The Gender Pay Gap in Europe: An International Comparison with Matched Employer-Employee Data*

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Abstract

This study examines the origin of the gender wage gap and of its cross-country heterogeneity using unique harmonized international matched employer-employee microdata for nine representative European countries. Evidence obtained uncovers that female segregation into low-paying workplaces is by and large an outstanding origin of both the gender pay gap in every European economy and of international differences in its magnitude. Empirical results also suggest that, in contrast with the findings of previous comparative studies, international disparities in global structures, and particularly in wage dispersion, are not major determinants of inter-country differences in the size of the gender wage gap. Finally, also of concern is that an important diversity exists both in the size of the gender wage gap and in its underlying causes across transitional new members of the European Union.

Keywords: Wage inequality; gender wage gap; matched employer-employee data.
Journal of Economic Literature Classification Numbers: J16, J30, J31, J70.

1. Introduction

The existence of a significant and persistent gap in earnings between males and females is a well-documented stylized fact of modern labour markets. Furthermore, the size of the gap displays a significant variation across countries (see Blau and Kahn, 2003 and OECD, 2002 for detailed descriptive evidence). Provided that identifying the sources of gender differences in wages is crucial to implementing effective policy decisions in order to reduce them, the origin of the gap and of international differences in its magnitude has deserved considerable attention in the economic literature (for authoritatives reviews, see Altonji and Blank, 1999 and Blau and Kahn, 2000).

Some regularities emerge from empirical studies on the origin of the gender gap in pay. Firstly, differences by gender in human capital endowments are not the main origin of the gender pay gap. Thus, differences in individual characteristics such as age, education and experience tend to play a relatively minor part in the explanation of the gap and, given the general improvement of educational situation and participation rates of females, these gender-specific differences in individual

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characteristics tend in general to diminish over time (Weichselbaumer and Winter-Ebmer, 2005 and OECD, 2002). Secondly, the gender pay gap is strongly related to the segregation of women into low-wage structures. Earlier studies highlighted the detrimental effect on female wages arising from female segregation into low-paid occupations (see e.g. Groshen, 1991 and Macpherson and Hirsch, 1995). More recent studies drawing on matched employer-employee data reveal that female segregation into low-wage workplaces play a particularly important negative impact on their relative wages (e.g., Bayard et al., 2003, Meng, 2004 and Amuedo-Dorantes and De la Rica, 2006) and also that international differences in the intensity of female workplace segregation could play a role in the explanation of international differences in the size of the gap (Simón and Russell, 2007). This type of female segregation is, furthermore, a phenomenon proving to be persistent in Europe, given that recent increase in female employment is achieved mainly into sectors of activity and professions which are already dominated by women (European Commission, 2007). Thirdly, current evidence suggests that the size of the gender pay gap is related to the global characteristics of the wage structure and, in particular, to the extent of wage dispersion. This link is explained by the fact that, as women are usually concentrated in the lower part of the wage structure, the more dispersed the structure prevailing in a country the greater the penalty for female wages. Accordingly, empirical evidence shows that gender wage gaps are generally higher in those countries with comparatively more dispersed wage structures (Blau and Kahn, 1992, 1996, 2003 and Simón and Russell, 2007) and, in a similar vein, that the evolution of wage dispersion over time is a significant determinant of the changes of the gender wage gap (Edin and Richardson, 2002 and Blau and Kahn, 1997, 2006). A final point of concern regarding overall existing international evidence on the gender wage gap is that it is illustrative of how cross-country comparative analyses have complemented more traditional within-country examinations of gender pay differentials and, thus, have led to additional compelling progress in this literature.

This study is concerned with examining the origin of the gender pay gap and of international differences in its size in a wide set of European countries (specifically, Italy, Spain, Portugal, the Netherlands, Norway, the Czech Republic, Latvia, Slovakia and Lithuania). Despite long-standing equal pay and equal opportunity legislation, a significant gender gap in pay is generally observed in the European Union. Moreover, it exhibits a remarkable heterogeneity across its members (Eurostat, 2005 and European Commission, 2006). As long as an examination across a number of representative European countries could provide a sounder empirical base for assessing the sources of the gender gap in earnings and of its international variation and consequent policy options, this sort of comparative analysis is particularly appealing.

The empirical study is carried out on the basis of the unique harmonized matched employer-employee microdata drawn from the 2002 wave of the European Structure of Earnings Survey. This survey is conducted in all the members of the European Union plus some additional European countries according to a common methodology. A remarkable drawback of previous international comparative studies on the origin of the gender wage gap is that they are not based on appropriate international harmonized microdata, which implies that estimates of the gender pay gap may vary depending, *inter alia*, on the data available, the specific sample, year of analyses and the wage concept used.[1] In contrast with previous related work, the comparative analysis in this study is based on a reliable cross-country harmonized pay data. In addition, it must also be stressed that previous comparative studies have been carried out with household-based microdata, which involve well-known important restrictions when analyzing wages (namely a high risk of measurement error in wages and a usually rather limited information on key wage-determining characteristics of individuals and, very specially, of their workplaces and jobs). On the contrary, an outstanding feature of the European Structure of Earnings Survey is that it contains matched employer-employee data. Overall, this type of data has allowed fundamental advances in our understanding of wage determination (for reviews, see Abowd and Kramarz, 1999 and Haltiwanger *et al*., 1999). Nevertheless, international databases with matched data are extremely scarce and, for that reason, this sort of data has been used heretofore essentially in analyses for individual countries, despite their potential use for international comparisons. As far as we know, the only international matched employer-employee data currently available is, indeed, the European Structure of Earnings Survey. However, accessibility to their microdata has been traditionally highly constrained by data confidentiality.[2] For that reason, the empirical comparative analysis in this study benefits particularly from the use of harmonized matched data with a variety of information on workers and their workplaces and jobs, which allow, consequently, to consider the influence on a gender wage gap of a wider set of factors than microdata coming from individual or household surveys.

Countries covered by the study comprise 'old' and 'new' European Union members. Therefore, a particular purpose of the study is the analysis of the origin of the gender wage gap for transitional countries of Central and Eastern Europe. Previous studies on the gender wage gap in

[1] As far as we know, the only exception are international analysis of the sources of the gender gap in earnings for European countries provided drawing on comparable individual microdata from the European Community Household Panel (OECD 2002 and Eurostat, 2002).

[2] This survey has been used basically for descriptive analyses (e.g. Eurostat, 2005), with the exception of a number of international comparative studies carried out with the 1995 wave of the survey in the context of a project financed by the European Commission (5th framework project 'Pay Inequalities and Economic Performance'; http://cep.lse.ac.uk/piep), under extremely restrictive conditions of access to the microdata (*inter alia*, Lallemand *et al*., 2007, Plasman *et al*., 2007, Simón and Russell and Simón, 2005).

countries in transition document a number of stylized facts (see Paci and Reilly, 2004 for a thorough review of the existing empirical work on the extent and trends of the gender wage gap during transition). First, the gender gap in pay in most transitional economies is relatively small, predominantly thanks to the comparatively high productivity endowments held by women in these countries. As a result, a large part of the total wage differential can only be explained in terms of gender differences in the returns workers receive to their characteristics. Second, in most countries the gender pay gap either remained stable or contracted during the transitional period, in spite of the fact that the increase in wage dispersion has acted to widen the gap in most cases. It should be stressed that an important lacuna in the current empirical literature consists of that the studies that have explicitly addressed the specific impact of occupational and/or workplace segregation on the gap in these countries are rather scarce. One of the main exceptions is the empirical work on the determinants of the gender pay gap in Slovakia and the Czech Republic based on employer-employee matched data in Jurajda (2003), whose findings suggest that a significant portion of the overall gender pay gap is attributable to workplace segregation in both countries.

An extension of the Juhn *et al.* (1991) wage decomposition methodology suggested by Blau and Kahn (1992) is employed in order to ascertain the origin of the gender wage gap and of its international differences. This technique permits to distinguish between the impact on the gender pay gap of gender-specific factors and of a country's wage structure. The decomposition has been specifically adapted for its use with matched employer-employee data following the hints of Gartner and Stephan (2004). As a consequence, its application to international matched data allows to assess to what extent international differences in the gender wage gap are influenced by two workplace-related factors, namely the intensity of female sorting into low-wage workplaces and the dispersion of workplace wage differentials. Let us notice that, aside the comparative evidence for four European countries in Simón and Russell (2007), the interesting concern wether the intensity of firm segregation by gender is an influential source of international differences in the gender gap in earnings has not been empirically tested to date. In a similar vein, there exists fragmentary evidence suggesting that the dispersion of inter-firm wage differentials could vary considerably across countries (Simón, 2005), which implies that there is empirical plausibility to the argument that international differences in the dispersion of these differentials may play a part in the explanation of differences in the gender wage gap across countries. Yet, this a largely unknown concern.

The outline of the study is as follows. Section 2 describes the dataset and presents summary statistics on the extent of wage dispersion and the magnitude of wage differentials by gender for our set of European countries. Section 3 describes the methodology used in the analysis. Section 4

examines the sources of the gender wage gap and of international differences in its size. Finally, Section 5 concludes.

In brief, obtained evidence uncovers several main findings. Firstly, the gender wage gap exhibits a remarkable heterogeneity across European countries. Second, female segregation into low-paying workplaces is an outstanding origin of both the gender pay gap in all European economies and of international differences in its size, being segregation of females into workplaces with a high presence of female employees a factor with a particularly detrimental effect on relative wages of European females. Third, obtained evidence reveals that, in contrast with the findings of previous comparative studies, international disparities in global characteristics of the wage structure, and in particular in the extent of wage inequality, are not major determinants of inter-country differences in the size of the gender wage gap in Europe. In contrast, they are mainly driven by gender-specific factors. Finally, also of concern is that an important diversity exists both in the size of the gender wage gap and in its underlying causes across new members of the European Union.

2. Data

2.1. Data Source

The microdata used in this study are drawn from the 2002 European Structure of Earnings Survey (ESES hereafter). This dataset is a collection of national surveys conducted in all member states of the European Union (as well as Iceland, Liechtenstein and Norway) according to a standard methodology under the auspices of the Statistical Office of the European Communities. It provides detailed and comparable information on the level and structure of remuneration of employees, their individual characteristics and the enterprise or local unit to which they belong. This study draws on the 2002 national data samples for Italy, Spain, Portugal, the Netherlands, the Czech Republic, Latvia, Slovakia and Lithuania a non-EU country, Norway. The ESES survey covers workplaces with more than 9 employees in sections C to O of the economic activity classification scheme NACE, except for Norway, Latvia, Italy and Portugal where sectors L, M, N and O (public administration, defence and compulsory social security; education; health and social work and other community, social and personal service activities) are not covered and Spain, where sector L is not covered.[3] Thus, industry coverage in these countries is narrower than elsewhere. Given that it does not comprise the public sector, partially or totally, and that wage differentials in European labour markets tend to be lower there than in the private sector (Arulampalam *et al.*, 2004), its exclusion is

[3] The national samples of Norway, Latvia, Lithuania, the Netherlands and Slovakia actually cover workplaces with less than 10 employees. In order to work with similar types of workplaces in all the countries, they have been dropped from the samples.

likely to inflate the size of the raw gender pay gap in these countries. On the other hand, the exclusion of small entreprises may affect the figures for southern countries in particular, given that a significant portion of total private employment in these countries corresponds to this segment of the labour market.

A prominent feature of the ESES is that it consists of matched employer-employee data with a sample of workers at each workplace. The ESES collects information, usually provided by the management of the establishments, on demographic information for workers (earnings, sex, age, level of education, tenure in the firm, occupation, type of contract and full-time/part-time indicators) along with detailed information for each respondent's establishment (industry, size and type of financial control).[4] Additional features of workplace's labour force composition can be derived from the observations of each establishment included in ESES. The analysis is restricted to individuals aged 18-64. The final national samples are in the range between 58,049 and 972,729 workers (for Portugal and the Czech Republic, respectively) and between 472 and 21,615 establishments (Slovakia and Spain) and the number of workers per firm in the sample is in the range between 8.8 and 831.2 (Portugal and Slovakia). Descriptive statistics are reported in Table A.1 in the Appendix.

The earnings measure used in the empirical analysis is the gross hourly wage. This implies that the goal of the research is to explain international differences in the gender gap of the price of labour rather than in labour incomes. In particular, earnings cover remuneration in cash paid by the employer before deductions for tax and employee social security contributions. They comprise all payments different from overtime pay, including commissions, travelling expenses, premium payments for shift, night and weekend work and all bonuses and allowances, regardless of whether or not they are paid regularly in each monthly pay period (thus, they also cover annual bonuses as holiday bonuses, 13th and 14th monthly salaries, profit sharing and allowances for leave not taken)[5]. Let us emphasize that the wage information in the ESES data has an important advantage in that the wage definition is exactly the same across countries.

2.2. Descriptive Evidence

Table 1 documents the gender wage gap and wage dispersion for the countries in the sample. A large international heterogeneity in the magnitude of the wage gap is observed: the gap goes from 0.067

[4] Information on the type of collective agreement covering the workplace is also available for some of the countries in the sample (Norway, Italy and the Netherlands are exceptions). Yet, due to the presence of different institutional wage-settings and, consequently, types of collective agreements across countries it is troublesome to design proper common indicators to all the countries. Likewise, a variable regarding the main market of the firm is available only for a small subset of the countries in the sample. Consequently, information on type of collective agreement and the main market of the firm has not been used in subsequent empirical analyses.

[5] According to ESES 2002 data, bonuses paid annually in industry and services, respectively, represent between 1-3% of mean annual earnings in Norway and Lithuania, around 5-6% in Latvia and Italy, 9% in the Netherlands and between 14-17% in the Czech Republic, Slovakia, Portugal and Spain (Eurostat, 2005).

log points in Lithuania to 0.313 points in Slovakia.[6] In order to put this evidence into a wider perspective, Table A.2 in the Appendix reports the hourly gender wage gap for the European Union-25 countries plus Norway and Iceland. (Interestingly, evidence in Table A.2 is drawn from the same survey used in this study, the 2002 wave of the European Structure of Earnings Survey.)[7] The gender wage gap exhibits a very important heterogeneity across Europe: the gap goes from 0.052 log points in Slovenia to 0.329 in Slovakia. As can be observed, this heterogeneity is specially important as regards the new member states of Central and Eastern Europe, given that some of them (namely Slovenia, Poland and Lithuania) exhibit the lowest gender wage gaps in Europe, whereas other countries of this group, like Slovakia and Estonia, are among the countries with the highest gaps. Very interestingly, the countries embraced by this study cover almost the full range of heterogeneity in the gender wage gap in Europe. Hence, as noted before, the gender wage gap in Slovakia is the highest of the European Union, whereas that of Lithuania is in the lowest range of the EU countries (to be more precise, only Poland and Slovenia exhibit a lower gender wage gap than Lithuania).

Wage dispersion also shows a large heterogeneity across the countries in the sample. Thus, very dispersed wage structure are found in countries like Latvia (where the variance of log hourly wages is 0.529 and the ninetieth-tenth percentile log wage differential is 1.786) and more compressed distribution are present in economies like Norway (0.136 and 0.891, respectively).[8] When all the countries in the sample are considered, bivariate correlation between the size of the gender wage gap and wage dispersion is actually negative (although coefficients are non-significant at conventional levels) for all the dispersion measures. As a matter of fact, the two countries with lowest gaps in the sample, Lithuania and Latvia exhibit, indeed, comparatively very dispersed wage structures. In the same vein, the two economies with the highest gaps in the sample, the Czech Republic and Slovakia, are not in the upper range of wage inequality in the sample. Note, yet, that these four economies are new members of the European Union. When the analysis is constrained to old members of the European Union, a somewhat different picture emerges: bivariate correlation between the gender wage gap and wage dispersion is positive (although, again, coefficients are statistichally non-significant). All in all, these overall results constitute just mixed evidence on an association between the magnitude of the gender gap and wage dispersion in the case of European economies, in contrast with the findings of previous comparative studies, which support the link between wage inequality and the gender wage gap.

[6] These gaps should be exponentiated in order to express the estimates as percentage mark-ups.
[7] This information is available in http://europa.eu.int/comm/eurostat.
[8] A thorough analysis with ESES matched data of the origin of international differences in wage inequality in European economies and its link with labour institutions can be found in Simón (2008).

3. Methods

In evaluating the sources of international differences in the gender wage gap, the extension of the Juhn *et al.* (1991) decomposition suggested by Blau and Kahn (1992) is used. Let us notice that it has been specifically adapted for its use with matched employer-employee data, following the hints of Gartner and Stephan (2004). As a consequence, this version of the technique allows to consider the role of firm-related factors as an additional source of these gaps and their international discrepancies.

The empirical analysis departs from the separate estimation for each country of the following wage function:

$$w_{ij} = X_i \beta + \varepsilon_{ij} + a_j \qquad (1)$$

where w_{ij} is the natural log of hourly wage of individual i in workplace j; X_i is a vector of individual and job characteristics; β is a vector of parameters to be estimated (including an intercept); ε_{ij} is a stochastic error term and a_j is an error component corresponding to workplace j and invariant for all the individuals working in the same workplace.[9]

Equation (1) is estimated for the pool of workers in each country. Although the choice of the wage structure of the majority group as the reference structure in order to develop wage decompositions (e.g., using men as the reference group when addressing the gender wage gap) is largely a standard in the literature, we use the estimate from the pool of workers as the estimate of the wage structure that would exist in the absence of discrimination. There are several advantages to using a pooled approach obtained from a matrix combination of both the female and the male prices as the base for the decomposition. First, pooling the wage structures for all workers allows use of all the available information to estimate market wage returns and the joint wage structure also constitutes a more natural approximation to the labour market's non-discriminatory wage structure than just adopting the structure of the main group or using other alternatives such as the wage structure of the minority group or a linear combination of the structures of both groups (Oaxaca and Ransom, 1994 and Neumark, 1988). Second, there are some methodological and computational advantages, since it makes unnecessary both the use of percentile ranks in the Juhn *et al.* (1991) decomposition, which can drive to problems of identification in the decomposition (see Suen,

[9] Given that the workplace specific effects a_j also capture unobservable individual effects common to all employees in a workplace and that it is not possible to identify this effect in ESES cross-section microdata, they are relegated to the residual. Existing evidence for several countries suggests that unobserved individual effects tend to be weakly uncorrelated with workplace specific effects (Goux and Maurin, 1999 and Abowd *et al.*, 2001).

1997),[10] and the requirement of the samples comprising two males and two females in every workplace in order to identify workplace effects in separate estimations of wage equations by gender.

The result of the Hausman's contrast indicates that workplace specific effects are in all the countries correlated with the rest of the explanatory variables. Therefore, the use of random effects in the estimation would generate inconsistent estimations of the parameters of the equation and, hence, the a_j's are estimated as fixed effects. Let us notice that the identification of the workplace effects is guaranteed given that there is more than one observation per workplace in all the national samples in our matched employer-employee dataset (thus, workplaces with less than two observations have been dropped from the samples). Equation (1) is thus estimated by fixed effects, which is equivalent to estimate by ordinary least squares with a set of workplace dummies.[11] Therefore, relying on the properties of the ordinary least squares estimator, after the estimation of equation (1) with the pooled data of country A and having obtained the values of $\hat{\beta}^A$, σ^A y η^A, the average wage of the subgroup of workers s (s=males or females) in country A can be expressed as:

$$\overline{w}_s^A = \overline{X}_s^A \hat{\beta}^A + \sigma^A \overline{\theta}_s^A + \eta^A \overline{\lambda}_s^A \qquad \text{where } \overline{\theta}^A \sim (0,1),\ \overline{\lambda}^A \sim (0,1) \qquad (2)$$

where the superscript A is for the country A (note that subscripts i and j have been omitted in the equation for ease of presentation); $\overline{w}_s^A$ stands for the mean natural log of hourly wage of given group s; $\overline{X}_s^A$ is a vector of the average of the set of explanatory variables for group s; $\hat{\beta}_s^A$ is the vector of coefficients estimated with equation (1) and the pooled data of country A; σ^A is the standard deviation of wage residuals of the pool of workers; $\overline{\theta}_s^A$ is the average standardized residual of group s; η^A is the standard deviation of workplace effects of the pool of males and females and $\overline{\lambda}_s^A$ is the average standardized workplace effect of group s. Let us notice that, as long as equation (1) is estimated for the pool of workers in the economy, neither $\sigma^A \overline{\theta}_s^A$ nor $\eta^A \overline{\lambda}_s^A$ has to be zero for each separate group of workers.

Using the pooled wage structure as the market price references in the decomposition, the wage gap between males and females in country A, D_A, can be written as follows:

[10] A recent assessment of the merits and shortcomings of the Juhn *et al.* (1991) decomposition can be found in Yun (2007). According to this author, the decomposition relies on a few strong assumptions difficult to verify.

[11] Unfortunately, ESES samples are restricted to employees and this precludes the treatment of selection bias into employment with the conventional econometric correction techniques *à la* Heckman (Heckman, 1979). We are aware of the potential bias of our estimates, since the econometric models do not account for this systematic selection of workers.

$$D^A = w_a^A - w_f^A = (X_m^A - X_f^A)\beta^A + (\theta_m^A - \theta_f^A)\sigma^A + (\lambda_m^A - \lambda_f^A)\eta^A = \Delta X^A \beta^A + \Delta\theta^A \sigma^A + \Delta\lambda^A \eta \qquad (3)$$

where the subscript *m* is for males and *f* for females and a Δ prefix denotes average difference between males and females in the subsequent variable.

Equation (3) quantifies the extent to which average wage differences between males and females in country A are related to (a) differences in endowments of observed characteristics, (b) the influence of unobserved factors and (c) the influence of workplace-related factors. More specifically, the first term on the right side of the equation corresponds to the portion of the wage differential attributable to differences between the observed characteristics of the two groups $(\overline{X}_m^A - \overline{X}_f^A)$, valued at market prices $(\hat{\beta}^A)$. That is to say that this term of the decomposition coincides with the 'explained' component of the standard Oaxaca-Blinder decomposition.[12]

The second term measures the influence on the relative wages of males and females of the unobserved factors in the model. This component comprises the effect of unobserved ability, motivation and discrimination and corresponds to the impact of differences in the average standardized residual multiplied by the money value per unit difference in the standardized residual. Therefore, it is the product of the difference in average standardized wage residuals $(\bar{\theta}_m^A - \bar{\theta}_f^A)$, which captures the average influence of unobserved factors, and the dispersion of the sample-wide distribution of wage residuals (σ^A), which determines the specific wage penalty suffered by the group which is left comparatively disadvantaged by the effect of these factors.

The third term in the right-hand side of equation (3) approximates the influence of workplaces on the gender wage differential. This term is taken as a product of the difference in the average standardised workplace effect of males and females $(\bar{\gamma}_m^A - \bar{\gamma}_f^A)$ and the dispersion of the sample-wide effects distribution (η^A). Thus, the overall influence of workplaces on the gap depends on two factors. Firstly, to what extent males and females work in workplaces where different wages are paid to observationally similar workers (in other words, if one group of workers is segregated into comparatively low-wage workplaces). The magnitude of this phenomenon is captured by the difference in the two groups' average standardised workplace effect. The second is the size of the dispersion of wage differentials across workplaces, which determines the extent of the wage penalty of the group which is relatively more segregated into low-wage firms.

[12] It remains a matter of debate as to what controls should be included in wage equations when carrying out wage decompositions. Thus, the widest possible range of observed characteristics has been chosen for use in the analysis. These comprise occupation, for which the different levels of endowments/distributions for different groups of workers in an economy may be affected by discriminatory practices and, as a result, they would not simply reflect competitive wage differentials. For that reason, the first term of the decomposition cannot be labelled 'non-discriminatory', as it frequently is in the economic literature.

In the end, the difference in the magnitude of the gender wage gap between countries A and B may be expressed, after applying the decomposition in equation (3) twice, as the following (double) decomposition equation:

$$D^A - D^B = (\Delta\overline{X}^A - \Delta\overline{X}^B)\hat{\beta}^A + \Delta\overline{X}^B(\hat{\beta}^A - \hat{\beta}^B) + (\Delta\bar{\theta}^A - \Delta\bar{\theta}^B)\sigma^A + \Delta\bar{\theta}^B(\sigma^A - \sigma^B) + (\Delta\bar{\lambda}^A - \Delta\bar{\lambda}^B)\eta^A + \Delta\bar{\lambda}^B(\eta^A - \eta^B) \qquad (4)$$

By the accounting scheme in equation (4), international discrepancies in the magnitude of the gender wage gap can be explained by inter-country differences in six factors, each of them captured by the relevant term of the decomposition. The first term measures the effect of differences in the gap of observed characteristics of males and females. The second term reflects the contribution of differences in the market prices of observed characteristics. The third term measures the impact of inter-country differences in the relative positions of males and females within the residual wage distribution after controlling for measured characteristics and workplace effects. The fourth term isolates the impact of differences in wage residual dispersion holding the relative position of the average worker of each group in the residual distribution constant.[13] The fifth term captures the impact of inter-country differences in the extent of workplace segregation of males and females. Finally, the sixth term measures the effect of differences in the dispersion of workplace wage differentials.

The components of the decomposition methodology can be further grouped into those attributable to worker-specific factors and those components related to the wage structure. Therefore, the first, third and fifth terms in equation (4) capture the role of inter-country deviations in the differences by gender in productivity characteristics, unobservable factors and workplace segregation. That is, they measure differences in the relative behaviour or treatment of males and females and are, therefore, worker-specific terms. The second, fourth and sixth terms in equation (3) measure the overall effect of inter-country differences in the underlying wage structure. In particular, the fourth and sixth terms measure the effect of differences in wage inequality, as measured by residual wage inequality and the dispersion of workplace wage differentials. Instead, the first and second decomposition terms can be aggregated to assess the overall effect of observed characteristics in generating international differences in the gender wage gap; the third and fourth terms capture the overall influence of unobserved factors and the fifth and sixth decomposition terms assess the joint effect of workplace-related factors.

[13] If inter-country differences in residual inequality were interpreted as differences in the market premium for unobserved skills, this component would represent the effect of differences in the returns to unobservable skills. However, this is quite a strong interpretation of residual inequality as it may also capture, *inter alia*, the effect of measurement errors, equation misspecification and heterogeneity in unmeasured characteristics.

4. Results

Table 2 provides summary results of the within-country decomposition of the gender wage gap in the European countries in the sample, obtained after applying the extension of the Juhn *et al.* (1991) decomposition methodology suggested by Blau and Kahn (1992) and specifically adapted for its use with matched employer-employee data to the breakdown of international differences in wage differentials by gender. This information has been drawn after the separate estimation of the wage equation (1) for each country in our sample.[14] It comprises evidence on the dispersion of residual wages and workplace wage differentials (as measured by the standard deviation of standardized wage residuals and workplace effects, respectively) and on the average position of men and women in both distributions. Final column reports the (unweighted) average values for the nine countries.

It is observed that, conditioning on measurable characteristics and on workplace effects, the average wage residual is positive for males and negative for females in every European labour market. Consequently, the average female position in the residual distribution is always well below the median (on average, they are in the percentile 44) and the average male position is above it (percentile 59). This result suggests that unobserved factors are systematically detrimental for female wages. Yet, some international differences can be found as regards the importance of this phenomenon. Thus, the negative impact of unobserved factors on female wages seems to be particularly important in Italy, Spain and the Czech Republic (the mean female wage residual in these countries is of -0.238, -0.236 and -0.204, respectively, compared to an average for the nine countries of -0.167) and less severe in Latvia, Lithuania and the Netherlands (-0.076, -0.080 and -0.086). International differences in residual wage inequality, which determines the specific wage penalty of unobserved factors on female wages, exists as well: the average standard residual deviation for the nine countries is of 0.276, but it ranges between 0.212 (Italy) and 0.349 (Latvia).

In the same vein, in all the economies in the sample the average male workplace effect is positive, whereas the average female workplace effect is largely negative (average values for the nine countries are 0.137 and -0.179, respectively). This result reflects a general female segregation into low-paying workplaces all across Europe. However, significant differences in this concern are also to be found across countries. Therefore, female segregation is comparatively more intense in Slovakia, the Czech Republic and Spain (the mean female workplace in these countries is of -0.325, -0.261 and -0.237, respectively) and significantly less important in Norway (-0.126), Lithuania (-0.119) and, very specially, Latvia (-0.051). International differences in workplace effects inequality, which determines the specific wage penalty on female wages of this type of segregation, are also observed: the average standard

[14] The estimated earning functions are reported in Table A.1 in the Appendix. The general econometric results are fairly standard, so we do not discuss them.

deviation of workplace effects ranges between 0.568 (Latvia) and 0.126 (Norway), with an average of 0.294.

Overall, descriptive evidence reveals that the effect on females wages of both unobserved elements and workplace-related factors is without exception unfavourable in all European economies. Yet, it also shows that their impact is far from being homogeneous across European labour markets and, as a consequence, that they are potential sources of international differences in the size of the gender wage gap. An additional point of concern is that cross-country differences in these issues are particularly important between the new members of the European Union, which suggests the existence of a significant diversity into this group of countries.

Table 3 contains the results of separate within-country decompositions of the gender wage gap according to the three terms shown in equation (3). The results of the breakdown of inter-country differences in the gap according to equation (4) are reported, in turn, in Tables 5 (summary results) and 6 (full results of pairwise country comparisons). This overall evidence has been obtained after the separate estimation for each country of a fully specified wage equation (1). In order to ensure cross-country comparability of the results, the specification of the wage equation is the same for all countries. Thus, wage regressions comprise individual and job controls and workplace effects. In particular, individual controls consist of a set of traditional human capital variables that proxy productivity endowments: the highest level of education reached by the individual (six levels are considered); age and its squared term (as a proxy for experience) and the time spent with the current employer and its squared term. Job controls consist of dummies for 27 major occupational groups and indicators for a permanent contract and a full-time job.

The results of the breakdown of the gender gap in each country (Table 3) shows, firstly, that differences in measured characteristics of males and females account, on average, for 0.046 log points of the gender wage gap, which amounts to 22.7% of a total gap of 0.202 points. The impact on the gap of gender differences in measured qualifications is not, in particular, very remarkable: overall differences in education, age and tenure explain just 0.014 log points (or 6.9%) of the total gap. In turn, job characteristics are a more significant source (0.033 points), being the bulk of this effect explained by female occupational segregation (0.025 and 12.4%). Overall, in line with previously available evidence, these findings confirm that differences by gender in observed productive characteristics are in general a minor source of the gap in earnings in every European country. Furthermore, they suggest that occupational segregation is a more important origin of the gap than differences between males and females in productivity-related characteristics.

Nevertheless, average results uncover in some cases a remarkable heterogeneity across countries. Thus, as regards the impact on the gap of gender differences in productivity individual

characteristics, in contrast with average results, it is quite significant in the Netherlands (where it explains 0.061 points, or 26.4%, of a total gap of 0.231) and is, indeed, beneficial for female wages in Latvia (-0.012) and Lithuania (-0.036), where females are better educated than men and they have longer tenure and total work experience (as proxied by age). This last country constitutes the only case where female are actually sorted into high-paying occupations (so that this factor would diminish ceteris paribus the wage gap in Lithuania in 0.055 log points), which contrasts with Norway and Portugal, where occupational segregation is particularly harmful for females wages, being the origin of a gap in the order of 0.07 log points in both cases.

Obtained evidence reveals, in addition, that gender differences in wage residuals are a relevant source of the gender wage gap: the second term of the breakdown accounts on average for 0.071 log points (35.2%) of the total average gap. This result uncovers that in all European countries there exist significant average within-workplace wage differentials between observationally similar men and women doing the same type of jobs. This suggests that women are regarded by European employers as having a lower unobservable productivity component than their male counterparts and/or their observable productivity characteristics are treated as having lower value. Again, some differences are to be found between countries (as a matter of fact, the importance of this phenomenon is particularly important in the Czech Republic and Slovakia, the two countries in the sample with the highest gaps), although it should be noted that in every European country, including transitional new members of the European Union, unobserved factors are detrimental for female wages.

Gender differences in firm location are, in turn, an outstanding source of the gender wage gap in all nine countries. The third term of the breakdown has an average effect of 0.085 log points (42.1% of the total average gap), which implies that, overall, this factor is comparatively the most important origin of the gender pay gap. The negative impact on female wages of female segregation into low-wage labour structures is still more clean-cut when occupational and workplace segregation are aggregated: 54.4% of the total average gap is explained by this factor. Yet, let us notice that although workplace segregation is systematically prejudicial for female wages in every European economy, a significant cross-country heterogeneity is also observed in this case, including the new members state of the European Union of Central and Eastern Europe. Therefore, for instance, the penalty wage associated to workplace segregation is less significant for females in Norway (0.025) and Latvia (0.051), but it is particularly important for those in the Czech Republic (0.117) and, very specially, Slovakia (0.160).

In order to ascertain the attributes of low-wage workplaces in which European women are over-represented, Table 4 contains the results of within-country decompositions of the gap with an

alternative specification of the model of wage determination, in which workplace effects have been substituted by workplace characteristics. The attributes included are indicators for industry (55 dummies); the type of financial control (a dummy for a fully publicly owned firms); size (five dummies) and a set of characteristics of the workplace workforce (specifically, the ratio to all employees in the workplace of women, low- and high-educated workers -as defined as those workers with lower than upper-secondary and with tertiary education, respectively- and the average age and tenure).[15] These characteristics almost entirely capture the effect of workplace effects on the sex wage gap: they account for 0.090 points of the gap, compared to 0.085 with the specification of the wage equation with workplace effects. In short, this alternative evidence reveals that the segregation of females into workplaces with a high presence of female employees is, with some minor exception, the factor with the most detrimental effect on female relative wages, with an average explanatory power of the gap of 0.068 points and a comparatively more severe effect in Spain (0.093), Slovakia (0.100) and the Czech Republic.[16]

Table 5 displays the average results of pairwise decompositions of cross-country differences in the gender wage gap, as expressed by equation (4), with the wage structure of country A and country B weights used as the base.[17] For each pair of countries the comparison where the difference in wage inequality is positive has been considered (the total amount of comparisons is 36).

These pair inter-country comparisons reveal that gender-specific components play an outstanding role in explaining differences in the gender wage gap between European countries: these factors explain 0.086 points of a total average difference of 0.091. Thus, in countries with higher gaps the relative endowments of observed characteristics are comparatively detrimental for female wages (with an average effect of 0.030); the residual gap (0.015) is also relatively disadvantageous for females (so that the impact of unobserved characteristics and/or of labour market discrimination against women is especially harmful for their wages) and, very specially, the negative impact of workplace segregation on female wages is considerably more intense (0.041).

[15] Many of these firm characteristics are usual controls in empirical analysis on wage determination. Yet, let us notice that, in particular, the set of characteristics of the firm workforce has been included providing the evidence that the average human capital endowment of a firm's workforce affects the individual wages of all its workers, due to human capital externalities, such as productive complementarities and knowledge diffusion (Battu *et al.*, 2003) and that a higher presence of women in a firm depresses overall wages (Bayard *et al.*, 2003 and Amuedo-Dorantes and De la Rica, 2006). According to the economic theory, the disproportionate location of females in low-wage labour structures depresses wages due to a 'crowding' effect, namely the oversupply of labour in those structures (Sorensen, 1990).

[16] The estimated coefficient of the female share is negative and highly significant in every country (Table A.1 of the Appendix). According to the economic theory, the disproportionate location of females in low-wage labour structures depresses wages due to a 'crowding' effect, namely the oversupply of labour in those structures (Sorensen, 1990).

[17] Given that the decomposition is subject to the well-known index number problem, decomposition outcomes could in some cases be sensitive to the choice of references in the comparison. To avoid this problem we use different benchmark countries and thus perform the decomposition using in turn all the countries in the sample as benchmarks (Table 6).

On the other hand, differences in wage structures play in general a comparatively minor influence in shaping international differences in the size of the gender wage gap. Thus, although female wages in countries with lower wage gaps tend to be favoured by global wage structure characteristics, this factor explains just 0.005 points of a total average difference of 0.091. Also of concern, wage inequality (whose influence is more properly approximated by the joint effect of residual wage inequality and the dispersion of workplace wage differentials) plays an almost negligible opposite influence: had the high-gap countries the same wage inequality than low-gap economies, their gender pay gap would actually increase by 0.007 log points.

These conclusions hold also from the specific results of the pairwise comparisons of low- and high-gap countries. Thus, in the case of Latvia and Lithuania, the two countries with the lowest gaps in the sample, gender-specific factors are the main explanation of their comparatively low gaps, given that their very dispersed wage structures would originate *ceteris paribus* comparatively higher gaps in these countries. In the same vein, gender-specific factors play in general an outstanding part in the explanation of the lower gap in low-gap countries. Therefore, they are by far the main origin of the comparatively lower gap in the Netherlands and the Czech Republic (altough the results for Slovakia are more mixed).

In order to ascertain to what extent average results mask a different relationship between the gender wage gap and wage inequality in old and new members of the European Union, second and third columns of Table 5 contain the average results of the decomposition when the new members of the European Union are excluded of the examinations. Therefore, when just Lithuania and Latvia are excluded (second column) a new picture apparently emerges: gender-specific and wage structure components explain, in turn, 0.032 and 0.028 points of a total average difference of 0.060. Yet, when all the new members are eliminated from the comparative analysis, main conclusions of the general analysis hold. Thus, gender-specific terms explain the bulk of international differences in the size of the gender gap (0.037 point compared to 0.036). On the contrary, although differences in wage inequality components play a part in the explanation (0.013), total wage structure characteristics are comparatively less important (-0.001). Therefore, overall obtained evidence seems to suggest, in contrast with the findings of earlier studies that wage structure characteristics are prominent in explaining pair-country differences in the magnitude of the sex wage gap, that this conclusion can not be generalized to European economies.

5. Conclusions

This study has examined the origin of international differences in the gender wage gap in Europe. Despite long-standing equal pay and equal opportunity legislation, a significant gender gap in pay is generally observed in European Union members. Our analysis for a number of representative European economies has permited to obtain a full range of comparative empirical evidence that sheds light on the origin of the gender wage gap and of its significant international heterogeneity across European countries. This is relevant insomuch identifying the sources of sex differences in wages is crucial to implementing effective policy decisions in order to reduce gender differences in pay.

The empirical research has been conducted on the basis of microdata drawn from a unique harmonized international matched employer-employee dataset, the European Structure of Earnings Survey. This survey, which includes a rich array of key determinants of earnings that comprise workplace-related factors, is an excellent source of strictly comparable data to address these questions in a comprehensive fashion. In short, this database has two important advantages relative to previous international comparative studies, which allow for highly unparalleled examination of the sources of the sex wage gap. Firstly, it consists of inter-country harmonized microdata, so that international comparisons are developed on a strictly comparable basis. Secondly, it constitutes a unique harmonized international matched employer-employee dataset with linked information on both worker and workplace characteristics. Therefore, it allows for novel empirical insights into the reasons why the gender pay gap exist and differs substantially across countries. In practice, its use provides a full range of empirical evidence that permits a sounder empirical base for assessing the sources of the gender gap in earnings and consequent policy options.

Obtained evidence confirms previous findings in the gender-related literature that differences in individual productivity-related characteristics play in general a minor role in the explanation of the gender pay gap. All in all, female segregation into low-wage structures emerges as the main contributor to the gender pay gap, with female segregation into low-wage workplaces as an outstanding origin of both the gender pay gap in all European economies and of international differences in its size. Interestingly, this result extends also to new members of the European Union, in which this theme has been traditionally under-researched. Although it should be taken into account that some degree of gender segregation could be plausibly optimal for both men and women, in case they differ in their preferences about non-labour activities and jobs non-pecuniary attributes or in socialization patterns, these findings support potential attempts to enforce an equal distribution of men and women across occupations and workplaces through equal treatment

legislation, affirmative action or other means (for more details on potential policy responses, see European Commission, 2006). Furthermore, the result that segregation of females into workplaces with a high presence of female employees is a factor with a particularly detrimental effect on their relative wages suggests that particular attention should be given to the low level of wages in labour structures which tend to be dominated by females. Policy initiatives aimed at improving the remuneration of female-dominated jobs might comprise, *inter alia*, the development and application of gender-neutral systems of job evaluation.

On the other hand, obtained evidence reveals that, in contrast with the findings of previous comparative studies, international disparities in global characteristics of the wage structure, and in particular in the extent of wage inequality, are not major determinants of inter-country differences in the size of the gender wage gap in Europe. This result reveals that the generalization of the conclusions of earlier analyses covering different countries is not straightforward. Moreover, it suggests that policy initiatives adopting a mainstreaming or multi-dimensional approach that includes potential changes of institutional factors like wage formation systems with the aim of influencing the wage structure might not be central in order to reduce the gender pay gap.

A final point of concern is that cross-country differences in the origin and the magnitude of the gender gap in pay are particularly significant between the new members of the European Union, which suggests the existence of a remarkable diversity into this group of countries.

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Table 1
Gender wage gap and wage dispersion. ESES 2002.

	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia
Log hourly wage gap	0.067	0.130	0.163	0.204	0.222	0.229	0.231	0.261	0.313
Hourly wage dispersion									
Variance of logarithms	0.385	0.529	0.175	0.136	0.376	0.274	0.254	0.196	0.252
90-10 log differential	1.591	1.786	1.002	0.891	1.545	1.289	1.139	1.060	1.190
Gini Index	0.367	0.456	0.252	0.217	0.376	0.315	0.262	0.263	0.308

Notes: 90-10 log differential is the wage differential between the 90^{th}-10^{th} deciles of the log hourly wage distribution.

Table 2
Within-country decomposition of the gender wage gap. Summary statistics. ESES 2002.

	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average
Gender wage gap	0.067	0.130	0.162	0.204	0.222	0.229	0.231	0.261	0.313	0.202
Mean female residual	-0.080	-0.076	-0.238	-0.181	-0.150	-0.204	-0.086	-0.236	-0.167	-0.158
Mean male residual	0.094	0.058	0.111	0.104	0.092	0.112	0.088	0.205	0.143	0.112
Female mean residual percentile	46	46	41	43	45	42	47	40	43	44
Male mean residual percentile	56	55	65	59	58	60	57	62	59	59
Residual standard deviation	0.341	0.349	0.212	0.216	0.266	0.242	0.281	0.244	0.331	0.276
Mean female workplace effect	-0.119	-0.051	-0.180	-0.126	-0.138	-0.237	-0.172	-0.261	-0.325	-0.179
Mean male workplace effect	0.140	0.039	0.084	0.072	0.084	0.129	0.177	0.227	0.278	0.137
Female mean workplace effect percentile	52	54	44	53	50	43	41	43	42	47
Male mean workplace effect percentile	62	57	61	61	67	59	58	63	63	61
Workplace effects standard deviation	0.374	0.568	0.250	0.126	0.340	0.309	0.169	0.240	0.266	0.294

Table 3
Within-country decomposition of the gender wage gap. ESES 2002.

	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average
Gender wage gap	0.067	0.130	0.162	0.204	0.222	0.229	0.231	0.261	0.313	0.202
Observed characteristics (1)	-0.089(-133.3)	0.033(25.2)	0.023(14.0)	0.117(57.5)	0.082(37.0)	0.040(17.3)	0.124(53.7)	0.037(14.0)	0.050(16.0)	0.046(22.7)
Individual characteristics	-0.036	-0.012	0.017	0.023	0.017	0.026	0.061	0.016	0.011	0.014
Education	-0.016	-0.007	-0.006	0.006	-0.009	-0.008	0.013	0.011	0.009	-0.001
Age	-0.003	-0.002	0.017	0.014	0.017	0.013	0.032	-0.001	0.000	0.010
Tenure	-0.017	-0.003	0.006	0.003	0.009	0.021	0.017	0.006	0.002	0.005
Job characteristics	-0.053	0.045	0.006	0.094	0.065	0.014	0.063	0.020	0.039	0.033
Type of contract	-0.001	0.000	0.001	0.001	0.001	0.003	0.007	0.003	-0.003	0.001
Full-time/Part-time	0.003	-0.001	0.000	0.023	-0.008	-0.003	0.034	0.000	0.008	0.006
Occupation	-0.055	0.046	0.005	0.070	0.072	0.014	0.022	0.017	0.034	0.025
Wage residuals (2)	0.059(88.7)	0.047(35.7)	0.074(45.5)	0.062(30.2)	0.064(28.9)	0.076(33.3)	0.049(21.1)	0.108(41.2)	0.103(32.8)	0.071(35.2)
Workplace effects (3)	0.097(144.6)	0.051(39.0)	0.066(40.5)	0.025(12.3)	0.076(34.1)	0.113(49.4)	0.059(25.5)	0.117(44.8)	0.160(51.2)	0.085(42.1)

Notes: The percentage of each term relative to the wage gap is in parentheses.

Table 4
Within-country decomposition of the gender wage gap. Alternative specification with workplace characteristics. ESES 2002.

	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average
Gender wage gap	0.067	0.130	0.162	0.204	0.222	0.229	0.231	0.261	0.313	0.202
Observed characteristics (1)	0.009(13.4)	0.082(63.2)	0.083(51.0)	0.148(72.5)	0.157(70.7)	0.150(65.4)	0.181(78.4)	0.151(57.9)	0.219(69.9)	0.131(64.9)
Individual characteristics	-0.036	-0.011	0.017	0.022	0.017	0.028	0.061	0.017	0.010	0.014
Education	-0.018	-0.008	-0.006	0.005	-0.009	-0.005	0.013	0.012	0.009	-0.001
Age	-0.001	0.000	0.017	0.013	0.017	0.012	0.032	0.000	0.000	0.010
Tenure	-0.017	-0.003	0.006	0.003	0.009	0.021	0.017	0.006	0.001	0.005
Job characteristics	-0.055	0.052	0.002	0.068	0.064	0.010	0.061	0.024	0.015	0.027
Type of contract	0.000	0.000	0.001	0.001	0.001	0.003	0.008	0.003	-0.001	0.002
Full-time/Part-time	0.006	0.006	-0.004	0.018	-0.008	-0.002	0.032	0.000	0.006	0.006
Occupation	-0.061	0.045	0.005	0.049	0.071	0.010	0.021	0.021	0.009	0.019
Workplace characteristics	0.100	0.041	0.063	0.058	0.076	0.112	0.059	0.111	0.194	0.090
Industry	0.101	0.015	0.017	0.021	0.027	0.038	-0.012	0.039	0.097	0.038
Type of financial control	-0.032	-0.001	0.001	0.000	0.000	0.000	0.017	-0.003	0.010	-0.001
Size	-0.005	-0.007	0.000	0.000	-0.008	-0.014	0.000	-0.001	-0.001	-0.004
Female share	0.065	0.039	0.046	0.034	0.060	0.093	0.053	0.118	0.100	0.068
Average age	0.005	-0.005	0.000	0.004	0.006	0.003	0.000	-0.017	-0.006	-0.001
Average tenure	-0.008	0.000	0.002	-0.002	-0.003	0.005	0.004	-0.010	-0.003	-0.002
Share of high-educated	-0.026	-0.004	-0.001	0.000	-0.001	-0.006	0.000	-0.015	-0.005	-0.006
Share of low-educated	0.001	0.003	-0.002	0.001	-0.005	-0.007	-0.002	0.001	0.001	-0.001
Wage residuals (2)	0.058(86.4)	0.048(36.8)	0.080(49.0)	0.056(27.4)	0.065(29.3)	0.079(34.7)	0.051(21.9)	0.110(42.1)	0.094(30.1)	0.071(35.1)
Workplace effects (3)	-	-	-	-	-	-	-	-	-	-

Notes: The percentage of each term relative to the wage gap is in parentheses.

Table 5
Decomposition of inter-country differences in the gender wage gap. Summary results. ESES 2002.

	Average	Average (without Latvia and Lithuania)	Average (old members of the EU)
D_A-D_B	0.091	0.060	0.036
Gap in observed characteristics (1)	0.030	-0.013	0.033
Market prices for observed characteristics (2)	0.013	0.009	-0.014
Wage residual gap (3)	0.015	-0.001	-0.015
Wage residual standard deviation (4)	0.003	0.015	0.010
Gap in workplace effects (5)	0.041	0.046	0.020
Workplace effects standard deviation (6)	-0.010	0.004	0.003
Characteristics (1)+(2)	0.042	-0.004	0.018
Wage residuals (3)+(4)	0.017	0.015	-0.005
Workplace effects (5)+(6)	0.032	0.050	0.023
Worker-specific components (1)+(3)+(5)	0.086	0.032	0.037
Wage structure components (2)+(4)+(6)	0.005	0.028	-0.001
Wage inequality (4)+(6)	-0.007	0.019	0.013

Notes:: The average values in the table have been calculated from all the pairwise comparisons of the nine countries in the sample. Regressions include workplace fixed effects and individual and job controls (education, age and its squared term, tenure in the firm and its squared term, type of contract, full-time/part-time job and occupation).

Table 6
Decomposition of inter-country differences in the gender wage gap. Full results. ESES 2002.

Reference: Lithuania	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
$D_{Lithuania}$-$D_{Other\ country}$	-	-0.063	-0.096	-0.137	-0.155	-0.162	-0.164	-0.194	-0.246	-0.152	-0.152	-
Gap in observed characteristics (1)	-	-0.144	-0.152	-0.216	-0.156	-0.123	-0.194	-0.135	-0.121	-0.155	-0.155	-
Market prices for observed characteristics (2)	-	0.022	0.040	0.009	-0.015	-0.006	-0.019	0.009	-0.018	0.003	0.003	-
Wage residual gap (3)	-	0.014	-0.060	-0.038	-0.023	-0.048	0.000	-0.091	-0.046	-0.037	-0.037	-
Wage residual standard deviation (4)	-	-0.001	0.045	0.036	0.018	0.031	0.010	0.043	0.003	0.023	0.023	-
Gap in workplace effects (5)	-	0.063	-0.002	0.023	0.014	-0.040	-0.034	-0.085	-0.129	-0.024	-0.024	-
Workplace effects standard deviation (6)	-	-0.017	0.033	0.049	0.007	0.023	0.071	0.065	0.065	0.037	0.037	-
Characteristics (1)+(2)	-	-0.122	-0.112	-0.207	-0.171	-0.129	-0.213	-0.126	-0.139	-0.152	-0.152	-
Wage residuals (3)+(4)	-	0.013	-0.015	-0.002	-0.005	-0.017	0.011	-0.048	-0.043	-0.013	-0.013	-
Workplace effects (5)+(6)	-	0.046	0.031	0.072	0.021	-0.017	0.038	-0.020	-0.064	0.013	0.013	-
Worker-specific components (1)+(3)+(5)	-	-0.067	-0.213	-0.231	-0.165	-0.212	-0.227	-0.311	-0.296	-0.215	-0.215	-
Wage structure components (2)+(4)+(6)	-	0.003	0.117	0.094	0.010	0.049	0.062	0.117	0.050	0.063	0.063	-
Wage inequality (4)+(6)	-	-0.018	0.078	0.085	0.025	0.055	0.082	0.108	0.068	0.060	0.060	-
Reference: Latvia	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
D_{Latvia}-$D_{Other\ country}$	0.063	-	-0.032	-0.074	-0.091	-0.099	-0.101	-0.131	-0.183	-0.081	-0.102	0.063
Gap in observed characteristics (1)	0.067	-	0.001	-0.053	-0.020	-0.025	-0.038	0.000	0.005	-0.008	-0.019	0.067
Market prices for observed characteristics (2)	0.055	-	0.009	-0.032	-0.029	0.018	-0.054	-0.004	-0.022	-0.007	-0.016	0.055
Wage residual gap (3)	-0.014	-	-0.075	-0.053	-0.037	-0.064	-0.014	-0.107	-0.061	-0.053	-0.059	-0.014
Wage residual standard deviation (4)	0.001	-	0.048	0.038	0.020	0.034	0.012	0.046	0.005	0.026	0.029	0.001
Gap in workplace effects (5)	-0.096	-	-0.099	-0.061	-0.075	-0.157	-0.147	-0.226	-0.292	-0.144	-0.151	-0.096
Workplace effects standard deviation (6)	0.050	-	0.084	0.087	0.050	0.094	0.139	0.160	0.182	0.106	0.114	0.050
Characteristics (1)+(2)	0.122	-	0.010	-0.084	-0.049	-0.007	-0.091	-0.004	-0.017	-0.015	-0.035	0.122
Wage residuals (3)+(4)	-0.013	-	-0.027	-0.015	-0.018	-0.030	-0.002	-0.061	-0.056	-0.028	-0.030	-0.013
Workplace effects (5)+(6)	-0.046	-	-0.015	0.026	-0.025	-0.062	-0.008	-0.066	-0.109	-0.038	-0.037	-0.046
Worker-specific components (1)+(3)+(5)	-0.043	-	-0.173	-0.167	-0.133	-0.245	-0.199	-0.333	-0.348	-0.205	-0.228	-0.043
Wage structure components (2)+(4)+(6)	0.107	-	0.140	0.094	0.041	0.146	0.097	0.202	0.165	0.124	0.126	0.107
Wage inequality (4)+(6)	0.052	-	0.131	0.125	0.070	0.128	0.151	0.206	0.188	0.131	0.143	0.052
Reference: Italy	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
D_{Italy}-$D_{Other\ country}$	0.096	0.032	-	-0.042	-0.059	-0.067	-0.069	-0.099	-0.151	-0.045	-0.081	0.064
Gap in observed characteristics (1)	0.050	-0.040	-	-0.064	-0.082	0.025	-0.073	-0.013	-0.023	-0.028	-0.038	0.005
Market prices for observed characteristics (2)	0.062	0.030	-	-0.031	0.023	-0.042	-0.028	-0.001	-0.005	0.001	-0.014	0.046
Wage residual gap (3)	0.037	0.046	-	0.014	0.023	0.007	0.037	-0.020	0.008	0.019	0.012	0.042
Wage residual standard deviation (4)	-0.022	-0.018	-	-0.001	-0.013	-0.009	-0.012	-0.014	-0.037	-0.016	-0.014	-0.020
Gap in workplace effects (5)	0.001	0.043	-	0.016	0.010	-0.026	-0.021	-0.056	-0.085	-0.015	-0.027	0.022
Workplace effects standard deviation (6)	-0.032	-0.028	-	0.025	-0.020	-0.022	0.028	0.005	-0.009	-0.007	0.001	-0.030
Observed characteristics (1)+(2)	0.112	-0.010	-	-0.095	-0.059	-0.017	-0.101	-0.014	-0.027	-0.026	-0.052	0.051
Wage residuals (3)+(4)	0.015	0.027	-	0.012	0.010	-0.002	0.025	-0.034	-0.029	0.003	-0.003	0.021
Workplace effects (5)+(6)	-0.031	0.015	-	0.041	-0.010	-0.047	0.007	-0.051	-0.094	-0.021	-0.026	-0.008
Worker-specific components (1)+(3)+(5)	0.089	0.049	-	-0.034	-0.049	0.006	-0.057	-0.088	-0.099	-0.023	-0.054	0.069
Wage structure components (2)+(4)+(6)	0.007	-0.017	-	-0.007	-0.011	-0.073	-0.012	-0.010	-0.051	-0.022	-0.027	-0.005
Wage inequality (4)+(6)	-0.054	-0.047	-	0.023	-0.033	-0.031	0.016	-0.009	-0.046	-0.023	-0.013	-0.051
Reference: Norway	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech	Slovakia	Average	Average when	Average when

								Republic			the difference is negative	the difference is positive
D_{Norway}-$D_{Other\ country}$	0.137	0.074	0.042	-	-0.018	-0.025	-0.027	-0.057	-0.109	0.002	-0.047	0.084
Gap in observed characteristics (1)	0.140	0.098	0.058	-	0.061	0.071	-0.025	0.075	0.082	0.070	0.053	0.099
Market prices for observed characteristics (2)	0.066	-0.013	0.037	-	-0.026	0.007	0.019	0.006	-0.015	0.010	-0.002	0.030
Wage residual gap (3)	0.024	0.033	-0.014	-	0.009	-0.007	0.024	-0.034	-0.005	0.004	-0.003	0.014
Wage residual standard deviation (4)	-0.022	-0.018	0.001	-	-0.012	-0.008	-0.010	-0.012	-0.036	-0.015	-0.016	-0.013
Gap in workplace effects (5)	-0.008	0.014	-0.008	-	-0.003	-0.021	-0.019	-0.036	-0.051	-0.017	-0.026	-0.001
Workplace effects standard deviation (6)	-0.064	-0.040	-0.033	-	-0.048	-0.067	-0.015	-0.056	-0.084	-0.051	-0.054	-0.046
Characteristics (1)+(2)	0.207	0.084	0.095	-	0.035	0.078	-0.007	0.081	0.067	0.080	0.051	0.129
Wage residuals (3)+(4)	0.002	0.015	-0.012	-	-0.003	-0.015	0.013	-0.046	-0.041	-0.011	-0.018	0.002
Workplace effects (5)+(6)	-0.072	-0.026	-0.041	-	-0.051	-0.088	-0.034	-0.092	-0.135	-0.067	-0.080	-0.046
Worker-specific components (1)+(3)+(5)	0.157	0.144	0.036	-	0.067	0.043	-0.020	0.005	0.026	0.057	0.024	0.112
Wage structure components (2)+(4)+(6)	-0.020	-0.071	0.006	-	-0.085	-0.069	-0.008	-0.062	-0.135	-0.056	-0.072	-0.028
Wage inequality (4)+(6)	-0.086	-0.057	-0.031	-	-0.060	-0.075	-0.026	-0.068	-0.120	-0.065	-0.070	-0.058
Reference: Portugal	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
$D_{Portugal}$-$D_{Other\ country}$	0.155	0.091	0.059	0.018	-	-0.007	-0.009	-0.039	-0.091	0.022	-0.037	0.081
Gap in observed characteristics (1)	0.171	0.081	0.088	0.071	-	0.105	0.117	0.091	0.096	0.103	0.102	0.103
Market prices for observed characteristics (2)	0.001	-0.032	-0.029	-0.106	-	-0.063	-0.159	-0.045	-0.064	-0.062	-0.083	-0.042
Wage residual gap (3)	0.018	0.029	-0.029	-0.012	-	-0.020	0.018	-0.053	-0.018	-0.008	-0.018	0.002
Wage residual standard deviation (4)	-0.013	-0.011	0.019	0.014	-	0.008	-0.003	0.010	-0.020	0.001	-0.001	0.002
Gap in workplace effects (5)	-0.013	0.045	-0.014	0.008	-	-0.049	-0.043	-0.090	-0.130	-0.036	-0.078	0.007
Workplace effects standard deviation (6)	-0.009	-0.020	0.024	0.042	-	0.011	0.060	0.049	0.045	0.025	0.041	0.009
Characteristics (1)+(2)	0.171	0.049	0.059	-0.035	-	0.042	-0.042	0.045	0.032	0.040	0.019	0.061
Wage residuals (3)+(4)	0.005	0.018	-0.010	0.003	-	-0.012	0.016	-0.043	-0.038	-0.008	-0.019	0.004
Workplace effects (5)+(6)	-0.021	0.025	0.010	0.051	-	-0.038	0.017	-0.041	-0.085	-0.010	-0.037	0.016
Worker-specific components (1)+(3)+(5)	0.176	0.155	0.045	0.068	-	0.036	0.092	-0.053	-0.052	0.058	0.006	0.111
Wage structure components (2)+(4)+(6)	-0.021	-0.063	0.014	-0.050	-	-0.044	-0.102	0.013	-0.039	-0.037	-0.043	-0.030
Wage inequality (4)+(6)	-0.022	-0.031	0.043	0.057	-	0.019	0.057	0.059	0.025	0.026	0.040	0.012
Reference: Spain	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
D_{Spain}-$D_{Other\ country}$	0.162	0.099	0.067	0.025	0.007	-	-0.002	-0.032	-0.084	0.046	-0.084	0.072
Gap in observed characteristics (1)	0.111	0.017	-0.017	-0.059	-0.036	-	-0.059	0.005	0.025	0.007	0.025	0.003
Market prices for observed characteristics (2)	0.018	-0.010	0.034	-0.019	-0.006	-	-0.025	-0.002	-0.035	-0.003	-0.035	0.003
Wage residual gap (3)	0.034	0.044	-0.008	0.007	0.018	-	0.034	-0.030	0.001	0.016	0.001	0.019
Wage residual standard deviation (4)	-0.017	-0.014	0.010	0.007	-0.006	-	-0.007	-0.001	-0.028	-0.008	-0.028	-0.004
Gap in workplace effects (5)	0.033	0.086	0.032	0.052	0.045	-	0.005	-0.038	-0.073	0.029	-0.073	0.050
Workplace effects standard deviation (6)	-0.017	-0.023	0.016	0.036	-0.007	-	0.049	0.034	0.026	0.005	0.026	0.001
Observed characteristics (1)+(2)	0.129	0.007	0.017	-0.078	-0.042	-	-0.084	0.003	-0.010	0.004	-0.010	0.007
Wage residuals (3)+(4)	0.017	0.030	0.002	0.015	0.012	-	0.028	-0.031	-0.026	0.008	-0.026	0.015
Workplace effects (5)+(6)	0.017	0.062	0.047	0.088	0.038	-	0.054	-0.004	-0.047	0.034	-0.047	0.050
Worker-specific components (1)+(3)+(5)	0.178	0.146	0.007	0.000	0.027	-	-0.020	-0.062	-0.047	0.052	-0.047	0.072
Wage structure components (2)+(4)+(6)	-0.016	-0.047	0.060	0.025	-0.019	-	0.017	0.031	-0.037	-0.006	-0.037	0.001
Wage inequality (4)+(6)	-0.034	-0.037	0.026	0.044	-0.013	-	0.042	0.033	-0.001	-0.003	-0.001	-0.003
Reference: Netherlands	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
$D_{Netherlands}$-$D_{Other\ country}$	0.164	0.101	0.069	0.027	0.009	0.002	-	-0.030	-0.082	0.048	-0.082	0.074

Gap in observed characteristics (1)	0.213	0.142	0.075	0.030	0.085	0.105	-	0.107	0.125	0.112	0.125	0.109
Market prices for observed characteristics (2)	0.000	-0.051	0.026	-0.023	-0.043	-0.021	-	-0.019	-0.051	-0.024	-0.051	-0.018
Wage residual gap (3)	0.000	0.011	-0.049	-0.030	-0.019	-0.040	-	-0.075	-0.038	-0.021	-0.038	-0.017
Wage residual standard deviation (4)	-0.010	-0.009	0.024	0.018	0.004	0.012	-	0.016	-0.016	0.002	-0.016	0.005
Gap in workplace effects (5)	0.015	0.044	0.014	0.026	0.021	-0.003	-	-0.023	-0.043	0.013	-0.043	0.024
Workplace effects standard deviation (6)	-0.053	-0.036	-0.021	0.009	-0.038	-0.051	-	-0.035	-0.058	-0.033	-0.058	-0.028
Characteristics (1)+(2)	0.213	0.091	0.101	0.007	0.042	0.084	-	0.088	0.074	0.088	0.074	0.091
Wage residuals (3)+(4)	-0.011	0.002	-0.025	-0.013	-0.016	-0.028	-	-0.059	-0.054	-0.020	-0.054	-0.013
Workplace effects (5)+(6)	-0.038	0.008	-0.007	0.034	-0.017	-0.054	-	-0.058	-0.101	-0.020	-0.101	-0.004
Worker-specific components (1)+(3)+(5)	0.228	0.197	0.040	0.024	0.088	0.062	-	0.007	0.044	0.104	0.044	0.115
Wage structure components (2)+(4)+(6)	-0.063	-0.096	0.029	0.004	-0.078	-0.060	-	-0.037	-0.125	-0.055	-0.125	-0.041
Wage inequality (4)+(6)	-0.063	-0.045	0.003	0.027	-0.035	-0.039	-	-0.018	-0.074	-0.031	-0.074	-0.023

Reference: Czech Republic	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
$D_{\text{Czech Republic}}$-$D_{\text{Other country}}$	0.194	0.131	0.099	0.057	0.039	0.032	0.030	-	-0.052	0.078	-0.052	0.104
Gap in observed characteristics (1)	0.090	-0.002	-0.003	-0.078	-0.032	0.009	-0.045	-	0.017	-0.001	0.017	-0.005
Market prices for observed characteristics (2)	0.036	0.006	0.017	-0.003	-0.014	-0.013	-0.042	-	-0.030	0.002	-0.030	0.008
Wage residual gap (3)	0.065	0.075	0.023	0.038	0.049	0.031	0.065	-	0.032	0.047	0.032	0.050
Wage residual standard deviation (4)	-0.017	-0.014	0.011	0.008	-0.005	0.001	-0.006	-	-0.027	-0.007	-0.027	-0.003
Gap in workplace effects (5)	0.055	0.095	0.054	0.069	0.064	0.029	0.033	-	-0.028	0.052	-0.028	0.067
Workplace effects standard deviation (6)	-0.035	-0.029	-0.003	0.023	-0.022	-0.025	0.025	-	-0.015	-0.014	-0.015	-0.013
Characteristics (1)+(2)	0.126	0.004	0.014	-0.081	-0.045	-0.003	-0.088	-	-0.014	0.001	-0.014	0.004
Wage residuals (3)+(4)	0.048	0.061	0.034	0.046	0.043	0.031	0.059	-	0.005	0.040	0.005	0.046
Workplace effects (5)+(6)	0.020	0.066	0.051	0.092	0.041	0.004	0.058	-	-0.043	0.038	-0.043	0.054
Worker-specific components (1)+(3)+(5)	0.210	0.168	0.073	0.029	0.081	0.069	0.053	-	0.021	0.097	0.021	0.112
Wage structure components (2)+(4)+(6)	-0.015	-0.038	0.025	0.028	-0.042	-0.037	-0.023	-	-0.073	-0.019	-0.073	-0.008
Wage inequality (4)+(6)	-0.052	-0.043	0.009	0.030	-0.028	-0.025	0.018	-	-0.043	-0.021	-0.043	-0.017

Reference: Slovakia	Lithuania	Latvia	Italy	Norway	Portugal	Spain	Netherlands	Czech Republic	Slovakia	Average	Average when the difference is negative	Average when the difference is positive
D_{Slovakia}-$D_{\text{Other country}}$	0.246	0.183	0.151	0.109	0.091	0.084	0.082	0.052	-	0.125	-	0.125
Gap in observed characteristics (1)	0.084	-0.005	-0.037	-0.116	-0.070	-0.050	-0.132	-0.011	-	-0.042	-	-0.042
Market prices for observed characteristics (2)	0.056	0.023	0.064	0.049	0.038	0.061	0.058	0.025	-	0.047	-	0.047
Wage residual gap (3)	0.045	0.058	-0.013	0.008	0.023	-0.002	0.045	-0.044	-	0.015	-	0.015
Wage residual standard deviation (4)	-0.002	-0.002	0.042	0.033	0.016	0.028	0.009	0.039	-	0.020	-	0.020
Gap in workplace effects (5)	0.091	0.136	0.090	0.108	0.101	0.063	0.068	0.031	-	0.086	-	0.086
Workplace effects standard deviation (6)	-0.028	-0.027	0.004	0.028	-0.017	-0.016	0.034	0.012	-	-0.001	-	-0.001
Characteristics (1)+(2)	0.139	0.017	0.027	-0.067	-0.032	0.010	-0.074	0.014	-	0.004	-	0.004
Wage residuals (3)+(4)	0.043	0.056	0.029	0.041	0.038	0.026	0.054	-0.005	-	0.035	-	0.035
Workplace effects (5)+(6)	0.064	0.109	0.094	0.135	0.085	0.047	0.101	0.043	-	0.085	-	0.085
Worker-specific components (1)+(3)+(5)	0.220	0.189	0.041	0.000	0.054	0.011	-0.020	-0.024	-	0.059	-	0.059
Wage structure components (2)+(4)+(6)	0.026	-0.007	0.110	0.110	0.037	0.073	0.101	0.076	-	0.066	-	0.066
Wage inequality (4)+(6)	-0.030	-0.029	0.046	0.060	-0.001	0.012	0.042	0.051	-	0.019	-	0.019

Notes: Regressions include workplace fixed effects and individual and job controls (education, age and its squared term, tenure in the firm and its squared term, type of contract, full-time/part-time job and occupation).

Appendix

Table A.1
Descriptive evidence and regression results.

	Lithuania			Latvia			Italy			Norway			Portugal			Spain			Netherlands			Czech Republic			Slovakia		
	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.	Mean Males	Mean Fem.	Coeff.
Age	40.361	41.120	0.003	39.493	39.422	-0.001	39.945	37.730	0.021	39.779	38.133	0.029	38.757	35.948	0.029	38.456	36.056	0.016	41.017	38.007	0.060	41.141	40.573	0.012	40.129	39.525	0.016
Age*age	1759.4	1800.3	0.000	1704.7	1682.2	0.000	1687.7	1510.0	0.000	1722.5	1608.8	0.000	1630.1	1397.3	0.000	1599.4	1402.9	0.000	1811.5	1567.2	-0.001	1827.0	1766.8	0.000	1726.5	1659.0	0.000
Tenure	5.861	8.407	0.014	3.673	4.003	0.029	11.694	10.346	0.011	7.841	6.598	0.006	10.011	8.732	0.018	8.616	6.314	0.017	9.662	5.754	0.010	11.350	9.225	0.011	11.600	10.700	0.012
Tenure*tenure	90.51	145.93	0.000	39.94	48.44	-0.001	242.97	210.69	0.000	144.38	110.17	0.000	198.60	161.26	0.000	176.45	110.16	0.000	198.05	81.817	0.000	257.11	175.57	0.000	250.01	211.32	0.000
Primary education	0.008	0.005	Refer.	0.004	0.002	Refer.	0.077	0.062	Refer.	0.040	0.037	Refer.	0.524	0.478	0.486	0.285	0.210	Refer.	0.085	0.079	-0.497	0.002	0.004	Refer.	0.000	0.000	Refer.
Lower secondary education	0.080	0.039	0.021	0.128	0.071	-0.036	0.428	0.365	0.048	0.103	0.118	-0.038	0.192	0.172	0.120	0.300	0.256	0.003	0.171	0.184	0.076	0.084	0.146	-0.014	0.062	0.124	-
Upper secondary education	0.397	0.271	0.045	0.306	0.329	-0.011	0.384	0.466	0.125	0.600	0.633	0.008	0.187	0.234	0.129	0.157	0.204	0.025	0.372	0.416	0.172	0.737	0.695	0.075	0.739	0.692	0.098
Post-secondary education	0.176	0.219	0.070	0.361	0.350	0.003	0.019	0.017	0.144	0.039	0.032	0.041	0.000	0.000	-	0.000	0.000	-0.085	0.048	0.050	0.218	0.000	0.000	-	0.000	0.000	-
Tertiary education	0.334	0.463	0.175	0.197	0.245	0.137	0.086	0.084	0.222	0.212	0.178	0.125	0.096	0.117	0.265	0.254	0.327	0.053	0.316	0.269	0.385	0.166	0.149	0.295	0.195	0.182	0.269
Postgraduate	0.006	0.003	0.441	0.004	0.003	0.233	0.007	0.005	0.275	0.005	0.002	0.213	0.000	0.000	-	0.003	0.003	0.062	0.007	0.002	0.646	0.010	0.006	0.514	0.004	0.002	0.531
Fixed-term	0.094	0.079	-0.025	0.070	0.060	0.047	0.033	0.045	-0.055	0.021	0.035	-0.048	0.188	0.200	-0.058	0.244	0.286	-0.069	0.131	0.211	-0.095	0.112	0.145	-0.097	0.107	0.084	-0.030
Indefinite duration	0.906	0.921	Refer.	0.930	0.940	Refer.	0.967	0.955	Refer.	0.979	0.965	Refer.	0.812	0.800	1.058	0.756	0.714	Refer.	0.869	0.789	1.095	0.888	0.855	Refer.	0.893	0.916	Refer.
Part-time	0.115	0.152	-0.160	0.101	0.144	-0.150	0.053	0.245	0.019	0.093	0.406	-0.058	0.006	0.031	0.326	0.044	0.207	0.014	0.196	0.758	-0.057	0.069	0.136	0.000	0.012	0.062	-0.116
Full-time	0.886	0.848	Refer.	0.899	0.856	Refer.	0.947	0.755	Refer.	0.907	0.594	Refer.	0.994	0.969	0.674	0.956	0.793	Refer.	0.804	0.242	1.057	0.931	0.864	Refer.	0.988	0.938	Refer.
Isco 11	0.009	0.006	Refer.	0.000	0.000	Refer.	0.001	0.000	Refer.	0.000	0.000	Refer.	0.000	0.000	1.779	0.000	0.000	Refer.	0.004	0.001	8.757	0.004	0.005	Refer.	0.001	0.001	Refer.
Isco 12	0.112	0.075	-0.325	0.089	0.061	-0.435	0.017	0.004	0.136	0.081	0.036	0.089	0.035	0.022	0.634	0.029	0.011	-0.182	0.101	0.031	-0.045	0.044	0.024	0.326	0.039	0.023	-0.043
Isco 13	0.000	0.000	-	0.026	0.011	-0.484	0.003	0.001	0.089	0.012	0.010	-0.095	0.000	0.000	0.470	0.000	0.000	-	0.021	0.011	-0.133	0.006	0.011	-0.011	0.005	0.006	-0.366
Isco 21	0.037	0.018	-0.582	0.038	0.023	-0.675	0.004	0.001	-0.028	0.060	0.026	-0.174	0.030	0.015	0.430	0.038	0.014	-0.432	0.063	0.009	-0.153	0.039	0.010	-0.138	0.037	0.013	-0.446
Isco 22	0.013	0.030	-0.466	0.001	0.011	-0.761	0.000	0.000	-0.211	0.001	0.002	-0.105	0.001	0.002	0.361	0.016	0.048	-0.423	0.016	0.031	-0.080	0.013	0.016	-0.015	0.013	0.019	-0.127
Isco 23	0.036	0.136	0.008	0.000	0.001	-0.611	0.001	0.000	-0.077	0.000	0.000	-0.360	0.000	0.000	0.314	0.020	0.053	-0.410	0.075	0.096	-0.188	0.015	0.017	-0.096	0.011	0.025	-0.388
Isco 24	0.043	0.094	-0.554	0.027	0.091	-0.563	0.001	0.001	-0.063	0.026	0.031	-0.145	0.014	0.019	0.294	0.019	0.032	-0.485	0.080	0.068	-0.153	0.031	0.058	-0.174	0.024	0.049	-0.538
Isco 31	0.025	0.012	-0.687	0.043	0.025	-0.747	0.040	0.015	-0.657	0.097	0.024	-0.235	0.059	0.025	0.085	0.058	0.025	-0.708	0.066	0.014	-0.252	0.121	0.047	-0.170	0.107	0.047	-0.595
Isco 32	0.002	0.073	-0.805	0.001	0.010	-0.559	0.002	0.002	-0.721	0.002	0.006	-0.329	0.001	0.001	0.049	0.002	0.007	-0.817	0.015	0.126	-0.208	0.003	0.103	-0.179	0.006	0.132	-0.484
Isco 33	0.001	0.021	-0.263	0.000	0.001	-0.664	0.032	0.025	-0.632	0.000	0.000	-0.251	0.000	0.001	-0.107	0.001	0.004	-0.855	0.000	0.001	-0.376	0.002	0.004	-0.084	0.002	0.004	-0.486
Isco 34	0.055	0.069	-0.707	0.050	0.071	-0.710	0.023	0.008	-0.718	0.078	0.133	-0.287	0.086	0.062	0.188	0.083	0.121	-0.727	0.084	0.094	-0.270	0.043	0.165	-0.234	0.032	0.113	-0.603
Isco 41	0.017	0.064	-0.888	0.032	0.129	-0.860	0.269	0.483	-0.766	0.102	0.174	-0.446	0.130	0.242	-0.152	0.061	0.121	-0.962	0.078	0.120	-0.354	0.023	0.084	-0.420	0.020	0.078	-0.779
Isco 42	0.004	0.019	-0.972	0.005	0.026	-0.934	0.000	0.000	-	0.009	0.050	-0.430	0.017	0.035	-0.245	0.016	0.062	-0.959	0.009	0.056	-0.391	0.004	0.048	-0.429	0.005	0.050	-0.812
Isco 51	0.059	0.069	-0.939	0.048	0.062	-1.019	0.011	0.016	-0.792	0.034	0.080	-0.426	0.024	0.047	-0.231	0.047	0.120	-0.994	0.041	0.103	-0.327	0.043	0.051	-0.517	0.036	0.051	-0.859
Isco 52	0.019	0.043	-0.918	0.035	0.178	-0.948	0.071	0.100	-0.816	0.060	0.215	-0.395	0.027	0.055	-0.254	0.021	0.064	-0.899	0.020	0.040	-0.349	0.006	0.041	-0.512	0.006	0.047	-0.759
Isco 61	0.001	0.000	-1.012	0.003	0.002	-1.028	0.038	0.014	-0.872	0.001	0.000	-0.447	0.000	0.000	-0.237	0.003	0.000	-1.089	0.016	0.003	-0.417	0.001	0.001	-0.503	0.001	0.001	-0.902
Isco 71	0.121	0.006	-0.850	0.092	0.008	-0.886	0.040	0.008	-0.856	0.056	0.001	-0.374	0.075	0.003	-0.188	0.096	0.004	-0.916	0.032	0.000	-0.361	0.061	0.001	-0.379	0.067	0.002	-0.723
Isco 72	0.129	0.007	-0.748	0.144	0.008	-0.778	0.150	0.050	-0.884	0.101	0.004	-0.368	0.138	0.022	-0.141	0.103	0.006	-0.898	0.049	0.002	-0.357	0.223	0.044	-0.340	0.210	0.022	-0.710
Isco 73	0.003	0.003	-0.887	0.005	0.007	-0.969	0.018	0.011	-0.882	0.004	0.004	-0.335	0.011	0.014	-0.291	0.008	0.006	-0.971	0.004	0.001	-0.320	0.010	0.018	-0.430	0.007	0.009	-0.713
Isco 74	0.019	0.042	-0.882	0.055	0.097	-0.917	0.060	0.081	-0.916	0.016	0.011	-0.408	0.041	0.155	-0.325	0.022	0.025	-1.004	0.005	0.003	-0.343	0.014	0.035	-0.464	0.014	0.070	-0.809
Isco 81	0.034	0.006	-0.842	0.050	0.010	-0.857	0.016	0.003	-0.819	0.058	0.012	-0.323	0.038	0.011	-0.206	0.041	0.004	-0.912	0.013	0.001	-0.268	0.086	0.024	-0.351	0.104	0.029	-0.697
Isco 82	0.031	0.077	-0.798	0.028	0.033	-0.778	0.091	0.069	-0.915	0.059	0.047	-0.418	0.084	0.107	-0.258	0.132	0.096	-0.966	0.025	0.007	-0.368	0.058	0.098	-0.407	0.058	0.091	-0.768
Isco 83	0.136	0.005	-0.813	0.141	0.006	-0.841	0.000	0.000	-	0.056	0.004	-0.449	0.090	0.002	-0.178	0.083	0.003	-0.932	0.037	0.003	-0.352	0.102	0.015	-0.377	0.140	0.018	-0.679
Isco 91	0.059	0.114	-1.128	0.029	0.103	-1.118	0.057	0.069	-0.933	0.020	0.082	-0.474	0.031	0.093	-0.418	0.030	0.133	-1.112	0.042	0.068	-0.458	0.015	0.046	-0.643	0.018	0.055	-1.001
Isco 92	0.000	0.002	-1.015	0.001	0.001	-0.885	0.000	0.001	-0.862	0.000	0.001	-0.436	0.000	0.000	-	0.001	0.000	-1.070	0.000	0.000	-0.465	0.000	0.000	-0.617	0.000	0.000	-1.191
Isco 93	0.034	0.009	-0.965	0.059	0.027	-0.867	0.053	0.038	-0.899	0.022	0.010	-0.458	0.069	0.067	-0.372	0.074	0.042	-1.034	0.032	0.013	-0.400	0.034	0.035	-0.567	0.038	0.042	-0.857
Isco 99	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.043	0.036	-0.335	0.000	0.000	-	0.000	0.000	-	0.069	0.098	-0.369	0.000	0.000	-	0.000	0.000	-
Size 10-49	-0.151	-0.387	Refer.	0.315	0.313	Refer.	0.230	0.254	Refer.	0.033	0.053	Refer.	0.114	0.074	0.185	0.252	0.146	Refer.	-0.407	-0.642	0.999	-0.317	-0.436	Refer.	-0.276	-0.427	Refer.
Size 50-249	0.439	0.451	0.156	0.441	0.392	0.200	0.202	0.207	0.099	0.267	0.238	0.027	0.316	0.327	0.113	0.295	0.262	0.105	0.161	0.144	0.009	0.105	0.095	0.065	0.130	0.120	0.029

Size 250-499	0.120	0.117	0.236	0.054	0.072	0.407	0.155	0.157	0.157	0.146	0.137	0.033	0.100	0.109	0.206	0.099	0.093	0.157	0.129	0.150	0.014	0.123	0.119	0.081	0.118	0.114	0.085
Size 500-999	0.091	0.088	0.287	0.023	0.040	0.389	0.115	0.108	0.189	0.129	0.124	0.033	0.106	0.083	0.219	0.081	0.096	0.191	0.116	0.094	0.016	0.162	0.162	0.102	0.189	0.242	0.129
Size>999	0.119	0.135	0.308	0.050	0.058	0.408	0.231	0.232	0.182	0.294	0.313	0.043	0.202	0.245	0.233	0.201	0.276	0.201	0.568	0.585	0.032	0.598	0.612	0.128	0.541	0.503	0.147
Publicly owned firm	0.383	0.595	0.153	0.117	0.125	0.128	0.067	0.042	0.022	0.130	0.134	-0.042	0.161	0.162	0.044	0.072	0.126	-0.004	0.433	0.669	-0.071	0.329	0.447	0.029	0.298	0.448	-0.068
Other type of control	0.617	0.405	Refer.	0.883	0.875	Refer.	0.933	0.958	Refer.	0.870	0.866	Refer.	0.839	0.838	0.956	0.928	0.874	Refer.	0.567	0.331	1.071	0.671	0.553	Refer.	0.702	0.552	Refer.
Nace division 10	0.003	0.001	0.113	0.008	0.003	0.381	0.000	0.000	-0.261	0.001	0.000	0.048	0.000	0.000	-	0.005	0.000	0.356	0.000	0.000	-	0.053	0.008	0.280	0.009	0.001	0.210
Nace division 11	0.001	0.000	1.041	0.000	0.000	-	0.001	0.000	0.367	0.045	0.019	0.263	0.000	0.000	-	0.001	0.000	0.367	0.003	0.000	0.304	0.000	0.000	-0.026	0.008	0.002	0.342
Nace division 12	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-0.032	0.000	0.000	-	0.000	0.000	-	0.005	0.002	0.133	0.000	0.000	-
Nace division 13	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.001	0.000	0.041	0.004	0.000	0.241	0.001	0.000	0.070	0.000	0.000	-	0.000	0.000	-	0.004	0.001	0.030
Nace division 14	0.004	0.001	0.288	0.002	0.001	0.468	0.014	0.003	0.014	0.004	0.001	0.011	0.015	0.004	0.197	0.016	0.003	0.054	0.000	0.000	0.046	0.001	0.000	0.234	0.001	0.000	0.166
Nace division 15	0.053	0.052	0.002	0.055	0.093	0.042	0.038	0.045	0.025	0.059	0.057	-0.059	0.047	0.055	0.027	0.048	0.048	-0.062	0.020	0.005	0.063	0.031	0.036	0.072	0.035	0.038	0.049
Nace division 16	0.001	0.000	1.022	0.000	0.000	-	0.001	0.001	-0.018	0.001	0.001	-0.040	0.001	0.001	0.022	0.001	0.002	0.051	0.002	0.000	0.005	0.002	0.001	0.536	0.001	0.001	0.442
Nace division 17	0.012	0.022	0.101	0.007	0.021	0.087	0.023	0.045	-0.041	0.003	0.005	-0.111	0.036	0.066	-0.176	0.011	0.017	-0.173	0.002	0.001	-0.033	0.019	0.041	0.081	0.010	0.029	-0.074
Nace division 18	0.009	0.068	-0.073	0.004	0.050	0.050	0.006	0.043	-0.083	0.000	0.002	-0.162	0.007	0.102	-0.146	0.005	0.031	-0.168	0.000	0.000	-0.067	0.002	0.015	0.019	0.009	0.063	-0.152
Nace division 19	0.002	0.004	-0.058	0.002	0.003	-0.054	0.011	0.023	-0.090	0.000	0.001	-0.080	0.014	0.031	-0.064	0.011	0.013	-0.114	0.000	0.000	-0.050	0.001	0.004	0.094	0.005	0.020	-0.163
Nace division 20	0.032	0.007	-0.100	0.084	0.027	-0.062	0.019	0.012	-0.119	0.016	0.006	-0.163	0.029	0.019	-0.005	0.028	0.009	-0.156	0.001	0.000	-0.078	0.006	0.003	0.044	0.010	0.004	-0.098
Nace division 21	0.005	0.002	0.220	0.005	0.005	-0.010	0.020	0.015	0.041	0.016	0.006	-0.094	0.027	0.014	0.181	0.013	0.005	-0.016	0.006	0.000	0.067	0.008	0.005	0.155	0.017	0.008	0.326
Nace division 22	0.009	0.009	0.004	0.013	0.027	0.091	0.019	0.020	0.079	0.019	0.021	-0.003	0.019	0.020	0.139	0.020	0.018	0.001	0.010	0.007	0.083	0.002	0.003	0.205	0.007	0.008	0.092
Nace division 23	0.002	0.001	0.825	0.000	0.000	-	0.011	0.004	0.139	0.002	0.001	0.114	0.000	0.000	-	0.005	0.001	0.363	0.003	0.000	0.212	0.004	0.001	0.235	0.000	0.000	0.659
Nace division 24	0.006	0.004	0.187	0.007	0.009	0.007	0.041	0.034	0.057	0.022	0.016	-0.022	0.018	0.014	0.222	0.031	0.023	0.094	0.023	0.006	0.082	0.019	0.012	0.106	0.032	0.025	0.169
Nace division 25	0.011	0.003	0.045	0.010	0.006	-0.020	0.029	0.023	0.001	0.007	0.003	-0.090	0.017	0.015	0.039	0.028	0.015	-0.022	0.005	0.001	-0.006	0.025	0.015	0.164	0.022	0.010	0.285
Nace division 26	0.014	0.004	0.105	0.014	0.008	0.196	0.043	0.027	0.029	0.013	0.005	-0.066	0.044	0.025	0.125	0.045	0.011	-0.020	0.005	0.000	-0.019	0.040	0.027	0.135	0.027	0.016	0.157
Nace division 27	0.003	0.001	0.082	0.004	0.001	0.173	0.034	0.010	0.051	0.025	0.007	-0.017	0.016	0.005	0.000	0.014	0.002	0.030	0.008	0.000	-0.060	0.057	0.016	0.183	0.087	0.027	0.424
Nace division 28	0.019	0.003	-0.097	0.028	0.010	0.098	0.035	0.017	-0.007	0.014	0.004	-0.089	0.043	0.023	0.030	0.050	0.011	-0.052	0.009	0.001	-0.058	0.027	0.013	0.042	0.032	0.009	0.118
Nace division 29	0.017	0.005	-0.004	0.018	0.007	-0.011	0.076	0.040	0.019	0.021	0.007	-0.039	0.039	0.023	0.030	0.038	0.010	-0.058	0.013	0.002	-0.037	0.074	0.028	-0.021	0.043	0.015	0.050
Nace division 30	0.001	0.000	-0.364	0.000	0.000	0.180	0.006	0.007	-0.011	0.001	0.000	-0.090	0.000	0.000	-	0.001	0.000	-0.183	0.002	0.001	-0.132	0.002	0.002	-0.205	0.002	0.001	0.040
Nace division 31	0.004	0.004	0.139	0.005	0.006	0.141	0.029	0.025	-0.024	0.010	0.005	-0.039	0.019	0.024	0.039	0.028	0.014	-0.067	0.005	0.001	-0.056	0.028	0.033	0.047	0.028	0.051	0.009
Nace division 32	0.006	0.005	0.004	0.003	0.003	-0.090	0.018	0.021	-0.015	0.006	0.006	-0.097	0.011	0.020	-0.004	0.003	0.003	-0.047	0.019	0.005	-0.065	0.010	0.016	0.026	0.010	0.014	-0.062
Nace division 33	0.005	0.003	0.057	0.003	0.003	-0.053	0.017	0.017	-0.005	0.005	0.003	-0.019	0.005	0.007	0.099	0.003	0.003	-0.050	0.004	0.001	-0.147	0.007	0.009	-0.029	0.004	0.003	0.212
Nace division 34	0.001	0.000	-0.040	0.003	0.001	0.054	0.043	0.022	0.029	0.009	0.003	-0.068	0.032	0.023	0.090	0.028	0.013	-0.011	0.007	0.001	-0.036	0.062	0.035	0.196	0.051	0.008	0.184
Nace division 35	0.014	0.003	0.232	0.010	0.003	0.039	0.023	0.011	-0.034	0.037	0.008	-0.050	0.018	0.004	0.007	0.013	0.003	-0.033	0.007	0.001	-0.016	0.015	0.005	0.037	0.010	0.003	0.099
Nace division 36	0.022	0.009	-0.037	0.024	0.014	0.023	0.021	0.025	-0.117	0.008	0.008	-0.045	0.015	0.018	-0.023	0.029	0.015	-0.122	0.041	0.014	-0.166	0.011	0.013	0.063	0.004	0.005	0.148
Nace division 37	0.003	0.001	-0.089	0.002	0.001	-0.030	0.006	0.004	-0.009	0.001	0.000	-0.036	0.002	0.001	0.158	0.001	0.000	-0.120	0.000	0.000	-0.004	0.001	0.000	0.085	0.001	0.001	0.048
Nace division 40	0.033	0.009	0.046	0.032	0.016	0.164	0.023	0.009	0.063	0.027	0.011	-0.099	0.021	0.006	0.346	0.016	0.004	0.108	0.011	0.002	0.096	0.040	0.016	0.215	0.042	0.015	0.478
Nace division 41	0.014	0.004	-0.050	0.002	0.001	0.113	0.007	0.004	0.093	0.000	0.000	-	0.007	0.003	0.114	0.013	0.005	-0.025	0.002	0.001	0.063	0.017	0.008	0.064	0.027	0.009	0.234
Nace division 45	0.142	0.017	Refer.	0.149	0.038	Refer.	0.034	0.010	Refer.	0.098	0.015	Refer.	0.095	0.015	-3.486	0.104	0.014	Refer.	0.038	0.003	0.743	0.054	0.009	Refer.	0.051	0.009	Refer.
Nace division 50	0.033	0.009	-0.091	0.044	0.025	-0.007	0.020	0.012	0.006	0.030	0.011	-0.044	0.038	0.018	0.043	0.011	0.004	-0.081	0.010	0.002	-0.076	0.005	0.002	0.112	0.006	0.002	0.319
Nace division 51	0.052	0.022	-0.010	0.114	0.099	0.074	0.033	0.035	0.006	0.082	0.057	-0.022	0.044	0.040	0.031	0.032	0.032	-0.061	0.038	0.013	-0.005	0.009	0.010	0.063	0.017	0.019	0.062
Nace division 52	0.026	0.060	-0.115	0.070	0.235	-0.111	0.031	0.087	-0.085	0.060	0.239	-0.107	0.018	0.047	-0.125	0.029	0.081	-0.075	0.048	0.088	-0.130	0.019	0.072	-0.073	0.012	0.055	0.080
Nace division 55	0.008	0.017	-0.085	0.012	0.043	0.110	0.017	0.035	-0.129	0.035	0.094	-0.029	0.031	0.073	0.028	0.037	0.084	-0.020	0.005	0.010	-0.127	0.006	0.014	0.061	0.003	0.004	0.067
Nace division 60	0.062	0.017	-0.141	0.070	0.028	-0.032	0.048	0.012	-0.059	0.044	0.015	-0.060	0.052	0.006	0.055	0.040	0.009	-0.040	0.024	0.006	-0.016	0.106	0.036	0.139	0.191	0.068	0.158
Nace division 61	0.005	0.001	0.228	0.001	0.000	0.421	0.006	0.004	0.127	0.022	0.011	-0.032	0.004	0.001	0.274	0.002	0.000	0.094	0.001	0.000	0.094	0.000	0.000	-	0.001	0.001	0.303
Nace division 62	0.002	0.001	0.277	0.002	0.001	0.217	0.003	0.004	0.290	0.018	0.023	0.135	0.017	0.018	0.336	0.002	0.002	0.225	0.008	0.005	0.096	0.005	0.004	0.483	0.001	0.000	0.336
Nace division 63	0.018	0.007	0.219	0.042	0.026	0.328	0.029	0.021	0.047	0.017	0.019	-0.022	0.019	0.015	0.334	0.014	0.016	0.009	0.010	0.005	0.052	0.008	0.007	0.222	0.003	0.003	0.131
Nace division 64	0.015	0.018	0.025	0.031	0.031	0.125	0.008	0.010	0.059	0.054	0.079	-0.020	0.019	0.017	0.304	0.010	0.012	-0.022	0.039	0.020	-0.038	0.034	0.059	0.145	0.030	0.069	0.127
Nace division 65	0.008	0.016	0.423	0.010	0.022	0.355	0.055	0.069	0.315	0.035	0.074	-0.089	0.093	0.129	0.320	0.038	0.032	0.181	0.036	0.030	0.138	0.017	0.047	0.056	0.009	0.025	0.548
Nace division 66	0.004	0.007	0.232	0.003	0.006	0.239	0.013	0.020	0.189	0.012	0.022	-0.121	0.004	0.004	0.373	0.009	0.014	0.094	0.016	0.010	0.090	0.005	0.013	0.110	0.008	0.008	0.216
Nace division 67	0.001	0.001	-0.056	0.002	0.002	0.470	0.004	0.016	0.091	0.006	0.008	0.150	0.003	0.005	0.389	0.001	0.003	0.105	0.002	0.002	0.033	0.000	0.000	0.553	0.000	0.000	0.456
Nace division 70	0.013	0.011	0.086	0.038	0.056	0.177	0.006	0.008	0.029	0.007	0.009	-0.029	0.004	0.007	0.011	0.002	0.003	0.079	0.006	0.004	0.099	0.010	0.005	0.094	0.005	0.003	0.221
Nace division 71	0.001	0.000	0.155	0.003	0.003	0.529	0.005	0.004	0.027	0.005	0.003	-0.021	0.011	0.008	0.053	0.003	0.001	-0.076	0.002	0.001	-0.064	0.000	0.000	0.373	0.000	0.000	0.109
Nace division 72	0.005	0.003	0.118	0.012	0.008	0.182	0.022	0.030	0.026	0.036	0.025	0.031	0.013	0.011	0.091	0.005	0.005	-0.133	0.019	0.003	-0.025	0.001	0.001	-0.059	0.006	0.002	0.613
Nace division 73	0.007	0.008	-0.403	0.008	0.012	-0.790	0.004	0.007	0.011	0.011	0.009	-0.202	0.002	0.004	0.145	0.001	0.001	-0.223	0.009	0.003	-0.025	0.005	0.007	-0.139	0.009	0.010	-0.001

Nace division 74	0.026	0.022	0.015	0.044	0.046	0.147	0.050	0.110	-0.144	0.054	0.081	-0.047	0.029	0.059	0.167	0.054	0.123	-0.089	0.084	0.081	-0.015	0.032	0.026	-0.090	0.014	0.014	0.033
Nace division 75	0.099	0.079	0.009	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000		0.169	0.095	0.077	0.034	0.087	0.035	0.014	0.045	-0.018
Nace division 80	0.087	0.265	-0.350	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.031	0.088	-0.162	0.113	0.147	0.021	0.022	0.038	-0.264	0.021	0.053	-0.137
Nace division 85	0.037	0.153	-0.261	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.030	0.136	-0.147	0.088	0.403	0.064	0.033	0.175	0.043	0.045	0.213	-0.037
Nace division 90	0.021	0.007	0.039	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.010	0.005	0.081	0.006	0.002	0.070	0.013	0.004	0.051	0.006	0.002	0.076
Nace division 91	0.002	0.002	0.146	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.006	0.017	-0.140	0.010	0.007	-0.031	0.000	0.000	-0.136	0.002	0.000	-0.580
Nace division 92	0.021	0.028	-0.292	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.021	0.026	-0.022	0.008	0.008	0.040	0.011	0.014	-0.160	0.004	0.004	-0.011
Nace division 93	0.002	0.005	-0.068	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.000	0.000	-	0.004	0.011	-0.157	0.001	0.002	-0.056	0.000	0.001	0.065	0.005	0.004	0.109
Share of females	0.355	0.696	-0.190	0.306	0.600	-0.134	0.224	0.518	-0.158	0.259	0.549	-0.118	0.233	0.620	-0.156	0.216	0.604	-0.239	0.331	0.677	-0.154	0.338	0.611	-0.431	0.356	0.584	-0.439
Average age	40.468	41.029	-0.009	39.694	39.159	-0.009	39.595	38.482	0.000	39.765	38.157	0.003	38.350	36.613	0.003	37.962	36.960	0.003	40.029	38.969	0.000	41.326	40.359	-0.018	39.992	39.686	-0.018
Average tenure	6.562	7.809	0.007	3.819	3.812	0.022	11.593	10.563	0.002	7.725	6.799	-0.003	9.876	8.951	-0.003	8.336	6.826	0.003	8.749	6.642	0.002	11.329	9.250	-0.005	11.580	10.723	-0.004
Share high-educated workers	0.363	0.446	0.312	0.219	0.223	0.866	0.090	0.096	0.087	0.203	0.204	0.264	0.102	0.107	0.237	0.265	0.317	0.114	0.298	0.297	0.033	0.153	0.182	0.523	0.180	0.206	0.206
Share low-educated workers	0.075	0.055	0.067	0.117	0.092	0.126	0.489	0.461	-0.072	0.145	0.152	-0.098	0.701	0.674	-0.183	0.570	0.495	-0.098	0.267	0.251	-0.130	0.113	0.120	-0.105	0.084	0.098	-0.092
Adjusted R^2		0.488			0.390			0.547			0.619			0.695			0.568			0.620			0.587			0.530	
Number of observations	63,214	74,019	-	100,748	77,143	-	55,187	25,693	-	359,508	206,863	-	35,998	22,051	-	138,950	75,961	-	38,579	39,363		520,605	452,124	-	211,478	180,851	-
Number of workplaces		5,601			5,023			8,778			7,491			6,604			21,615			6,373			2,274			472	

Table A.2
The gender wage gap in Europe. ESES 2002.

	Gender hourly wage ratio	Gender log hourly wage gap
Slovakia	72.0	0.329
Iceland	72.7	0.319
United Kingdom	72.8	0.317
Estonia	73.3	0.311
Austria	73.6	0.306
EU-25	74.4	0.296
Germany	74.4	0.296
EU-15	76.8	0.265
Czech Republic	78.8	0.238
Latvia	79.3	0.232
Spain	79.8	0.226
Denmark	80.0	0.223
Norway	80.2	0.221
Luxembourg	81.1	0.210
Italy	81.1	0.209
Netherlands	81.2	0.208
Bulgaria	81.8	0.201
Finland	82.0	0.199
Hungary	82.6	0.191
Belgium	82.9	0.188
France	83.4	0.181
Romania	84.1	0.174
Ireland	84.2	0.172
Sweden	84.7	0.166
NMS-10	85.4	0.157
Lithuania	87.2	0.136
Poland	92.7	0.076
Slovenia	94.9	0.052