## EGGE - EC's Expert Group on Gender and Employment

# National Reports on the Unadjusted and Adjusted Gender Pay Gap 

## Spain

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# THE GENDER PAY GAP IN SPAIN. 

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## 1. National Measures of unadjusted gender pay gap ${ }^{\mathbf{1}}$.

### 1.1. Sources of information.

Different sources of information will be used here to assess the impact of different factors on the unadjusted gender pay gap.
(i) Survey of wage structure 1988.

First, the survey on wage structure for 1988 (Distribucion salarial en España, INE 1992), provides information on the structure of payment and employment, collected through a survey of 20.000 observational elements, consisting of companies of manufacturing, construction and the service sector. The survey coverage is restricted to employees within the Social Security system, working full time, either with a permanent or temporary contract in firms of five or more employees. Employees are classified according to several personal and working environment characteristics like sex, occupational category (defined within the social security system), type of contract, activity branch and size of the establishment. Average earnings is the ratio between total annual earnings and the mean number of workers during the year. Earnings, are measured here as gross pay before tax deductions or social security contributions.
(ii) Survey of living and working conditions 1985.

Second, the survey on living and working conditions (Encuesta de Condiciones de Vida y Trabajo en España, 1985-1986) provides information on net monthly wages of a representative sample of 60,000 households. It has the advantage of covering employees for the various segments of the labour market, including those in precarious working conditions. It allows investigation of pay differences across the complete distribution of earnings. However, this survey does not contain a precise measure of earnings because income is reported in interval form. There is no information on hours of work, and, consequently there is no possibility of knowing the hourly wage in order to obtain a measure of adjusted wages.
(iii) Survey of gender discimination in the labour market 1988.

The survey of gender discrimination in the labour market (Estudio Piloto sobre Discriminación Laboral de la Mujer, 1988) contains information about personal and

[^0]household characteristics, that was collected through questionnaire to a sample of 3.000 individuals concerning the total hourly wages before tax and social security contributions. It was specially designed to measure wage differences between men and women, containing quite a lot of information on personal and family characteristics. Nonetheless, it must be taken into account not only the lower coverage of this last survey compared to other surveys but that the male sub-sample is formed by the partners of female members interviewed in the sample.
(iv) Household Expenditure Survey 1990-91.

The household expenditure survey (Encuesta de presupuestos familiares 199091) is addressed to a sample of 25,000 households. Even if its main purpose is to obtain information on the consumption patterns of Spanish houseolds, it allows to compare female and male wages, but only on a yearly basis, as the information on working hoursis only restricted to whether they are working more than 13 weekly hours or not. Ther is neither information on important variables like seniority within the firm or experience in the labour force.
(v) Survey on social biography and class structure (1991).

The survey on social biography and class structure (Encuesta de estructura, conciencia y biografía de clase, 1991) contains information on a sample of 6,632 individuals ( 1,308 men, all of them employees and 1,374 women, 881 of them employees providing information on their hourly wage). It is a very wealthy set of information on family and labour market characteristics.
(vi) Structure of earnings survey-Spain (1995).

The structure of earnings survey (Encuesta de estructura salarial, 1995) provides detailed information on a sample of 175,000 employees of industry and services. The fact that public sector employees are not covered by this survey is an important drawback for knowing the pay gap, given women tend to concentrate in occupations of the public sector.
(vii) European Community Household Panel Data (1994-1997).

The European Community Household Panel Data (ECPH) for Spain (1994-1997) provides information on income and wages that is comparable at the European level. On the other hand, as far as it concerns the availability of Spanish data it complements
previous surveys as for example the Spanish Labour Force Survey (EPA) or the Household Expenditure Survey (EPF).

The objective to use different data source is to show that, in spite of having different levels of reliability on a priori grounds, given that the surveys which measure earnings are quite different in the purpose for which they were designed, all of them provide evidence of the gender pay gap.

### 1.2. The unadjusted gender wage gap during the 80's and 90's.

Using the survey on the wage structure for 1988, we will explore first the gender pay gap at the aggregate level, distinguishing among occupational categories on the one hand, and between permanent and temporary contracts on the other hand. it can be observed that the gross wage differential among men and women was $26 \%$ for all occupational categories, these differences being considerable higher for qualified professionals and technicians than for administrative categories (Moltó (1993), Table 10). The smallest difference corresponded to employees under eighteen. The ratio between the earnings in the upper and the lower tail of the distribution was higher for men than for women (e.g. 3.66 is the ratio for men, compared to 3.12 for women). The ratio among qualified professionals and engineers and administrative officials was also higher for men (1.9 for men against 1.6 for women). In addition, a higher percentage of female employees than male employees were employed in 1988 in occupational categories, whose earnings were, on average, less than the overall average wage, which was approximately one and a half million pesetas (almost nine thousand Euro).

The gross gender average wage differential was five percentage points smaller for employees under permanent contracts than under temporary contracts (Moltó (1993), Table 12 and 14). The percentage of employees belonging to occupational categories whose earnings, on average, were less than the respective overall average earnings under temporary contract (one million pesetas/six thousand Euro) and permanent contract (one million eight thousand pesetas/ ten thousand eight hundred Euro) was very high around $90 \%$, being quite close in both cases for female employees. In the case of male employees this percentage varied from only $30 \%$ for employees under temporary contracts to $62 \%$ for employees under permanent contracts (Moltó (1993), Tables 13 and 15).

The gender earnings gap estimated for industrial and service workers show little variation over the 90 's, as Table 1.2 .1 shows. It is nevertheless higher on a monthly than on a daily basis, ( 28.53 in comparison to 26.59 in 1994). In other words, women earn on average $71.47 \%$ of men per month and 73.41 per day. This partly reflects the greater proportion of women working part-time, but also captures the industrial segregation dimension.

Table 1.2.1: Monthly and daily average earnings (Euro) per worker, by gender.

| Monthly | 1990 |  |  | $\mathbf{1 9 9 4}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Men (1) | Women (2) | (2)/(1) | Men (1) | Women (2) | $(\mathbf{2}) /(\mathbf{1})$ |
|  |  | 846.2916 | 592.2947 | 69.99 | 1101.2922 | 787.1138 |
|  |  |  |  |  |  |  |
| Daily | 5.71583 | 4.1351 | 72.34 | 7.4829 | 5.4934 | 73.41 |

Source: INE, Encuesta de Salarios en la Industria y los servicios (4th quarter).
The gender earnings gap is smaller when we analyse the net yearly earnings as it is shown in Table 1.2.2. Also in the second half of the 90 's there was little variation between 1994 and 1997, but the time trend shows a slight increase of the gender gap. In 1994 women earned on average $79 \%$ of men per year while in 1997 women earned 78.43\%.

Table 1.2.2. Net yearly average earnings (Euro).

|  | Men (1) | Women (2) | Ratio (2)/(1) |
| :--- | ---: | ---: | ---: |
| $\mathbf{1 9 9 4}$ | 11047.016 | 8727.2526 | 79.00 |
| $\mathbf{1 9 9 5}$ | 10994.638 | 8685.1676 | 78.99 |
| $\mathbf{1 9 9 6}$ | 11785.723 | 9087.5460 | 77.11 |
| $\mathbf{1 9 9 7}$ | 11607.989 | 9104.2958 | 78.43 |

Source: INE, Spanish Household Panel Data Survey. Own calculation.

The gender pay gap varies with industry, as Table 1.2 .3 shows. The overall earnings gap for the industrial and service sector is in fact quite stable through the 90's, having diminished only between one and two percentage points, the gender pay gap being even higher for non-manual workers. While in 1990, average earnings for female manual workers were equivalent to $67.43 \%$ of men's average, in 1994 it was 68.58, and 62.85 for non-manual workers. In 2000 average earnings for female manual workers were equivalent to $61.51 \%$ of men's average and $64.83 \%$ for non-manual workers. The reversal of the general trend of a higher gender gap in the case of manual workers than in the non-manual workers at the end of the century, is due to increasing weight of the service sector in employment. On the one hand women tend to
concentrate in the services, where the gender pay gap, on a monthly basis, is higher for the non-manual than for the manual workers (In 2000 female manual employees in the service sector earned only $59.8 \%$ of male manual employees in comparison to $66.7 \%$ in the case of non-manual employees, those percentages being reversed in the industrial sector: $66.2 \%$ for manual versus $62.7 \%$ for non-manual). This is due to the increasing proportion of women working part-time in the service sector. This is well illustrated when we look at the hourly pay gap, which is higher for non-manual employees, even in the service sector.

Table 1.2.3: Monthly average earnings (Euro) per worker. by industry, by gender.

|  | Non-manual |  |  | Manual |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 | Men (1) | Women (2) | (2)/(1) | Men (1) | Women (2) | (2)/(1) |
| 1. Energy and water | 1496.66 | 1002.88 | 67.01 | 1114.43 | 590.26 | 52.97 |
| 2. Extrac. \& proces. non-energy minerals | 1322.33 | 890.56 | 67.35 | 802.84 | 587.4 | 73.17 |
| 3. Metal manufacture \& instr.engineering | 1292.54 | 800.32 | 61.92 | 769.9 | 645.95 | 83.90 |
| 4. Other manufacturing industries | 1087.14 | 685.84 | 63.09 | 678.66 | 457.43 | 67.40 |
| 5. Building \& civil engineering | 1044.82 | 643.03 | 61.55 | 612.5 | 478.05 | 78.05 |
| 6. Distributive trades, hotels, catering. | 869.87 | 568.52 | 65.36 | 596.42 | 414.26 | 69.46 |
| 7. Transport \& communications | 1181.48 | 870.65 | 73.69 | 751.06 | 631.6 | 84.09 |
| 8. Banking, finance, \& bussiness service | 1242.25 | 923.62 | 74.35 | 902.25 | 481.09 | 53.32 |
| Total | 1122.16 | 705.31 | 62.85 | 695.97 | 469.29 | 67.43 |
| 1994 |  |  |  |  |  |  |
| 1. Energy and water | 1959.57 | 1372.76 | 70.05 | 1423.61 | 780.48 | 54.82 |
| 2. Extrac. \& proces. non-energy minerals | 1721.18 | 1181.91 | 68.67 | 1043.65 | 769.5 | 73.73 |
| 3. Metal manufacture \& instr.engineering | 1653.41 | 1092.51 | 66.08 | 1038.98 | 850.58 | 81.87 |
| 4. Other manufacturing industries | 1396.05 | 894.84 | 64.10 | 867.63 | 604.51 | 69.67 |
| 5. Building \& civil engineering | 1385.32 | 810.3 | 58.49 | 793.77 | 563.66 | 71.01 |
| 6. Distributive trades, hotels, catering. | 1022.98 | 705.75 | 68.99 | 738.66 | 565.9 | 76.61 |
| 7. Transport \& communications | 1496.05 | 1172.88 | 78.40 | 930.59 | 706.45 | 75.91 |
| 8. Banking, finance, \& bussiness service | 1672.89 | 1208.49 | 72.24 | 1235.74 | 646.18 | 52.29 |
| Total | 1410.97 | 908.91 | 64.42 | 897.26 | 615.35 | 68.58 |
| 2000 |  |  |  |  |  |  |
| 1. Energy and water | 2963.90 | 1965.69 | 66.32 | 1831.96 | 863.89 | 47.16 |
| 2. Extrac. \& proces. non-energy minerals | 2644.11 | 1663.70 | 62.92 | 1656.46 | 942.93 | 56.92 |
| 3. Metal manufacture \& instr.engineering | 2544.11 | 1597.44 | 62.79 | 1460.82 | 975.59 | 66.78 |
| 5. Building \& civil engineering | 2156.13 | 1365.14 | 63.31 | 1176.36 | 779.35 | 66.25 |
| 6A. Distributive trades \& repairs | 1786.51 | 1139.21 | 63.77 | 1160.58 | 748.63 | 64.50 |
| 6B.Hotels, catering. | 1433.43 | 1131.12 | 78.91 | 1036.20 | 777.64 | 75.05 |
| 7. Transport \& communications | 2172.09 | 1576.36 | 72.57 | 1425.86 | 821.10 | 57.59 |
| 8A. Banking \& finance | 3143.12 | 2318.75 | 73.77 | 2172.27 | 910.71 | 41.92 |
| 8B. Bussiness service | 1904.73 | 1355.75 | 71.18 | 1102.53 | 625.85 | 56.76 |
| Total | 2211.47 | 1433.65 | 64.83 | 1306.32 | 803.54 | 61.51 |

Source: INE, Encuesta de Salarios en la Industria y los Servicios (4th quarter).
The earnings gap for non-manual workers during the first half of the 90 's tend to close in most sectors, women's average earnings increasing in relation to men's, particularly for manual workers in retail and catering. But it is probably the downgrading of men's working conditions, more than the upgrading of female
employment, the main responsible for diminishing the earnings gap in some sectors. There are also important differences between manual and non-manual workers in relation to the gender pay gap, arising from different conditionings. If we take two service sectors like banking and retailing and catering, we find a persistent pay gap variation between non-manual and manual workers, which is favourable to women in the case of banking and unfavourable in the case of retail and catering. The downgrading of men entering the latter with increasing shares of temporary and parttime employment is causing the earnings gap of manual workers in retail and catering to close, while it is still comparatively higher for non-manuals where women tend to occupy subordinate positions due to cultural factors. Just the opposite occurs in the case of banking and business services, where non-manual female workers used to entry and get promotion through competitive examinations (in banking), while manual tasks used to be subcontracted, being thus subject to poor working conditions, in particular to low wages.

In the second half of the 90 's the gender pay gap reamins stable for non-manual workers, but increases for manual workers by 7 percentage points. This is due to the increases in the gap suffered by all manufacturing and construction sectors.

The gender pay gap varies with occupation, as Table 1.2.4 shows. In 1994 the highest yearly earning gap is observed in the group of Skilled agricultural and fishery workers. Here the average earning for female workers were equivalent to $35,07 \%$ of men's average while in 1997 it was $52,72 \%$. These differences could be attributed to the fact that women in this group should be segregated to the unskilled jobs, the representation of women in this category are small around $15 \%$. In any case also the average earning for men are below the average.

| $\begin{aligned} & \text { ISCO-88(COM) } \\ & 1 \text { digit. } \end{aligned}$ | 1994 |  |  | 1995 |  |  | 1996 |  |  | 1997 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men <br> (1) | Women (2) | $\begin{aligned} & \text { Ratio } \\ & (2) /(3) \\ & \hline \end{aligned}$ | Men <br> (1) | Women (2) | $\begin{gathered} \text { Ratio } \\ (2) /(3) \\ \hline \end{gathered}$ | Men <br> (1) | Women <br> (2) | $\begin{aligned} & \text { Ratio } \\ & (2) /(3) \\ & \hline \end{aligned}$ | Men <br> (1) | Women <br> (2) | $\begin{aligned} & \text { Ratio } \\ & (2) /(3) \\ & \hline \end{aligned}$ |
| Legislator, seniors officials | 25972.96 | 15782.25 | 60.76 | 20729.85 | 14988.15 | 72.30 | 24346.18 | 12591.63 | 51.72 | 27381.22 | 13967.16 | 51.01 |
| Professionals | 18959.40 | 14461.62 | 76.28 | 19107.65 | 14165.16 | 74.13 | 20149.07 | 14485.29 | 71.89 | 19599.09 | 14431.99 | 73.64 |
| Technicians and associate professionals) | 14383.34 | 10846.27 | 75.41 | 14106.67 | 10973.31 | 77.79 | 14906.98 | 11211.96 | 75.21 | 15096.00 | 11234.63 | 74.42 |
| Clerks | 11556.25 | 8535.62 | 73.86 | 11575.32 | 8389.59 | 72.48 | 12481.35 | 8992.45 | 72.05 | 12673.34 | 9215.25 | 72.71 |
| Service Workers and shop and market sales workers | 8855.07 | 6824.65 | 77.07 | 9093.60 | 6285.09 | 69.12 | 9288.75 | 6554.59 | 70.56 | 9457.08 | 6937.16 | 73.35 |
| Skilled agricultural and fishery workers | 6888.32 | 2415.94 | 35.07 | 6616.89 | 2524.34 | 38.15 | 8479.51 | 5909.47 | 69.69 | 7395.83 | 3898.99 | 52.72 |
| Craft and related trade workers | 9113.14 | 6021.15 | 66.07 | 9276.28 | 6510.32 | 70.18 | 9824.33 | 6042.55 | 61.51 | 9584.60 | 6741.65 | 70.34 |
| Plant and machine operators and assemblers | 9904.02 | 6025.78 | 60.84 | 10054.09 | 5871.79 | 58.40 | 10474.45 | 5914.36 | 56.46 | 10158.92 | 5395.52 | 53.11 |
| Elementary occupations | 6911.24 | 5213.32 | 75.43 | 6814.89 | 5020.18 | 73.66 | 7433.99 | 5263.33 | 70.80 | 7222.73 | 5294.25 | 73.30 |
| Total | 11047.00 | 8727.25 | 79.00 | 10994.64 | 8685.17 | 78.99 | 11785.72 | 9087.55 | 77.11 | 11607.99 | 9104.30 | 78.43 |
| Source: Spanish Household Panel Survey, own calculation |  |  |  |  |  |  |  |  |  |  |  |  |

In the group of legislator women are sub-represented, $9,6 \%$ of the total of workers. Even though the yearly earnings for women are higher than the average earnings for all occupations, the pay gap with respect to men is higher around $39 \%$, that means that a woman earns, on average, $60.76 \%$ of men's average.

The earnings gap women during the second half of the 90 's tend to increase in occupations where there was a high percentage of women. That is the case of Professionals, Technicians, Clerks, Service Workers and Elementary Occupations.

The dispersion of both female in and male yearly earnings reported Table 1.2.5 increased over the period 1994-1997, but comparatively more for men than for women. The fact that women tend to be concentrated in a few occupations in services that are also low paid, accounts for the lower variation among female employees. The age factor and the type of contract of young male employees (temporary, apprenticeship, etc) explain the higher variation in the case of men.

Table 1.2.5. Variation coefficient of net yearly average earnings (Euro) by gender.

|  | Men |  | Women (2) |  | Men | Women |
| :--- | :--- | :--- | :---: | :--- | :---: | :---: |
|  | Mean (1) |  | Std. Dev. (2) | Mean (1) | Std. Dev. (2) | V.coef (2)/(1) |
| $\mathbf{V . c o e f ~ ( 2 ) / ( 1 ) ~}$ |  |  |  |  |  |  |
| $\mathbf{1 9 9 4}$ | 11047.016 | 7466.8329 | 8727.2526 | 5710.3901 | 0.68 | 0.65 |
| $\mathbf{1 9 9 5}$ | 10994.638 | 6923.2500 | 8685.1676 | 5432.2881 | 0.63 | 0.63 |
| $\mathbf{1 9 9 6}$ | 11785.723 | 7917.6058 | 9087.5460 | 5698.3073 | 0.67 | 0.63 |
| $\mathbf{1 9 9 7}$ | 11607.989 | 8307.0568 | 9104.2958 | 5784.3743 | 0.72 | 0.64 |

Source: INE, Spanish Household Panel Data Survey. Own calculation.

Next we will analyse the effect of the type of contracts in the gender pay gap. Figure 1.3 .1 shows the evolution of the tempory contracts by gender in Spain from 1987 to 2001. The e gender evolution about temporality for both men and women is similar. In 1987, 564,900 women occupy temporary contracts while in 2001 these contracts were around 1623000 .

Figure. 1.2.1: Temporary contracts by gender, 1987-2001.


The percentage of temporary contacts, by gender, appear in Table 1.2.6. As we can observe the temporary rates are higher for female than for male. On average the difference between the percentage of female and male is of 5 points, reaching even a difference of eight and nine perecntage points between 1990 and 1991 respectively. Also we can observe how these differences diminishes during 1997 and 1998. In these last two years increase more the indefinite than the temporary contract for women than for men.

Table 1.2.6. Percentage of temporary contracts by gender

|  | Women | Men | Total |
| :--- | ---: | ---: | ---: |
| $\mathbf{1 9 8 7}$ | 23.5 | 18.2 | 19.8 |
| $\mathbf{1 9 8 8}$ | 29.3 | 23.3 | 25.1 |
| $\mathbf{1 9 8 9}$ | 32.1 | 26.4 | 28.2 |
| $\mathbf{1 9 9 0}$ | 37.2 | 28.8 | 31.5 |
| $\mathbf{1 9 9 1}$ | 39.5 | 30.3 | 33.3 |
| $\mathbf{1 9 9 2}$ | 38.2 | 30.4 | 33.0 |
| $\mathbf{1 9 9 3}$ | 37.1 | 30.3 | 32.6 |
| $\mathbf{1 9 9 4}$ | 37.7 | 32.8 | 34.5 |
| $\mathbf{1 9 9 5}$ | 37.5 | 32.9 | 34.5 |
| $\mathbf{1 9 9 6}$ | 36.0 | 32.3 | 33.6 |
| $\mathbf{1 9 9 7}$ | 34.8 | 32.2 | 33.2 |
| $\mathbf{1 9 9 8}$ | 33.9 | 31.6 | 32.5 |
| $\mathbf{1 9 9 9}$ | 34.8 | 31.2 | 32.6 |
| $\mathbf{2 0 0 0}$ | 33.7 | 30.4 | 31.7 |
| $\mathbf{2 0 0 1}$ | 34.5 | 29.9 | 31.7 |

Source: INE (EPA).

Table 1.2.7 presents the average yearly earnings for male and female by type of contract. The wage gap between men and women is higher as worse is the labour contract condition 1996, while in 1997 the small pay gap is reported for temporary female. As we mentioned above the number of indefinite contracts increase in 1997 for women. It seems that, even though female percentage of temporary jobs diminish, the earning gap between male and female inside these category have increased.

Table 1.2.7. Net yearly average earnings (Euro) by gender and by type of contract.

|  | Men (1) |  | Women (2) |  | Ratio (2)/(1) |  |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ |
|  | 13777.942 | 14050.374 | 11123.570 | 10946.255 | 0.81 | 0.78 |
| Temporary | 7265.3663 | 6589.7940 | 5739.2945 | 5955.3776 | 0.79 | 0.90 |
| Without <br> contract. | 5947.2493 | 5338.2909 | 3321.4213 | 3800.0657 | 0.56 | 0.71 |
| Others | 8660.3189 | 9464.3482 | 5746.1945 | 5748.5439 | 0.66 | 0.61 |

Source: INE, Spanish Household Panel Data Survey. Own calculation.

The pay gap differences between male and female working part-time were higher in 1997 than in 1994, while in the case of full-timers the earnings gap was quite stable during those years. Table 1.2 .8 shows that the wage gap of female part-timers increased over the period 1994-1997.

Table 1.2.8. Net yearly average earnings (Euro) by gender and by contract (fifteen hours and more per week).

|  | Men (1) |  | Women (2) |  | Ratio (2)/(1) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Part-time |  | Full-time | Part-time | Full-time | Part-time |
|  | 6659.9733 | 11141.721 | 5438.1056 | 9248.5871 | 0.82 | 0.83 |
| $\mathbf{1 9 9 5}$ | 5865.9629 | 11077.223 | 4653.8681 | 9247.9125 | 0.79 | 0.83 |
| $\mathbf{1 9 9 6}$ | 5678.7721 | 11893.396 | 4293.4881 | 9744.5390 | 0.76 | 0.82 |
| $\mathbf{1 9 9 7}$ | 6071.3302 | 11724.052 | 4391.2658 | 9787.1720 | 0.72 | 0.83 |

Source: INE, Spanish Household Panel Data Survey. Own calculation.

### 1.3. Trends in low pay and wage inequality.

The generalization of temporary contracts has also an incidence on low earnings. In 1992, $21.47 \%$ of female wage earners were paid up to $50 \%$ the national minimum wage, on an annual basis, in comparison with $13.12 \%$ male earners. Comparatively a higher difference between women and men appears if we compare those earning under the statutory minimum wage ( $35.87 \%$ of women and $22.44 \%$ men) (See Moltó, 1995: 113-114, Table 3.1.3). In 1993, approximately the same percentages apply as Table 1.3 .1 shows.

Table 1.4.1: Wage earners, by statutory minimum salary (SMI) steps, by gender, in 1993.

|  | Women | W \% distrib. | Men | M \% distrib. | Female sha. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{0 - 0 . 5}$ SMI | 833485 | 21.70 | 978776 | 14.14 | 45.99 |
| $\mathbf{0 . 5 - 1 ~ S M I ~}$ | 515069 | 13.41 | 622438 | 8.99 | 45.28 |
| 1-1.5 SMI | 505210 | 13.15 | 659912 | 9.53 | 43.36 |
| $\mathbf{1 . 5 - 2}$ SMI | 513763 | 13.38 | 967434 | 13.98 | 34.69 |
| More than 2 SMI | 1473387 | 38.36 | 3693379 | 53.36 | 28.52 |
| Total | 3840914 | 100.00 | 6921939 | 100.00 | 35.69 |

Source: IEF, Empleo, Salarios y Pensiones en las Fuentes Tributarias (1993).

Women are over-represented on the lower earnings steps, the female share for employees earning up to one and a half times the minimum wage being $45 \%$ compared to the $35 \%$ female share on the total number of employees. Note also that the percentage of women earning more than twice the minimum wage is relatively lower than that for men ( $38 \%$ and $53 \%$, respectively).

The estimated percentage of women earning the minimum wage, on a daily basis, working in companies of six employees or bigger, appears in Table 1.4.2.

Table 1.4.2: Employees earning the minimum wage (SMI), by age, by sector, by company size, by gender (thousands).

|  | SMI Men | SMI Wome | Female SMI sha | Total Men | Total Women | $\begin{gathered} \hline \% \text { men on } \\ \text { SMI } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { \% women } \\ \text { on SMI } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 |  |  |  |  |  |  |  |
| Sector |  |  |  |  |  |  |  |
| Industrial | 24.1 | 19.8 | 45.10 | 1926.0 | 505.3 | 1.25 | 3.92 |
| Construction | 15.7 | 2.8 | 15.14 | 701.2 | 62.0 | 2.24 | 4.52 |
| Service | 28.9 | 27.8 | 49.03 | 2062.0 | 1202.5 | 1.40 | 2.31 |
| Total | 68.7 | 50.4 | 42.32 | 4689.2 | 1769.8 | 1.47 | 2.85 |
| Company size |  |  |  |  |  |  |  |
| 6 to 50 | 53.5 | 38.8 | 42.04 | 2267.8 | 816.6 | 2.36 | 4.75 |
| 51 to 250 | 9.7 | 9.1 | 48.40 | 1108.6 | 449.0 | 0.87 | 2.03 |
| Over 250 | 5.5 | 2.5 | 31.25 | 1312.9 | 504.2 | 0.42 | 0.50 |
| Total | 68.7 | 50.4 | 42.32 | 4689.3 | 1769.8 | 1.47 | 2.85 |
| 1994 |  |  |  |  |  |  |  |
| Sector |  |  |  |  |  |  |  |
| Industrial | 2.7 | 2.6 | 49.06 | 1566.7 | 401.0 | 0.17 | 0.65 |
| Construction | 0.7 | 0.3 | 30.00 | 510.0 | 46.3 | 0.14 | 0.65 |
| Service | 7.4 | 7.8 | 51.32 | 2028.8 | 1320.7 | 0.36 | 0.59 |
| Total | 10.8 | 10.7 | 49.77 | 4105.5 | 1768.0 | 0.26 | 0.61 |
| Company size |  |  |  |  |  |  |  |
| 6 to 50 | 6.8 | 8.7 | 56.13 | 2024.8 | 796.7 | 0.34 | 1.09 |
| 51 to 250 | 3.3 | 1.6 | 32.65 | 992.1 | 444.6 | 0.33 | 1.96 |
| Over 250 | 0.7 | 0.4 | 36.36 | 1088.7 | 526.7 | 0.06 | 0.30 |
| Total | 10.8 | 10.7 | 49.77 | 4105.6 | 1768 | 0.26 | 0.61 |
| 2000 |  |  |  |  |  |  |  |
| Sector |  |  |  |  |  |  |  |
| Industrial | 7.3 | 8 | 52.29 | 1799.9 | 599.9 | 0.41 | 1.33 |
| Construction | 7.3 | 1.4 | 16.09 | 1169.8 | 83 | 0.62 | 1.69 |
| Service | 26.7 | 41.4 | 60.79 | 3443.3 | 3138.9 | 0.78 | 1.32 |
| Total | 41.3 | 50.8 | 55.16 | 6413.0 | 3821.8 | 0.64 | 1.33 |
| Company size |  |  |  |  |  |  |  |
| 1 to 10 | 25.9 | 30.2 | 53.83 | 1699.3 | 1131.6 | 1.52 | 2.67 |
| 11 to 50 | 6.9 | 10.4 | 60.12 | 1970.0 | 933.4 | 0.35 | 1.11 |
| 51 to 250 | 6.5 | 6.6 | 50.38 | 1355.6 | 736.7 | 0.48 | 0.90 |
| Over 250 | 2 | 3.6 | 64.29 | 1388.1 | 1020.1 | 0.14 | 0.35 |
| Total | 41.3 | 50.8 | 55.16 | 6413.0 | 3821.8 | 0.64 | 1.33 |

Source: MTSS, Encuesta de Coyuntura Laboral (4th quarter).
Given that most employees in the private sector earning the national minimum wage are working in small firms or in family bussiness, the estimates of employees earning the minimum wage will be interpreted in relative terms. The first feature worth signalling is the increasing female share on employees earning the minimum wage, which in 1994 was approximately $50 \%$, the female share having experienced a 7.45 percentage points in the period 1990-1994 and continued increasing in the second half of the 90 's, up to $55 \%$. Consequently, given that the estimated female share on total employment in 1994 is only $30.1 \%$, women are clearly overrepresented on the low
earnings segment of the labour force. It is also worth to note that the smaller the company size, the higher the female share on minimum wage is, as shown by the $56.13 \%$ female share for companies between 6 and 50 employees in 1994 and 60.12\% female share for companies between 11 and 50 employees in 2000. As recession had a relatively strong negative impact on small businesses, thus relatively worsening off the working conditions, in particular the wages of their female employees. In any case the number of both female and male employees earning the minimum wage in absolute values has been maintained over the period 1990-2000.

Other estimates (Moltó, 1995: 132-133) show that the statutory minimum wage affect to $10 \%$ of the wage earners. It has also an indirect impact on incomes through social security benefits, on the one hand. on the other hand, through those wage workers not covered by collective agreements, which are estimated to $20-25 \%$ of wage workers, a high share of them being most probably women in small firms in manufacturing (textiles and clothing) and in services (retailing, catering and domestic workers). An upper bound on a yearly basis is provided by fiscal data sources, showing that $27 \%$ of workers were under the minimum wage in 1992 and 1993. In hotel and catering and personal services this percentage can go up to $30 \%$ ( $40 \%$ in the case of women in 1993). Fixed-term contracts and part-time play a crucial role on the explanation of the differences between the estimates obtained on a year round basis or on surveys counting employees earning the minimum wage at a moment in time (the last day of the quarter for Encuesta de Coyuntura Laboral).

The difference between earnings of employees in firms and the earnings distribution by SMI steps of women and men employed in the public administration appears in Table 1.4.3.

Table 1.4.3: Wage Receips by statutory minimum salary (SMI) steps, by gender 1993.

|  | Firms |  |  |  | Public Administration |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  | Men |  | Women |  | Men |  |
|  | receips | \% distrib. | receips | \% distrib. | receips | \% distrib. | receips | \% distrib. |
| 0-0,5 SMI | 1041665 | 34,27 | 155142 | 23,89 | 235525 | 19,71 | 343349 | 22,97 |
| 0,5-1 SMI | 495148 | 16,29 | 745518 | 11,48 | 81735 | 6,84 | 90882 | 6,08 |
| 1-1,5 SMI | 448946 | 14,77 | 654602 | 10,08 | 55326 | 4,63 | 60837 | 4,07 |
| 1,5-2 SMI | 407608 | 13,41 | 872802 | 13,44 | 82691 | 6,92 | 73543 | 4,92 |
| Over 2 SMI | 646215 | 21,26 | 266979 | 41,11 | 739675 | 61,90 | 926161 | 61,96 |
| Total | 3039583 | 100,00 | 649403 | 100,00 | 1194951 | 100,00 | 149472 | 100,00 |

Note that the absolute figures are refered to wage receips. In the case of multiple jobholders the number of receips is the same as the number of different jobs held. In any case, the percentage distribution can be interpreted in terms of employees, as the receips per person were 1.14 for women and 1.17 for men.
Source: IEF, Empleo, Salarios y Pensiones en las Fuentes Tributarias (1993).
Note that the percentage of male salary receips over twice the minimum wage, near double the percentage of female receips, in firms, while in the public administration this percentage is the same for both women and men (61.9\%). The implication for women employed in the public administration is the much lower chance of having annual earnings under the minimum wage than in firms. In particular, one out of every four women in the public administration has earnings under the minimum wage, on a yearly basis, in comparison to one out of every two women or one out of every three men working in private and public companies. This is of course due not only to lower wages for women employed by small firms, but also to the higher impact of temporary contracts on firms than on public administration. Also, although to a lesser extent, to the effect of part-time working practices increasingly used for the female workforce in private firms.

The earnings distribution is analysed next by using the Survey of wage structure 1995. A summary of the most important indicators of wage inequality appears in Table 1.4.4.

Table 1.4.4: Wage inequality by gender 1995.

| Gross wages (Euros) and unadjusted gender pay gap. |  |  |  |
| :---: | :---: | :---: | :---: |
| Gross wages (Euros)   <br> Women (1) Men (2) Ratio (1)/(2) |  |  |  |
| Median wage |  |  |  |
| All | 10297 | 15379 | 67,0 |
| Full-time | 10938 | 15531 | 70,4 |
| Part-time | 4423 | 4685 | 94,4 |
| Lowest decile wage |  |  |  |
| All | 2454 | 4499 | 54,5 |
| Full-time | 3253 | 4917 | 66,2 |
| Part-time | 1003 | 812 | 123,5 |
| Highest decile wage |  |  |  |
| All | 29822 | 46677 | 63,9 |
| Full-time | 30654 | 46838 | 65,4 |
| Part-time | 12329 | 28430 | 43,4 |
| Lowest decile wage (by sex) to the median for male full-time workers |  |  |  |
| Women 15,8 |  |  |  |
| Men 29,0 |  |  |  |
| Share of male and female workers earning less than 2/3of the median for male full-time workers. Absolute value (percentage) |  |  |  |
| Women | 489921 | (51\%) |  |
|  | $759505$ | (25\%) |  |
| Ratio of lowest to highest decile wage by sex |  |  |  |
| Women | 8,2 |  |  |
| Men | 9,6 |  |  |

Source: Own calculations based on the Survey of earnings structure, INE, 1995.

The gender pay gap at the median wage is higher for full-time than for parttime workers. That is, a woman on the median wage earns $70.4 \%$ of the wage of men on the median if both are working full-time, while if they work part-time a woman earns up to $94.4 \%$ of a men wage. A similar pattern is observed in the lowest decile of the earnings distribution. But in this case women on part-time employment earn $123.5 \%$ of a men wage. The opposite occurs when we look at the highest decile, where women on part-time employment earn only $43.4 \%$ of men's wage.

When we use the norm for comparison (the full-time male median wage), we find that women in the lowest decile of the female earnings distribution are comparatively worse off than their male counterparts (women earning only $15.8 \%$, while men earn $29 \%$ in the same situation). Also the share of female workers earning less than two thirds of the median for male full-time workers is higher than the share of male workers ( $51 \%$ versus $25 \%$ ). That is, one out of every two women earn less than two thirds of the male norm while one out of every four men do. However, the ratio of the lowest to the highest decile wage is lower for women than it is for men.

## 2. National Measures of adjusted gender pay gap.

Drawing on the evidence provided by previous studies on wage differentials, which are based on different data sets, we report next on the gender average earnings gap within sectors, industries and occupations, taking into account also personal characteristics.

Andrés and Garcia (1991a) estimated wage differentials by sector for 1985, using data from the Survey on Living and Working Conditions. They discounted for the effects of supply side variables, which include demographic characteristics (age, sex and marital status), human capital indicators of general qualifications (schooling level), and of specific training (seniority, occupation, type of contract-permanent versus temporary). They found that gender and education were very significant factors in the explanation of wage differentials by sector. After controlling for supply side factors, there is a positive wage differential with respect to the average wage in high pay sectors like finances, energy and water, the chemical industry and public administration. There is a negative wage differential estimated for traditional low pay sectors like textiles, footwear, clothing, trade and personal and domestic services. As the authors conclude, the estimated structure of wage differentials, by sector, seems to be in favour of an interpretation in the context of non-competitive labour market. A higher pay does not fulfil the function of rewarding characteristics of jobs like danger, extra effort, etc., within the sectors where a positive difference was estimated. This is especially the case in finance, public administration, etc. This constitutes a first piece of evidence, which will be completed next by analysing the impact of human capital factors on the explanation of gender wage differentials. In addition, in trying to measure the impact of schooling and experience on wage differentials, Andrés and Garcia (1991b), using data from the above mentioned survey for 1985 estimated wage differentials for men and women, after controlling for age, schooling and seniority in a basic model. The wage differentials with respect to the mean wage in the sample corresponding to different levels of schooling are bigger for women than for men. Thus, for example, women with university degrees have considerably higher wages ( $71 \%$ ) more than the sample female average wage, in comparison with men, who earn
46.5\% more with respect to the sample mean male wage. Using a more general model, after controlling for the basic personal characteristics mentioned above and some additional factors too, like industrial branch, occupational category, region and type of contract, they found that the estimated raw wage differential in favour of men, is $21.2 \%$. Notice that estimated wage differentials according to schooling level, are systematically smaller in the general than in the basic model. This is due to the fact that he use of more controls in the general model reduces the size of the differentials because part of the differential estimated through the basic model is now explained by additional factors.

The usual methodological approach in the studies that attempt to measure the wage gap differential between men and women is the Oaxaca (1973) decomposition. It consists in decomposing the wage gap into a part attributable to differences in the vector of worker characteristics and a part attributable to differences in the return associated to each of these characteristics using the estimates for the expectation of the conditional wage distribution of both groups.

Riboud and Hernández Iglesias (1989), gave an estimate of wage discrimination using the data of the survey on gender discrimination in the labour market (Estudio piloto sobre "Discriminación laboral de la mujer", 1988). They decompose the wage differential into the differential due to different personal characteristics among men and women and the wage differential due to differences in the estimated coefficient which measure the differential impact of the same characteristics for both men and women. They estimate a total hourly wage differential of $19 \%$, 13 percentage points being the differential due to discrimination, after discounting for the effect of different factors like labour market experience, schooling and seniority. Women had a lower return from education, labour market experience and tenure, but they had quite different weights in their contribution to the discriminatory differential. In fact education was the most important factor with a different quantitative return for men and women, on average. It contributed to discrimination by approximately $80 \%$, while $10 \%$ of the differential could be attributed to the lower return from labour market experience and $5 \%$ to the lower return from tenure in the last job. The generalisation of the lower returns of all those factors reflect phenomena like the underutilization of qualified female labour force (at least in a formal sense) and the difficulties women
encounter in going higher up in the occupational hierarchy. It is well known that even in the public sector in Spain where the female share is above $50 \%$, only $12 \%$ of decision making position are occupied by women.

Caillavet (1990), by using the subsamples for both married women and married men only, and after controlling for human capital and some others factors, quantified the total hourly wage differential, according to both male and female wage equations. She decomposed the total wage differential of $40 \%$ into 23 percentage points due to different returns to the same characteristics, evaluated at male estimated returns, and the remaining 17 percentage points due to differences in characteristics among women and men in the sample.

The difference on the estimates of wage discrimination, evaluated at the male wage equation, obtained by Riboud and Caillavet, should be attributed to the different composition of the female subsample. Caivallet used only the observations corresponding to married females while Riboud included both married and nonmarried females observations in the female sample, thus being more heterogeneous in their behaviour. So, it could be a priori expected that the estimate of the wage difference due to discrimination would be smaller for the restricted female sample. In any case, in spite of sample selection bias problem, Caillavet's estimate could be useful to give an approximate measure of intra-household wage discrimination.

The most recent results obtained with this methodology for the Spanish labour market are found in the works by Ugidos (1997), Hernández (1995, 1996, 1997), de la Rica and Ugidos (1995), Prieto (1995), Rodriguez et al. (1995), Ullibarri (1996) and Pérez Camarero et al. (2000). Even if the data sources and methology applied are different, all of these studies find that a substantial percentage of wage gap is due to differences in the returns to observable characteristics in favour of men. We will next report some of this reasearch (see Table 2.1 for a summary).

Table 2.1: Summary of Spanish Studies of measures of (un) adjusted gender pay gap.

| Authors | Source | Method/variables used | Unadjusted gender gap | \% due to discrimination |
| :---: | :---: | :---: | :---: | :---: |
| Albert (2001) | ECPH- Spain (1994) | Estimation of earnings and age profiles by education | Ranging from $22 \%$ to $32 \%$. |  |
| Caillavet (1990) | Survey on Living and Working Conditions (1985) | Earnings eq for married women and men controling for human capital and other factors | 40\% | 57.5\% |
| De la Rica \& Ugidos (1995) | Survey on social biography and class structure (1992) | Earnings eq. by gender, controlling for sample selection bias with participation eq. for women. | 16.7\% | 114.27\% |
| García et al. (2002) | Structure of earnings survey-Spain (1995) | Quantile regression eq by gender, controlling for experience, industry and education | 30\% | 74.32\% |
| Hernández (1996) | Survey on Living and Working Conditions (1985) | Earnings eq. by gender controlling for gender segregation by occupation. | 46.4\% | 10.48\% |
| Hernández (1996) | Survey of gender discrimination in the labour market (1988) | Earnings eq. by gender controlling for gender segregation by occupation | 19.2\% | 4.49\% |
| Hernández (1996) | Survey on social biography and class structure (1992) | Earnings eq. by gender controlling for gender segregation by occupation. | 21.2\% | 67.17\% |
| Pérez Camarero \& Hidalgo Vega (2000) | Structure of earnings survey-Spain (1995) | Earnings eq. by gender controlling for age schooling, seniority, industry, occupation, contract type, firm size and collective agreement. | 30\% | 50\% |
| Prieto (1995) | Survey on social biography and class structure (1992) | Earnings eq. by gender controlling for expected tenure at the firm level and for sample selection bias with participation eq. For women.. | 65.4\% | 87.7\% |
| Riboud \& Hernández Iglesias (1989) | Survey of gender discrimination in the labour market (1988) | Earnings eq. by gender controlling for schooling and seniority. | 19\% | 69.5\% |
| Rodríguez et al. (1995) | Household Expenditure Survey 1990-91 |  | 30\% | 35\% |
| Ugidos (1997) | Survey of gender | Earnings eq. by gender, | 17.0\% | 37.37\% |


|  | discrimination in the labour <br> market (1988) | controlling for sample <br> selection bias with <br> participation eq. for <br> women. |  |
| :--- | :--- | :--- | :--- |
| Ullibarri (1996) | Survey on social biography <br> and class structure (1992) | Earnings eq. by gender, <br> controlling for the decision <br> to work in the <br> public/private sector. | $98.2 \%$ |

De la Rica and Ugidos (1995) by using the survey on social biography and class structure (Encuesta de Estructura Biografia y Conciencia de Clases 1991) show that the differences in the university education returns as well as the differences in seniority between men and women are the main factors that contribute to explain the observed wages differentials. In fact, if women had the same returns than men in university education and the same average years of seniority the wage gap differential could be reduced by $50 \%$. Ugidos (1997) estimates, with la Encuesta de Discriminacion Salarial (1988), the gender wage discrimination coefficient but in this case controlling the selection bias caused by the labour force participation decision. She estimates the women's participation equation and women's and men's wage equation using a truncated regression model. The results show that the discrimination coefficient estimated by Maximum Likelihood is 0.042 is significantly different from zero at $10 \%$ level of significance. This suggests that the male-female wage ratio is statistically different from the one that would prevail in a non discriminatory labour market.

García, et al. (1998, 2002) with data from the structure of earnings survey (Encuesta de Estructura Salarial 1995) show that on average women earn $70 \%$ as much as men. This differences cannot be accounted for by observable variables such as experience, sector of employment or education. They use quantile regressions models and the decomposition of predicted wage gaps at different quantiles in order to provide a more accurate set of measures for the size of the part of the wage gap that is attributed to different returns to skills between men and women, i.e. the discriminatory component of the wage gap. As they argue, their results are consistent with the evidence reported by Khun (1987) about the higher likelihood of reporting being discriminated against on behalf of women at high wage levels. Their evidence would suggest reconcilition between "objective" and "subjective" measures of discrimination. It consists in the examination of the statistical relationship between objective measures of discrimination, obtained from the decomposition of quantile functions, and subjective reports on behalf of the concerned worker using suitable data sets, i.e. data sets that contain not only the usual information on wages and characteristics but also subjective information of discrimination. It hinges on the point that women will infer the extent of their wage discrimination by comparing themselves with men who also
have these (unobserved to the econometrician) characteristics. For instance, among the workers with a university degree, a characteristic which econometricians can usually observe, some will work at firms which reward computer literacy and/or knowledge of languages, but the econometricians usually cannot observe neither whether the firm rewards such skills nor which worker has them. In these circumstances, it is reasonable to expect women to form an idea of the discrimination that they may suffer comparing themselves not just with the group of workers with a degree, but with the group of workers with a degree at the same firm and with the same mastery of computers and languages. Their results suggest that the wage gap increases with the pay scale: while the wage floor of the best paid $50 \%$ of men with average characteristics is estimated to be around $12 \%$ greater than the wage floor of the best paid $50 \%$ of women, the wage floor for the best paid $10 \%$ of men is around $15 \%$ greater than that of the best paid $10 \%$ of women. Moreover, the decomposition of the wage gap in the spirit of the Oaxaca methodology reveals that the "unexplained part" is greater both in absolute terms and relative terms as we move up along the wage scale: while different returns generate a difference of more than 13 percentage points, which account for $90 \%$ of the full gap. Even if it is not possible to test formally whether such differentials are caused by discrimination or unobserved differences in productivity, their results are consistent with the reported claims of more frequent and greater discrimination on behalf of women at high salary levels.

An interesting issue is how the wage gap between men and women moves along the life cycle. Albert (2001) estimates wage equations both for men and women and with this results she estimates the earnings-age profiles by gender and education. She shows with the Spanish Household Panel Data 1994 that the gains for a higher level of education are bigger for men than for women as we can see in Table 2.2. However, in Spain women demand more education than men. One possible explanation is that women demand education not only to obtain better results in the labour market in terms of earnings if not in terms of employment. In this sense education could prevent women from unemployment.

Table 2.2 Monthly average earnings (Euro) by gender and education.

|  | Men (1) |  | Women (2) |  | $\begin{aligned} & \text { Ratio } \\ & (2) /(1) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | S.Dev | Mean | S.Dev |  |
| Primary education, illiterate etc. | 710.15 | 263.51 | 491.71 | 209.08 | . 69 |
| First level of Secondary education | 765.40 | 344.22 | 547.10 | 244.24 | . 71 |
| Second level of Secondary Education | 949.45 | 464.15 | 732.14 | 375.58 | . 77 |
| Vocational training | 913.17 | 423.43 | 621.14 | 259.21 | . 68 |
| University | 1475.15 | 737.70 | 1060.20 | 449.28 | . 72 |
| University (3 years) | 1226.07 | 500.13 | 958.82 | 346.78 | . 78 |
| University (5 years) | 1650.26 | 822.60 | 1178.73 | 520.77 | . 71 |

Source: Albert (2001), Spanish ECPH Survey 1994.

In sum, the range of unadjusted gender pay gap varies from $16 \%$ to $65.4 \%$, depending on the sample and the data source used. There is also quite a lot of variation on the percentage of the gender pay gap due to discrimination, ranging from $4.5 \%$ to $114 \%$. The latter estimate is so high probably due to the sampling frame of the survey, where it is estimated a negative percentage of the gender pay gap due to the characteristic (meaning that women in the sample have better characteristics than men). It is also particularly difficult to interpret the great contribution of the constant term of the regression equations to the gender pay gap due to discrimination. On the other hand, it is particularly interesting the introduction of the sample selection correction as an additional factor explaining the gender gap. Another feature of the studies worth mentioning is the closer look at gender pay gap over the earnings distribution provided by Oaxaca (1973) decomposition using the quantile regression. However, none of the studies provide policy recommendations. The link between empirical analysis and policy prescription is still pending, despite the wealth of information and methods for data analysis already available.

## 3. National Institutional factors and the gender pay gap.

### 3.1. The role of collective bargaining.

According to Rubery and Fagan (1993), the system of collective bargaining has a dual role in the determination of gender pay differentials; it provides a form of protection against low pay and the major vehicle through which changes in gender pay
differentials have been achieved; yet it acts to codify and reinforce customary payment practices, including gender pay differentials.

Next, we analyse in some depth the structure and coverage of collective bargaining, the content of collective agreements and the components of the wage structure.
(i)Structure of collective bargaining.

Collective bargaining in Spain is mainly operating at the sectoral province level (in 2001, $56 \%$ of all workers were covered by sectoral province level collective agreements, followed by $25 \%$ of workers covered by sectoral national agreements). At the regional level there are still a compartively small proportion of agreements, but with an increasing trend (the number of workers covered at the regional level has changed from $2 \%$ in 1996 to $9.6 \%$ in 2001). There is also an increasing trend in firm level and groups of firms bargaining. However the number of workers covered by agreements at those levels has not changed. The province sectoral agreements are mainly in agriculture, hotel and catering and small shops, while the national sectoral agreements have a greater weight in banking, textiles, food, education and big department stores.

Even if in Spain, the sectoral level bargaining clearly predominates, and, consequently, neither firm-level bargaining nor local supplements or variations in rates provide much scope for the relatively lower bargaining power of women to translate itself into pay differentials, they continue being overrepresented in sectors such as clothing and personal services where preassure on wage cost is greater. Consequently, it is the segregation mechanism mediated by the ability to pay of organisations the responsible mechanism of gender pay differentials, together with the bargain power or the bargaining system.

The current trend in Spain now is towards decentralisation of bargaining (note that it in fact is already a mixed system) that will presumably increase of skill differentials within organisations. Consequently decentralisation will involve widening the pay gap, given that women tend to work in small firms with less pay ability and that they will continue to be segregated in services where firm-level bargaining seems more difficult to implement. Note that female male pay ratio in 1995 was highest for (big) firm agreements (76\%) and group of firms agreements (67.2\%), followed by
national sectoral agreements ( $65.2 \%$ ), the lowest ratio being $62.7 \%$ for (small) firm agreement (Zarapuz, 2001, Structure of earnings survey).

Finally, differences in the quality of collective regulation among sectors also contribute to the pay gap. For example, it is interesting to note that the average negotiated wage increase in all collective agreements in the service sector is the lowest of all the sectors, as Table 3.1.0 shows.

Table 3.1.0: Collective agreements, enterprises and employees covered and percentage wage increase, by sector 2001.

|  | Agreements | Enterprises | Employees | \% Wage increase |
| :--- | ---: | ---: | ---: | ---: |
| Agriculture | 84 | 61614 | 472655 | 4.04 |
| Industry | 1536 | 170296 | 2297694 | 3.40 |
| Construction | 66 | 94072 | 928244 | 4.12 |
| Service | 2335 | 569082 | 3907261 | 3.31 |
| Total | 4021 | 895064 | 7605854 | 3.48 |

Source: MTAS, Estadística de Convenios Colectivos 2001, CES (2002: 408)
(ii) Coverage of collective bargaining.

It is very difficult to asses the coverage of collective bargaining, as some collective agreements can cover simultaneouly the same group of employees, but at different levels of negotiation (national sectoral, province sectoral, etc.). Thus, the statistics on collective agreements provided by the Ministry of Labour and Social Affairs can count employees twice. On the other hand, the total number of employees provided by the Labour force survey include public sector employees, that do not have a contractual relationship with the Public Administration. Consequently, they should be excluded from the denominator of the coverage ratio (but there is no information desagregated at this level). In 2000, provisional data on employees covered by collective agreements amounts to $9,222,700$ and the total number of employees in the Labour force survey amounts to $11,508,900$. Consequently, approximately $80 \%$ of employees were covered by collective agreements in 2001 (CES, 2002:386-387).

The labour force groups excluded from collective bargaining are quite different for women and they are for men. Men at the top end of the job hierchy or selfemployed men despite their exclusion from collective bargaining are in a much better
position than women are because low level ancilliary jobs held by women are excluded with very small individual power to negotiate their own wages.

However, the signature of new collective agreements in 2001 show that it is in the services, particularly those where women tend to concentrate like health, association, leasure and personal services, that have the highest number of employees covered at the sectoral level and the second highest at the enterprise level (see Table 3.1.1).

Table 3.1.1: The first 389 new collective agreements of 2001 , by sector, by level.

|  | Sectoral |  | Enterprise |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Agreements | Employees | Agreements | Employees |
| Agriculture and fishing | - | - | 7 | 278 |
| Extrac. \& proces. non-energy minerals | - | - | 1 | 115 |
| Metal manufacture \& instr.engineering | 5 | 5602 | 65 | 10911 |
| Energy production and distribution | - | - | 20 | 1831 |
| Building \& civil engineering | - | - | 3 | 184 |
| Distributive trades \& repairs | 4 | 2626 | 21 | 5677 |
| Hotels, catering. | - | - | 17 | 957 |
| Transport \& communications | 5 | 4569 | 27 | 5122 |
| Banking \& finance | - | - | 4 | 3285 |
| Bussiness service | 1 | 4000 | 46 | 5326 |
| Public Administration | - | - | 38 | 2874 |
| Education | 1 | 74 | 6 | 766 |
| Social, health leasure activities and personal services | 12 | 11791 | 106 | 8766 |
| Total | 28 | 28662 | 361 | 46092 |

Source: Dirección General de Trabajo (CES, 2002: 400).

It seems that the increasing number of employees of the service sector covered by collective agreements provides a higher coverage to women than used to have in the past. In 2001, $51.4 \%$ of all employees covered by collective agrrement were in the service sector in comparison to $58.1 \%$ of all the agreements.
(iii) Content of collective agreements.

One of the aspects that is changing faster in collective bargaining is the content of collective agreements

The poverty of content of collective agreements (Moltó, 1993: 18) where by mainly wages used to be regulated, started to change around 1994, some aspects like equal opportunities clauses being captured for the first time in 1993 in official statistics, in particular for agreements negotiated this same year.

Table 3.1.2: Agreements including Equal Opportunities clauses (EOC), Employees covered by EOC, Agreements and Employees covered.

|  | 1993* | $\mathbf{1 9 9 4}$ | $\mathbf{2 0 0 0}$ |
| :--- | ---: | ---: | ---: |
| EOC Agreements |  |  |  |
| Firm level | 258 |  | 432 |
| Other level | 119 | 152 | 236 |
| All levels | 377 | 506 | 668 |
| EOC Employees |  |  |  |
| Firm level | 1094529 | 215621 | 258306 |
| Other level | 1302100 | 1457901 | 2828016 |
| All levels |  | 1673522 | 3086322 |
| Total Agreements | 2241 |  |  |
| Firm level | 954 | 2970 | 3318 |
| Other level | 3195 | 1339 | 1265 |
| All levels |  | 4309 | 4583 |
| Total employees | 667718 |  | 954773 |
| Firm level | 3367101 | 655561 | 7668221 |
| Other level | 4034819 | 6900989 | 8622994 |
| All levels | 32.27 | 24.25 | 35.79 |
| \% EOC employees | 11.8 | 11.74 | 14.58 |
| \% EOC agreements |  |  |  |

* Equal opportunities clauses were only recorded in agreements negotiated in 1993. Consequently, the total number of agreements in operation in 1993 was 4749 , and the total number of employees covered was 7737138.
Source: MTSS, Anuario de Estadísticas Laborales
Equality clauses show a positive trend, as well as the number of employees covered by EOC (Table 3.1.2). The percentage of agreements including EOC was relatively low, but increased from $11.8 \%$ in 1993 to $14.6 \%$ in 2000, covering now more than one out of every three employees. There used to be no clear difference between firm level bargaining and sectoral agreements, being the percentage of employees covered by company agreements including EOC slightly over other level ( $25.2 \%$ in comparison to $24.12 \%$ ). However, in 2000 this trend has changed, being the percentage of employees covered by company agreements including EOC ( $27 \%$ ) well over other level agreements ( $36.8 \%$ ).

Other aspects that are relevant for the gender pay gap are the regulation of working time, the occupational classification, the contracts and employment generation.

The majority of agreements establish the working time on an annual basis (in 2001 it was 1759.3 hours, equivalent to 38.5 weekly hours, CES, 2002: 419); some agreements fix it both annual and weekly. In the last decade working time has been diminished by 2 hours per year, on average, except in 1995-1997. But this decreasing working time is also accompanied by a greater flexibility of the its distribution, from 1994 onwards ${ }^{2}$. The effective working time is lower than the working time established in collective agreements by near 90 hours in 2001, but is has increased by 30 hours in part-time contracts, while decreasing by 6.8 hours in full-time contracts (Encuesta de Coyuntura Laboral, MTAS, 2001). Even if there is still not possible to interpret this as a positive development, at least means that we are in the good path of longer part-time hours and shorter full-time hours. There is also a clear trend to abolish (or reduce) overtime. A significant part of collective agreements that contain provisions for overtime establish no monetary compensation but time off work instead. The irregular dsitribution of working time adopts differents forms, from the enterprise initiative to certain maximum limits, under the workers representative control or with previous consultation with the employees.

As to the occupational classification, despite a certain renovation, there remains some continuities with the old system of labour ordinances, that were highly discriminatory towards women. The great majority of agreements use a mixed system, but there are also some agreements working towards a modern system of occupational classification.
(iv) Wage structure components.

Article 26 of the Workers Statute defines the wage as any form of remuneration. Even if the structure of wages appearing in the previous regulation (Decreto 2380/1973 de Ordenación del salario) is already out of use, collective agreements do not show significant changes in this matter: the weight of the fixed component of the wage is only changing slowly towards a greater share of the variable part, that is still relatively small. On the other hand, the employer and the employee

[^1]have now more autonomy and the traditional wage igualitarism promoted by collective bargaining is also being reduced (Escudero, 2002).

The structure of wages is predominantely guided by tables of wages related to occupational categories ( $71.2 \%$ of collective agreements affecting $70.2 \%$ of employees in 2001). Only a relatively small percentage of employees are subject to clauses with incentives related to productivity ( $27.2 \%$ of collective agreements affecting $22.1 \%$ of employees in 2001) (CES, 2002: 416).

Gender differences can be observed in the composition of the average gross monthly pay in 1995. Although the distribution between ordinary and extraordinary components of wages is $80 \%-20 \%$ for both women and men, within the main part of the wage, the ordinary pay, the basic pay and the suplements have a different share for women $(60 \%-20 \%)$ than for men $(50 \%-30 \%)$ (Zarapuz, 2001). Overpay have a very small weight in the average wage but even though the weight is greater for men (1.2\%) than it is for women ( $0.5 \%$ ). The gender pay gap in the gross monthly pay in 1995 that was $69 \%$, according to the Structure of earnings survey, is even higher for the basic component of wages (salario base) ( $81.4 \%$ ) and for extraordinary payments (pagos extraordinarios) component ( $70.6 \%$ ). The gender gap is lower for the suplements (complementos salariales) and overtime payment (pagos horas extras) (27.9\%). However, despite the fact that the suplementary part of the wage is only representing between 20 and $30 \%$ of the wage, nearly a half of the gender pay gap is due to this suplementary component. The highest contribution is followed by the basic pay that contributes in $30 \%$ to the gender pay gap, $18 \%$ the extraordinary payments and finally only $3 \%$ the overtime payments. It has to be noted that the suplementary payments contains an important part for seniority, that tend to diminish, and a part related to the characteristics of the job (dangerous hazard, toxic job, painful tasks, night working, functional polivalency, etc.). The latter supplements tend to be associated more to male than to female jobs.

### 3.2. Regulation of low pay

The current system of minimum wages in Spain, called "Salario Minimo Interprofesional" (hereafter SMI), was introduced in 1963, replacing an early system in which minimum wage varied by region and age. It is set annually by govenment after
consultation with trade unions and employer organisations and its stated purpose is to protect wage earners and ensure "a guarantee of their purchasing power and participation in the economic development of the nation". This statutory minimum is binding across the economy without distinction by occupation, work status or contractual relationship with the employer (for instance, temporary/fixed-term or permanent workers). The government must determine the level of the SMI taking into account various factors such as the cost of living index, the change in productivity, the share of wages in national income, and the current economic situation. In practice, expected inflation is the most important determining factor. There is no pre-established formula on how these variables affect minimum wage, so government enjoys a great deal of discretion (European Commission, 1997).

Women have a significantly higher risk of being lower pay than men. Part-timers (especially short part-time), women working in elementary occupations of the service sector not covered by collective agreements, and women in the informal economy are examples in the case of Spain. Moreover, the national minimum wage in Spain does not prevent a high incidence of low pay, because it is set at a lower level relative to median earnings than in other member states (CERC, 1991). Also, their evolution through time implies a significant loss of purchasing power of approximately $10 \%$ during the period 1964-1991 (Uriel and Gea, 1997). In the last decade, the loss of purchasing power was of $5.4 \%$. In particular, the SMI in 2001, which amounted to 433.45 Euros per month, represented only $35.5 \%$ of the average wage, this percentage being one of the lowest in the European Union (CC.OO and UGT, 2001).

## 4. Policy review and future prospects.

The evaluation of the future of the gender pay gap in Spain should take into account, on the one hand, the labour market reforms of 1994 and 1997, that have the follow up in the labour reform 2001. On the other hand The Agreement on collective bargaining 1997 and its subsequent Agreement on collective bargaining signed on the $20^{\text {th }}$ December 2001.

The most important changes of the last labour market reform (Royal Decree Law 5/2001 and Law 12/2001) concern stable employment promotion measures and the quality of jobs as well as the development of the Law on conciliacion between family
and work (Law 29/1999). The main measure for generating stable and quality employment is the new indefinite contract with a lower compensation for lay-off and the establishment of a compensation payment at the end of the contract for temporary contracts. There is also the new (de)regulation of part-time contracts with the flexibilisation of working time. In fact, the new regulation goes back to the one previous to 1998 , eliminating the requirement of a maximum number of working hours equivalent to $77 \%$ of the working hours of an equivalent full-time job, and the specification of the distribution of working time in part-time contracts. It also allows more complementary hours. At he same time, the development of the law on conciliation of family and work (Royal Decree Law 1251/2001), improves the regulation of maternity/paternity leave by modifying articles 37.4 and 48.4 of the Workers Statute and article 30 of Law 30/1984 of public administration. In fact, it establishes an independent subsidy that is applied for the first time to sef-employed and domestic workers and also allows sharing the subsidy with part-time working by an agreement between the employer and the employee. The transmission of the subsidy to the father is also regulated ${ }^{3}$. The leave for taking care of adult family members has the same consideration than a working period as to the social security allowances is concerned.

As to the Agreement on collective bargaining, the main trade unions CC.OO and UGT and the entrepreneurs associations CEOE and CEPYME, established the compromise of wage moderation as well as the stability of employement and equal opportunities. The tradeunions and also, though to a lesser extent, the entrepreneurs associations, had the following objectives: (i) the articulation of collective agreements, traditionally excessively dispersed and atomised, and to widen the coverage in deregulated sectors. (ii) To limit the use of temporary contracts and subcontracting with maximum quotas and the progressive conversion of temporary into indefinite contracts. (iii) To protect the purchasing power of the employees by including wage revision clauses in collective agreements that allows recovering the previous losses in purchasing power. (iv) Efective reduction of working time, towards the 35 weekly hours, voluntary part-time and long duration work leaves. And (v) the control of direct

[^2]and indirect discrimination by adapting selection, promotion procedures and job classifications, as well as an employee flexible distribution of working time that allows conciliation of family and work. In addition, the protection of health at work should include the job risk for pregnancy.

However, current developments in collective bargaining lay behind the purposes. For example, the articulation and rationalisation of collective agreements seems to make slow progress, according to CES (2002). There is only some reorganisation of collective bargaining due to segmentation of activities and to subcontracting by grouping similar sectors or establishing specific areas of negotiation. There continues to be a variety of situations as to the matters regulated by agreements at different geographical levels within sectors. Some sectors have only one sectoral agreement, while others may have many collective agreements at different levels (province, region), regulating the same matters at both levels. However, there is already a few sectoral national agreements that contain clauses for articulating the negotiation at the regional and province levels (for example the revision of wages). Women, mostly working in the services, in small bussineses, tend to be covered by a great variety of collective agreements (in 2001, $58 \%$ of all collective agreements corresponded to $66.6 \%$ of all the enterprises, covering $51.4 \%$ of the employees covered by collective bargaining). It is in the service sector where the wage increase negotiated is the lowest of all sectors ( $3.31 \%$ in 2001, under the average increase :3.48\%).

On the other hand, women are over-represented among the low paid and there persist discriminatory elements in the occupational classification systems used to define the wage structure that penalise women's wages. Moreover, suplementary payments (complementos salariales) that contribute near $50 \%$ to the gender pay gap, are defined in reference to male job characterisitics, the individual charateristic of seniority loosing progressively weight on the suplementary payments. The existence of double wage scales, applicable to equivalent temporary and indefinite workers is another source of gender wage differentials. All this toghether with the above mentioned elements, can exhacerbate or, at the least, not compensate the small advances in dimishing the gender pay gap in Spain.

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#### Abstract

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[^0]:    ${ }^{1}$ This section draws from previous reports for the EC Network of experts on the situation of women in the labour market (Moltó, 1993, 1996).

[^1]:    ${ }^{2}$ It is interesting to observe that the inclusion of clauses on the irregular distribution of working time is becoming mor important in national sectoral agreements, which is not the level of negotiation where this clauses should appear according to the 1997 General Agreement on Collective Bargaining (CES, 2002: 428).

[^2]:    ${ }^{3}$ It is possible for the father to enjoy part or the whole time of the paid maternity leave, except 6 weeks that should be enjoyed by the mother. The total paid leave amounts to 16 weeks.

