together with Norway and Iceland (as exceptions, the reference years for France and Austria are respectively 1994 and 1996). Council Regulation (EC) No. 2744/95 laid down that a sample survey of employers should be conducted by the national statistical services for this purpose, except where equivalent information was available from other appropriate sources. The Regulation was implemented by the national statistical offices of the Member States, each following its own practices in such areas as sample design and the calculation of appropriate weighting factors, but applying the agreed arrangements for implementing the Regulation (available from Eurostat).

The statistics exclude persons who are self-employed or who work in local units employing less than ten people, and also employees in agriculture and fishing, public administration and defence, education, health and social work, other community, social and personal service activities, private households or extra-territorial organisations (together with certain other exceptions on a national basis).



The aim of this note is to compare the relative distribution of earnings between different groups of employees, and to examine how these vary between Spain, France, Sweden and the United Kingdom. It should in particular be borne in mind that the reference year used in France for these statistics was 1994, whereas in the three other Member States it was 1995, but while this would certainly affect a comparison of the level of earnings, there is no reason to suppose that the distribution would have been greatly different if the reference year in the Member States had been the same.

The Structure of Earnings Statistics include information on hourly, monthly and annual earnings. In this note, hourly figures are used mostly to permit comparison between the rates of full-time and part-time workers, and between men and women (since a far greater proportion of women employees work part-time than men). Where monthly figures are used, they refer only to full-time employees. Persons employed as trainees are excluded here because their lower rates of pay would distort the averages. Overtime payments, and bonuses paid for working shifts or for other reasons, are included in the monthly figures but not in hourly rates.

In some Member States, bonuses paid at irregular intervals (for example payment of a thirteenth or even fourteenth monthly salary) make up an important element of annual earnings. Annual gross earnings (for example in figure 1) take account of these irregular bonuses.

The calculation of women's earnings as a percentage of men's, takes into account certain structural effects (occupation, economic activity and education), but it should be pointed out that different results might be obtained by using a different selection of variables.

All earnings given are in ECUs unless otherwise stated; the following currency conversion rates are used:

1 ECU = ESP 163.00 = FRF 6.5826 = SEK 9.3319 = GBP 0.8288

The SES may be consulted on-line in Eurostat's New Cronos database, together with a full description of the methodologies used at EU and national levels. Both the data and methodologies may also be obtained from the Eurostat data shops (see below).

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