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Understanding the gender wage gap differential between public and private sector in Italy: A quantile approach for panel data

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Abstract

This paper analyzes the gender wage gaps across the wage distribution in both the private and public sectors in Italy for the years 2005 – 2010. We use quantile regression methods to estimate and decompose the gender wage gap at different points of the wage distribution. We find in both sectors a consistent level of gender wage gap (lower in the public sector) and an increasing path along the wage distribution. Counterfactual decomposition analysis supports the idea of a *sticky floor* mechanism in action in the private sector and of a *glass ceiling* in the public sector. In addition to standard decomposition techniques we propose a two step procedure that relies on a novel approach to estimating fixed effects quantile regressions. Its main advantage is that it allows the estimation of the marginal effect of the employment sector on wages at different points of the distribution, while accounting for both observable and time-invariant unobservable factors. When we control for employees' observed and unobservable individual characteristics, the main finding is that the gender wage gap substantially decreases in both sectors. A second evidence is that the *sticky floor* effect in the private sector vanishes, while the *glass ceiling* effect in the public sector remains.

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The evidence from the longitudinal analysis amplifies the differences of the wage-setting mechanisms in the two sectors.

Keywords: Gender wage gap, quantile regression for panel, public-private wage differential

JEL - Classification: J3, J45

1 Introduction

Gender differentials in the labor market have obtained much attention from policy makers and researchers, leading to the implementation of equal-pay legislation and the promotion of equal opportunities. Even though the latter policies have been promoted in Western industrialized countries for several decades, differences in pay between men and women persist. Yet, there are tremendous differences across countries, and a robust finding in the literature is that the difference in pay by gender cannot be entirely explained by differences in human capital, job or firm characteristics, and that the unexplained part of the gap is considerably large. Moreover, recent researches have shown that the magnitude of the gender wage gap (GWG) varies substantially across both the public and private sector and the wage distribution.

The theoretical interpretations of differences in pay among sectors are several: for instance Gregory and Borland (1999), among others, argue that these differences in wage structure are not surprising given that wage setting in the public sector occurs in a political environment whereas private-sector decision making occurs in a market environment. It is entirely possible that greater attention to bureaucratic procedures for wage setting and pay comparability in the public sector can lead to better relative wage outcomes for females than in the private sector. Moreover, anti-discrimination legislation may be more aggressively enforced in the public sector, and there is some evidence that occupational integration has been more rapid in public-sector employment. Public sector jobs also tend to be concentrated in larger establishments, in a limited number of industries, and in specific occupations employing relatively educated workers. Finally, public-sector employment may attract more risk-averse workers (Pfeifer, 2008).

The empirical evidence on how the relative wage of men and women varies across different sectors has shown that the mean gender wage gap is typically considerably smaller in public-

sector jobs (see Arulamplam, Booth, and Bryan (2007), Gregory and Borland (1999), Gunderson (1989)) while the distribution of wages varies dramatically across sectors (see Arulamplam, Booth, and Bryan (2007), Kee (2006)). However, the finding of a lower level of GWG in the public sector is limited to developed economies only, as stressed by Lausev (2014) and Ganguli and Terrell (2005).

Barón and Cobb-Clark (2010) investigate the GWG across public and private sector wage distribution for the Australia. They find that the gender wage gap among high-wage workers is largely unexplained in both the private and the public sector while is more than explained by differences in individual characteristics among low-paid workers. This finding suggests that *glass ceilings* rather than *sticky floors* may be prevalent in explaining the gender wage gap in the different sectors. For *glass ceilings* and *sticky floors* we refer to the unexplained component of the GWG widening at the top and at the bottom of the wage distribution, respectively.

The results of Barón and Cobb-Clark (2010) are confirmed by the analysis of Blau and Kahn (2003). They find that on average, discrimination on the basis of gender differences, as well as the differential between male and female wage increase over the work life of an individual. Further, the unexplained gender gap in the public sector increases along the wage distribution and with respect to the private sector.

Arulamplam, Booth, and Bryan (2007) investigate GWG by sector for 11 European countries and conclude that glass ceilings are more prevalent than sticky floors in most countries. They show that the magnitude of the GWG varies substantially across the public and private sector wage distributions. The main finding in Kee (2006) for Australia is that a strong glass ceiling effect is detected only in the private sector. On the opposite, Wahlberg (2010) provides evidence for the Swedish market of a glass ceiling effect in both the private and public sectors (particularly evident in the public sector).

Miller (2009) extends the line of inquiry of Arulamplam, Booth, and Bryan (2007) and Kee (2006) to the US labor market. The analysis shows that the GWG differs by sector of employment and according to the part of the earnings distribution that is considered. The pay differential in the private sector in the US does not display either the glass ceiling or sticky floor effects that have been reported for many other countries. The government sector is, however,

characterized by a distinct sticky floor effect in the female-male pay differential.

Zweimüller and Winter-Ebmer (1994) draw attention to the role of different job levels on the GWG in Austria. They identify discriminatory promotion scheme and show structural differences among the two sectors: women are overrepresented at the bottom of the job hierarchy in the private sector, while they suffer from a career stop from middle management positions upwards in the public sector. Chatterjia, Mumfordb, and Smith (2011) investigate for Britain the role of workplace characteristics in explaining the gender earnings gap in the public and private sectors. Even the inclusion of detailed workplace characteristics explains little of the GWG in both sectors.

Rahona-López, Murillo-Huertas, and del Mar Salinas-Jiménez (2016) show a consistent level of GWG in Spain and that the wage differentials are significantly greater in the private sector across the entire wage distribution. Moreover while women possess better personal endowments than men in the public sector, men have better personal endowments in the private sector. The empirical evidence shows also that the GWG is more pronounced in the top of the earnings distribution and the GWG cannot be explained by differences in productive characteristics, with differences in returns accounting for 80% or more of the observed gap among the best paid workers in the public and private sectors.

However, the results change when the analysis is pointed to transitioning countries of Eastern Europe, for instance, as shown by Ganguli and Terrell (2005), Pignatti (2012) and Lausev (2014). Ganguli and Terrell (2005) examine gender gaps across the distribution of wages in Ukraine for the period Ukraine started to be considered a market economy. They find evidence in both sectors of a persistent *glass ceiling* but lower in the public than in the private sector. By decomposing the GWG in their components, they find differences in men's and women's (observed) productive characteristics that favor men in the public and women in the private sector. However, they report substantial evidence in each year and in each sector that the most important force driving the gender gaps throughout the distribution are differential rewards, or discrimination. They confirm the analysis of Pignatti (2012) of the effect of the gender-equalizing policies on the reduction in the GWG, particularly at the bottom of the distribution. Surprisingly, Ganguli and Terrell (2005) show that the GWG in the private sector is smaller

than in the public sector in the top half of the distribution. This result has been confirmed by Lausev (2014) who shows that the lower GWG in the public sector is limited only to developed economies. Indeed, in the transitioning countries of Eastern Europe, for example, the GWG in the public sector is wider than in the private sector.

The literature on the GWG in general identify the unexplained component of the GWG as discrimination component. However, as stressed by Blau and Kahn (2006) among others, the unexplained portion of the GWG may include effects of unobserved productivity or compensating differentials.

The focus of this paper is the analysis of the GWG in Italy in both public and private sector and the decomposition in its determinants. To this task we rely on the Machado and Mata (2005) methodology to obtain counterfactual distributions of the wage gap. The Machado and Mata (2005)'s procedure has been extensively applied in the context of the estimation of GWG, as, for example, in Albrecht, Bjorklund, and Vroman (2003), Arulamplam, Booth, and Bryan (2007) and Albrecht, van Vuurenc, and Vroman (2009). However, together with the Machado and Mata (2005) approach we consider the unobserved individual-specific heterogeneity by means of the quantile regression for panel data proposed by Canay (2011). In order to assess how the GWG varies across the wage distribution we propose the following two step procedure for computing the Oaxaca-Blinder decomposition; First, we estimate the GWG by means of Canay (2011) approach and then we run the Machado and Mata (2005) decomposition for quantile regression. The main advantage of our method is that it allows the estimation of the marginal effect of the employment sector on wages at different points of the distribution, while accounting for both observable and time-invariant unobservable factors.

The results of the analysis conducted with standard techniques are in line with those highlighted by Barón and Cobb-Clark (2010) and Blau and Kahn (2003). We find a lower level of the GWG in the public sector with respect to the private one, but still significant. More interesting, the GWG increases along the wage distribution in both sectors. The Oaxaca-Blinder decomposition shows that the unexplained component mostly exceeds the explained part, and the distance grows as the wage increases. This pattern is much more evident in the public sector where we find evidence of a *glass ceiling* mechanism in action. In the private sector the

proportion of the GWG that cannot be explained by observable characteristics is higher at the bottom of the distribution, i.e. *sticky floor*.

However, when we take into account the unobserved individual heterogeneity the results of the analysis change. The evidence of a sticky floor in the private sector vanishes while the evidence of glass ceiling in the public sector is rather amplified. However, in both sectors there is a significant unexplained component of the GWG throughout the distribution.

The paper is organized as follows. Section 2 presents the econometric approach. Section 3 describes the data. Section 4 reports and discusses the results about the GWG within sectors on the basis of the cross-section analysis. Section 5 extends the analysis to take into account the individual heterogeneity in the longitudinal sample. Section 6 concludes.

2 Econometric modelling and methodology

We estimate the wage equations by means of quantile regression, as developed by Koenker and Bassett (1978). Following Buchinsky (1998) and assuming a linear specification, the model is defined as

$$Q_\theta(y_i|x_i) = x_i'\beta_\theta \tag{1}$$

$$y_i = x_i'\beta_\theta + u_{\theta i} \tag{2}$$

where $Q_\theta(y_i|x_i)$ defines the *conditional quantiles* of the dependent variable y (log wages), given the covariates x (individual characteristics). The distribution of the error term $u_{\theta i}$ is left unspecified and it is assumed that $Q_\theta(u_{\theta i}|x_i) = 0$.

To investigate the gender wage gap in the public sector, we estimate this model for men and women separately at different quantiles, namely $\theta = \{0.10, 0.25, 0.50, 0.75, 0.90\}$. Results based on quantile regressions provide a complete view of how the wage gaps between and within sectors varies along the distribution. Moreover, as the quantile regression (QR) allows the regressors, i.e. individual observable characteristics, to have a different impact at different quantiles, we can control more deeply for differences between men and women's wages that depend on their

characteristics.

2.1 Quantile decomposition

To decompose the wage gap in explained and unexplained components, we make use of the procedure proposed by Machado and Mata (2005), that generalizes the Oaxaca-Blinder decomposition to a quantile regression framework. The advantage of the quantile decomposition is that we can estimate the unexplained component of the wage gap across the distribution of wage, that is, at any quantile of the wage distribution.

While in the Oaxaca-Blinder setting, the wage gap is divided by means of a *counterfactual wage structure*, the Machado and Mata (2005) decomposition is based on the construction of a counterfactual distribution of y^f , i.e. a distribution of what would be female wage, had the wage structure been the same as the male one.

Let $k \in \{m, f\}$ represent male and female observations, so that we have samples $\{(y_i^k, x_i^k) : i = 1, \dots, n_k\}$ for all populations k , and we can estimate $Q_\theta(y^k)$ separately for the two groups.

Formally, the Machado-Mata approach to estimate the counterfactual distribution of y^f can be summarized as follows:¹

1. Draw a random sample θ_i^* , $i = 1, 2, \dots, 5000$ from a uniform distribution $U[0, 1]$.
2. For each θ_i , estimate $\beta^m(\theta)$ and $\beta^f(\theta)$ as

$$\hat{\beta}^k(\theta_i^*) = \arg \min_{\beta \in \mathbb{R}^p} \sum_{j=1}^{n_k} \rho_{\theta_i^*}(y_j^k - x_j^{k'} \beta) \quad k = m, f.$$

using the male and female dataset, respectively.²

3. randomly draw 5,000 women with replacement and use their characteristics (x^{*f}) to pre-

¹The decomposition proposed by Machado and Mata (2005) grounds on the probability integral transformation theorem from elementary statistics: if U is uniformly distributed on $[0, 1]$, then $F^{-1}(U)$ has distribution F . Thus, for a given x_i and a random $\theta \sim U[0, 1]$, $x_i' \beta(\theta)$ has the same distribution as $y_i | x_i$. If, instead of keeping x_i fixed, we draw a random x from the population, $x' \beta(\theta)$ as the same distribution of y .

²As shown by Koenker and Bassett (1978), the quantile estimator of β_θ solves the following minimization problem

$$\hat{\beta}(\theta) = \arg \min_{\beta \in \mathbb{R}^p} \left[\sum_{j: y_j \geq x_j' \beta} \theta |y_j - x_j' \beta| + \sum_{j: y_j < x_j' \beta} (1 - \theta) |y_j - x_j' \beta| \right]$$

dict the wages using the estimated coefficients $\beta^m(\theta)$ generating a set of predicted wages, $\tilde{y}^f(\theta) = x'^{*f}\hat{\beta}^m(\theta)$. The empirical c.d.f. of these values is the estimated counterfactual distribution, namely what women would have earned if they were paid like men.

4. Then compare the counterfactual distribution with the empirical male and female distributions whose θ quantiles are defined by $\hat{y}^m(\theta) = x'^m\beta^m(\theta)$ and $\hat{y}^f(\theta) = x'^f\beta^f(\theta)$, respectively.

As in the Oaxaca-Blinder decomposition for the mean differential, the wage gap between males and females can be divided in two parts; one representing the effect of different characteristics between the two groups; the other representing differences unexplained by the quantile regression model. The advantage of the quantile decomposition is that we can estimate the two components across the distribution of wage, that is, at any θ th quantile of the wage distribution.

More precisely, we can write

$$y^m(\theta) - y^f(\theta) = [\hat{y}^m(\theta) - \tilde{y}^f(\theta)] + [\tilde{y}^f(\theta) - \hat{y}^f(\theta)] + residual \quad (3)$$

where $y^k(\theta)$ denotes the observed log wages for $k = (male, female)$, $\hat{y}^k(\theta)$ denotes the estimator of the $k = (male, female)$ log wages based on the observed sample, and $\tilde{y}^f(\theta)$ denotes the estimated counterfactual log wages. By *counterfactual*, we mean the wage that females would get, if their abilities had been rewarded according to the male pays' schedule. The residual term captures the changes unaccounted for by the estimation method.

The first part of the wage differential is the so-called *characteristics* effect, since it is the consequence of the different distribution of covariates for the two groups. The second addend in (3) represents the so-called *coefficient* effect (i.e. *effect of the wage structure*), since it is obtained by evaluating female characteristics using two different conditional distributions. As the same endowments should have the same effect on earnings for male and female, the wage structure should not differ by gender, which is why this term represents the unexplained part of the GPG.

In the following analysis we make use of the estimation procedure for standard errors proposed by Chernozhukov, Fernex-Val, and Melly (2013). In fact, Machado and Mata (2005)

proposed quantile regression-based estimators to evaluate distributional effects, but provided no econometric theory for these estimators. The asymptotic behavior of the estimators' error is studied by Chernozhukov, Fernandez-Val, and Melly (2013) who also show the validity of *exchangeable bootstrap* methods to obtain the asymptotic covariance matrix.

2.2 Quantile regression for panel

In order to take into account the unobserved individual heterogeneity in explaining the wage gap across the distribution, we extend our empirical analysis by exploiting the longitudinal structure of the data.³ To this task, we consider the following quantile regression fixed effect model (hereafter FE-QR):

$$Q_\theta(y_{it}|x_{it}) = \alpha_i + x'_{it}\beta_\theta \quad (4)$$

$$y_{it} = x'_{it}\beta_\theta + u_{\theta it} \quad (5)$$

While estimation methods for cross-sectional conditional quantile regression models are well developed, corresponding methods for panel data (especially FE models) have received attention only recently. The FE-QR is designed to control for individual specific heterogeneity while exploring heterogeneous covariate effects, and therefore provides a more flexible method for the analysis of panel data than that afforded by the mean regression models.

One problem associated with FE-QR is that, as it is the case with nonlinear panel data models, the method of differencing out the fixed effects used for the conditional linear mean model does not carry over to the conditional quantiles. Koenker (2004) proposes to treat each individual effect as a parameter to estimate⁴ by means of a penalized estimation method. However, controlling fixed effects by directly estimating them is not without difficulty - known as incidental parameter problem (Neyman and Scott, 1948), which manifest itself in inconsistency of the common parameters when the number of individuals goes to infinity while the number of time period is fixed.⁵

³See Section 3 for the characteristics of the data when we rely on panel observations.

⁴The individual fixed effects are treated as pure location shift parameters common to all conditional quantiles.

⁵The analysis of an incidental parameter problem in FE-QR is described in Graham, Hahn, and Powell (2009) and Kato and Galvao (2016).

A second problem arises because the objective function is not differentiable. The implication is that standard asymptotic analysis of panel data model is not directly applicable to QR. Kato and Galvao (2016) propose the smoothing of the objective function and study the properties of the estimator. They show that the estimator is asymptotically normally distributed and propose a bias correction for the estimator's mean. Flores, Flores-Lagunes, and Kapetanakis (2014) estimate a two-way fixed effects model where both effects vary over quantiles. Flores, Flores-Lagunes, and Kapetanakis (2014) account for the problem of *quantile crossing* adopting the method proposed by Chernozhukov, Fernandez-Val, and Galichon (2010) to transform the original estimated quantiles into monotonic ones. However, the objective function they consider is not smooth and they rely on Monte Carlo experiment to show the small bias in their estimates.

Alternative approaches that not consider the case of unobserved heterogeneity represented by the classical individual effects α_i are introduced by Harding and Lamarche (2014) who propose a quantile regression estimator for a model with a multifactor error structure and interactive effects potentially correlated with covariates.

In our application we follow the approach proposed by Canay (2011). In the line of research introduced by Koenker (2004), Canay (2011) assumes a pure location shift effect for the individual parameters; i.e. the fixed effects affect all quantiles in the same way. Canay (2011) proposes an easy-to-use two-step estimator. In the first step, the individual effects α_i are estimated by traditional mean estimations (for instance estimation in first differences or by means of the within estimator), then corrected wages $\hat{y}_{it} = y_{it} - \hat{\alpha}_i$ are estimated on the other covariates by means of traditional quantile regression. Given \hat{y}_{it} we estimate the wages by quantile regression and we rely on Machado and Mata (2005) method to decompose the wage gap in observed and unobserved components.

We adopt the FE-QR estimator proposed by Canay (2011) for two reasons. First, it does not add computational complexity to the estimation of the model. In fact, estimation and inference using alternatives FE-QR may be difficult to conduct when the number of FE is large. Second, we rely on the good finite sample properties of the estimator provided by Canay (2011) even for low values of T.

In Section 5, to running the decomposition of the GWG across sectors we proceed as follows.

First, we estimate, for each sector, the following two fixed effects models for female and male sample, respectively :

$$y_{it}^f = \alpha_i^f + x_{it}^{f'}\beta^f + \epsilon_{it,f} \quad (6)$$

$$y_{it}^m = \alpha_i^m + x_{it}^{m'}\beta^m + \epsilon_{it,m} \quad (7)$$

where f (m) stands for female (male) employee.

Second, we estimate

$$Q_\theta(\hat{y}_{it}^f|x_{it}) = x_{it}^{f'}\beta_\theta^f \quad (8)$$

$$Q_\theta(\hat{y}_{it}^m|x_{it}) = x_{it}^{m'}\beta_\theta^m \quad (9)$$

where $\hat{y}_{it}^k = y_{it}^k - \hat{\alpha}_i^k$ for ($k = f, m$) is the log wage net out by the estimated individual heterogeneity. Last, we apply the Machado-Mata decomposition to compute the counterfactual distribution of \hat{y} and to obtain the decomposition in equation (3).

3 Data and preliminary analysis

To carry out our analysis we rely on individual data drawn from the 2005, 2006, 2008 and 2010 waves of the ISFOL-PLUS survey. ISFOL is the Italian Institute for the Development of Vocational Training for Workers. The data was collected in the context of a joint project with the Italian Ministry of Labor and Social Policy that was started in 2005.⁶ The project aims particularly at creating a data set for the study of wage inequality by gender. Hence, it delivers broad information on the personal working profiles and individual motivation to work as well as on the cultural and territorial background of the participants

Since the first PLUS survey, in 2005, each consecutive year includes a proportion of panel interviews, taken from the previous sample. In the analysis we consider the panel dimension, taking into account all the available years. The target population is composed of individuals

⁶The data was collected by means of Computer Assisted Telephone Interviewing (CATI).

between 15 and 64 years old. The selection process chosen by ISFOL was stratified sampling, with optimal allocation over five types of domains: region, size of the municipality, gender, age and occupational status. A multi-domain inclusion strategy was implemented to guarantee sampling error lower than a given threshold, and significant sampling size for each domain. One of the main characteristics of the national survey is that only answers with direct responses were considered, that is no proxies were used.

The ISFOL-PLUS questionnaire is composed of specific sections for five sub-groups of the population: young individuals between 15 and 29 years old; women between 20 and 49 years old; elderly population between 50 and 64 years old; unemployed individuals; employed population. A rich set of information for each of these categories is included, ranging from family characteristics to individual skills and personal history.

Despite the fact that also self-employed and those with project-linked positions are present in the PLUS samples, we consider only salaried employees, which form by far the largest category. In our analysis we focus on full-time employees aged between 18 and 64 years. Facing the usual trade-off between representativeness of the sample at the population level and the comparability across sector, we opt in favour of the latter and make further selections for the sake of comparability. We restrict the sample to those holding a full time contract and exclude trainees and temporary contracts. Part-time workers are excluded as they have a larger dispersion in pay than their full-time colleagues that may raise the probability of earning less than the average hourly wage. Moreover, the incidence of part-time work differs significantly between men and women in favour of women (e.g. Chzhen and Mumford (2011)).

We have used log-hourly net wage (adjusted to the 2010 level) as the dependent variable. We determine each individual's hourly wage by dividing the reported monthly salary by the number of weeks worked in the month multiplied by the number of hours usually worked during the week.⁷

We use this measure rather than monthly or annual pay to get rid of the effect of the different number of hours worked by men and women. Last, we exclude blue-collar workers because they are strongly over-represented in the private sector (about 35%) compared to the public sector

⁷We use net hourly wage instead of gross hourly wage because of data limitations. In fact, The ISFOL-PLUS survey collects data on the net monthly wage for employees and on the gross monthly wage for self employed.

(about 10%), and would make the two distributions much less comparable both in terms of occupation types and earnings.

We have selected a group of about thirty independent variables, which include: years of schooling; actual market experience; family characteristics (civil status, presence of pre-schooling age children); occupation and industry dummies; geographic variables (denoting people living in northern and central regions, and people living in urban areas); personal skills that may reveal individual ability as knowledge of English, and knowledge of how to use a computer for particular basic tasks. In addition to these personal skills, we consider the *University Performance*, that is, the university degree score penalized for years lost.⁸

Table A.1 in Appendix describes the variables we use for our descriptive analyses and in the decompositions. Table A2 presents descriptive statistics for male and female public and private sector employees. Means of relevant variables show that, on average, men earn higher salaries in both sectors and have a longer working history. They also show that public sector employees are, on average, better educated than private sector employees. On the other hand, women have more years of schooling and show higher university performance. The number of years of schooling has been constructed from the available information on educational attainments, and thus has a relatively low variability. Table A2 shows that workers in the public sectors have more experience on average; they have more frequently achieved a university degree while employees in the private sector have more often reached an high school education only.

A first visual summary of the wage distribution across sectors, gender and within sectors is provided in Figure 1. The density functions are estimated using Epanechnikov kernel estimator.⁹ Figure 1 shows that in both sectors, private and public, the female wage distribution is shifted to the left with respect to the men's one, which gives us a preliminary evidence of a GWG. However, at this preliminary stage, we are considering only the unconditional wage distribution, without taking into account possible factors affecting it.

⁸The variable *University Performance* is a proxy of the unobserved ability for graduate individuals. The use of this variable has been proposed by Castagnetti and Rosti (2009). It is given by the final degree score eventually penalized by the number of years in excess used to get the degree. For a complete definition of the variable see Table A1 in Appendix A.

⁹The bandwidth is chosen in order to minimize the mean integrated squared error where the data are Gaussian and a Gaussian kernel is used. We choose to adopt this criteria, that is the default option in STATA to minimize the degree of discretionary in presenting the results.

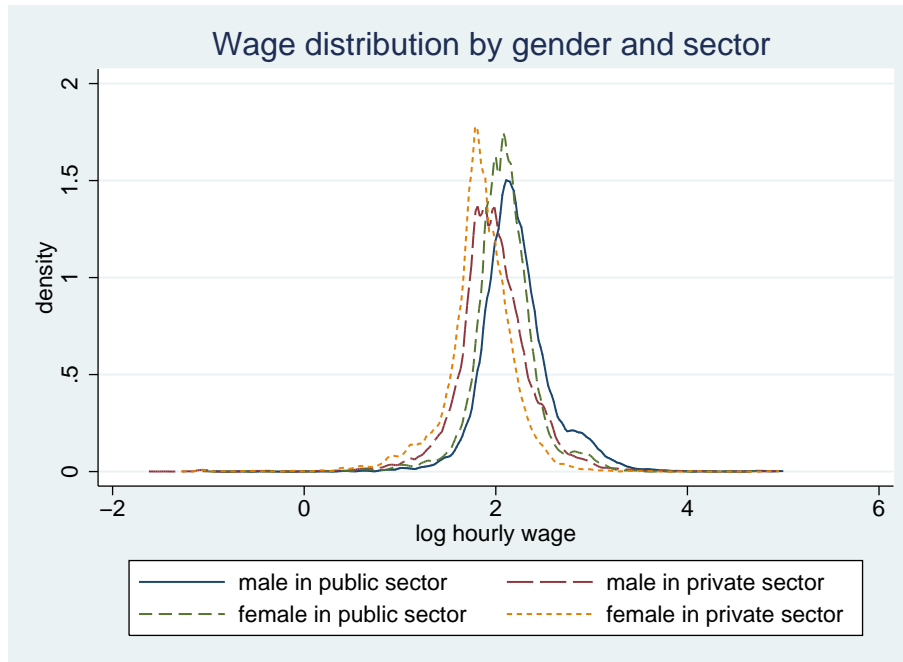


Figure 1: Kernel-density estimates of hourly net log-wages by gender and sector

The regression-based decompositions of Sections 4-5 are based on quantile estimation whose main strength lies in the fact that it allows to estimate productivity and coefficients gender differentials across the wage distribution. As preliminary step in the investigation of the effects of differences in characteristics on the GWG by sector, we carry out a series of quantile regressions on the pooled data. Pooled quantile regressions shown in Tables A3-A4 estimate the wage by sector including in addition to standard individual and work-related characteristics, a gender dummy to identify the GWG.

In reading the Tables, recall that each coefficient represents the effect on wage, at a given quantile, of a shift in the corresponding covariate, keeping all else constant. The standard errors were computed, using the bootstrap method with 800 replications, a procedure that involves weaker assumptions with regard to the distributional form taken by the variables of interest, since it provides a consistent estimate even in the presence of heteroskedasticity.¹⁰

The overall specification of the model seems to fit well, and most of the reported coefficients have the predicted signs. It is worth noticing that the GWG, caught by the parameter of the

¹⁰Two good and short reviews on inference methods for quantile regression are given by Buchinsky (1995) and by Buchinsky (1998). For a more comprehensive treatment of the topic, see Koenker (2005).

dummy variable *Female*, when the homogeneity of parameters by gender is imposed, appears larger in the public sector.

A second evidence coming out from this model is that the return on the *University Performance* is higher in the public sector. On the contrary, the other variables for individual ability have a stronger influence on the wage in the private sector.

Finally, while the dummies denoting the presence of children are significant only for a small number of quantiles and mostly in the public sector, the variables denoting civil status are statistically significant in both sectors and across the whole distribution.

4 Cross-section decomposition

In order to decompose the differences in the wage distribution according to Oaxaca-Blinder decomposition we apply the Machado and Mata (2005) procedure described in Section 2.1. While the preliminary dummy-based approach presented in Section 3, owns the important shortcoming of assuming that the return to individual and job characteristics are the same across gender, the Machado and Mata (2005) decomposition relies on the estimation of quantile wage regressions for both gender and sector.

We estimate four different specifications, denoted in Table A5 by columns A-D. Specification A represents a basic extended version of the Mincer equation, that we augment sequentially by indicators of individual productivity/ability (specification B), by occupational dummy variables (specification C) up to the inclusion of dummies for industry classification (specification D). Tables A6-A9 present the estimation results at five quantiles of the wage distribution for specification D of Table A5.¹¹ These results allow us to evaluate the overall accuracy of our wage specifications, to test the significance of each of our proxies for productivity, and to appreciate any difference, among the sector and the gender dimensions, in the shape taken by the wage structure.

A first evidence coming out from this model is that the return on schooling is stronger for women at lower quantiles while the reverse happens for higher quantiles of the wage distribution.

¹¹For the sake of saving space we report only the detailed estimation results of specification D. The results of the remaining specifications are available upon request.

More, the return on experience is always stronger for men in both sectors.

In general we observe that occupational dummies tend to be more significant than industrial dummies in both sectors and for both genders. Finally, while the dummies denoting the presence of children are statistically significant only for a small number of quantiles, the variable denoting civil status tends to be more significant, especially among men. To sum up, we can draw a couple of preliminary conclusions, and try to make connections with some of the recent findings in the empirical literature. The dynamics of the schooling coefficient, on one hand, suggest that there might be an increasing pattern, in the GWG, for graduated women. This evidence is in line with the findings of de la Rica, Dolado, and Llorens (2008), who show that, in Spain, the wage gap increases along the distribution of wage for higher educated women. On the contrary, the presence of a floor pattern, that is, of a decreasing wage gap for lower educated women, at this stage, is difficult to assess.

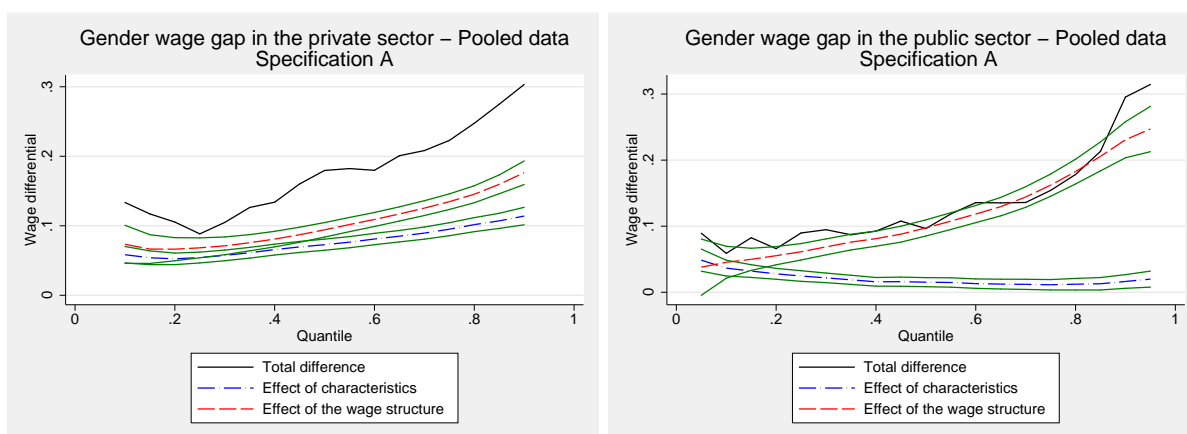


Figure 2: Gender wage gap decomposition, divided by sector. Specification A in Table A5. 95% confidence intervals.

The decomposition by sector of the GWG presented in Figures 2 and 5 lead to several observations. First, in both sectors, the relative wages are increasing across the distribution and the GWG in the private sector is always bigger than those in the public sector. When we look at the decomposition of the GWG, we observe that a significant part of the gender wage gap remains unexplained in both sectors, after controlling for individual characteristics, education, job attributes and regional specific effects. Moreover, the weight of the unobserved component in explaining the gender wage gap is always bigger in the public sector with respect



Figure 3: Gender wage gap decomposition, divided by sector. Specification B in Table A5. 95% confidence intervals.



Figure 4: Gender wage gap decomposition, divided by sector. Specification C in Table A5. 95% confidence intervals.

to the private sector. We observe also that the coefficients component decreases along the wage distribution for the private sector while it increases for the public sector. Comparing the two sectors, we observe that among high wage workers, the wage gap faced by women is completely unexplained in the public sector while is mostly unexplained in the private sector. In other words, the *discrimination component* looks much stronger for the public sector. More deeply, it appears that high-wage public-sector employees in Italy may face more employer discrimination (i.e., glass ceilings) than low wage workers (i.e., sticky floors).¹²

This result contrasts with the findings of Melly (2005) for the Germany but confirms the

¹²In particular, the part of GWG attributed to the wage structure goes from about 50% for the lower quantiles to about 90% at highest quantiles.

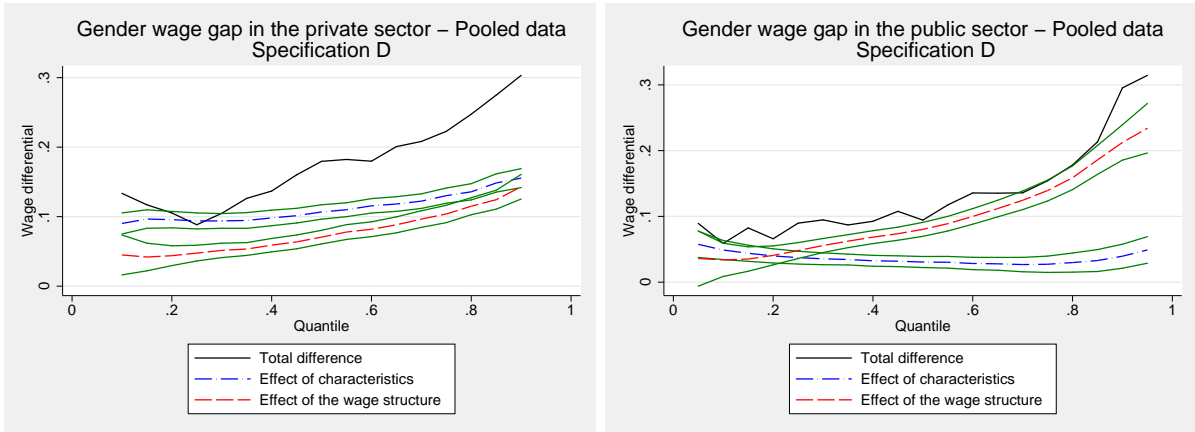


Figure 5: Gender wage gap decomposition, divided by sector. Specification D in Table A5. 95% confidence intervals.

findings of Barón and Cobb-Clark (2010). Further, Arulamplam, Booth, and Bryan (2007) and Kee (2006) find no evidence of sticky floors in public sector employment for Europe and Australia, respectively.

When we look at the private sector, instead, we observe that, unlike the public, the unexplained component of the conditional GWG decreases along the wage distribution. Therefore, it seems that employer discrimination is more prevalent among low-wage employees than among their high-wage counterparts. Thus, contrary to what found for the public-sector, the mechanism in action seems to be of sticky floors rather than glass ceilings.

However, when we control for occupation and industry the relative weight of the observed characteristics on the GWG increases only for the private sector. The change in the contribution of the wage structure to the GWG goes in the same direction; while it decreases for the private sector it looks rather stable for the public one. One implication is that apparently there is an effect of gender segregation in the private sector while no evidence is found for the public one.

5 Longitudinal decomposition

The first step in the longitudinal analysis is the fixed effects estimation of the wage equation by gender and sector. The Machado and Mata (2005) decomposition is then applied on the wage net by the estimated individual heterogeneity (see Section 2). As for the cross section analysis, we first estimate a model that excludes occupation, industry and individual ability

controls from the vector of labour market position variables (specification A). We then repeat the estimation/decomposition exercise adding controls for measures of ability (specification B), for occupation (specification C) and for industry (specification D). In this way we want to identify the extent to which the results are driven by occupational and industrial segregation. In the spirit of the analysis of Arulamplam, Booth, and Bryan (2007), this procedure also may provide insights into the sensitivity of the unexplained component (i.e. the effect of the wage structure) to alternative assumptions about the discriminatory nature of the occupational distribution itself.¹³

Tables A10 - A13 show the estimation results at five quantiles of the *net wage*¹⁴ distribution for Specification D of Table A5.¹⁵ These results allow us to evaluate the overall accuracy of our wage specification, to test the significance of each of our proxies for productivity, and to evaluate any difference, among the sector and the gender dimensions, in the shape taken by the wage structure. At this stage, the comparison with the estimation results of Section 4 does not provide evidence on important differences. The only exception is represented by the role of social variables as dummies for the parents' degree whose coefficients now become highly statistical significant.

The decomposition analysis in Figures 6-9 shows important differences with respect to the results presented in Section 4. First, in both sectors the GWG markedly reduces once the individual heterogeneity has been taken into account. Second, the evidence found of a glass ceilings in the public sector is still valid while the weight of the effect of the wage structure on the GWG is rather stable across the distribution in the private sector. Third, in the public sector the gender difference in observed characteristics is statistically significant only at lower quantile of the distribution. The private sector, unlike the public, shows a statistically significant contribution of the characteristics throughout the wage distribution.

Moreover, the rate of increase of the GWG across the distribution is much lower in the public sector while the opposite was true in the cross section analysis. In the private sector, the control for individual heterogeneity shows a weaker impact on the wage decomposition. It is true that

¹³We would like to thank an anonymous referee for raising this question.

¹⁴ \hat{y}_{it}^k in (8) and (9).

¹⁵For the sake of saving space we report only the detailed estimation results of specification D. The results for the alternative specifications are available upon request.

the level of the GWG in the public sector is lower across the distribution with respect to the cross section analysis but the evidence of sticky floor in the private sector vanishes. Like the public sector, the decomposition results for the private sector show that the GWG rises as the wage level increases.

A further important evidence arises from the impact on the decomposition of the introduction of measures of occupation and industry into the set of controls for labour market; introducing these controls does not have a large impact on the decomposition between sectors (see Figures 6-9). Differently from the cross section, the longitudinal analysis does not support the evidence of segregation effect. The percentage of the GWG accounted for by the observed and unobserved factors (namely the effect of characteristics and the wage structure effect) remains roughly unchanged. Hence, there is no information gain from controlling from proxies of individual ability, occupation and industry allocation. It seems that the effect of segregation highlighted in the cross section analysis was only apparent. Indeed the individual heterogeneity explains much more.

One important result that emerges is that, also when the estimation is netted from the individual heterogeneity, the evidence that the magnitude (and source) of the gender wage gap varies across labour market sectors clearly supports the view that wage-setting mechanisms differ in the two sectors.

One side that cannot be omitted to explain these differences is the hiring method used in the two sectors. In Italy public servants are still generally recruited through public contests that are a special recruitment method of open competition. Public contests increase the accuracy of assessment as they require the use of objective criteria and justification of the candidate choice thereby increasing the probability of fair assessment for both men and women compared to other recruitment methods. Dobbs and Crano (2001) argue that individuals who have to justify their decisions have a stronger incentive to bypass their stereotyped impressions than those that do not have to provide justifications. As a consequence, when decision makers are required to justify their choices and describe the criteria they use to evaluate candidates, as in open competition, they are less likely to discriminate against a specific group.

Therefore the lower GWG in the public sector can be the result of both the different hiring

selection method and of a greater effort in the application of gender equality policies.

The explanation of the higher weight of the unexplained component of the GWG in the public sector is twofold. At the bottom of the distribution, the unexplained component may cover non monetary benefits offered by the public sector. At the top of the distribution, the increasing weight of the wage effect may hide a sort of *favoritism* in the public sector for men rather than a discrimination against women. As a matter of fact, the top management job positions in the public sector, are often linked to political appointment that in prevalence support males more than females.

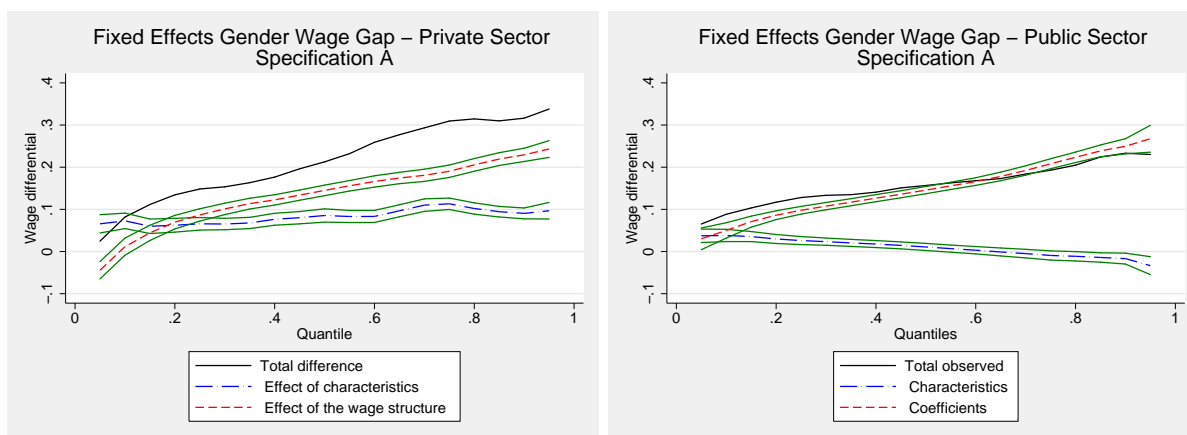


Figure 6: Fixed effects gender wage gap by sector. Specification A in Table A5. 95% confidence intervals.

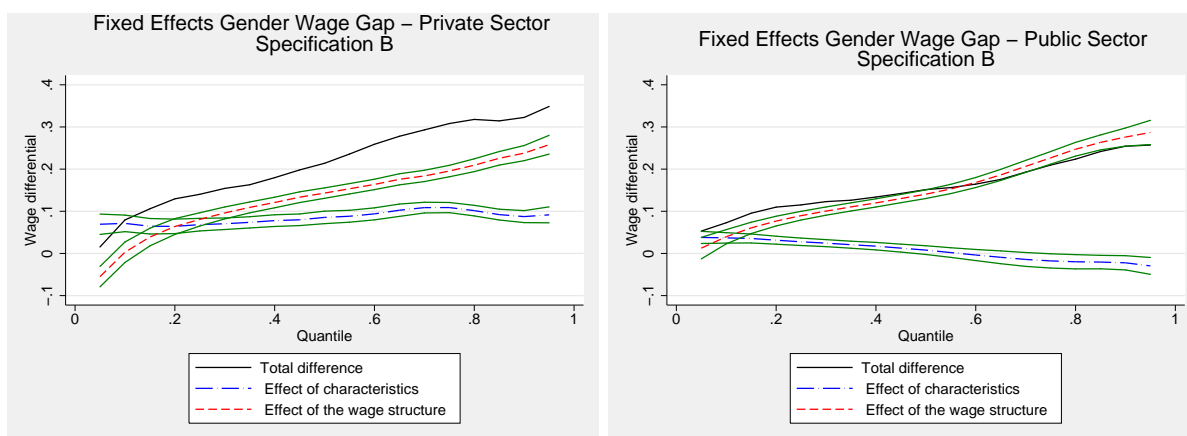


Figure 7: Fixed effects gender wage gap by sector. Specification B in Table A5. 95% confidence intervals.

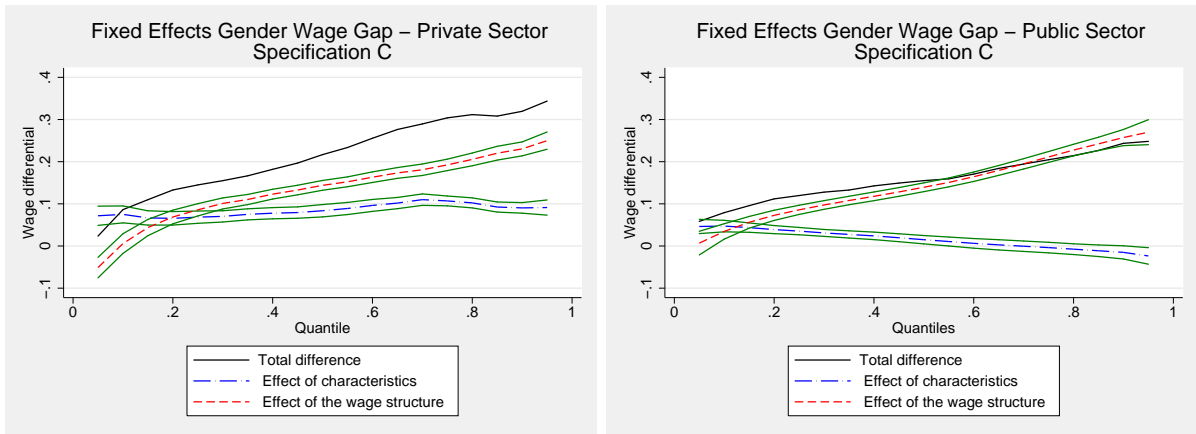


Figure 8: Fixed effects gender wage gap by sector. Specification C in Table A5. 95% confidence intervals.

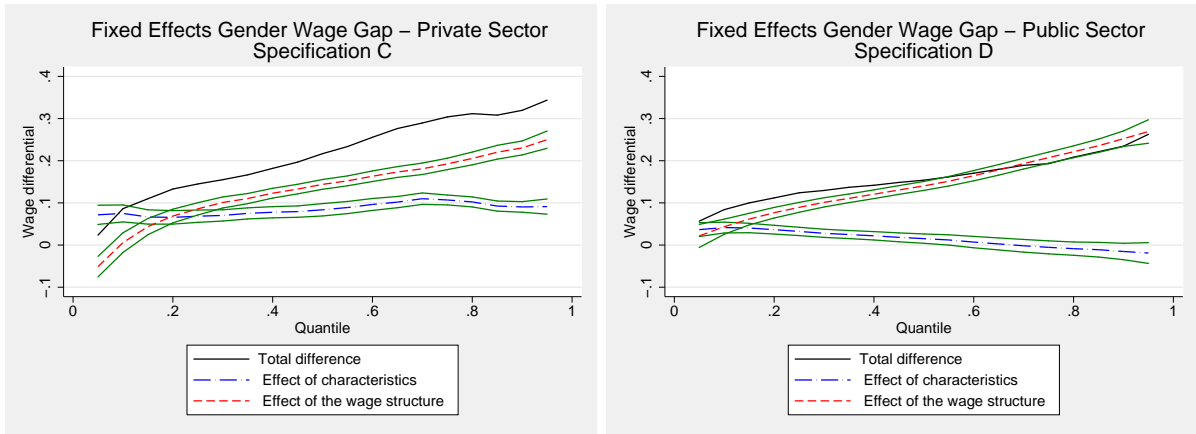


Figure 9: Fixed effects gender wage gap by sector. Specification D in Table A5. 95% confidence intervals.

6 Conclusion

The significant and persistent level of the GWG has obtained much attention from policy makers and researchers leading to the implementation of an equal-pay legislation and the promotion of equal opportunities in many countries. Starting from 2008, the GWG has been introduced among the indicators for monitoring occupation policies in the European Union countries. Despite the important effort devoted to combat it,¹⁶ in Europe women are paid on average 16.3% less than men. To tackle the GWG it is essential to understand and decompose it in terms of explained (observed) and unexplained (unobserved) components. In this paper, we investigate

¹⁶The European Commission is adopting an Action Plan to defeat the gender pay gap in the next biennium.

the decomposition by gender of the wage in the Italian public and private sector. Using quantile regression methods we perform the analysis for both cross section and panel data. For the latter we perform the analysis by considering the quantile approach for panel data proposed by Canay (2011). In order to assess how the GWG varies across the wage distribution we propose a two step procedure for computing the Oaxaca-Blinder decomposition. First, we estimate the GWG by means of Canay (2011) approach and then we run the Machado and Mata (2005) decomposition for quantile regression.

Because of the more standardized career path in the public sector with respect to the private one and the different hiring selection method (by competition in the public sector), the unexplained component of the gender wage gap, at least at the beginning of the career, should be lower with respect to those for the private one because the so called *discrimination* components should be counteracted. Hence, we expect a larger unexplained component for the GWG in the private sector with respect to the public counterpart.

The main results are as follows. In line with the findings in the literature we confirm the substantially higher level of the GWG in the private sector with respect to the public sector. When we control for the unobserved individual heterogeneity, we find a consistent decrease of the GWG and of the slope of the wage curve in both sector. The evidence based on the cross section analysis of a sticky floor effect in the private sector vanishes, while the public sector still shows a glass ceiling effect even if resized. However, in both sectors there is a significant unexplained GWG whose weight is larger in the public sector throughout the wage distribution.

We propose the following explanation for these results. From one side, the lower GWG in the public sector can be the result of both the different hiring selection method and of putting more effort in the application of policies for gender equality. From the other side, the increasing weight of the wage effect (unexplained component of the GWG) observed in the public sector at the top of the distribution may hide a sort of *favoritism* for men rather than a discrimination for women. As a matter of fact, the top management job positions in the public sector, are often linked to political appointment that in prevalence support males more than females. At the bottom of the distribution, the higher weight of the unexplained component of the GWG in the public sector may cover non monetary benefits offered by the public sector that, particularly in

Italy, have an important role in the welfare system and labor market wage setting. In contrast with poor care supports offered by the national welfare regime, public employment in Italy may represent in fact a tool to reconcile work and family activities, see Solera and Bettio (2013).

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Appendix A. Definition of Variables

Table A1: Definition of Variables

Variable Name	Definition
Log net hourly wage	Natural logarithm of hourly wages in Euros net of taxes and social security contributions
Female	One if the individual is woman, zero otherwise
Experience	Number of years of work experience
Experience ²	<i>Experience</i> squared
Tenure	Number of years worked for current employer
Schooling	Number of years of schooling completed
University_Degree	One if the individual has graduated from university, zero otherwise
University Performance	$\frac{DegreeScore}{1+0.1*Years}$ where <i>Degree Score</i> is the degree mark plus the laude or highest honors when it occurs. <i>Years</i> is the number of years in excess used to get the degree. In the Italian education system, each faculty only sets a minimum number of years in which to obtain a degree. As a consequence there is a high dispersion in the age at which students graduate. The speed of completion of the academic career is, therefore, together with the final mark, an important component of educational performance. The degree scores have been normalized to take into account the different marking scale for each faculty. The final degree score ranges from 66 to 110 (for some universities the maximum mark awarded is 100). According to each faculty internal ruling a laude (distinction) may be assigned to candidates with a 110/110 mark for recognition of the excellence of their thesis (in the analysis the 110 cum laude is considered as 111).
High School	One if highest education was high school, zero otherwise
Secondary Education	One if highest degree obtained was secondary education, zero otherwise
Primary Education	One if highest education obtained was primary education, zero otherwise

Knowledge of English	One if the individual answer "yes" to all the questions of PLUS questionnaire on the ability to speak and understand English, zero otherwise
Computer skill	One if the individual answer "yes" to all the questions of PLUS questionnaire on the ability to using PC, zero otherwise
North	One if the individual lives and works in the North of Italy, zero otherwise
Centre	One if the individual lives and works in the Centre of Italy, zero otherwise
Age	Age of the individual (in years)
Married	One if the individual is married, zero otherwise
Kids	One if the individual has at least one child, zero otherwise
Kids_10	One if the age of the youngest child is below 10 years, zero otherwise In the wave of 2005, <i>Kids_10</i> is equal to one if there is at least one child below the age of three in the household, zero otherwise
Italian	One if the individual holds the Italian citizenship, zero otherwise
Mother's university degree	One if the mother's education is equal to <i>University_Degree</i> , i.e. the mother holds a university degree, zero otherwise
Father's university degree	One if the father's education is equal to <i>University_Degree</i> , i.e. the father holds a university degree, zero otherwise
Metropolitan Area	One if individual is located in a metropolitan area, zero otherwise
Permanent Contract	One if the individual holds an unlimited contract, zero otherwise
Manager	One if the respective individual is occupied in an intellectual profession; scientific or highly specialized occupations, zero otherwise
Intermediate_Profession	One if the respective individual is occupied in an intermediary position in the commercial, technical or administrative sector, in health services or is a technician, zero otherwise
White-collars worker	One if the respective individual is occupied in an intermediary position in the commercial, technical or administrative sector, in health services or is a technician, zero otherwise
<i>textBlue – collarsworker</i>	One if the respective individual is

	handicraftsmen, factory worker (skilled and unskilled) and worker for unqualified jobs
Agriculture	One if the individual is engaged in agriculture, hunting and fishing, zero otherwise
Manufacturing	One if the individual is engaged in manufacturing, zero otherwise
Energy	One if the individual is engaged in energy, zero otherwise
Construction	One if the individual is engaged in construction, zero otherwise
Retail	One if the individual is engaged in retail and wholesale, zero otherwise
Tourism	One if the individual is engaged in tourism, zero otherwise
Transport	One if the individual is engaged in transport, warehousing and logistic, zero otherwise
Finance	One if the individual is engaged in finance and insurance services, zero otherwise
Health	One if the individual is engaged in health and care, zero otherwise
Telecommunication	One if the individual is engaged in telecommunication, zero otherwise
Government Administration	One if the individual is engaged in government administration, zero otherwise
Education	One if the individual is engaged in education, zero otherwise
AdminServices	One if the individual is engaged in administrative services, zero otherwise
Other Services	One if the individual is engaged in other firms and business services, zero otherwise
Public_Sector	One if individual is employed in the public sector, zero otherwise
Big Firm	One if firm has at least 10,000 workers, zero otherwise
Year_1-Year_3	Year dummies, one if year = 2005, 2006, 2008, respectively, and zero otherwise

Appendix B. Descriptive Statistics and Estimation Results

Table A2: Descriptive Statistics

Variable	Private		Public	
	Mean	Std. Dev.	Mean	Std. Dev.
Net hourly wage	1.916	0.405	2.157	0.366
Net hourly wage - women	1.826	0.383	2.087	0.330
Net hourly wage - men	1.975	0.408	2.216	0.384
Female	0.391	0.488	0.456	0.498
Age	36.919	12.772	45.804	11.885
Age - women	34.735	11.581	44.151	11.675
Age - men	38.319	13.293	47.188	11.884
Married	0.464	0.499	0.685	0.464
Kids	0.611	0.487	0.724	0.447
Kids_10	0.099	0.299	0.085	0.279
Mother's university degree	0.031	0.174	0.034	0.181
Father's university degree	0.044	0.205	0.076	0.265
Experience	16.404	12.829	23.968	11.825
Monthly hours worked	180.745	22.974	168.482	22.363
Permanent contracts	0.520	0.500	0.525	0.499
Tenure	10.460	10.706	18.669	11.549
Big Firm	0.414	0.493	0.468	0.499
North	0.540	0.498	0.391	0.488
Centre	0.191	0.393	0.196	0.397
Metropolitan area	0.267	0.442	0.337	0.473
<i>Education</i>				
University degree	0.165	0.371	0.332	0.471
University degree - women	0.206	0.404	0.387	0.487
University degree - men	0.139	0.346	0.285	0.451
University performance - women	95.63	11.05	97.89	11.25
University performance - men	92.47	12.86	94.75	12.01
High School	0.594	0.491	0.521	0.500
Secondary Education	0.219	0.413	0.137	0.343
Primary Education	0.022	0.148	0.011	0.105
Knowledge of English	0.335	0.472	0.266	0.442
Computer skill	0.827	0.378	0.831	0.375
<i>Occupation</i>				
Managers	0.096	0.295	0.254	0.435
Intermediate professions	0.140	0.347	0.201	0.401
White-collars workers	0.435	0.496	0.432	0.495
Blue-collars workers	0.328	0.470	0.112	0.316
<i>Sector</i>				
Agriculture	0.022	0.146	0.011	0.102
Manufacturing	0.156	0.363	0.013	0.114
Energy	0.099	0.299	0.016	0.124
Construction	0.039	0.193	0.007	0.083
Retail	0.097	0.296	0.012	0.108
Tourism	0.051	0.219	0.008	0.092
Transport	0.103	0.304	0.029	0.168
Finance	0.062	0.242	0.020	0.138
Health	0.022	0.146	0.129	0.335
Telecommunication	0.081	0.272	0.031	0.174
Government Administration	0.044	0.205	0.244	0.430
Education	0.029	0.169	0.231	0.422
AdminServices	0.050	0.219	0.115	0.319
Other Services	0.144	0.351	0.135	0.341
No of observations	21530		11227	

See Appendix A for the definition of the variables.

Table A3: Quantile Regression of Wage in the Private sector.

	q10	q25	q50	q75	q90
Schooling	0.0193*** (0.0025)	0.0170*** (0.0025)	0.0195*** (0.0021)	0.0199*** (0.0019)	0.0212*** (0.0025)
Experience	0.0341*** (0.0022)	0.0234*** (0.0012)	0.0212*** (0.0010)	0.0203*** (0.0012)	0.0205*** (0.0020)
Experience2	-0.000*** (0.0000)	-0.000*** (0.0000)	-0.000*** (0.0000)	-0.000*** (0.0000)	-0.000*** (0.0000)
Female	-0.075*** (0.0063)	-0.076*** (0.0063)	-0.085*** (0.0036)	-0.112*** (0.0062)	-0.131*** (0.0064)
Agriculture	-0.042 (0.0662)	-0.078 (0.0583)	-0.075*** (0.0232)	-0.094** (0.0416)	-0.106*** (0.0383)
Manufacturing	-0.012 (0.0265)	-0.015 (0.0113)	-0.026** (0.0131)	-0.060*** (0.0145)	-0.068*** (0.0226)
Energy	0.0011 (0.0288)	0.0036 (0.0101)	-0.025** (0.0119)	-0.060*** (0.0182)	-0.079*** (0.0152)
Construction	-0.077 (0.0603)	-0.021 (0.0220)	0.0030 (0.0167)	-0.038*** (0.0132)	-0.069** (0.0302)
Retail	-0.031 (0.0274)	-0.029*** (0.0079)	-0.046*** (0.0092)	-0.087*** (0.0121)	-0.106*** (0.0174)
Tourism	-0.034 (0.0341)	-0.067*** (0.0196)	-0.061*** (0.0113)	-0.081*** (0.0149)	-0.073*** (0.0267)
Transport	-0.026 (0.0170)	-0.048*** (0.0143)	-0.045*** (0.0096)	-0.076*** (0.0149)	-0.078*** (0.0205)
Finance	0.0251 (0.0178)	0.0134 (0.0094)	0.0043 (0.0106)	0.0048 (0.0138)	-0.005 (0.0205)
Health	-0.085** (0.0338)	-0.062* (0.0375)	-0.058*** (0.0208)	-0.051* (0.0272)	-0.066 (0.0493)
Telecommunication	0.0027 (0.0344)	0.0146 (0.0138)	-0.000 (0.0093)	-0.006 (0.0119)	-0.008 (0.0188)
Government Administration	-0.046 (0.0473)	-0.011 (0.0232)	-0.011 (0.0161)	-0.039** (0.0167)	-0.061*** (0.0141)
Education	0.0285*** (0.0092)	-0.020* (0.0119)	-0.030** (0.0141)	-0.061*** (0.0178)	-0.077** (0.0319)
AdminServices	-0.068** (0.0322)	-0.055*** (0.0141)	-0.048*** (0.0180)	-0.070*** (0.0125)	-0.092*** (0.0200)
Permanent Contract	0.0252* (0.0137)	0.0069 (0.0061)	0.0126*** (0.0043)	-0.006 (0.0091)	-0.013 (0.0136)
Big firm	0.1051*** (0.0149)	0.0770*** (0.0088)	0.0710*** (0.0054)	0.0595*** (0.0080)	0.0538*** (0.0083)
Manager	-0.031 (0.0199)	0.0497*** (0.0123)	0.0713*** (0.0076)	0.1036*** (0.0079)	0.1483*** (0.0129)
Intermediate Profession	0.0180 (0.0143)	0.0158 (0.0110)	0.0203** (0.0097)	0.0248** (0.0120)	0.0508** (0.0203)
Married	0.0657*** (0.0100)	0.0574*** (0.0101)	0.0758*** (0.0058)	0.0823*** (0.0087)	0.0799*** (0.0116)
Kids	0.0041 (0.0123)	0.0073 (0.0074)	0.0133** (0.0063)	0.0101* (0.0061)	0.0133 (0.0120)
Kids_10	0.0206 (0.0145)	0.0115 (0.0104)	0.0089 (0.0107)	0.0161 (0.0155)	0.0170 (0.0206)
University Performance	0.0004 (0.0002)	0.0005*** (0.0001)	0.0005*** (0.0001)	0.0007*** (0.0001)	0.0008*** (0.0002)
Knowledge of English	-0.004 (0.0141)	0.0170** (0.0085)	0.0247*** (0.0060)	0.0231*** (0.0085)	0.0345*** (0.0094)
Computer skill	0.0976*** (0.0186)	0.0903*** (0.0100)	0.0892*** (0.0100)	0.0864*** (0.0152)	0.0777*** (0.0143)
University degree father	-0.034 (0.0395)	-0.007 (0.0144)	0.0234*** (0.0082)	0.0408** (0.0168)	0.0853*** (0.0218)
University degree mother	0.0749 (0.0555)	0.0229** (0.0099)	-0.001 (0.0124)	-0.004 (0.0168)	-0.011 (0.0207)
Metropolitan area	-0.023*** (0.0062)	-0.002 (0.0072)	0.0066 (0.0062)	-0.002 (0.0063)	-0.009 (0.0106)
North	0.1727*** (0.0165)	0.0930*** (0.0064)	0.0547*** (0.0063)	0.0560*** (0.0099)	0.0476*** (0.0107)
Centre	0.1409*** (0.0224)	0.0749*** (0.0073)	0.0350*** (0.0078)	0.0304** (0.0121)	0.0476*** (0.0143)
Time effects	X	X	X	X	X
Constant	0.6759*** (0.0435)	1.0980*** (0.0316)	1.2632*** (0.0297)	1.4512*** (0.0324)	1.5884*** (0.0311)

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A4: Quantile Regression of Wage in the Public sector.

	q10	q25	q50	q75	q90
Schooling	0.0139*** (0.0021)	0.0138*** (0.0006)	0.0154*** (0.0014)	0.0172*** (0.0012)	0.0203*** (0.0021)
Experience	0.0329*** (0.0020)	0.0247*** (0.0015)	0.0202*** (0.0012)	0.0213*** (0.0011)	0.0232*** (0.0019)
Experience2	-0.000*** (0.0000)	-0.000*** (0.0000)	-0.000*** (0.0000)	-0.000*** (0.0000)	-0.000*** (0.0000)
Female	-0.059*** (0.0069)	-0.071*** (0.0048)	-0.095*** (0.0062)	-0.138*** (0.0063)	-0.158*** (0.0120)
Agriculture	-0.023 (0.0257)	-0.078** (0.0388)	-0.102*** (0.0272)	-0.126** (0.0583)	-0.045 (0.0421)
Manufacturing	-0.049 (0.0705)	0.0253 (0.0396)	0.0009 (0.0507)	-0.058* (0.0300)	-0.107 (0.0716)
Energy	0.0075 (0.0740)	0.0142 (0.0282)	-0.015 (0.0135)	-0.027 (0.0214)	-0.125* (0.0698)
Construction	-0.064 (0.0764)	-0.008 (0.0344)	-0.015 (0.0279)	-0.018 (0.0596)	-0.015 (0.0445)
Retail	-0.196** (0.0982)	-0.089*** (0.0266)	-0.089*** (0.0194)	-0.122*** (0.0227)	-0.094** (0.0421)
Tourism	-0.025 (0.0593)	-0.007 (0.0339)	-0.052* (0.0284)	-0.067* (0.0373)	-0.083** (0.0336)
Transport	-0.022 (0.0348)	0.0145 (0.0203)	0.0007 (0.0163)	0.0438* (0.0252)	0.0194 (0.0312)
Finance	-0.024 (0.0596)	0.0034 (0.0265)	-0.035 (0.0255)	-0.041 (0.0297)	-0.056 (0.0366)
Health	-0.041* (0.0217)	-0.036** (0.0145)	-0.054*** (0.0126)	-0.057*** (0.0171)	-0.092*** (0.0160)
Telecommunication	0.0032 (0.0476)	-0.009 (0.0214)	0.0135 (0.0277)	0.0109 (0.0281)	-0.022 (0.0378)
Government Administration	-0.019* (0.0098)	-0.014 (0.0105)	-0.027*** (0.0102)	-0.042*** (0.0140)	-0.062*** (0.0088)
Education	-0.016 (0.0125)	-0.014** (0.0060)	-0.024*** (0.0090)	-0.022* (0.0116)	-0.030*** (0.0115)
AdminServices	0.0087 (0.0162)	0.0248** (0.0102)	0.0314** (0.0144)	0.0517*** (0.0191)	0.0064 (0.0210)
Permanent Contract	0.0221** (0.0097)	0.0025 (0.0106)	0.0164 (0.0133)	0.0107 (0.0095)	0.0080 (0.0196)
Big firm	0.0168 (0.0166)	0.0090 (0.0172)	0.0261 (0.0182)	0.0425** (0.0183)	0.0486 (0.0336)
Manager	0.0101 (0.0148)	0.0670*** (0.0121)	0.1143*** (0.0089)	0.2001*** (0.0157)	0.2746*** (0.0219)
Intermediate Profession	0.0139 (0.0095)	0.0455*** (0.0078)	0.0597*** (0.0085)	0.0520*** (0.0093)	0.0509*** (0.0105)
Married	0.0400** (0.0180)	0.0259*** (0.0092)	0.0289*** (0.0097)	0.0325*** (0.0076)	0.0302* (0.0156)
Kids	0.0205** (0.0095)	0.0155** (0.0066)	0.0123** (0.0060)	0.0179** (0.0088)	0.0132 (0.0123)
Kids_10	0.0351** (0.0143)	0.0300*** (0.0100)	0.0328*** (0.0083)	0.0229 (0.0146)	0.0138 (0.0115)
University Performance	0.0006*** (0.0001)	0.0007*** (0.0001)	0.0010*** (0.0000)	0.0016*** (0.0001)	0.0019*** (0.0001)
Knowledge of English	0.0059 (0.0124)	0.0001 (0.0080)	0.0077 (0.0051)	0.0205*** (0.0066)	0.0264*** (0.0092)
Computer skill	0.0333*** (0.0105)	0.0543*** (0.0065)	0.0564*** (0.0074)	0.0541*** (0.0063)	0.0489*** (0.0140)
University degree father	-0.001 (0.0386)	-0.002 (0.0147)	0.0305*** (0.0102)	0.0400** (0.0192)	0.0334 (0.0267)
University degree mother	-0.000 (0.0287)	-0.024 (0.0185)	-0.028 (0.0222)	-0.007 (0.0234)	0.0151 (0.0350)
Metropolitan area	-0.003 (0.0137)	-0.009 (0.0085)	-0.011** (0.0055)	-0.012 (0.0109)	-0.007 (0.0129)
North	0.0067 (0.0126)	-0.000 (0.0055)	-0.001 (0.0059)	0.0054 (0.0064)	0.0130 (0.0156)
Centre	0.0010 (0.0100)	-0.004 (0.0097)	-0.000 (0.0083)	0.0148 (0.0097)	0.0528*** (0.0156)
Constant	1.1657*** (0.0373)	1.3861*** (0.0314)	1.5238*** (0.0252)	1.6053*** (0.0242)	1.7006*** (0.0485)

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A5: Specification

	A	B	C	D
Schooling	X	X	X	X
Experience	X	X	X	X
Experience ²	X	X	X	X
Permanent Contract	X	X	X	X
Big firm	X	X	X	X
Married	X	X	X	X
Kids	X	X	X	X
Kids.10	X	X	X	X
University degree father	X	X	X	X
University degree mother	X	X	X	X
Metropolitan area	X	X	X	X
North	X	X	X	X
Centre	X	X	X	X
Year dummies	X	X	X	X
Measures of individual ability ^a		X	X	X
Occupational dummies ^b			X	X
Sectors ^c				X

^a University Performance, Knowledge of English, Computer skill.

^b Manager and Intermediate Profession, White collar is the reference category.

^c 13 Sectors, Other Services is the reference category.
See Appendix A for the definition of the variables.

Table A6: Quantile Regression of Wage for Males in Private Sector. Specification D.

	q10	q25	q50	q75	q90
Schooling	0.0184*** (0.0037)	0.0168*** (0.0026)	0.0210*** (0.0019)	0.0210*** (0.0017)	0.0223*** (0.0031)
Experience	0.0351*** (0.0044)	0.0250*** (0.0023)	0.0237*** (0.0016)	0.0256*** (0.0021)	0.0237*** (0.0022)
Experience ²	-0.0005*** (0.0000)	-0.0003*** (0.0000)	-0.0002*** (0.0000)	-0.0002*** (0.0000)	-0.0002*** (0.0000)
Agriculture	-0.0775 (0.1034)	-0.1324 (0.0927)	-0.1078*** (0.0394)	-0.1025 (0.0719)	-0.1757*** (0.0532)
Manufacturing	-0.0298 (0.0283)	-0.0204 (0.0284)	-0.0305 (0.0185)	-0.0638*** (0.0220)	-0.0842*** (0.0229)
Energy	0.0150 (0.0453)	0.0221 (0.0195)	-0.0166 (0.0116)	-0.0441** (0.0213)	-0.0873*** (0.0297)
Construction	-0.0838 (0.0722)	-0.0145 (0.0346)	-0.0136 (0.0190)	-0.0706** (0.0299)	-0.1331*** (0.0284)
Retail	0.0123 (0.0331)	-0.0195 (0.0258)	-0.0453** (0.0178)	-0.0692*** (0.0266)	-0.0963** (0.0391)
Tourism	-0.0183 (0.0279)	-0.0578** (0.0268)	-0.0499** (0.0248)	-0.0627* (0.0324)	-0.0223 (0.0489)
Transport	-0.0201 (0.0199)	-0.0448* (0.0240)	-0.0544*** (0.0178)	-0.0724*** (0.0158)	-0.0664** (0.0269)
Finance	0.0378 (0.0262)	0.0212 (0.0173)	-0.0067 (0.0145)	-0.0169 (0.0178)	-0.0169*** (0.0161)
Health	-0.1126 (0.1085)	-0.0323 (0.0655)	-0.0541* (0.0282)	-0.0252 (0.0377)	-0.0500 (0.0431)
Telecommunication	-0.0165 (0.0380)	0.0220 (0.0295)	0.0013 (0.0273)	-0.0211 (0.0261)	-0.0213 (0.0363)
Government Administration	0.0185 (0.0570)	-0.0039 (0.0396)	-0.0112 (0.0242)	-0.0430 (0.0338)	-0.0575 (0.0413)
Education	0.0359 (0.0291)	-0.0225 (0.0247)	-0.0620* (0.0345)	-0.0624 (0.0401)	-0.0534 (0.0482)
AdminServices	-0.0485 (0.0527)	-0.0578* (0.0343)	-0.0768** (0.0326)	-0.0858*** (0.0313)	-0.0932** (0.0460)
Permanent Contract	0.0268 (0.0193)	0.0084 (0.0123)	0.0090 (0.0097)	0.0033 (0.0128)	-0.0324** (0.0155)
Big firm	0.0833*** (0.0172)	0.0698*** (0.0111)	0.0537*** (0.0062)	0.0420*** (0.0068)	0.0366** (0.0146)
Manager	0.0110 (0.0448)	0.0651*** (0.0165)	0.0766*** (0.0148)	0.1026*** (0.0180)	0.1736*** (0.0320)
Intermediate Profession	-0.0046 (0.0225)	0.0038 (0.0089)	0.0095* (0.0048)	0.0224** (0.0109)	0.0517*** (0.0191)
Married	0.0572** (0.0258)	0.0612*** (0.0128)	0.1006*** (0.0081)	0.1109*** (0.0205)	0.1317*** (0.0202)
Kids	0.0389** (0.0153)	0.0161 (0.0113)	0.0138** (0.0056)	-0.0110 (0.0087)	-0.0114 (0.0138)
Kids_10	0.0134 (0.0174)	0.0122 (0.0198)	0.0221 (0.0158)	0.0106 (0.0171)	0.0153 (0.0292)
University Performance	0.0004** (0.0002)	0.0006*** (0.0001)	0.0006*** (0.0001)	0.0008*** (0.0001)	0.0007*** (0.0001)
Knowledge of English	-0.0235 (0.0153)	0.0154** (0.0069)	0.0224*** (0.0079)	0.0249*** (0.0093)	0.0360*** (0.0127)
Computer skill	0.0668 (0.0423)	0.0628*** (0.0167)	0.0835*** (0.0120)	0.1013*** (0.0215)	0.0816*** (0.0201)
University degree father	0.0112 (0.0439)	0.0258 (0.0200)	0.0408** (0.0191)	0.0653*** (0.0228)	0.1069*** (0.0349)
University degree mother	-0.0119 (0.0657)	0.0062 (0.0198)	-0.0225 (0.0159)	-0.0242* (0.0134)	-0.0460 (0.0293)
Metropolitan area	0.0085 (0.0213)	0.0077 (0.0090)	0.0016 (0.0046)	-0.0099 (0.0085)	-0.0233 (0.0171)
North	0.1443*** (0.0273)	0.0746*** (0.0127)	0.0544*** (0.0096)	0.0582*** (0.0088)	0.0623*** (0.0168)
Centre	0.1104*** (0.0384)	0.0462** (0.0209)	0.0164 (0.0173)	0.0190 (0.0193)	0.0520* (0.0298)
Constant	0.7310*** (0.0664)	1.1074*** (0.0214)	1.2423*** (0.0367)	1.3734*** (0.0366)	1.5490*** (0.0768)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A7: Quantile Regression of Wage for Females in Private Sector. Specification D.

	q10	q25	q50	q75	q90
Schooling	0.0251*** (0.0058)	0.0178*** (0.0027)	0.0151*** (0.0018)	0.0158*** (0.0028)	0.0216*** (0.0033)
Experience	0.0310*** (0.0035)	0.0220*** (0.0014)	0.0186*** (0.0017)	0.0166*** (0.0013)	0.0177*** (0.0012)
Experience ²	-0.0004*** (0.0000)	-0.0003*** (0.0000)	-0.0002*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)
Agriculture	-0.0796 (0.1319)	-0.0284 (0.0963)	-0.0589 (0.0585)	-0.0563 (0.0573)	-0.1027*** (0.0260)
Manufacturing	-0.0034 (0.0334)	-0.0155 (0.0203)	-0.0328 (0.0245)	-0.0617*** (0.0099)	-0.0639* (0.0333)
Energy	-0.0614** (0.0265)	-0.0377* (0.0226)	-0.0554*** (0.0179)	-0.0735*** (0.0194)	-0.1041** (0.0463)
Construction	-0.0720 (0.1075)	-0.0393 (0.0410)	0.0326 (0.0364)	0.0117 (0.0394)	-0.0051 (0.0334)
Retail	-0.0866*** (0.0283)	-0.0503** (0.0199)	-0.0511*** (0.0189)	-0.0908*** (0.0168)	-0.1131*** (0.0401)
Tourism	-0.1262*** (0.0433)	-0.0948** (0.0376)	-0.0970*** (0.0165)	-0.1203*** (0.0148)	-0.0906 (0.0571)
Transport	-0.0554* (0.0318)	-0.0413** (0.0169)	-0.0399*** (0.0145)	-0.0855*** (0.0091)	-0.0883*** (0.0176)
Finance	-0.0047 (0.0363)	-0.0068 (0.0187)	0.0146 (0.0184)	0.0073 (0.0189)	0.0435 (0.0377)
Health	-0.1203* (0.0622)	-0.0766* (0.0411)	-0.0571** (0.0225)	-0.0546** (0.0221)	-0.0453 (0.0344)
Telecommunication	-0.0144 (0.0271)	-0.0024 (0.0158)	0.0064 (0.0180)	-0.0087 (0.0186)	0.0168 (0.0450)
Government Administration	-0.1179*** (0.0438)	-0.0390* (0.0210)	-0.0102 (0.0128)	-0.0462** (0.0190)	-0.0464 (0.0344)
Education	-0.0020 (0.0262)	-0.0214 (0.0205)	-0.0092 (0.0193)	-0.0481*** (0.0159)	-0.0810** (0.0401)
AdminServices	-0.0803*** (0.0271)	-0.0547* (0.0297)	-0.0292** (0.0135)	-0.0705*** (0.0174)	-0.0813*** (0.0290)
Permanent Contract	0.0123 (0.0179)	0.0122 (0.0154)	0.0068 (0.0092)	-0.0143** (0.0066)	-0.0107 (0.0119)
Big firm	0.1262*** (0.0255)	0.0757*** (0.0137)	0.0791*** (0.0116)	0.0714*** (0.0078)	0.0708*** (0.0148)
Manager	-0.1020*** (0.0235)	0.0251 (0.0232)	0.0593*** (0.0157)	0.1035*** (0.0158)	0.1010*** (0.0291)
Intermediate Profession	0.0462 (0.0287)	0.0321*** (0.0123)	0.0280** (0.0118)	0.0443*** (0.0110)	0.0369* (0.0190)
Married	0.0392* (0.0203)	0.0366*** (0.0117)	0.0465*** (0.0080)	0.0547*** (0.0068)	0.0460*** (0.0122)
Kids	-0.0361* (0.0189)	-0.0108 (0.0112)	0.0155* (0.0091)	0.0170*** (0.0060)	0.0340*** (0.0114)
Kids_10	0.0272 (0.0226)	0.0246 (0.0154)	0.0146 (0.0101)	0.0276* (0.0150)	0.0131 (0.0171)
University Performance	-0.0000 (0.0005)	0.0004*** (0.0001)	0.0006*** (0.0001)	0.0008*** (0.0001)	0.0006*** (0.0002)
Knowledge of English	0.0165 (0.0163)	0.0138 (0.0114)	0.0254** (0.0099)	0.0239*** (0.0064)	0.0192 (0.0161)
Computer skill	0.1345*** (0.0359)	0.1105*** (0.0209)	0.0934*** (0.0090)	0.0907*** (0.0098)	0.0631*** (0.0162)
University degree father	-0.0861 (0.0648)	-0.0296 (0.0238)	-0.0016 (0.0130)	0.0293 (0.0332)	0.0856** (0.0345)
University degree mother	0.0997*** (0.0206)	0.0341** (0.0154)	0.0238 (0.0148)	0.0101 (0.0247)	-0.0250 (0.0321)
Metropolitan area	-0.0542*** (0.0178)	-0.0078 (0.0123)	0.0086 (0.0098)	0.0066 (0.0091)	0.0115 (0.0199)
North	0.2520*** (0.0299)	0.1337*** (0.0148)	0.0693*** (0.0061)	0.0549*** (0.0101)	0.0376*** (0.0132)
Centre	0.2236*** (0.0354)	0.1225*** (0.0201)	0.0593*** (0.0090)	0.0451*** (0.0055)	0.0406*** (0.0128)
Constant	0.5096*** (0.0891)	1.0081*** (0.0612)	1.2461*** (0.0312)	1.4264*** (0.0433)	1.5096*** (0.0420)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A8: Quantile Regression of Wage for Males in Public Sector. Specification D

	q10	q25	q50	q75	q90
Schooling	0.0118*** (0.0039)	0.0126*** (0.0014)	0.0122*** (0.0021)	0.0180*** (0.0026)	0.0251*** (0.0031)
Experience	0.0356*** (0.0046)	0.0274*** (0.0018)	0.0259*** (0.0011)	0.0270*** (0.0013)	0.0267*** (0.0021)
Experience ²	-0.0005*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)
Agriculture	-0.0372 (0.0583)	-0.0510 (0.0713)	-0.1082 (0.0704)	-0.0548 (0.1229)	-0.0602 (0.0604)
Manufacturing	0.0463 (0.0799)	0.0482 (0.0413)	0.0111 (0.0249)	-0.0771** (0.0386)	-0.0833 (0.1464)
Energy	0.0408 (0.0747)	0.0349 (0.0288)	-0.0284 (0.0273)	-0.0347 (0.0334)	-0.1340*** (0.0339)
Construction	-0.0611 (0.0975)	0.0730 (0.0523)	0.0287 (0.0431)	0.0131 (0.0876)	-0.0203 (0.0512)
Retail	-0.0726 (0.1131)	-0.0506 (0.0581)	-0.0895*** (0.0339)	-0.1487*** (0.0395)	-0.2026*** (0.0319)
Tourism	-0.0387 (0.0882)	0.0052 (0.0596)	-0.0492 (0.0431)	-0.0198 (0.0730)	-0.1178 (0.1389)
Transport	-0.0254 (0.0518)	0.0551*** (0.0164)	0.0113 (0.0217)	0.0533* (0.0312)	-0.0003 (0.0256)
Finance	-0.0683* (0.0399)	-0.0024 (0.0252)	-0.0447** (0.0184)	-0.0148 (0.0397)	-0.0295 (0.1303)
Health	-0.0364 (0.0351)	-0.0365** (0.0148)	-0.0747*** (0.0216)	-0.1033*** (0.0234)	-0.1391*** (0.0301)
Telecommunication	-0.0515 (0.0467)	-0.0212 (0.0295)	0.0092 (0.0205)	0.0350 (0.0230)	-0.0139 (0.0328)
Government Administration	-0.0213 (0.0166)	-0.0108 (0.0070)	-0.0400*** (0.0140)	-0.0591*** (0.0192)	-0.0719*** (0.0272)
Education	-0.0236 (0.0220)	-0.0112 (0.0143)	-0.0357** (0.0158)	-0.0263 (0.0170)	-0.0587*** (0.0158)
AdminServices	-0.0190 (0.0349)	0.0205 (0.0161)	0.0369 (0.0306)	0.0528* (0.0272)	-0.0160 (0.0310)
Permanent Contract	0.0550* (0.0323)	0.0066 (0.0203)	0.0400 (0.0283)	0.0274 (0.0249)	0.0156 (0.0276)
Big firm	0.0092 (0.0362)	-0.0033 (0.0247)	0.0211 (0.0296)	0.0094 (0.0323)	-0.0014 (0.0389)
Manager	0.0250*** (0.0085)	0.0783*** (0.0118)	0.1396*** (0.0156)	0.2126*** (0.0251)	0.2584*** (0.0296)
Intermediate Profession	0.0110 (0.0185)	0.0529*** (0.0134)	0.0594*** (0.0087)	0.0552*** (0.0109)	0.0485*** (0.0080)
Married	0.0387 (0.0267)	0.0267* (0.0158)	0.0278** (0.0135)	0.0272* (0.0143)	0.0202 (0.0254)
Kids	0.0333 (0.0254)	0.0208 (0.0144)	0.0140 (0.0157)	0.0323** (0.0133)	0.0111 (0.0224)
Kids_10	0.0504* (0.0264)	0.0514*** (0.0184)	0.0789*** (0.0141)	0.0539*** (0.0155)	0.0340** (0.0153)
University Performance	0.0004 (0.0003)	0.0006*** (0.0001)	0.0014*** (0.0002)	0.0023*** (0.0002)	0.0023*** (0.0002)
Knowledge of English	0.0256* (0.0136)	0.0187** (0.0083)	0.0233 (0.0146)	0.0360*** (0.0137)	0.0523*** (0.0149)
Computer skill	0.0318* (0.0162)	0.0730*** (0.0083)	0.0903*** (0.0112)	0.0673*** (0.0119)	0.0724*** (0.0198)
University degree father	0.0595 (0.0428)	0.0268* (0.0156)	0.0348*** (0.0115)	-0.0308 (0.0193)	-0.0397 (0.0426)
University degree mother	-0.0339 (0.0441)	-0.0407 (0.0388)	-0.0485 (0.0397)	0.0128 (0.0367)	0.0369 (0.0451)
Metropolitan area	-0.0116 (0.0174)	-0.0084 (0.0076)	-0.0196* (0.0101)	-0.0286*** (0.0092)	-0.0062 (0.0139)
North	-0.0093 (0.0119)	-0.0063 (0.0106)	-0.0043 (0.0077)	0.0046 (0.0080)	0.0294 (0.0214)
Centre	0.0187*** (0.0068)	-0.0051 (0.0094)	0.0036 (0.0117)	0.0387** (0.0159)	0.0842*** (0.0218)
Constant	1.1322*** (0.0898)	1.3228*** (0.0504)	1.4399*** (0.0558)	1.4944*** (0.0533)	1.5631*** (0.0425)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A9: Quantile Regression of Wage for Females in Public Sector. Specification D.

	q10	q25	q50	q75	q90
Schooling	0.0193*** (0.0038)	0.0158*** (0.0027)	0.0168*** (0.0032)	0.0149*** (0.0020)	0.0177*** (0.0047)
Experience	0.0296*** (0.0025)	0.0214*** (0.0020)	0.0138*** (0.0015)	0.0148*** (0.0017)	0.0211*** (0.0022)
Experience ²	-0.0004*** (0.0000)	-0.0003*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0002*** (0.0000)
Agriculture	-0.1228 (0.1233)	-0.0815** (0.0383)	-0.1043** (0.0413)	-0.1671 (0.1645)	0.0635 (0.1801)
Manufacturing	-0.1091 (0.2684)	-0.1793* (0.1008)	-0.1187* (0.0635)	-0.0521 (0.0804)	-0.1520 (0.1126)
Energy	-0.0484 (0.1197)	0.0065 (0.0981)	-0.0296 (0.0304)	-0.0408 (0.0460)	0.0858 (0.1386)
Construction	0.0748 (0.0981)	-0.0211 (0.0322)	-0.1162** (0.0531)	-0.1325* (0.0784)	-0.1923*** (0.0472)
Retail	-0.3275** (0.1414)	-0.1433 (0.0892)	-0.1111*** (0.0355)	-0.1005* (0.0595)	-0.0600 (0.0692)
Tourism	0.0454 (0.1061)	-0.0224 (0.0544)	-0.0572 (0.0834)	-0.0525 (0.0470)	-0.0037 (0.0756)
Transport	-0.0261 (0.0975)	-0.0565** (0.0249)	-0.0277 (0.0636)	0.0221 (0.0430)	0.0340 (0.0669)
Finance	-0.0176 (0.0235)	-0.0241 (0.0182)	-0.0290* (0.0154)	-0.0610*** (0.0185)	-0.0234 (0.0386)
Health	-0.0551* (0.0319)	-0.0371** (0.0184)	-0.0246 (0.0191)	-0.0411*** (0.0153)	-0.0349 (0.0215)
Telecommunication	-0.0015 (0.0400)	-0.0184 (0.0414)	0.0236 (0.0253)	0.0254 (0.0207)	-0.0201 (0.0206)
Government Administration	-0.0188 (0.0222)	-0.0118 (0.0140)	-0.0060 (0.0127)	-0.0290 (0.0180)	-0.0461 (0.0314)
Education	-0.0153 (0.0285)	-0.0193* (0.0110)	0.0060 (0.0173)	-0.0095 (0.0126)	0.0109 (0.0233)
AdminServices	0.0127 (0.0253)	0.0206 (0.0128)	0.0403*** (0.0149)	0.0204 (0.0189)	0.0369 (0.0230)
Permanent Contract	-0.0026 (0.0356)	-0.0095 (0.0189)	-0.0019 (0.0167)	-0.0107 (0.0078)	-0.0042 (0.0221)
Big firm	0.0395 (0.0440)	0.0119 (0.0278)	0.0244 (0.0204)	0.0405*** (0.0129)	0.0862*** (0.0210)
Manager	0.0124 (0.0210)	0.0521*** (0.0157)	0.0835*** (0.0161)	0.1552*** (0.0151)	0.2542*** (0.0386)
Intermediate Profession	0.0238** (0.0119)	0.0442*** (0.0076)	0.0530*** (0.0117)	0.0535*** (0.0123)	0.0420** (0.0184)
Married	0.0231** (0.0113)	0.0256** (0.0124)	0.0181** (0.0092)	0.0297*** (0.0097)	0.0212 (0.0143)
Kids	-0.0014 (0.0128)	0.0014 (0.0078)	0.0071 (0.0115)	0.0013 (0.0084)	0.0196 (0.0168)
Kids_10	0.0334 (0.0237)	0.0202 (0.0172)	0.0080 (0.0104)	0.0062 (0.0098)	-0.0054 (0.0176)
University Performance	0.0004*** (0.0001)	0.0007*** (0.0001)	0.0008*** (0.0001)	0.0011*** (0.0001)	0.0015*** (0.0002)
Knowledge of English	-0.0287 (0.0268)	-0.0123 (0.0087)	-0.0079 (0.0084)	0.0038 (0.0123)	-0.0091 (0.0109)
Computer skill	0.0345*** (0.0131)	0.0305* (0.0174)	0.0210 (0.0129)	0.0382*** (0.0098)	0.0273 (0.0271)
University degree father	-0.0273 (0.0177)	-0.0030 (0.0217)	0.0244 (0.0154)	0.0925*** (0.0188)	0.1164** (0.0451)
University degree mother	-0.0237 (0.0564)	-0.0189 (0.0264)	-0.0065 (0.0154)	-0.0162 (0.0300)	0.0064 (0.0355)
Metropolitan area	-0.0098 (0.0187)	-0.0056 (0.0089)	-0.0109** (0.0050)	-0.0195** (0.0076)	-0.0134 (0.0116)
North	0.0167 (0.0264)	-0.0056 (0.0101)	-0.0016 (0.0099)	-0.0001 (0.0068)	-0.0079 (0.0158)
Centre	0.0030 (0.0187)	-0.0083 (0.0115)	-0.0062 (0.0072)	0.0055 (0.0094)	0.0228 (0.0154)
Constant	1.1157*** (0.0999)	1.3961*** (0.0481)	1.5493*** (0.0474)	1.6540*** (0.0352)	1.6431*** (0.0614)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A10: Fixed Effects Quantile Regression of Wage for Males in Private Sector. Specification D

	q10	q25	q50	q75	q90
Schooling	0.0049** (0.0024)	0.0061** (0.0024)	0.0056*** (0.0011)	0.0053*** (0.0020)	0.0029 (0.0038)
Experience	0.0311*** (0.0023)	0.0247*** (0.0009)	0.0224*** (0.0008)	0.0204*** (0.0016)	0.0172*** (0.0032)
Experience ²	-0.0004*** (0.0000)	-0.0003*** (0.0000)	-0.0002*** (0.0000)	-0.0001*** (0.0000)	-0.0001 (0.0000)
Agriculture	-0.0765 (0.0577)	-0.0854 (0.0607)	-0.0644*** (0.0215)	-0.0846*** (0.0319)	-0.1066 (0.0727)
Manufacturing	-0.0174 (0.0393)	-0.0282 (0.0204)	-0.0008 (0.0083)	-0.0032 (0.0133)	0.0381 (0.0332)
Energy	0.0807*** (0.0234)	0.0367*** (0.0088)	0.0474*** (0.0119)	0.0551*** (0.0183)	0.0752** (0.0349)
Construction	0.0034 (0.0462)	-0.0331* (0.0196)	0.0042 (0.0060)	-0.0049 (0.0194)	0.0450 (0.0531)
Retail	-0.0141 (0.0355)	-0.0135 (0.0151)	0.0103 (0.0107)	0.0130 (0.0124)	0.0262 (0.0194)
Tourism	-0.0338 (0.0386)	-0.0074 (0.0216)	0.0003 (0.0124)	0.0085 (0.0212)	0.0395 (0.0316)
Transport	-0.0317 (0.0363)	-0.0105 (0.0139)	0.0097 (0.0090)	0.0016 (0.0123)	0.0137 (0.0311)
Finance	-0.0040 (0.0393)	-0.0036 (0.0142)	0.0201 (0.0133)	0.0218* (0.0118)	0.0246 (0.0272)
Health	0.0082 (0.0448)	0.0010 (0.0195)	0.0109 (0.0173)	0.0118 (0.0220)	0.0095 (0.0566)
Telecommunication	0.0060 (0.0388)	0.0160 (0.0163)	0.0359*** (0.0083)	0.0220** (0.0108)	0.0407* (0.0225)
Government Administration	-0.0047 (0.0443)	-0.0032 (0.0160)	0.0050 (0.0104)	-0.0153 (0.0242)	-0.0003 (0.0243)
Education	0.0532 (0.0404)	0.0661*** (0.0168)	0.0694*** (0.0166)	0.0631** (0.0273)	0.0778* (0.0420)
AdminServices	-0.0205 (0.0348)	-0.0110 (0.0238)	0.0050 (0.0118)	-0.0174 (0.0185)	0.0341 (0.0595)
Permanent Contract	-0.0416 (0.0296)	-0.0027 (0.0127)	0.0086 (0.0071)	-0.0011 (0.0140)	-0.0313 (0.0261)
Big firm	0.0239** (0.0100)	0.0242*** (0.0059)	0.0278*** (0.0052)	0.0336*** (0.0094)	0.0291 (0.0244)
Manager	-0.0698** (0.0306)	-0.0053 (0.0119)	0.0066 (0.0078)	0.0241** (0.0105)	0.0709** (0.0283)
Intermediate Profession	0.0125 (0.0130)	0.0292*** (0.0088)	0.0329*** (0.0053)	0.0428*** (0.0074)	0.0558*** (0.0092)
Married	0.0298* (0.0159)	0.0458*** (0.0111)	0.0526*** (0.0068)	0.0591*** (0.0119)	0.0740*** (0.0112)
Kids	-0.0307 (0.0211)	-0.0251*** (0.0093)	-0.0236*** (0.0049)	-0.0315*** (0.0099)	-0.0351*** (0.0106)
Kids_10	-0.0534*** (0.0192)	-0.0582*** (0.0072)	-0.0491*** (0.0069)	-0.0595*** (0.0119)	-0.0981*** (0.0229)
University Performance	0.0009*** (0.0003)	0.0007*** (0.0001)	0.0009*** (0.0001)	0.0011*** (0.0001)	0.0014*** (0.0002)
Knowledge of English	0.0521*** (0.0136)	0.0483*** (0.0051)	0.0472*** (0.0046)	0.0472*** (0.0078)	0.0488*** (0.0148)
Computer skill	-0.0195 (0.0216)	0.0082 (0.0098)	-0.0068 (0.0086)	-0.0161* (0.0092)	-0.0311 (0.0416)
University degree father	-0.0004 (0.0433)	-0.0488*** (0.0156)	-0.0525*** (0.0103)	-0.0565*** (0.0094)	-0.0649*** (0.0183)
University degree mother	0.2217*** (0.0507)	0.3180*** (0.0170)	0.3109*** (0.0130)	0.3059*** (0.0321)	0.3781*** (0.0664)
Metropolitan area	-0.0154* (0.0086)	0.0025 (0.0077)	-0.0083** (0.0035)	-0.0166** (0.0075)	-0.0002 (0.0159)
North	0.3527*** (0.0144)	0.3497*** (0.0103)	0.3461*** (0.0068)	0.3432*** (0.0064)	0.3493*** (0.0236)
Centre	0.2772*** (0.0268)	0.2890*** (0.0120)	0.2808*** (0.0049)	0.2796*** (0.0069)	0.2775*** (0.0286)
Constant	1.2965*** (0.0382)	1.3236*** (0.0335)	1.4078*** (0.0199)	1.5219*** (0.0385)	1.6944*** (0.0793)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A11: Fixed Effects Quantile Regression of Wage for Females in Private Sector. Specification D.

	q10	q25	q50	q75	q90
Schooling	0.0022 (0.0023)	0.0063** (0.0027)	0.0052*** (0.0017)	0.0062*** (0.0022)	0.0082*** (0.0021)
Experience	0.0144*** (0.0025)	0.0187*** (0.0008)	0.0170*** (0.0006)	0.0159*** (0.0011)	0.0162*** (0.0034)
Experience ²	-0.0002*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)
Agriculture	0.0890** (0.0435)	0.0143 (0.0212)	0.0219 (0.0370)	0.0079 (0.0224)	-0.0811*** (0.0267)
Manufacturing	-0.0406 (0.0306)	-0.0445*** (0.0168)	-0.0374*** (0.0123)	-0.0465*** (0.0152)	-0.0729*** (0.0168)
Energy	-0.0414 (0.0409)	-0.0510*** (0.0140)	-0.0541*** (0.0151)	-0.0536*** (0.0137)	-0.0316 (0.0286)
Construction	-0.0289 (0.0468)	-0.0223 (0.0293)	-0.0012 (0.0325)	-0.0013 (0.0397)	-0.0209 (0.0300)
Retail	-0.0564* (0.0308)	-0.0515*** (0.0156)	-0.0466*** (0.0106)	-0.0472*** (0.0169)	-0.0658*** (0.0195)
Tourism	-0.0680** (0.0296)	-0.0318* (0.0188)	-0.0260** (0.0117)	-0.0124 (0.0219)	-0.0065 (0.0416)
Transport	-0.0356 (0.0383)	-0.0477*** (0.0082)	-0.0505*** (0.0072)	-0.0666*** (0.0101)	-0.0831*** (0.0261)
Finance	0.0201 (0.0226)	0.0112 (0.0142)	0.0116 (0.0087)	0.0138 (0.0204)	0.0347 (0.0266)
Health	0.0226 (0.0402)	0.0218 (0.0187)	0.0238* (0.0129)	0.0219** (0.0103)	0.0188 (0.0257)
Telecommunication	0.0322 (0.0417)	0.0246 (0.0188)	0.0138 (0.0113)	-0.0062 (0.0186)	-0.0060 (0.0131)
Government Administration	-0.0047 (0.0380)	-0.0218 (0.0189)	-0.0243** (0.0116)	-0.0254 (0.0220)	-0.0113 (0.0271)
Education	0.0276 (0.0275)	0.0346* (0.0185)	0.0161 (0.0112)	0.0105 (0.0121)	-0.0176 (0.0195)
AdminServices	0.0196 (0.0307)	0.0138 (0.0167)	0.0080 (0.0067)	-0.0024 (0.0156)	-0.0136 (0.0202)
Permanent Contract	-0.0190* (0.0101)	-0.0117 (0.0072)	-0.0101 (0.0078)	-0.0178** (0.0080)	-0.0285* (0.0152)
Big firm	0.0335*** (0.0111)	0.0262*** (0.0071)	0.0236*** (0.0050)	0.0215*** (0.0060)	0.0115 (0.0091)
Manager	0.0317 (0.0294)	0.0254*** (0.0082)	0.0460*** (0.0138)	0.0662*** (0.0150)	0.0584** (0.0264)
Intermediate Profession	0.0385* (0.0212)	0.0341*** (0.0094)	0.0335*** (0.0069)	0.0325*** (0.0097)	0.0477** (0.0186)
Married	0.0421*** (0.0158)	0.0308*** (0.0063)	0.0337*** (0.0040)	0.0334*** (0.0080)	0.0300*** (0.0111)
Kids	-0.0173 (0.0154)	-0.0192*** (0.0044)	-0.0036 (0.0042)	0.0145** (0.0070)	0.0075 (0.0082)
Kids_10	0.0589*** (0.0198)	0.0678*** (0.0055)	0.0498*** (0.0056)	0.0418*** (0.0109)	0.0669*** (0.0207)
University Performance	0.0002 (0.0001)	0.0001 (0.0001)	0.0001** (0.0000)	0.0000 (0.0001)	-0.0000 (0.0001)
Knowledge of English	0.0120 (0.0138)	0.0148** (0.0061)	0.0185*** (0.0040)	0.0250*** (0.0068)	0.0337*** (0.0102)
Computer skill	0.0513*** (0.0189)	0.0314** (0.0126)	0.0311*** (0.0076)	0.0198* (0.0109)	0.0349* (0.0182)
University degree father	0.0278 (0.0477)	0.0754*** (0.0104)	0.0789*** (0.0104)	0.0991** (0.0412)	0.1361*** (0.0313)
University degree mother	0.0247 (0.0387)	0.0121 (0.0107)	-0.0021 (0.0097)	-0.0310* (0.0167)	-0.0056 (0.0360)
Metropolitan area	-0.0009 (0.0095)	0.0058 (0.0065)	0.0146*** (0.0029)	0.0148** (0.0065)	0.0178 (0.0138)
North	-0.0235 (0.0146)	-0.0591*** (0.0083)	-0.0625*** (0.0086)	-0.0687*** (0.0103)	-0.0956*** (0.0205)
Centre	0.1835*** (0.0195)	0.1600*** (0.0120)	0.1562*** (0.0095)	0.1545*** (0.0099)	0.1419*** (0.0208)
Constant	1.6102*** (0.0647)	1.6234*** (0.0309)	1.7123*** (0.0181)	1.7640*** (0.0283)	1.8584*** (0.0315)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A12: Fixed Effects Quantile Regression of Wage for Males in Public Sector. Specification D

	q10	q25	q50	q75	q90
Schooling	0.0123*** (0.0027)	0.0046*** (0.0013)	0.0025*** (0.0009)	0.0018 (0.0021)	0.0010 (0.0044)
Experience	0.0303*** (0.0028)	0.0289*** (0.0018)	0.0273*** (0.0006)	0.0271*** (0.0012)	0.0292*** (0.0030)
Experience ²	-0.0005*** (0.0000)	-0.0005*** (0.0000)	-0.0004*** (0.0000)	-0.0004*** (0.0000)	-0.0004*** (0.0000)
Agriculture	0.0964** (0.0488)	0.0764* (0.0458)	0.0244* (0.0142)	-0.0185 (0.0118)	-0.0555 (0.0521)
Manufacturing	0.2143*** (0.0440)	0.2038*** (0.0356)	0.1812*** (0.0129)	0.1117 (0.0828)	0.2435** (0.1151)
Energy	0.0323 (0.0299)	0.0222 (0.0200)	-0.0014 (0.0139)	-0.0253 (0.0170)	-0.0066 (0.0445)
Construction	0.0092 (0.0685)	-0.0540 (0.0775)	-0.0334 (0.0966)	0.0206 (0.1491)	-0.0261 (0.1559)
Retail	0.1099 (0.1387)	0.0071 (0.0411)	0.0513 (0.0477)	0.0161 (0.0190)	-0.0318 (0.0431)
Tourism	-0.3593** (0.1739)	-0.1433*** (0.0360)	-0.1561*** (0.0123)	-0.2078*** (0.0129)	-0.2285*** (0.0453)
Transport	0.0167 (0.0172)	0.0107 (0.0108)	0.0057 (0.0117)	-0.0042 (0.0175)	0.0257 (0.0230)
Finance	-0.0437 (0.0958)	-0.0502** (0.0216)	-0.0645** (0.0260)	-0.0630*** (0.0212)	-0.0701*** (0.0256)
Health	-0.0161 (0.0323)	-0.0268 (0.0184)	-0.0179** (0.0072)	-0.0355*** (0.0123)	-0.0427 (0.0314)
Telecommunication	0.0319 (0.0319)	-0.0189 (0.0252)	0.0134 (0.0142)	-0.0018 (0.0158)	-0.0011 (0.0381)
Government Administration	0.0184 (0.0291)	0.0004 (0.0066)	-0.0033 (0.0065)	-0.0101 (0.0097)	0.0051 (0.0223)
Education	-0.0106 (0.0338)	-0.0162* (0.0085)	-0.0157** (0.0068)	-0.0210* (0.0119)	-0.0192 (0.0139)
AdminServices	0.0815*** (0.0290)	0.0523*** (0.0143)	0.0549*** (0.0149)	0.0648*** (0.0242)	0.0695* (0.0381)
Permanent Contract	-0.0140 (0.0408)	-0.0443*** (0.0118)	-0.0255** (0.0109)	-0.0570*** (0.0166)	-0.0473* (0.0246)
Big firm	-0.0705* (0.0401)	-0.0841*** (0.0199)	-0.0741*** (0.0183)	-0.0909*** (0.0188)	-0.0922*** (0.0250)
Manager	-0.0298** (0.0146)	0.0035 (0.0071)	0.0058 (0.0056)	0.0434*** (0.0095)	0.0400** (0.0183)
Intermediate Profession	-0.0187 (0.0174)	-0.0174** (0.0084)	-0.0128*** (0.0046)	-0.0062 (0.0065)	-0.0086 (0.0111)
Married	-0.0305 (0.0256)	-0.0205** (0.0088)	-0.0189*** (0.0055)	-0.0107 (0.0118)	-0.0309 (0.0203)
Kids	0.0674*** (0.0253)	0.0669*** (0.0058)	0.0759*** (0.0062)	0.0841*** (0.0066)	0.1047*** (0.0172)
Kids_10	-0.0297 (0.0314)	-0.0050 (0.0090)	0.0008 (0.0062)	0.0076 (0.0108)	0.0188 (0.0286)
University Performance	0.0015*** (0.0003)	0.0014*** (0.0001)	0.0015*** (0.0000)	0.0016*** (0.0001)	0.0022*** (0.0003)
Knowledge of English	0.0069 (0.0142)	-0.0065 (0.0086)	0.0091* (0.0048)	-0.0080 (0.0112)	-0.0036 (0.0123)
Computer skill	0.0653*** (0.0133)	0.0698*** (0.0080)	0.0673*** (0.0072)	0.0740*** (0.0113)	0.0868*** (0.0238)
University degree father	-0.1305*** (0.0257)	-0.1053*** (0.0189)	-0.0860*** (0.0219)	-0.0456* (0.0236)	-0.0515 (0.0317)
University degree mother	0.2658*** (0.0899)	0.2866*** (0.0295)	0.2975*** (0.0346)	0.3053*** (0.0383)	0.3011*** (0.0359)
Metropolitan area	0.0750*** (0.0130)	0.0686*** (0.0031)	0.0675*** (0.0052)	0.0616*** (0.0084)	0.0452*** (0.0142)
North	-0.0581*** (0.0168)	-0.0457*** (0.0090)	-0.0522*** (0.0061)	-0.0514*** (0.0053)	-0.0505*** (0.0121)
Centre	0.1924*** (0.0134)	0.2065*** (0.0069)	0.2055*** (0.0075)	0.2038*** (0.0067)	0.2003*** (0.0203)
Constant	1.7985*** (0.0749)	1.8076*** (0.0358)	1.8383*** (0.0215)	1.8979*** (0.0299)	1.8989*** (0.0476)
Time effects	X	X	X	X	X

Bootstrap s.e. in parenthesis (800 replications). ***: significant at .99 level; **: significant at .95 level; *: significant at .90 level

Table A13: Fixed Effects Quantile Regression of Wage for Females in Public Sector. Specification D

	q10	q25	q50	q75	q90
Schooling	0.0073* (0.0039)	0.0070*** (0.0025)	0.0049*** (0.0015)	0.0041*** (0.0013)	-0.0028 (0.0025)
Experience	0.0057*** (0.0019)	0.0070*** (0.0010)	0.0069*** (0.0010)	0.0070*** (0.0012)	0.0103*** (0.0024)
Experience ²	-0.0000 (0.0000)	-0.0000** (0.0000)	-0.0000** (0.0000)	-0.0000 (0.0000)	-0.0001* (0.0000)
Agriculture	-0.0040 (0.0487)	-0.0881*** (0.0234)	-0.1111*** (0.0283)	-0.1190*** (0.0374)	-0.1366*** (0.0322)
Manufacturing	-0.1456** (0.0574)	-0.0786 (0.0693)	-0.0891 (0.0791)	-0.0621 (0.1013)	0.0713 (0.1294)
Energy	-0.0031 (0.0156)	-0.0517*** (0.0102)	-0.0942*** (0.0342)	-0.0350 (0.0929)	0.0302 (0.0832)
Construction	0.0900*** (0.0275)	-0.0130 (0.0210)	-0.0038 (0.0589)	0.0399 (0.0779)	-0.0168 (0.0646)
Retail	-0.1094 (0.0668)	-0.1314*** (0.0351)	-0.1289*** (0.0219)	-0.1361*** (0.0327)	-0.0977** (0.0443)
Tourism	-0.0166 (0.0780)	0.0727 (0.0494)	0.0631** (0.0320)	0.0521 (0.1589)	0.3260** (0.1425)
Transport	0.0111 (0.0386)	-0.0292 (0.0342)	-0.0242 (0.0231)	-0.0097 (0.0285)	-0.0468 (0.0873)
Finance	-0.1530*** (0.0567)	-0.1102** (0.0460)	-0.0667*** (0.0115)	-0.0707** (0.0341)	-0.0737* (0.0379)
Health	-0.0486*** (0.0154)	-0.0370*** (0.0082)	-0.0181*** (0.0056)	-0.0281** (0.0142)	-0.0276 (0.0232)
Telecommunication	-0.0127 (0.0407)	0.0435** (0.0201)	0.0881*** (0.0184)	0.0776 (0.0533)	0.3267* (0.1926)
Government Administration	-0.0165 (0.0109)	-0.0114 (0.0107)	0.0019 (0.0072)	-0.0065 (0.0113)	0.0002 (0.0208)
Education	-0.0225 (0.0173)	-0.0180** (0.0072)	-0.0082 (0.0084)	-0.0028 (0.0167)	0.0147 (0.0174)
AdminServices	-0.0340 (0.0243)	-0.0425*** (0.0157)	-0.0282*** (0.0069)	-0.0292* (0.0152)	-0.0186 (0.0398)
Permanent Contract	-0.0627*** (0.0217)	-0.0276** (0.0125)	-0.0175** (0.0083)	-0.0152 (0.0136)	-0.0263 (0.0203)
Big firm	-0.0638*** (0.0220)	-0.0259* (0.0132)	-0.0250*** (0.0080)	-0.0257** (0.0111)	-0.0506*** (0.0190)
Manager	-0.0129 (0.0178)	0.0086* (0.0050)	0.0172*** (0.0061)	0.0261** (0.0105)	0.0389** (0.0163)
Intermediate Profession	-0.0415** (0.0200)	-0.0176*** (0.0065)	-0.0229** (0.0089)	-0.0144 (0.0097)	-0.0273** (0.0132)
Married	-0.0205* (0.0117)	-0.0214*** (0.0078)	-0.0227*** (0.0050)	-0.0226*** (0.0030)	-0.0267*** (0.0093)
Kids	0.0065 (0.0088)	0.0034 (0.0038)	0.0058 (0.0046)	0.0140*** (0.0039)	0.0120 (0.0113)
Kids_10	-0.0151 (0.0180)	-0.0205* (0.0119)	-0.0229*** (0.0041)	-0.0331*** (0.0064)	-0.0296 (0.0181)
University Performance	0.0011*** (0.0002)	0.0012*** (0.0001)	0.0012*** (0.0000)	0.0012*** (0.0000)	0.0013*** (0.0001)
Knowledge of English	0.0126 (0.0107)	0.0272*** (0.0061)	0.0414*** (0.0035)	0.0572*** (0.0051)	0.0840*** (0.0187)
Computer skill	0.0657*** (0.0118)	0.0644*** (0.0092)	0.0682*** (0.0050)	0.0780*** (0.0077)	0.1034*** (0.0162)
University degree father	-0.0104 (0.0391)	-0.0028 (0.0097)	-0.0124* (0.0071)	-0.0182** (0.0073)	-0.0230 (0.0455)
University degree mother	0.2257*** (0.0623)	0.2369*** (0.0132)	0.2227*** (0.0157)	0.2218*** (0.0289)	0.2995*** (0.1051)
Metropolitan area	-0.0673*** (0.0101)	-0.0571*** (0.0062)	-0.0593*** (0.0037)	-0.0567*** (0.0083)	-0.0617*** (0.0144)
North	0.0292*** (0.0110)	0.0174*** (0.0065)	0.0252*** (0.0043)	0.0225*** (0.0043)	0.0206* (0.0110)
Centre	0.0302** (0.0146)	0.0297*** (0.0080)	0.0376*** (0.0037)	0.0368*** (0.0050)	0.0468*** (0.0095)
Constant	2.1414*** (0.0581)	2.1429*** (0.0344)	2.1391*** (0.0236)	2.1708*** (0.0333)	2.2348*** (0.0426)

Bootstrap s.e. in parenthesis (800 replications). ***, significant at .99 level; **, significant at .95 level; *, significant at .90 level