

## **EGGE – EC’s Expert Group on Gender and Employment**

### **National Reports on the Unadjusted and Adjusted Gender Pay Gap**

#### **Portugal**

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# Gender Pay Gap in Portugal

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## Introduction

This report aims at clarifying the state of the debate on gender pay gap in Portugal. Being so its main purpose will be to present the state of the debate on the topic on the country and, in so doing, to present some available data allowing to clarify some of the more recent trends on the evolution of the gap.

Institutional specificities on the Portuguese case will also be referred in the report in order to clarify the institutional dimension of the existing gap as well as its role on the recent changes that can be observed.

Finally some policy issues will be highlighted in order to present the main lines of policy action (or absence of action) aiming to contribute to the reduction of the existing gaps.

Domingo and Moltó (1998) in an overview of the state of research on gender issues in Southern European countries stress that “there is a short tradition of studies on the gender pay gap in the Southern countries”<sup>1</sup>. In that study and referring to the Portuguese case some studies are analysed. Since than some other studies have treated the issue and deserve being referred as relevant conclusions deserve to be noted. Still it appears to me that gender issues and namely gender pay gaps are not (still?) a main topic of the scientific and policy debate in Portugal. This implies that most of the existing studies are, in general terms, more concerned with the estimation of earnings functions using recent human capital theory’s developments in which gender appears as one, among others, of the relevant variables of the study. So a step forward is needed in order to make gender gaps appear as a relevant object of analysis. This also means that a lot of dispersion exists and so that some systematisation of the existing analysis is needed. This report aims at being another step towards that systematisation<sup>2</sup>.

## 1. National measures of the unadjusted gender pay gap

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<sup>1</sup> Domingo, Moltó (1998), p.73.

<sup>2</sup> A first one, that will be one of the departure points of this report, is the contribution of Ruivo M. and Carneiro A. (1998) to the quoted publication on Southern countries (Domingo, Moltó, *op. cit*)

In Portugal studies on wages and earnings rely normally on a very important statistical source that is *Quadros de Pessoal*. This is a data set from the Portuguese Ministry of Labour that is the outcome of a legal disposition making it compulsory to all the firms having at least one wage earner (public administration and military excluded) to fulfil a detailed list of information on all their workers, including the characteristics of the workers and of the jobs they occupy. “Information such as age, sex, educational level, skill qualification level, occupation, years with the firm, hours worked and earnings are reported for employee and employer. Additional information about the firm is also required, mainly industry type, location of the firm, firm and plant size, type of management and legal form of ownership”<sup>3</sup>. This data set is a very important source of information mainly for the industrial sector. As to agriculture and services, taking into account the relative importance of independent work the data set is less representative.

The Statistical Office of the Ministry publishes, every year, a summary of the main indicators of the labour market issued from this procedure. The more recent data that are available refer to 1999. Despite its importance it’s also needed to stress the limitations of these data that overpass the sectoral limitations enounced above. In fact, taking into account their constitution, data must be considered very carefully when changes along time are the main object of analysis as the fact that, for instance, a big firm does not, in a certain year, accomplish with its obligation of delivering the data can introduce important distortions in the average data.

It’s also important to stress that, under certain conditions<sup>4</sup>, the all data set can be used for research purposes. Estimations on the decomposition of the gender wage gap according namely to the Oaxaca methodology have already been produced using these micro-level data and can be updated for the end of the 90’s allowing the analysis of the relevant tendencies on the composition of the gap. The complexity of the administrative procedures and of the analysis did not allow this analysis to be included in this report. Still its important to report the existence of the possibility of using it for updating some existing studies in order to better understand the recent evolution of the elements that appear to be the main components of the gender pay gap<sup>5</sup>.

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<sup>3</sup> Kiker and Santos, 1991, p.188.

<sup>4</sup> Namely, of course, confidentiality.

<sup>5</sup> A project on this issue is currently on work referring ti the years 1985, 1991 and 1997.

Despite its importance it must not be forgot that the use of this data set has two main restrictions: it does not include information on public administration and it only refers to wage earners which means that the different economic sectors are differently represented on it<sup>6</sup>.

The fact that public administration is not included in the data set is obviously a relevant limitation concerning the study of the gender pay gap taking into account the high feminisation of certain public sectors and namely health and care services and education. This fact is indeed of utmost importance and means that for an appropriate coverage of the Portuguese labour market national and EU statistics must be used. In fact, and as has previously been stressed on the first report on Portugal delivered under the EGGE in 2002 (pp. 12-13) Portugal has a diverse performance in EU terms concerning the pay gap when different statistical sources are used (ECHP and ESES).

### **1.1. Review of the pay trends over time**

#### i) unadjusted pay gap for all the workers

The synthesis of the published data from *Quadros de Pessoal* (QP) allows us to follow the recent evolution of the average monthly wages and the average monthly earnings for men and women. Table 1 evidences that the gross wage gap seems roughly stabilised along the last decades. If we compare the ratios of Table 1 and the ones that are included on Table 2 (using the EU data sets) we can notice that, despite the non coincidence of the calculated unadjusted pay gaps the ratios obtained when we use *Quadros de Pessoal* is much more close to the data obtained by using the ESES than by using the EHPS. Despite the fact that this proximity is not surprising, as both sources exclude the Public sector and refer to gross wages, the relevance of the differences of the ratio obtained using this source and using the EHPS must be taken in consideration because it points out to a relevant discrepancy of the gender pay gap in the public and in the private sectors.

#### ii) unadjusted pay gap for full and part-timers

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<sup>6</sup> Data available for agriculture is not representative of the sector as the sector has a high incidence of self-employment. As to the service sector it is differently represented as the incidence of self-employment differs in its different sub-sectors.

The synthesis of data published annually with the main results of *Quadros de Pessoal* does not include information on wages for full-time and part-time workers. This information is, nonetheless, included in the data reported by firms to the Ministry<sup>7</sup>.

The information available on European sources (Tables 3 and 4) indicates that no relevant gender wage gaps appear to be associated with the work duration. In relative terms Portugal performs better in EU standards when we consider the pay of part-timers as compared to the all rank of employees of the private sector.

iii) Other relevant information on unadjusted gender pay gaps

The use of the published data on *Quadros de Pessoal* allows a lot of additional information of the gender pay gap at several relevant levels of analysis namely: sector of activity, qualification, education, tenure, size of the firm and region<sup>8</sup>. The recent evolution on these indicators is registered in table 5<sup>9</sup> and deserves some comments and remarks.

As to the comments it is important to stress:

- In general terms and independent of the variable taken into account, the gender gap shows that, in average, women earn less than men do. The only exception to this tendency being observed in the sectors of activity of Construction and Transports and Communications<sup>10</sup> where, in average terms, women earn more than men do;
- At the economic sector level its important to notice that the gender pay gap is particularly unfavourable for women in Manufacturing;
- Qualification appears as an interesting dimension given the fact that, in all qualification levels the pay gap is above the average, the only group having a gender pay gap below the global average being the one of unknown qualification level. This numbers indicating that unknown qualification levels refer essentially to female jobs. Also it is deserve stressing that the smaller discrepancies on pay according to gender occur in the group of Apprentices and Highly qualified workers. Certain changes that appear to have occurred in the extreme levels of

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<sup>7</sup> Which, as we previously referred, is available for research purposes under certain restrictive conditions.

<sup>8</sup> It is important to note that the published data refers only to the mainland.

<sup>9</sup> The information included in the tables presented in the Statistical Annex and that refer to *Quadros de Pessoal* refers to wages. We could also report the same type of information referring to remunerations that includes wages and all the other payments (subsidies, overtime, ...) that the worker receives.

<sup>10</sup> These sectors are amongst the ones having the lower percentage of women in employment (see 1st report 2002).

qualification included in the data set (High level staff and Unknown) must not be overestimated (see references above on the caution that the use of these data for reading tendencies along time imply);

- Gender pay gaps seem to occur in all the education groups without relevant differences according to the different education groups. The only noticeable characteristic seeming to be the fact that the gender gap is lower for workers without any school degree;
- Opposite to the previous variable, the size of the firm seems to have a clear influence on the dimension of the gender pay gap: table 5 clearly shows that the gender pay gap is higher, the bigger the firm is<sup>11</sup>.
- Tenure has also a relevant influence on the gender pay gap: higher tenure goes together with increasing gender pay gaps.
- As to diversity of the regional gender pay gaps data seem to show that they don't seem to be relevant.

A remark must be done on the way how the synthesis of the information has been published: on recent years the variable gender seems to be losing relevance. Since 1994 some of the information published on wages and pay appears only for all the workers and for male. So female wages, at a disaggregated level, can only be obtained indirectly and implying a relevant and patient work of calculation. In the most recent data available by now (1999) the dimension gender is only referred according to the sector of activity and the qualification level. So an increasing pressure on the diffusion of information disaggregated by sex has to be promoted.

#### iv) Low pay trends over time

There is very few information on the incidence of low pay from a gender perspective in Portugal. The great majority of the existing studies on poverty and low pay do not include references to gender as they rely, normally, on data referring to families. There is a national source that is often used on the studies about the evolution of low pay, The *Inquérito ao Orçamento das Famílias*<sup>12</sup> produced by the National Institute of Statistics (INE). In the information published on this source the criteria of characterisation of the

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<sup>11</sup> This tendency appears clearly in firms having till 499 workers. Big firms (having 500 or more workers) have lower gender pay gaps although higher than small firms do.

<sup>12</sup> Survey of Family Budget

families does not include the gender dimension and so the studies on low income do not normally include this dimension. This criterion is considered on the ECHP and so this is the source normally used for accessing to this type of information.

Again the publication of the Statistical Office of the Ministry of Labour allows us to access to relevant information that has not, till now, been fully used for the study of low pay from a gender perspective. And these publications include not only *Quadros de Pessoal* but also the results of *Inquérito aos Ganhos*<sup>13</sup> that is a data set that inquires a sample of firms having at least one employee with the exception of Agriculture, Domestic Services and Public Administration. It is held every 6 months and a synthesis of the results is published<sup>14</sup>. It also includes information on the relative importance of workers receiving the minimum wage.

We could not find any analysis on statistical distribution of wages according to a decile decomposition. So the information we will rely on will be based on EU available data and on the gender disparities of incidence on the incidence of minimum wages.

A recent study on low pay in the EU<sup>15</sup> typifies jobs and workers where low wages<sup>16</sup> are concentrated in the EU countries and points out the diversities that, despite the common tendencies, are visible among the different member-states<sup>17</sup>. The study concludes that “what mostly typifies jobs with low (monthly) wages is a shorter than average working week. By type of activity, these jobs are more common in the services sector and in less skilled areas. Public-sector employees are less affected than those in the private sector. The risk of low wage is greater for employees who have fixed-term contracts.” As to the profile of the low paid workers the study concludes that “the first thing that strikes us is the large proportion of women: they account for 77% of the low-wage employees, which is almost double the percentage of women in the total number of employees in the EU. (...) There is also a higher risk of low wage among young people and people

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<sup>13</sup> Survey on pay: pay meaning here the gross amount (monetary or not) monthly paid on a regular basis including the wage and all the regular subsidies (meal pay, holidays and justified absences to work, seniority and productivity primes, premiums for night work, overtime and all other forms of regular payments associated to work). This information together with information on gross wages is provided by this source.

<sup>14</sup> Still, the last publication refers to 1994. Series on total pay (but not on wages) are published till 1988.

<sup>15</sup> Marlier and Ponthieux (2000), p.1.

<sup>16</sup> low wage employees are defined in this study as those whose “monthly wage is less than 60% of their country’s medium wage”.

<sup>17</sup> The study uses data of the ECHP, 1996 and so all the limitations of this data set must be considered (see EC, 2001, p.5). Being so the results refer to all the EU countries with the exception of Finland and Sweden. The study considers only employees working at least 15 hours/week.

with low educational level. Lastly, a low-wage work is a stage people have often to go through when entering or re-entering employment.”<sup>18</sup>.

Given the fact that the study works with monthly wages and so, part of the low paid employees may refer to part-time workers, the authors try to calculate the remuneration rates and so to identify the incidence of low-wages originated on part-time and that originated on low remuneration rates or both (or none).

Two tables included in that study deserve to be reproduced here:

**Table A: Proportion of low wages, part-time work, low remuneration rates and D5/D1 ratio in the EU**

	Low wages %	Part-time work %	Low-remuneration rates %	D5/D1 ratio
<b>Belgium</b>	9	11	4	1.6
<b>Denmark</b>	7	9	4	1.5
<b>Germany</b>	17	12	11	2.4
<b>Greece</b>	17	5	16	2.6
<b>Spain</b>	13	6	12	1.9
<b>Finland</b>	13	9	9	2.0
<b>Ireland</b>	18	11	13	2.2
<b>Italy</b>	10	8	10	1.8
<b>Luxembourg</b>	16	9	14	2.0
<b>Netherlands</b>	16	18	6	2.0
<b>Austria</b>	16	11	8	2.1
<b>Portugal</b>	6	3	6	1.5
<b>U.K.</b>	21	17	9	2.5
<b>EU13</b>	<b>15</b>	<b>11</b>	<b>9</b>	<b>2.2</b>

Source: Marlier and Ponthieux, 2000, p.2.

In a EU context where 15% of workers (working 15 or more hours) have low wages, Portugal stands as the best performer. Only 6% of the employees have low wages percentage that equals the one of workers being paid at the minimum wage level in Portugal according to the national data (see Table 10 – Statistical Annex). Still this must be read within the general context of the Portugal as being the EU country with the lowest level of wages: Portugal is the EU country with the lowest monthly minimum wage<sup>19</sup>.

Portugal differs from the average of the EU13 in terms of its very low incidence of part-time but also on the incidence of the low remuneration rates (6% of Portuguese workers

<sup>18</sup> *Idem, ibidem.*



have a low remuneration rate this percentage being in average terms 9% for the EU13)<sup>20</sup>. The ratio of the median wage to the first decile (the lowest) wage also show a lower extent of wage inequality for lower wage levels in Portugal than in the EU average.

The study<sup>21</sup> also identifies “four groups of low wage employees, depending on whether the low wage is linked solely to part-time employment, solely to a low-remuneration rate, to a combination of these two factors or, lastly, to none of them”. The results are synthesised on the following table:

**Table B: Categories of low wages in the EU (%)**

<b>B</b>	<b>DK</b>	<b>D</b>	<b>EL</b>	<b>E</b>	<b>F</b>	<b>IRL</b>	<b>I</b>	<b>L</b>	<b>NL</b>	<b>A</b>	<b>P</b>	<b>UK</b>	<b>EU13</b>
<b>Part-time work only</b>													
63	41	41	12	32	39	30	28	26	65	44	24	55	<b>43</b>
<b>Low-remuneration rate only</b>													
24	38	42	73	54	39	44	57	53	17	40	52	21	<b>37</b>
<b>Part-time work and low remuneration rate</b>													
7	18	12	9	7	13	19	10	17	13	9	10	12	<b>11</b>
<b>Neither of the two</b>													
6	4	6	7	7	9	8	4	3	6	7	15	12	<b>8</b>
<b>Total</b>													
<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Marlier, Ponthieux, 2000, p. 4.

This analysis allows us to stress relevant differences in the characterisation of low wage jobs in Portugal as compared to the average values of the EU:

- in the EU 43% (so the more relevant group) of low-wage jobs are part-time jobs but not remunerated at a low wage rate, in Portugal the more important cause of low wage jobs relies in low remuneration rates (52% of the low wage jobs correspond to low remuneration rate jobs but not part-time;
- the importance of part-time (solely) to explain low pay in Portugal is one of the lowest of the EU which is in accordance with the relative low incidence of this type of jobs in the country;
- Portugal is the EU country with the lower relative importance of these two elements (part-time and remuneration rate), solely considered or combined, in

<sup>19</sup> Clare (2002), p.2.

<sup>20</sup> Again it should be stressed that, given the fact that a relative measure of low wages is used, this only gives the relative position of the countries referred to their median wages that in the EU have their lowest level in Portugal.

the explanation of low wages: 15% of low wage jobs are related to other aspects that, most probably have to do with the low education level of the labour force, the still high importance of Agriculture in total employment and the high importance of fixed term contracts.

The study also provides concentration indicators on low wage jobs and employees<sup>22</sup> and also the concentration indicator of low-remuneration rate jobs and employees<sup>23</sup> which is a measure of relative intensity of the risk of low wage and low remuneration rate. The information on this last variable shows that in Portugal the risk of having a job remunerated a low wage rate<sup>24</sup>, when compared to the EU average, is higher for part-time workers, for less qualified workers and for women.

Tables 8 and 9 (Statistical Annex) show the share of women in low paying sectors and in low paid jobs. According to the information of Table 8 (ESES) we can see that Portugal is one of the EU countries having the higher concentration of women on low paying sectors<sup>25</sup> (after Spain, Netherlands and the UK); According to Table 9 it's quite clear that women, much more than men, are low paid in all the EU. Still, in relative terms, Portugal (together with Spain and specially Greece) a smaller gender gap on this issue<sup>26</sup>.

Table 10 shows us that women are over-represented amongst workers paid at the minimum wage level. It also clearly shows that the higher incidence of minimum wages is on small firms.

We have finally to refer the important research that Cardoso (1997 and 1999) has been doing on the explanation of the tendencies on inequality in Portugal and the role of workers and firms in shaping this inequality. Relying on data from *Quadros de Pessoal* for the years 1983 and 1992 she concludes that “traditional wage progression mechanisms based on seniority lost influence between the two years, whereas general skills became more valued by employers. Changes in the returns to tenure at the micro

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<sup>21</sup> Marlier, Ponthieux, 2000, p. 4.

<sup>22</sup> *Idem*, pp. 5 and 6.

<sup>23</sup> *Idem*, p. 7.

<sup>24</sup> So neutralising the effect of different working hours.

<sup>25</sup> This information must be read with care, if we integrate it in the context the previous figures, as it's based on the ESES and not on ECHP data.

<sup>26</sup> The study that we have been quoting, relying also on data from the ECHP, 1996, and concerning only persons working, at least 15 hours a week, refers a gender composition of low wage employees that differs from the one of table 9 (for Portugal the composition was 79% for women and 21 % for men). With this composition the relative position of Portugal would be quite different much more close from the UK than from Spain. So, again, caution is needed in dealing with this dispersed information.

level thus had an equalizing impact on the distribution, but sharply increased returns to education, as well as a rising wage disadvantage of women relative to men, increased overall inequality”<sup>27</sup>

## **2. Review of national studies that estimate an adjusted gender pay gap and comparison with estimates of unadjusted pay gaps.**

The existence, in Portugal, of a data source such as *Quadros de Pessoal* (personnel records on some relevant characteristics of firms having at least one employee and of the characteristics of a relevant amount of information on each one of their workers on a yearly basis), represents an important instrument to study wage gaps amongst workers and some interesting studies have used this information to explain gender pay gaps.

On the research we made on the topic we could find some studies that try to measure the part of the gender pay gap that may be explainable by some relevant characteristics on the way how men and women are integrated (or not) in the labour market. They all make use of the data set of the Ministry of Labour *Quadros de Pessoal*.

We will present the results of our survey following a chronological order related to the year to which the analysis refers.

<b>Year of analysis: 1977</b>
Study: Martins (1998)
<b>Main results of the analysis:</b> “Wage differentials by sex indicate a substantial difference between men and women, the data suggesting that the negative difference relative to men come from experience price and not from the schooling reward” (p.40)
<b>Unadjusted and the adjusted gap:</b>
<ul style="list-style-type: none"> <li>- unadjusted pay gap: 18.9% (p.23)</li> <li>- adjusted pay gap:</li> </ul>
1) <i>Using a dummy variable on sex on the global earnings function:</i>
The reading of the estimations (p.19) shows that the inclusion of dummy variables for sex allow to estimate that, for men and women having the same level of

<sup>27</sup> Cardoso (1999), p.97.

education and experience, a difference in the remuneration persists favourable to men: women under the same educational and experience conditions earn, on average, less 8.6% than men do; each year of education decreases the gender pay gap by 0.5% and each year of experience increases the gap in 0.5%.

So 45.5 % of the global gender pay gap could not be explained by education and experience.

2) *Using the regression of the log-earnings differential on education and experience (stated as a better procedure to decompose the wage gap)*

According to the obtained results the author concludes (p.24) “that the gap would start (no schooling, no experience) at a female 10.2% disadvantage relative to the male earnings level; a one year increase in education would diminish the earnings gap by 0.6%, but an extra year of experience would increase it by 0.5%”.

So 54% of the gender wage gap could be explained by differences in pay independent of schooling and experience levels which would be a possible indicator of discrimination. According to the estimation made the author includes a table with the earnings differentials between men and women including the differences in education and experience levels.

**Other relevant conclusions on gender earnings gap**

According to the results of her estimations of the earnings functions of men and women she concludes that:

- the rates of return to schooling are usually higher for women than for men (8.0% against 7.3%). The author points this evidence as being in favour of the discrimination hypothesis;
- The experience profiles are flatter for women than for men (which, at least partially, can be attributed to the fact the indicator of experience is less adequate for women than it is for men

**Source of data:** Ministry of Labour, *Quadros de Pessoal*, 1997. The author uses the monthly average earnings of individuals by sex, age groups and educational

level.

**Notable limitations:** use of average values: The author also stresses the fact that the proxy used to calculate experience is less adequate for women due to their more frequent interruption in participation in the fertility period

**Method of decomposition:**

- The author estimated different earnings functions for women and for men;
- She also included a regression model with dummy variables for sex and sex associated with both education and experience.
- She includes an estimation on the discrimination composition of the gender pay gap by using a decomposition technique that, despite not being nominated as so, appears to be Oaxaca decomposition (pp.22-26)

**Variables used in the estimation of the wage equations :**

Education: 8 groups were considered referring to the number of years of education respectively 0, 4, 6, 9, 11, 14, 16;

Experience: this indicator has been constructed by the usual procedure. So the experience for individuals of class  $i = \text{Age}_i - 6 - \text{Years of Education}_i$ ;

Age: 5 age groups were considered, 14-24, 25-34, 35-44, 45-54, 55-65;

Sex

No policy recommendations

**Year of analysis: 1985**

Study: Kiker and Santos (1991)

**Main results of the analysis:**

By decomposing gender and employment-sector earnings differentials into *attribute effects* and *price effects* the authors conclude that “price effects are more important than attribute effects in explaining gender and employment-sector earnings differential” (p.187)

**Unadjusted and the adjusted gap:**

- unadjusted pay gap: 29%
- adjusted pay gap: 19% (so: about 66% of the wage gap is not explained by the

variables included in the study)

Reading this difference the authors state that” if women have the same wage structure as men, the earnings differential falls to 19%; the attribute effect thus accounts for 33% of the observed earnings differential. Differences in the returns to the female attributes (the price effects) account for 67% of the gender earnings differential. Hence, it appears that differences in returns to attributes are more important in explaining gender earnings differences in Portugal than are differences in the attributes themselves” (p.193). So in their conclusions they state explicitly that in Portugal “if women could earn a return on their human-capital attributes similar to that earned by men, the salary gap could be reduced by about two-thirds” (p.201).

#### **Other relevant conclusions on gender earnings gap**

- The authors synthesise the most interesting findings of their study in four main points: ‘i) the strong effect of region, firm size and industry of occupation (for men) on earnings; ii) the sharp decline on the coefficients of schooling, tenure and experience variables in the presence of the expanded list of regressors; iii) the large positive earnings differential for men (...); and iv) the large negative impact of private sector employment” (p.193);
- The use of the basic Mincerian models shows a high rate of return to education for women than for men, respectively 10.4% and 9.4%

**Source of data:** A sample of about 50 000 individuals drawn from Ministry of Labour, *Quadros de Pessoal*, 1985. The sample represents about 2% of the covered Portuguese work force in the year 1985. Agriculture was excluded from the sample. Observations with missing values and with inconsistencies were excluded which means that the study relies on a sample of about 34 000 workers.

#### **Notable limitations :**

The authors refer (p.202, note 4) several limitations of the data available for the analysis namely the lack of information on family background, IQ, motivation and union status. They also refer that “our proxy for experience denotes potential

experience and hence is a combination of experience with other firms, unemployment time and leisure time (including household production). Since the data do not allow the identification of breaks in the labour force participation, the experience variable is particularly imprecise for women. Hence, the estimated returns to experience for women (...) are suspect”

**Method of decomposition:**

The Oaxaca (1973) procedure is used to calculate gender differentials attributable to differences in human capital traits (*attribute effect*) and differences in the return to these attributes (*price effect*) (p.188)

**Variables used in the estimation of the wage equations :**

Dependent Variable: Logarithm of total monthly earnings

Independent variables<sup>28</sup>:

Education: Years of schooling completed (8 different groups were considered)

Tenure: Years of experience with the same firm

Experience: Work experience in other firms (age-schooling-tenure-six);

Qualification: continuous variable denoting skill requirements for job and a generated variable for skill requirements for job;

Working hours: total monthly hour worked (in logarithm);

Number of employees in firm;

Dummy variables:

- Overeducation/undereducation
- Male/female
- Private/public<sup>29</sup>
- Small firms/medium firms/big firms
- Regions of the country
- Sectors of activity

No policy recommendations

<sup>28</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form (see table p.189).

<sup>29</sup> Public refers here to the “public sector” as a sector in which the government has 100% control over the employing firm. Public administration workers are not included.

**Year of analysis: 1985 and 1991**

Study: Castro and Santos (1995) and Santos (1995)

**Main results of the analysis:**

Santos,1995, pp. pp.153-172 makes a quite detailed analyses of the results of the estimations by gender.

**Unadjusted and the adjusted gap:**

- unadjusted pay gap: not referred
- adjusted pay gap: According to the coefficient of the dummy referring to sex we can read (Santos, 1995, p.190) that other things equal the (non-explained) gender gap favourable to men has increased between 1985 and 1991: in 1985 the gender wage gap that prevailed between men and women having the same characteristics was 14.3%; this percentage was 17.6 in 1991.

**Other relevant conclusions on gender earnings gap**

“Comparing the sample means by gender, women have significantly higher average years of education than men. However, sample average years of tenure and of previous work experience are lower for females than for males” (Castro and Santos, 1995, p.8)

**Source of data:** Two samples of about 50 000 individuals drawn from Ministry of Labour, *Quadros de Pessoal*, 1985 and 1991 representing about 2.5% of the population inquired

**Notable limitations :**

It is stressed that the fact that the estimation of the earnings for women is based only on data for women who participate in the labour market and so have an observed wage is a limitation as it potentially introduces biases. (Santos, 1995, p.155).

It is also stressed (Castro and Santos, 1995) that theoretical relevant factors to be incorporated in the model are not available in the used data set such as proxies for ability and family background.

**Method of decomposition:**

Separate wage regression were specified and estimated for females and males. The



results of the Chow test indicate that the earnings structure is different. The authors use traditional human capital variables (supply side ones) and demand side variables concerning the characteristics of jobs and not only those of workers.

**Variables used in the estimation of the wage equations :**

Dependent Variable: Logarithm of total monthly earnings in escudos

Independent variables<sup>30</sup>:

Education: Years of schooling completed (8 different groups were considered)

Tenure: Years of experience with the same firm

Experience: Work experience in other firms /(age-schooling-tenure-six);

Working hours: total monthly hour worked (in logarithme);

Dummy variables:

- Completed education level
- Male/female
- Private/public<sup>31</sup>
- Occupation level
- Firm size
- Regions of the country
- Sectors of activity

No policy recommendations

**Year of analysis: 1989**

Study: Vieira and Pereira (1992)

**Main results of the analysis:**

In Azores islands (the region to which the study refers) “females face not only low wage rates but also an allocation disadvantage by levels of qualification.

**Unadjusted and the adjusted gap:**

- unadjusted pay gap: not referred
- adjusted pay gap:

Using dummy variables the authors calculate that, *ceteris paribus*, females earn

<sup>30</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form.

<sup>31</sup> Public refers here to the “public sector” as a sector in which the government has 100% control over the employing firm. Public administration workers are not included.

about less 19% than men;

Using Oaxaca decomposition: the authors conclude “the part not explained (maybe discrimination) is higher than that attributable to characteristic (endowment) differences” (p.35). They include two estimations of the adjusted gap calculated with differently extended regressions:

1<sup>st</sup> decomposition of the gender gap:

- due to difference in characteristics: 19%
- not explained: 81%

2<sup>nd</sup> decomposition of the gender gap:

- due to difference in characteristics: 42%
- not explained: 58%%

#### **Other relevant conclusions on gender earnings gap**

- The implied rates of return to schooling are 11.1% for men and 10.9% for women (p.8);
- Females face an allocation disadvantage by levels of qualification leading to cases of discrimination (p.36)

**Source of data:** A micro-data sample concerning an Azores island drawn from Ministry of Labour, *Quadros de Pessoal*, 1989. It refers to about 4000 individuals (2094 males and 1900 females)

#### **Method of decomposition:**

- Using dummy variables
- Using earnings gap decompositions (Oaxaca technique) .

#### **Variables used in the estimation of the wage equations :**

Dependent Variable: Logarithm of total monthly earnings in escudos

Independent variables<sup>32</sup>:

Education: Years of schooling completed

Tenure: Years of experience with the same firm

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<sup>32</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form.

Experience: Work experience in other firms /(age-schooling-tenure-six);

Working hours: total monthly hour worked (in logarithm);

Dummy variables:

- Completed education level
- Male/female
- Level of qualification
- Firm size

**Policy recommendations:** the authors state that given the fact that females are disadvantaged both in pay and in qualification levels they sustain that “equal pay for equal work” policies can be inefficient against labour market discrimination. This suggests that they think that policies fighting gender segregation would be more efficient.

#### **Year of analysis: 1992**

Study: Ribeiro and Hill (1996)

#### **Main results of the analysis:**

The results of the study suggest that 76% of observed gender pay gap can be attributed to discrimination. The analysis has included the gender structure of occupations allowing to conclude that the increase in the relative importance of women in a certain occupation level is associated with a decrease in its average wage rate. This would contribute to highlight the link between segregation and pay discrimination.

#### **Unadjusted and the adjusted gap:**

- unadjusted pay gap: 29% for the sample used.
- adjusted pay gap:

Using *human capital* model:

With a dummy variable for sex the authors calculate that, *ceteris paribus*, females earn about less 21% than men;

Using separate regression for men and women and decomposing the gap they conclude that 76% of the existing gender pay gap can be attributed to discrimination and 24 % can be attributed to differences in the productivity of workers.

Using the *model of occupational segregation*: the authors conclude that “each extra unit on the existing percentage of women in each occupation, leads, in average terms and keeping all the other variables constant, to a decrease of 0.18% in the hourly wage” (p.21).

According to the decomposition they made 0,6% of the total gender gap (29%) can be attributed to the gender composition of occupations (1.74% of the total earnings differential) (p.23).

Using the *model of comparable value*: the authors conclude that being a woman and keeping all the other variables constant implies, in average terms, a decrease of 13.2% in wage (so 46% of the total gap could not be explained by the considered variables)

#### **Other relevant conclusions on gender earnings gap**

They refer an enlargement of the gender wage gap in recent years: the ration of the female to the male wage was 76.7% in 1989.

**Source of data:** A micro-data sample drawn from Ministry of Labour, *Quadros de Pessoal*, 1992. It refers only to the region of Lisbon and to the sector of Hotels and Restaurants. It is constituted by 1024 individuals (619 males and 405 females)

#### **Method of decomposition:**

- Human capital model
- Model of occupational segregation
- Model of comparable value

#### **Variables used in the estimation of the wage equations :**

*Human capital model:*

Dependent Variable: Logarithm of total monthly earnings in escudos

Independent variables<sup>33</sup>:

Education: Years of schooling completed

Tenure: Years of experience with the same firm

Dummy variables:

- Male/female

*Model of occupational segregation*

Dependent Variable: Logarithm of total monthly earnings in escudos

Independent variables<sup>34</sup>:

Tenure: Years of experience with the same firm

Percentage of women in each individual occupation

Dummy variables:

- Education level
- Sex

*Model of comparable value*

Dependent Variable: Logarithm of total monthly earnings in escudos

Independent variables<sup>35</sup>:

Tenure: Years of experience with the same firm

Percentage of women in each individual occupation

Dummy variables:

- Education level
- Sex
- Sector: Restaurants/Hotels
- Firm size

No Policy recommendations

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<sup>33</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form.

<sup>34</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form.

<b>Year of analysis: 1994</b>
Study: Lopes (1996)
<p><b>Main results of the analysis:</b></p> <p>Education and its formal recognition by the firm are the major determinants of wages for both men and women, but specially for women.</p> <p><b>Unadjusted and the adjusted gap:</b></p> <ul style="list-style-type: none"> <li>- unadjusted pay gap: not reported</li> <li>- adjusted pay gap: not calculated</li> </ul> <p><b>Other relevant conclusions on gender earnings gap</b></p> <ul style="list-style-type: none"> <li>- Comparing the estimated regressions for the two sexes the author concludes that "women's wages are much more influenced by the policy for the classification (and possible discrimination...) of employees at the firm through occupational grading than are those of men, although in the latter case this still remains the variable which has the greatest impact" (p.13);</li> <li>- "the minimum wage policy shows itself to be practically irrelevant – for either the two sexes – in the wage determination process, which enables us to refute the argument that makes this policy one of the principal reasons for the fact that the gender pay gap has not worsened, at least within the framework of the relationships of interdependence that we have studied here" (p.14)</li> </ul>
<p><b>Source of data:</b> Ministry of Labour, <i>Quadros de Pessoal</i>, 1994. The author used a sample with the data from 19 sectors of activity considered to be potential generators of women's employment.</p> <p><b>Method of decomposition:</b></p> <p>Estimation of regressions for men and women</p>
<p><b>Variables used in the estimation of the wage equations:</b></p> <p>Dependent Variable: Logarithm of total monthly earnings in escudos</p>

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<sup>35</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form.

Independent variables<sup>36</sup> (by sector):

Education: Relationship between levels of formal education (ratio 12 years of secondary school education/6 years of education)

Tenure: Years of experience with the same firm (ratio 6 or more years/less than 1)

Age: ratio 45 to 54 years/ 15 to 24 years)

Occupational grade attributed by the firm: Ratio *supervisors + highly skilled/skilled + semi-skilled*

Percentage of workers on fixed term contracts

Percentage of workers earning the minimum wage

Working time: a discrete variable which expresses the number of hours worked per week in the sector, as currently laid down in the law.

**Policy recommendations** : it is stressed the importance of developing procedures aimed at improving the value of women's employment and, in so doing, preventing forms of discrimination linked to the process of classification of workers by the firms

### Year of analysis: 1996

Study: Gonçalves (2000)

#### **Main results of the analysis:**

Workers' human capital interferes on earnings but it's not the only element to be considered. Firms play an important role and so do unions.

#### **Unadjusted and the adjusted gap:**

- unadjusted pay gap: not reported
- adjusted pay gap: the use of a dummy variable on gender in an extended earnings function indicates that for men and women under the same conditions (as to the variables used) a non explained gender pay gap (favourable to men) of 15.7% persists.

**Source of data:** Ministry of Labour, *Quadros de Pessoal*, 1996.

<sup>36</sup> We refer only the variables. In the estimations made some of them were also used on interaction form (see table p.14).

**Notable limitations :**

The author emphasises the quality of the used data set but refers some important limitations such as:

- the absence of qualitative information on formal education;
- the absence of both quantitative and qualitative information on training;
- the absence of information on the ability of individuals and of their family background;
- the absence of information allowing to identify the changes of the situation of the individuals towards the labour market on life cycle;
- the absence of information on institutional variables such as unions' strategy and agreements between unions and firms;
- the absence of information on non-legal forms of work.

**Method of decomposition:**

- Human capital model with dummy variables

**Variables used in the estimation of the wage equations :**

Dependent Variable: Logarithm of total monthly earnings in escudos

Independent variables<sup>37</sup>:

Education: Years of schooling completed

Experience: years of experience in the labour market previous to the actual job (Age-education-tenure-6)

Tenure: Years of experience with the actual firm

Dummy variables:

- Male/female
- Qualification level
- Size of the firm
- Sector of activity
- Public/private
- Region

**Policy recommendations :** importance of promoting formal education and training as a

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<sup>37</sup> We refer only the variables. In the estimations made some of them were also used on square and interaction form.



means of improving wages namely for older workers.

<b>Year of analysis: 2001?</b>
Study: NAP(2002)
<b>Unadjusted and the adjusted gap:</b> <ul style="list-style-type: none"><li>- unadjusted pay gap: 27,6%</li><li>- adjusted pay gap: 20.1% after correcting the effect of unequal sector distribution in the global gap; 13,9 after correcting the effect of unequal sector distribution and qualification levels</li></ul>

### **3. National institutional factors and the gender pay gap**

The national institutional<sup>38</sup> factors that most directly interfere with setting pay systems are the wage bargaining system and the minimum wage system.

#### **3.1. Wage bargaining**

As to the wage bargaining system it is important to stress that it has most characteristics of a centralised system but includes also some aspects of decentralisation<sup>39</sup>.

Centralisation derives essentially from three main characteristics of the Portuguese system: i) the fact that the yearly level of wage increase is settled on a centralised process of negotiation involving the social partners (union confederations and employers' associations) and the government; ii) the fact that in the Portuguese economy massive wage bargaining contracts predominate; iii) the fact that negotiated collective agreements are usually extended to all the employers' work force independently of the union affiliation status of the workers<sup>40</sup>.

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<sup>38</sup> For a more detailed characterization see Figueiredo and al. (1997) and Pinto (1996).

<sup>39</sup> See Cardoso(1977).

<sup>40</sup> *Idem*, p.525.

Aspects of decentralisation derive essentially from the fragmented union structure existing in the country (enterprise unions coexist with occupational and industry-based unions). Generally collective bargaining is undertaken at the industry or the occupation level. The fact that Portuguese labour market presents high levels gender segregation (occupational and sectoral) makes extremely important to involve unions in the discussion of the gender pay gaps and on the differences of incidence of low pay from the gender perspective.

### 3.2. Minimum wages

The main institutional measure interfering with low pay refers to the regulation on minimum wages. Minimum wages were introduced in Portugal in 1974 (after the Revolution that ended with corporative regime and instituted a democratic system). They were first introduced for non-agricultural and non-domestic activities. In 1977 agricultural activities were covered by the minimum wage despite the setting of a lower wage level for agriculture than for the one for non-agricultural. This gap has been kept till 1991 when the same level of minimum wage was settled for both activities. As to the domestic services a minimum wage was settled in 1978, lower than the other two existing levels: it represented 61.4% of the higher legal minimum wage (non-agriculture). This percentage has been increasing slightly in the beginning but sharply after and in 2001 it was already 96% of the general minimum wage. The policy followed is the one of approaching gradually the two wages till their equalisation by setting a yearly wage of increase of the minimum wage for the domestic service higher than the one that is settled for the general minimum wage.

This increase of the minimum wage on the domestic work has obvious implications on the gender pay gap as domestic work concerns essentially women. Still and taking into account the low relative importance of this sector in overall employment we should not expect a high quantitative impact of these equalisation. Nevertheless this change will also be important in qualitative terms as it acts as the recognition that domestic work has, in its nature, the same value of any other type of work. In this perspective the existence of a unique minimum wage rate is of utmost importance.

Despite the emphasis placed on the minimum wage policy in the country it has to be noted that its relative weight in relation to average wage has been decreasing (see table 1 – Annex)

### 3.3 Other relevant institutional issues

#### 3.3.1. Recent changes on the regulation on part-time

A new law on part-time work has been recently implemented (1999). The new law, which defines incentives for firms to use this type of contract namely when they apply to specific population groups, has still not had the time for a true evaluation. Still, part-time appears to be steadily growing in the last years essentially amongst women. The main aspects of the law are summarised in the following table:

<b>Definition</b>	Part-time work is defined as that corresponding to a work period equal or inferior to 75% of the considered full-time work on a certain job. This limit can be changed by means of Collective Bargaining.
<b>Regulation</b>	The global legal and Collective Agreed dispositions apply to part-time contracts. The law states that part-timers cannot have a less favourable treatment than full-timers with comparable situations have.
<b>Pay</b>	Wages and Mandatory Social Benefits are made on a <i>pro-rata</i> basis referring to full-timers pay.
<b>Overtime</b>	There is a limit to the number of overtime hours to overcome eventual activity fluctuations: 80 hours/year (or a proportion of the normal time in some particular cases). Still, by means of a written agreement, this limit can be spread till 200 hours/year (which is the limit that applies to normal contracts).  There is no explicit reference to overtime pay in part-time contracts which should mean that the general statements (extra-pay) apply for these contracts. Still, the law allows the change of the contract (from part-time to full-time, or the reverse, on a permanent or a temporary basis, by means of a written agreement). <sup>41</sup>
<b>Incentives to employees to</b>	The change of a full-time contact into a part-time contract (as far as it refers to a working time going from 25% till 75% of a full-time duration) gives

<sup>41</sup> The practice that resorts from some case studies seems to be the following: when the additional needs in part-timers working hours are known in advance, allowing anticipated arrangements with the worker, they are paid as normal hours; when they result from sudden needs they are paid as overtime. Possibly this results from the fact that the anticipation of the needs of extension of working time allows a written agreement which is not possible in the case of answering to immediate needs.

<b>reduce working time</b>	place to a reduction of the employee Social Security contributions: the applicable tax becomes 6% (the normal being 11%).
<b>Incentives to employers</b>	The employer benefits from reductions in the social security contributions (higher if the new recruitments refer to youngsters, long term unemployed and to permanent contracts) whenever a new part-time recruitment occurs.

According to this regulation the existence of a part-time contract does not interfere with hourly wage and pay as all payments must be done on a pro-rata basis (despite the fact that the flexibility on working arrangements have an influence on the payment of extra hours at a normal wage rate). So it seems that low pay influences much more part-timers by means of the spreading of low working hours part-time in some sectors (namely retail trade) than through the wage rate of this type of work.

### 3.3.2. Recent changes on the regulation parental leaves

As has been previously reported (1<sup>st</sup> report 2002 to the EGGE) the strategic action that has been implemented in the last years on the area of the promotion of Equal Opportunities in the labour market has clearly linked the labour market and family life making the issue of reconciliation between work and family life the more central one. The rationality that lies beyond this political strategy is that, both from a demand perspective and from a supply perspective, the promotion of full gender equality in the labour market cannot be achieved without the promotion of gender equality within family life: in the demand perspective action has to be promoted in terms of preventing employers' discrimination linked to the fact that they associate a higher risk to contracting a woman than to contracting a men (essentially because of the "risk" of maternity); in the supply side it means that if a better division of domestic tasks and care is promoted men and women would face identical constraints in their decisions of participating or not in the labour market.

The recent developments on the legislation of maternity and paternity leaves had this central issue as background: changes have been introduced in terms of the enlargement of the length of the remunerated leave for the father after the birth of a child and an enlargement of 15 days of the maternity leave is guaranteed under the condition that this extra days are asked by the father. In last March the (previous) Government has also announced that the 5 days of remunerated leave to which the father is entitled would be

made compulsive. Some public debate occurred by then about the necessity (and even about the legitimacy) of developing legislation on this sense. Still, and despite being publicly announced, the measure has never been implemented even if the prevailing strategy amongst the main political responsible for the area of Equal Opportunities was to take this measure as a departure point for the enlargement of compulsive paternity leave allowing to more equally dividing it between mothers and fathers in reality<sup>42</sup>.

Recent changes in the government make the future evolution of this field of political action uncertain as no relevant discussion has been, till now, introduced under this topic.

#### **4. Policy review**

In Portugal the policy debate on the gender questions and in more concrete terms on the gender pay gap is not really in the policy agenda. This debate was being introduced in a discrete but visible way through the action of the department on gender issues of the previous government that was preparing a second Global Plan on Equal Opportunities. Still with the change of government last April this process stopped and the issue of Equal Opportunities seems to be loosing visibility.

The narrowing of the gender pay gap recent policy was aimed at being promoted more through indirect measures (fighting discrimination practices and, essentially, promoting reconciliation between work and family life) than through direct measures.

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<sup>42</sup> The legal dispositions already allow that, after a period of time (6 weeks) that is necessarily taken by the mother, the leave can be taken by the mother or by the father by simple agreement between them.

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## Statistical Annex

Table 1: Average monthly wage (thousand escudos)

	1985	1990	1993	1995	1999
<b>Average wage*</b>					
Total	30.1	59.0	89.1	99.1	117.9
Male	32.4	64.6	98.0	109.3	130.7
Female	25,1	49.4	74.6	83.6	99.9
<b>F/M (%)</b>	<b>77.5</b>	<b>76.5</b>	<b>76.1</b>	<b>76.5</b>	<b>76.5</b>
<b>Minimum wage</b>					
General regime	19.2	35.0	47.4	52.0	61.3
Domestic serv.	13.0	28.0	41.0	45.7	56.9
<b>MW/Avr.W 1</b>	<b>63.8</b>	<b>59.3</b>	<b>53.2</b>	<b>52.5</b>	<b>52.0</b>
<b>MWd/AvrW 2</b>	<b>43.2</b>	<b>47.5</b>	<b>46.0</b>	<b>46.1</b>	<b>48.3</b>

\* Average monthly gross wage (thousand escudos), all employees.

1- Minimum wage (general regime)/Average wage

2- Minimum wage (domestic service)/Average wage

Source: DEMESS, *Quadros de Pessoal*; Figueiredo and al (1997), p.98; Banco de Portugal, 2002, p.173.

Table 2: **Gender Pay Gap** in the EU

	<b>ECHP 1995</b>	<b>ECHP 1996</b>	<b>ESES 1995</b>
	<b>GPG All</b>	<b>GPG All</b>	<b>GPG All</b>
<b>AT</b>	81%	80%	71%
<b>BE</b>	86%	91%	80%
<b>DE</b>	72%	74%	73%
<b>DK</b>	87%	89%	81%
<b>ES</b>	91%	91%	72%
<b>FI</b>	81%	87%	78%
<b>FR</b>	86%	85%	68%
<b>GR</b>	85%	83%	77%
<b>IE</b>	86%	80%	:
<b>IT</b>	91%	90%	71%
<b>LU</b>	84%	82%	78%
:	:	82%	67%
<b>PT</b>	100%	92%	72%
:	:	:	82%
<b>UK</b>	79%	80%	59%
<b>EU</b>		83%	70%

Notes: ECHP - Average net hourly earnings for paid employees (persons aged 16-64 working at least 15+ hours per week) - For France gross earnings. ESES - gender ratio of mean gross hourly earnings; overtime earnings excluded. Euros. No data for Ireland; weighted mean for DE

Sources: ECHP, Wave 3 1995 (EWERC calculations) ECHP 1996 (DGV calculations); ESES 1995 (EWERC calculations)

Table 3: **Comparison of country ranks by gender pay gap using ESES, full-timers and part-timers, 1995**

	<b>ESES (All)</b>	<b>ESES (FT)</b>	<b>ESES (PT)</b>
<b>SW</b>	1	1	6
<b>DK</b>	2	4	1
<b>FI</b>	3	5	2
<b>BE</b>	5	3	3
<b>GR</b>	8	9	4
<b>ES</b>	10	10	12
<b>FR</b>	9	7	13
<b>NL</b>	13	14	7
<b>LU</b>	4	2	8
<b>AT</b>	11	12	14
<b>UK</b>	14	11	10
<b>IR</b>	--	--	--



<b>IT</b>	6	8	5
<b>PO</b>	12	13	9
<b>DE</b>	7	6	11

Notes: ECHP data are for 1996 and ESES are for 1995; the country with the narrowest gender pay gap is ranked 1, and so on.

Source: ESES (1995), EWERC calculations.

**Table 4: The Relative Pay of Women Working Part-Time (FPT) Compared to Earnings of Men Working Full Time (MFT), overtime excluded**

		SES 1995	
		FPT/MFT	Ranks
<b>AT</b>	<b>Austria</b>	67,34%	8
<b>BE</b>	<b>Belgium</b>	72,70%	4
<b>DE</b>	<b>Germany</b>	68,36%	7
<b>DK</b>	<b>Denmark</b>	65,44%	10
<b>ES</b>	<b>Spain</b>	56,45%	12
<b>FI</b>	<b>Finland</b>	69,32%	6
<b>FR</b>	<b>France</b>	52,29%	13
<b>GR</b>	<b>Greece</b>	75,82%	2
<b>IT</b>	<b>Italy</b>	69,49%	5
<b>LU</b>	<b>Luxembourg</b>	66,03%	9
<b>NL</b>	<b>Netherlands</b>	61,80%	11
<b>PT</b>	<b>Portugal</b>	73,33%	3
<b>SE</b>	<b>Sweden</b>	76,48%	1
<b>UK</b>	<b>United Kingdom</b>	44,70%	14
<b>E14</b>	<b>EU</b>	61,79%	

**dew** Federal Republic of Germany 66,99%

**ex\_dd** GDR 73,94%

Source: European Structure of Earnings Survey (1995) ( no data available for Ireland) (EWERC calculations); gross hourly pay data; overtime excluded

**Table 5: Gender pay gap according to some relevant criteria**

	1985	1990	1993	1995	1999
All	77.5	76.5	76.1	76.5	76.5
<b>Economic sectors</b>					
Agriculture	80.4	83.8	82.6	(*)	81.4
Fishing	82.9	82.0	73.1	(*)	77.3
Mining	92.5	97.7	100.8	(*)	99.6
Manufacturing	73.4	71.4	70.0	(*)	68.9
Electricity, gas and water	89.4	92.9	94.8	(*)	99.8
Construction	104.7	103.2	101.8	(*)	106.2
Trade, hotels and restaurants	80.6	76.5	75.6	(*)	80.8
Transports and communication	101.5	98.5	105.6	(*)	110.3

Banking and Insurance	81.4	82.9	82.6	(*)	84.5
Social Services	89.4	83.3	79.5	(*)	53.7
<b>Qualification</b>					
High level staff	80.7	83.9	80.8	(*)	72.6
Medium level staff	86.3	87.0	87.3	(*)	83.3
Team leaders	89.6	88.9	88.3	(*)	88.4
Highly qual. workers	100.0	95.7	96.6	(*)	92.6
Qualified workers	87.5	85.9	84.9	(*)	85.4
Medium qual. Workers	81.1	80.5	81.8	(*)	82.7
Non qualif. Workers	91.7	89.6	87.8	(*)	88.2
Apprentices	97.6	94.7	93.4	(*)	94.5
Unknown	72.1	69.0	75.0	(*)	80.5
<b>Education level</b>					
None	84.1	83.7	85.3	(*)	n.p.
Basic – 4 years	77.1	77.2	75.5	(*)	n.p.
Basic – 6 years	77.8	76.7	75.7	(*)	n.p.
Basic – 9 years	81.5	78.4	79.6	(*)	n.p.
Secondary – 12 years	74.3	74.2	74.3	(*)	n.p.
University degree (16-18 years)	72.8	76.1	75.3	(*)	n.p.
<b>Dimension of the firm</b>					
1 to 9	92.3	91.3	89.4	(*)	n.p.
10-19	89.8	87.8	85.2	(*)	n.p.
20-49	83.3	79.8	78.4	(*)	n.p.
50-99	78.7	75.2	74.7	(*)	n.p.
100-199	76.2	74.4	72.6	(*)	n.p.
200-499	74.0	70.7	69.7	(*)	n.p.
500 and more	77.7	78.0	77.3	(*)	n.p.
<b>Tenure</b>					
< 1 year	82.7	81.0	81.0	(*)	n.p.
1 to 4 years	81.1	80.6	77.8	(*)	n.p.
5 to 9 years	79.7	79.1	76.2	(*)	n.p.
10 to 14 years	77.8	79.1	78.4	(*)	n.p.
15 to 19 years	77.0	76.0	75.9	(*)	n.p.
20 and more	76.5	67.3	75.5	(*)	n.p.
Unknown	79.9	76.0	81.3	(*)	n.p.
<b>Regions</b>					
North	76.0	78.0	76.6	(*)	n.p.
Center	78.0	74.5	73.7	(*)	n.p.
Lisbon and Tagus valley	79.2	77.2	77.0	(*)	n.p.

Alentejo	81.2	79.6	75.8	(*)	n.p.
Algarve	81.7	81.3	79.8	(*)	n.p.

Notes: (\*) In 1995 the published data refer only to total and men. So the value of the wage on women can be calculated but not directly; In 1999 the classification on economic sectors is more detailed than in previous years.

n.p. – non published

Source: DEMESS, *Quadros de Pessoal*.

**Table 6: Gender Pay Ratio by Level of Education**

	E1	E2	E3	Total (GPG)
Belgium	81,2%	82,9%	71,5%	81,12%
Denmark	86,7%	86,7%	76,1%	82,18%
Germany	79,14%	78,72%	74,55%	75,01%
Greece	68,55%	73,38%	70,98%	71,17%
Spain	73,76%	74,41%	65,37%	73,30%
France	77,50%	81,61%	68,15%	76,10%
Italy	78,08%	73,63%	60,35%	74,28%
Luxembourg	81,58%	80,77%	74,49%	82,27%
Netherlands	73,42%	68,70%	60,85%	69,06%
Austria	71,47%	74,48%	60,26%	70,45%
Portugal	70,75%	73,06%	72,92%	70,78%
Finland	80,85%	81,59%	82,72%	78,33%
Sweden	84,93%	84,22%	77,90%	82,39%
United Kingdom	71,01%	70,67%	71,25%	67,13%
EU	77,31%	75,80%	68,00%	

Note: Average Monthly Earnings (Full time Employees). No data for Ireland

Legend: e1 - first stage of secondary or lower; e2 - upper secondary; e3 - Higher Education

Source: ESES 1995 (EWERC calculations)

**Table 7: Gender Pay Gap by Age Group, 1995 (Monthly Earnings for FT Employees)**

	0_19 y	20_24 y	25_29 y	30_44 y	45_54y	55_max y
BE	78,6%	86,1%	90,9%	86,6%	82,3%	73,7%
DK	97,6%	89,6%	90,0%	82,8%	77,6%	78,2%
DEW	79,4%	83,0%	85,4%	77,7%	70,6%	69,0%
EX_DD	80,0%	91,2%	91,0%	87,8%	84,6%	80,9%
GR	89,5%	88,3%	89,7%	77,5%	62,1%	57,2%
ES	88,3%	84,6%	86,6%	78,6%	75,8%	71,8%
FR	106,2%	98,9%	94,1%	77,5%	69,8%	66,4%
IT	93,4%	89,7%	86,1%	80,7%	71,5%	68,6%
LU	91,7%	96,3%	97,6%	86,0%	71,8%	68,0%
NL	88,4%	85,5%	85,2%	81,0%	66,3%	67,9%
AT	83,9%	76,9%	80,4%	72,4%	68,5%	55,9%
PT	91,5%	86,5%	79,4%	73,4%	72,2%	67,4%
FI	87,7%	83,9%	84,0%	79,0%	74,6%	72,5%
SE	108,4%	90,9%	89,2%	84,6%	78,5%	77,1%
UK	84,5%	79,4%	81,4%	69,1%	57,6%	61,5%

Average Monthly Earnings (Full time Employees). Overtime included. No data for Ireland

**Table 8: The Concentration of Women and Men in Low Paying Sectors of Employment, 1995**

Countries	Women	Men
Belgium	7.3%	0.0%
Denmark	0.0%	0.0%
West Germany	33.5%	0.0%
East Germany	13.2%	0.0%
Greece	28.4%	0.0%
Spain	55.2%	2.0%
France	29.7%	0.0%
Italy	9.7%	0.0%
Luxembourg	33.1%	4.4%
Netherlands	50.1%	0.0%
Austria	0.0%	0.0%
Portugal	46.6%	2.5%
Finland	1.6%	0.0%
Sweden	0.0%	0.0%
United Kingdom	49.4%	4.6%

Notes: Female and male 'Low Paid Sectors' defined as ones with hourly earnings below 2/3 of the male median (per member state); No data for Ireland; Private sector only.  
Source: ESES, 1995.

**Table 9: Share of women among low paid, 1997**

Countries	Women	Men
France	86	14
Germany	86	14
Austria	83	17
Belgium	82	18
United Kingdom	82	18
Luxembourg	79	21
Denmark	78	22
Italy	77	23
Ireland	76	24
Finland	72	28
Portugal	70	30
Spain	69	31
Greece	59	41

Notes: The ratio of the number of women among the low paid compared to the number of men among the low paid. Low paid is less than 60% of the median wage  
Source: ECHP

**Table 10: Percentage of workers earning the minimum wage in Portugal by sex and firm size**

	<b>Total</b>	<b>Men</b>	<b>Women</b>
<b>1993</b>			
<b>Total</b>	<b>6.4</b>	<b>4.7</b>	<b>9.3</b>
<b>0 to 19 workers</b>	<b>15.4</b>	<b>12.6</b>	<b>19.7</b>
<b>20 to 99 workers</b>	<b>6.3</b>	<b>4.8</b>	<b>8.7</b>
<b>100 to 499 workers</b>	<b>4.5</b>	<b>2.1</b>	<b>7.9</b>
<b>500 and more</b>	<b>2.0</b>	<b>0.9</b>	<b>3.9</b>
<b>1994</b>			
<b>Total</b>	<b>5.7</b>	<b>4.0</b>	<b>8.3</b>
<b>0 to 19 workers</b>	<b>12.6</b>	<b>9.5</b>	<b>17.2</b>
<b>20 to 99 workers</b>	<b>6.3</b>	<b>4.9</b>	<b>8.7</b>
<b>100 to 499 workers</b>	<b>3.5</b>	<b>2.5</b>	<b>5.1</b>
<b>500 and more</b>	<b>1.7</b>	<b>0.7</b>	<b>3.5</b>
<b>1995</b>			
<b>Total</b>	<b>5.5</b>	<b>3.9</b>	<b>8.1</b>
<b>0 to 19 workers</b>	<b>12.9</b>	<b>10.3</b>	<b>17.0</b>
<b>20 to 99 workers</b>	<b>5.5</b>	<b>3.5</b>	<b>8.9</b>
<b>100 to 499 workers</b>	<b>3.4</b>	<b>2.2</b>	<b>5.1</b>
<b>500 and more</b>	<b>1.8</b>	<b>0.9</b>	<b>3.1</b>
<b>1996</b>			
<b>Total</b>	<b>4.7</b>	<b>3.5</b>	<b>6.5</b>
<b>0 to 19 workers</b>	<b>12.4</b>	<b>9.8</b>	<b>16.1</b>
<b>20 to 99 workers</b>	<b>3.7</b>	<b>3.3</b>	<b>4.6</b>
<b>100 to 499 workers</b>	<b>3.0</b>	<b>1.8</b>	<b>4.7</b>
<b>500 and more</b>	<b>1.4</b>	<b>0.7</b>	<b>2.7</b>
<b>1997</b>			
<b>Total</b>	<b>9.2</b>	<b>6.4</b>	<b>13.2</b>
<b>0 to 19 workers</b>	<b>21.6</b>	<b>16.9</b>	<b>27.7</b>
<b>20 to 99 workers</b>	<b>7.7</b>	<b>5.3</b>	<b>11.6</b>
<b>100 to 499 workers</b>	<b>4.3</b>	<b>2.4</b>	<b>7.1</b>
<b>500 and more</b>	<b>2.0</b>	<b>0.7</b>	<b>3.8</b>
<b>1998</b>			
<b>Total</b>	<b>6.2</b>	<b>4.2</b>	<b>9.3</b>
<b>0 to 19 workers</b>	<b>14.2</b>	<b>10.7</b>	<b>19.3</b>
<b>20 to 99 workers</b>	<b>5.5</b>	<b>3.8</b>	<b>8.2</b>
<b>100 to 499 workers</b>	<b>3.7</b>	<b>1.3</b>	<b>7.4</b>
<b>500 and more</b>	<b>1.4</b>	<b>0.6</b>	<b>2.6</b>

Notes: Data refer to the mainland. The data refer to October of each year except for 1994 and 1996 where they refer to April. Agriculture, domestic services and Public administration are not included.

Source: DETEFP/MTS, *Inquérito aos Ganhos*.