FRIEDRICH-ALEXANDER-UNIVERSITÄT ERLANGEN-NÜRNBERG

Lehrstuhl für VWL, insbes. Arbeitsmarkt- und Regionalpolitik
Professor Dr. Claus Schnabel

Diskussionspapiere
Discussion Papers

NO. 103

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FEBRUARY 2018

ISSN 1615-5831

Editor: Prof. Dr. Claus Schnabel, Friedrich-Alexander-Universität Erlangen-Nürnberg

Discriminate Me – if You Can! The Disappearance of the Gender Pay Gap among Public-Contest Selected Employees*

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Abstract: This paper analyzes the effect of public-contest recruitment on earnings for men and women using Italian microdata over a time period of ten years. We find that the gender pay gap vanishes and even reverses among the young, when employees are selected through public contests. The results suggest that selection mechanisms such as public contests may offer a way for merit-based and gender-fair wage setting. However, since public contests and the public sector are highly correlated, we analyze the gender pay gap taking the interconnection between the public and private sector as well as the open contest issue into account. By decomposing our results by sector we find that public contests represent a necessary but not sufficient condition for merit-based and gender-fair recruitment. Similarly, the institutional environment of the public sector is a necessary but not sufficient condition for making public contests merit-based and gender-fair screening devices. These two factors taken together, cause the disappearance of the gender pay gap.

Zusammenfassung: Dieser Beitrag untersucht die Auswirkungen von Einstellungen durch öffentlichen Wettbewerb (*concorsi pubblici*) auf den Verdienst von Männern und Frauen anhand italienischer Mikrodaten in einem Zeitraum von 10 Jahren. Er zeigt, dass das geschlechtsspezifische Lohndifferenzial im Mittel verschwindet, beziehungsweise umkehrt für unter 35-Jährige, wenn die Einstellung durch öffentlichen Wettbewerb stattfindet. Dieses Ergebnis legt nahe, dass öffentliche Wettbewerbe gendergerechte und leistungsorientierte Einstellungsverfahren ermöglichen. Da das Prinzip des öffentliche Wettbewerbs in Italien jedoch stark mit dem öffentlichen Sektor korreliert ist, betrachten wir das geschlechtsspezifische Lohndifferenzial (nach Einstellungsverfahren) separat für den öffentlichen und privaten Sektor. Dabei ergibt sich, dass öffentliche Wettbewerbe und der institutionelle Rahmen des öffentlichen Sektors notwendige aber keine hinreichenden Bedingungen für gendergerechte und leistungsorientierte Rekrutierung sind. Beide Faktoren zusammen führen zum Verschwinden des geschlechtsspezifischen Lohndifferenzials.

Keywords: Gender Pay Gap, Public-Contest Recruitment, Double Sample Selection
JEL - Classification: J7, J13, J310

*We are grateful to the Italian Institute for the Development of Vocational Training for Workers (ISFOL) and in particular to Emiliano Mandrone for data provision. We thank Lawrence Kahn, Insan Tunali and Steven Stillman for useful advice and suggestions. For helpful comments, we thank the participants of the open session on "Gender" at the Annual Conference of the German Economic Association 2016.

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1 Introduction

There is a huge literature on the Gender Pay Gap (GPG) and on its narrowing in recent years (e.g. Blau and Kahn, 2003, 2006, 2007; Godin, 2014; Kahn, 2015; Blau and Kahn, 2016). However, women continue to earn considerably less than men; about 20% in the United States of America and 15% in Europe.[1] Despite the empirical finding that the difference in pay between men and women has decreased in the last decades, a consistent part of the GPG remains unexplained and this part has not declined over time but has been roughly stable over the past 30 years (Blau and Kahn, 2016).

The unexplained GPG, i.e. the portion of the GPG not due to gender differences in observed characteristics, is generally taken to be an estimate of gender discrimination[2] and may be influenced by cognitive processes such as stereotyping. The literature on gender stereotypes finds that systematic errors in screening and performance assessment of applicants arise from unconscious discriminatory behavior (Lindzey et al., 1998; Schein, 2007). This literature is relevant for the analysis of the GPG as it highlights how, because of stereotypes, an identical curriculum is evaluated in a substantially different way if attributed to a woman instead of to a man (Valian, 1998). Based on findings from social psychologists that discriminatory attitudes and stereotyping may be unconscious and therefore difficult to detect and erase, Blau and Kahn (2016) argue that as gender discrimination has become less socially acceptable, it has become less overt and more subtle as well as unconscious.

The aim of this paper is to show that the selection procedure of public contests may counteract the discrimination mechanisms in the wage setting process. Public contests increase the accuracy of assessment as they require the use of objective criteria and justification of the candidate choice (Dobbs and Crano, 2001) thereby increasing the probability of fair assessment for both men and women compared to other recruitment methods. Castagnetti and Rosti (2013) identify specific environments in which the use of stereotypes is expected to be more likely to exert an influence on screening devices[3] and show that the unexplained component of the GPG increases in line with the expected influence of stereotypes.

This paper focuses on Italian public contests as their implementation is strictly regulated by Constitutional Law. In particular, the Italian Constitution states that every public employee shall be recruited following open competition procedures. Recruitment without public contest in the public sector is only possible if explicitly regulated by law.[4]

[1] See Kahn (2015), where the GPG in several countries is compared from 2010 to 2012.

[2] However, as stressed by Blau and Kahn (2006), the unexplained portion of the GPG may include effects of unobserved productivity differentials.

[3] Screening devices include for example educational attainment, aptitude tests or letters of recommendation as well as competitive mechanisms ranking the applicants.

[4] In general, in other European countries, only higher public servants are recruited through open competition, yet with different legal constraints compared to the Italian public contest. Other public-sector recruitment takes place via private methods of recruitment such as candidate submittal or agency recruitment. The latter is the main procedure used in the private sector. See Cardona (2006) for a detailed description of the recruitment in civil service systems in Europe.

Even though, public contests are the main recruitment method in the public sector, public-contest recruitment may take place in the private sector as well. However, as public-sector employees enjoy different institutional norms compared to private-sector employees, public contests in the public or private sector may evolve differently. In public employment, for example, pay levels are generally sticky and jobs are highly stable in order to guarantee the efficient exercise of public functions (Carinci et al., 2003). Therefore, in order to identify the impact of public contests on the GPG, we control for both the public and the private sector by estimating and decomposing the GPG separately within each sector.

This study uses a large survey of the Italian labor market, the survey ISFOL PLUS,[5] conducted by the Italian Institute for the Development of Vocational Training for Workers (ISFOL), over the period 2005-2014. The empirical strategy relies on the estimation and comparison of the GPG between two groups of employees which differ in the hiring method (i.e. recruitment by public contest or not). In the estimation we account for sample selection both in employment and in recruitment method. The double selection model is applied in order to detect selection differences by recruitment group and gender as well as to account for otherwise unobservable characteristics of the individuals.

The results obtained are robust over time as they hold for the period of ten years considered in this paper. We show that recruitment through public contest has a sizeable positive effect on wages (stronger for women than for men). This finding is in line with empirical evidence of a public-sector wage premium in Italy (Cappellari, 2002; Dickson et al., 2014) given that about 90% of public-contest selected individuals in our sample work in the public sector. Further, we show that both selection bias channels (i.e. the employment and recruitment decision) are indeed relevant for explaining the GPG. Given more equal and less discriminatory assessment of candidates, women may self-select themselves in public-contest recruitment (endogeneity bias). Moreover, the recruitment decision depends on individual heterogeneity and unobservable characteristics. Therefore, it is crucial to account for self selection deriving from both biases. Thanks to the detailed questionnaire underlying the ISFOL data set, we are able to identify instruments for the employment as well as for the recruitment selection. Furthermore, the validity of our instruments for both selection processes is confirmed by the test procedure proposed by Huber and Mellace (2015). The counterfactual analysis exploiting the double selection mechanism estimation suggests that public contests are merit-based and gender-fair selection methods. Public contests are merit-based because individuals (both men and women) recruited by public contest possess better characteristics (and wages) than unselected individuals. Public contests are gender-fair mechanisms for applicants' evaluation because among selected employees, women's characteristics are rewarded as men's. However, when we control for the sector of employment (public versus private) we find that the results are confirmed within the public sector while the effect of the recruitment mechanism on wages vanishes when we analyze the effect of public

[5] See Corsetti and Mandrone (2012).

contests in the private sector only. Thus, the institutional environment plays an important role in making public contests effective mechanisms for gender-fair and merit-based recruitment. It is worth noting that the latter is not entirely driven by the institutional framework of the public sector, as a significant and positive wage gap remains for unselected civil servants. We draw the conclusion that neither public employment nor public contests alone are sufficient to eliminate gender wage discrimination. However, taken together, these two conditions can remove the GPG among public-contest selected employees.

To the best of our knowledge, this is the first empirical work on the selection procedure of public contests as a tool to analyze the GPG and to counteract wage discrimination. In particular, it is the first work that shows the empirical disappearance of the GPG.

The paper is organized as follows. Section 2 describes the data. Section 3 shows the effect of public contests on log hourly wages. Section 4 provides evidence on public contests as gender-fair selection methods. Section 5 extends the analysis to a double sample selection model, thereby accounting for sample selection and endogeneity problems. In Section 6, the counterfactual GPG adjusted for selectivity bias is computed. As a robustness check, we compute in Section 7 the GPG by public-contest recruitment separately for the public and private sector. Section 8 concludes.

2 Data and Descriptive Statistics

The empirical analysis is based on microdata collected by the Italian Institute for the Development of Vocational Training for Workers (ISFOL) in the Participation, Labor, Unemployment Survey (PLUS). 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. ISFOL released up to now the following data waves with a longitudinal structure; 2005, 2006, 2008, 2010, 2011 and 2014.

The empirical analysis is conducted by exploiting both the cross-section and panel dimension of the data set.[6] In particular, the panel data set includes all individuals that have been interviewed for at least two periods. However, given that the focus is mainly on the impact of individual variables constant across time as being hired by public contest[7] and that part of the analysis relies on an extension of the Oaxaca-Blinder decomposition for the GPG , we base our estimates on a pooled OLS regression model. In total, ISFOL PLUS was conducted with 159,615 interviews of panel structure and on aggregate with 241,502 interviews for the cross-sectional waves.

In our analysis, we focus on full-time employees aged between 18 and 64 years. Part-time workers are excluded from the sample 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 favor

[6]The regression results for the cross sections are provided in Appendix B.

[7]The number of transitions in and out of being hired by public contest is low (about 1%).

of women (e.g. Chzhen and Mumford, 2011). Similarly, self-employed workers are not considered in the study, as the focus in this paper is employees' selection mechanisms, but self-employed are unselected or, if selection takes place it serves as an entrance examination. An example are notaries, where the main aim pursued is not to fill job vacancies but to ensure the citizens on the quality of the services provided.

The analysis is also constrained to earnings from the main job only, i.e. from the job that yields the highest income. As only 1-2% of the individuals in the sample have more than one job, the impact of this restriction should be negligible. Similarly, we exclude all individuals with disabilities (less than 2% of all observations).

The sample is further restricted by excluding students and pensioners as well as individuals not disposable to work or involuntarily unemployed. This restriction is justified by the aim to form a homogenous sample of employed individuals and individuals that are voluntarily out of work (Heinze et al., 2003). In the sample, individuals not in wage work are individuals indicating not to accept every job offer but only job offers in line with their characteristics (such as the level of educational attainment or labor market experience). Thus, in the sample all individuals out of employment are voluntarily out of work or in search unemployment.

Consequently, the employment decision considered in this paper consists in the decision between voluntary or search unemployment and employment. We do not take into account the selectivity bias stemming from labor-market participation but the bias deriving from search unemployment. We are aware of the fact that the selectivity bias from the labor force participation may be important for Italy given a comparably low female labor-force participation rate in Italy (see for example De la Rica et al., 2008; Olivetti and Petrongolo, 2008; Centra and Cutillo, 2009). However, as this participation bias is well known for the Italian case, we focus here on search unemployment that – similar to labor market participation – may be significantly different for men and women and particularly relevant for Italy.[8]

The selection criteria yielded a sample size of 72,928 for the panel and 109,172 for the cross sections of which 39,345 are female and 33,538 are male employees in the panel (in the cross sections; 59,406 women and 49,766 men). Out of this sample 41,845 (58,151) individuals are employed of which 19,398 are female (26,956) and 22,447 (31,195) are male employees in the panel data (and the cross sections, respectively). In the panel data, 6,798 male and 8,116 female employees entered via public contest in their current job. In the cross-section dimension 9,255 men and 11,230 women were recruited by means of public contest.

A complete list of the variables included in the analysis along with the corresponding definition and coding is provided in Appendix A. Table 1 for the panel and Table B1 for the cross sections report mean and standard deviation for some of the variables considered in the analysis. Employees hired by public contest have higher average levels of schooling (*Educ*) and are

[8]The observation of a positive wage may depend either on the decision of the employee to accept a job offer or not, or on the firm decision to hire the candidate or not (Baffoe-Bonnie, 2009). We assume that the selection into employment depends only on the individual decision and not on the firm decision.

more likely to have a degree (*University Degree*). Moreover, they have more often obtained the maximum grade when holding a university degree (*Max_D_Mark*). On average, public-contest selected employees have more experience (*Exper*) as well as job tenure (*Tenure*). In the sample of employees hired by public contest the percentage of individuals married (*Married*) and with children (*Kids*) (also young children *Kids_10*) is in general much higher than in the sample of employees not hired by public contest. Moreover, public-contest selected employees are on average more than ten years older than employees not selected by public contest.

Our data show that the selection by public contest is not a prerogative of the public sector; about 9% of the recruitment in the private sector takes place by public contest. Similarly, approximately 16% of the observed individuals employed in the public sector are not hired by public contest.

Table 1: Descriptive Statistics Panel

Year	Panel			
	(1)	(2)	(3)	(4)
	Public-Contest Selected Employees		Not Public-Contest Selected Employees	
Variables	Mean	Std.Dev.	Mean	Std.Dev.
Female	0.544	0.498	0.419	0.493
Educ	3.393	0.623	3.000	0.704
University_Degree	0.464	0.499	0.231	0.422
Max_D_Mark	0.094	0.292	0.035	0.182
Exper	25.500	10.839	16.627	12.978
Tenure	20.684	11.248	10.860	11.047
Married	0.743	0.437	0.466	0.499
Kids	0.758	0.429	0.480	0.500
Kids_10	0.300	0.458	0.261	0.439
Age	48.713	10.092	37.317	12.484
Public_Sector	0.912	0.284	0.163	0.370
Contract_Type	0.927	0.261	0.778	0.416
Manager	0.387	0.487	0.147	0.355
Intermed_Prof	0.496	0.500	0.455	0.498
Observations	14,914		26,931	

3 The Effect of Public-Contest Selection on Earnings

The unadjusted GPG[9] is a key indicator used within the European employment strategy to monitor imbalances in wages between men and women. The Eurostat data show that in the period considered, 2005-2014, the GPG is estimated to be on average 16.8% in the EU-27 as a whole and 5.7% in Italy.[10] In our data the gender gap in hourly wages among full-time employees is 6.6% for the panel data set and varies between 10.1% and 3.1% for the cross sections (see Table 2).

Table 2: GPG of Net Hourly Wages

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GPG in %	6.60	10.10	8.18	7.10	5.66	3.06	3.85
Observations	41,845	9,520	9,305	8,601	9,420	8,977	12,328

Source: Own elaboration on ISFOL PLUS.

A small GPG in hourly wage does not imply a thin overall income inequality between women and men within the economy. When considering the annual income instead of the hourly wage, the differential increases significantly due to a lower number of hours worked by female employees. Moreover, besides the GPG and the gender gap in paid hours, it is important to consider gender gaps in employment, as they also contribute substantially to increases of the difference in average earnings between men and women. In particular, in countries with low female employment rates, women choosing to work may decide to do so due to relatively higher job profiles and earnings expectations.

In order to give a complete picture of the GPG, Eurostat has developed a synthetic indicator called Gender Overall Earnings Gap. This indicator measures the impact of three combined factors (hourly earnings, hours paid and employment rate) on average earnings of all working age men and women. Eurostat (2015b) estimates the 2010 Gender Overall Earnings Gap to amount to 44.3% in Italy, and to 41.1% for the EU-27. At EU level, the Gender Overall Earnings Gap was mostly driven by the GPG (contribution of 37%), the gender employment gap (contribution of 35%) and the gender gap in paid hours (28%). In Italy the gender gap in employment rates was the main contributor to the total earnings gap (contribution of 65%), followed by the gender

[9] "The unadjusted gender pay gap provides an overall picture of gender inequality in hourly pay. This gap represents the difference between the average gross hourly earnings of men and women expressed as a percentage of average gross hourly earnings of men. It is called unadjusted as it does not take into account all of the factors that influence the gender pay gap, such as differences in education, labor market experience or type of job" Eurostat (2015b).

[10] According to Eurostat the GPG in Italy varies between 4.4% and 7.3% in the period considered. The GPG indicator is calculated using the Structure of Earnings Survey - NACE Rev. 2. The population consists of all paid employees in enterprises with 10 employees or more (Eurostat, 2015a).

gap in paid hours (26%) and by the GPG (contribution of 9%, see Eurostat, 2015b). This result suggests that considering sample selection is particularly relevant for Italy.

However, the GPG in hourly wages is only a part of the overall income inequality by gender in Italy, it is the analysis of that (relatively small) gap which brings out discrimination from the data and drives the gender gap in both paid hours and employment rates.

This paper analyzes the GPG separately for employees recruited by public contest and employees recruited by different methods. The basis of the analysis is the estimation of a standard Mincer-type wage equation separately for gender and recruitment group augmented by factors such as human capital, employment and job as well as personal and family background characteristics.

Table B2 shows the results for the panel data, while Tables B3–B8 in Appendix B present the results for the cross-sectional data.

In order to identify public-contest recruitment, we use the indicator variable *Public_Contest*, which is equal to one if the individual has been hired by public contest and zero otherwise. The estimation results show that recruitment carried out by public contest has a positive effect on wages. Indeed, recruitment through public contest has a sizeable positive effect on earnings and the dummy *Public_Contest* emerges as one of the most important variables in predicting earnings.

In the full sample of individuals aged 18-64, the wage premium for public-contest selection lies between 5.8% and 10.6%. The coefficient of the variable *Female*, negative and significant, confirms the usual result of the literature: being a woman significantly reduces earnings. In our sample, earnings are reduced between 8.3% and 14.1%, all else equal.

The coefficient estimate of the interaction term *Contfem*[11] being positive and significant shows that female employees receive from public-contest selection a wage premium. In particular, women selected by public contest perceive a wage premium – except for 2005 – at par or even higher than the gender penalty (see Table 3). Hence, the bonus received by female employees for public-contest recruitment outweighs the negative wage effect of being a woman significantly in the majority of the data waves. The other explanatory variables included in the regression impact on wages as expected (see Table B2 and Tables B3–B8).

Both theoretical literature and empirical evidence on the GPG suggest that small differences in the early career greatly expand with age and give rise to large lifelong observed gender disparities in earnings (Lazear and Rosen, 1990; Blau and Kahn, 2000). This is driven by gender differences in promotion, bargaining and particularly women's absence from the labor market due to childbearing and -care (Blackaby et al., 2005; Niederle and Vesterlund, 2007; Fortin, 2008; Heilman and Okimoto, 2008; Bertrand, 2011). As the positive effect of public-contest selection impacts to a greater extent on early wages, we expect to find a stronger effect of public-contest recruitment among young people by taking the early age as a proxy for the early career. The

[11]The variable *Contfem* is given by the interaction between the indicator variables *Female* and *Public_Contest*.

results presented in Table B2 and Tables B3–B8 (columns (2), (4) and (6), respectively) confirm that the positive effect on wages of recruitment carried out by public contest is stronger in the early career.

Moreover, the positive effect of recruitment through public contest is in general higher and less volatile among young employees: their earnings increase between 7.3% and 14.4% if individuals are selected by public contest (compared to the non-selected). The effect shown for the full sample is verified also for the sample of young individuals; being a woman and entering in employment by public contest, all else equal, on average raises log hourly wages.

As public contests are assumed to be less discriminatory or discretionary than other private methods of recruitment, they may be preferred by women (all else equal). This is in line with what shown in Table B9 and Tables B10-B15; the positive effect of recruitment carried out by public contest on wages is stronger for women than for men.[12]

Table 3: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest*, *Female* and Interactive Effect *Contfem* Only – Full Sample

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	Full Sample						
Female	-0.099***	-0.140***	-0.126***	-0.106***	-0.084***	-0.049***	-0.065***
	(0.006)	(0.011)	(0.011)	(0.011)	(0.013)	(0.013)	(0.011)
Public_Contest	0.362***	0.347***	0.356***	0.367***	0.366***	0.367***	0.285***
	(0.006)	(0.013)	(0.012)	(0.013)	(0.014)	(0.014)	(0.012)
Contfem	0.092***	0.101***	0.122***	0.100***	0.085***	0.058***	0.074***
	(0.009)	(0.018)	(0.018)	(0.019)	(0.021)	(0.021)	(0.017)
Constant	2.065***	1.942***	1.958***	1.999***	2.015***	2.016***	2.077***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.007)
Year Dummies	Yes	No	No	No	No	No	No
Observations	41,845	9,520	9,305	8,601	9,420	8,977	12,328
R-squared	0.171	0.179	0.188	0.187	0.134	0.136	0.099

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

[12] In all years, except for 2005.

Table 4: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem*

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Panel						
Public_Contest	0.068***	0.128***				
	(0.006)	(0.016)				
Female	-0.104***	-0.069***	-0.064***	-0.008	-0.104***	-0.069***
	(0.005)	(0.008)	(0.006)	(0.021)	(0.005)	(0.008)
Contfem	0.040***	0.050***				
	(0.008)	(0.019)				
2005						
Public_Contest	0.062***	0.070**				
	(0.014)	(0.035)				
Female	-0.132***	-0.138***	-0.105***	-0.050	-0.137***	-0.139***
	(0.010)	(0.014)	(0.013)	(0.045)	(0.010)	(0.014)
Contfem	0.025	0.062				
	(0.015)	(0.040)				
2006						
Public_Contest	0.060***	0.102***				
	(0.014)	(0.033)				
Female	-0.096***	-0.067***	-0.043***	0.033	-0.101***	-0.070***
	(0.010)	(0.015)	(0.013)	(0.042)	(0.011)	(0.015)
Contfem	0.047***	0.059				
	(0.015)	(0.037)				
2008						
Public_Contest	0.056***	0.134***				
	(0.013)	(0.032)				
Female	-0.111***	-0.089***	-0.066***	-0.014	-0.115***	-0.094***
	(0.010)	(0.014)	(0.014)	(0.043)	(0.010)	(0.014)
Contfem	0.037**	0.027				
	(0.016)	(0.039)				
2010						
Public_Contest	0.076***	0.112***				
	(0.015)	(0.040)				
Female	-0.093***	-0.043**	-0.068***	-0.030	-0.089***	-0.040**
	(0.012)	(0.018)	(0.016)	(0.053)	(0.013)	(0.018)
Contfem	0.031*	0.038				
	(0.018)	(0.045)				
2011						
Public_Contest	0.101***	0.111***				
	(0.015)	(0.031)				
Female	-0.079***	-0.024	-0.058***	0.108**	-0.080***	-0.023
	(0.013)	(0.019)	(0.015)	(0.051)	(0.013)	(0.019)
Contfem	0.023	0.105***				
	(0.019)	(0.039)				
2014						
Public_Contest	0.072***	0.119***				
	(0.013)	(0.030)				
Female	-0.087***	-0.048***	-0.073***	-0.027	-0.085***	-0.050***
	(0.011)	(0.017)	(0.013)	(0.034)	(0.011)	(0.017)
Contfem	0.014	0.019				
	(0.016)	(0.037)				

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Notes: The regression on each data set, panel or cross sections, contains sectoral as well as year or wave dummies.

4 The GPG by Public-Contest Selection

In Section 3, we provide evidence that hiring carried out by public contest has a positive effect on earnings that is more pronounced for female and young employees. In this Section we use the standard Oaxaca (1973) and Blinder (1973) methodology to decompose the GPG. We analyze the GPG all else equal as well as the (so-called) discriminatory part of the wage gap for both public-contest recruited employees and not public-contest recruited employees.

We assume that public contests, contrary to other methods of recruitment are merit-based and gender-fair. Indeed, private recruitment methods are more discretionary and unregulated and hence they may create conditions for gender discrimination to flourish. Hence, we expect that both the GPG as well as the discriminatory part are lower among public-contest selected employees. By using the implicit assumptions in Oaxaca (1973) and Blinder (1973), we decompose the wage differential in two parts; endowments and coefficients:

$$\begin{aligned} \overline{ln(W_M)} - \overline{ln(W_F)} &= \bar{X}'_M \hat{\beta}_M - \bar{X}'_F \hat{\beta}_M \\ &= (\bar{X}'_M - \bar{X}'_F)\hat{\beta}_M + \bar{X}'_F(\hat{\beta}_M - \hat{\beta}_F) \end{aligned} \quad (1)$$

where $\overline{ln(W_M)}$ and $\overline{ln(W_F)}$ are the log hourly wages for the male and female sample evaluated at the mean, respectively, with $\bar{X}_G$ and $\hat{\beta}_G$ being $K \times 1$ vectors of average characteristics and estimated coefficients for $G = (F, M)$, where $G = F$ stands for female and $G = M$ stands for male.

The first term is the endowments effect that evaluates the GPG in terms of characteristics at the rate of return of men.[13] As different endowments should have different effects on earnings, the difference in endowments represents the explained component of the Oaxaca-Blinder decomposition.

The second term is the coefficients effect evaluating the GPG in terms of different returns for female characteristics. As the same endowments should have the same effect on earnings for both men and women, coefficients should not differ by gender, which is why this term represents the unexplained part of the GPG. If the GPG depends mainly on the difference in returns on characteristics, this may indicate the presence of gender discrimination.[14]

In the case of public-contest recruitment, the GPG vanishes from 2005 onwards (see Table 5).[15] On the contrary, Table 6 shows that if individuals do not enter by public contests in

[13] Thus, we follow the standard approach using the male coefficients as non-discriminatory wage structure.

[14] As stated before, the unexplained part of the GPG is often taken to be an estimate for gender discrimination. However, the unexplained portion of the GPG may include the effects of unmeasured productivity and some of the explanatory variables such as the regressors accounting for gender differences in industries or occupations may be affected by discrimination (Blau and Kahn, 2006).

[15] We do not decompose the zero-GPG arguing that in the absence of a pay disparity, there is no need to decompose the wage gap.

employment, there is a significant GPG in all years. In particular, the component generally referred to as discrimination is the main driver of the pay gap in all years. In fact, the endowments effect is mostly not statistically significant.

Table 5 shows that the GPG among public-contest selected employees vanishes in the full sample of individuals aged 18-64 and even reverses in the young sample, 18-34 years (Table 7). One possible explanation is the career path that erodes the head start that young women receive by public-contest recruitment.

Recruitment carried out by public contest significantly reverses the GPG among young employees in all years, except for 2014, where the reversal is not statistically significant. Moreover, the reversed wage gap is mainly explained by endowments, i.e. by the fact that women have better observable characteristics than men. The unexplained component is never statistically significant: given the same set of observable labor market characteristics for men and women, the difference in coefficients by gender is negligible (i.e. not statistically significant).

On the contrary, in the sample of young individuals not hired by public contest (Table 8), the GPG is either positive or not statistically different from zero, apart for 2011 where, however, the reversed GPG is substantially smaller compared to the reversal found for young public-contest selected employees. In the case of young individuals not hired by public contest, the coefficients component is significant (when a positive and significant GPG is found) suggesting that discrimination may already play a role in the early career, when individuals are not recruited by public contest.

The different magnitude of the GPGs shown in Tables 6 and 8 may be due to the fact that even small differences at the start of the career expand greatly in the career path and give rise to large lifelong wage gaps.

Table 5: Log Hourly Wages and Oaxaca-Blinder Decomposition of Gender Log Hourly Wage Gap, Public-Contest Selected Employees – Full Sample 18-64

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Differential							
Male Wages (Log Hourly Wages)	2.356***	2.289***	2.313***	2.366***	2.381***	2.383***	2.361***
	(0.005)	(0.011)	(0.010)	(0.011)	(0.012)	(0.012)	(0.010)
Female Wages (Log Hourly Wages)	2.352***	2.250***	2.310***	2.360***	2.382***	2.392***	2.370***
	(0.005)	(0.010)	(0.010)	(0.010)	(0.011)	(0.011)	(0.009)
Difference	0.004	0.039***	0.004	0.005	-0.001	-0.009	-0.009
	(0.007)	(0.014)	(0.014)	(0.015)	(0.016)	(0.016)	(0.014)
Decomposition							
Explained		-0.050***					
		(0.013)					
Unexplained		0.089***					
		(0.015)					
Observations	14,914	3,679	3,482	2,978	3,037	2,905	4,404

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table 6: Log Hourly Wages and Oaxaca-Blinder Decomposition of Gender Log Hourly Wage Gap, Not Public-Contest Selected Employees – Full Sample 18-64

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Differential							
Male Wages (Log Hourly Wages)	2.001***	1.942***	1.958***	1.999***	2.015***	2.016***	2.077***
	(0.004)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.007)
Female Wages (Log Hourly Wages)	1.901***	1.802***	1.832***	1.893***	1.932***	1.967***	2.012***
	(0.004)	(0.009)	(0.008)	(0.009)	(0.010)	(0.010)	(0.008)
Difference	0.100***	0.140***	0.126***	0.106***	0.084***	0.049***	0.065***
	(0.006)	(0.011)	(0.011)	(0.011)	(0.013)	(0.013)	(0.011)
Decomposition							
Explained	0.005	0.004	0.035***	-0.002	0.010	-0.031***	-0.012*
	(0.004)	(0.008)	(0.009)	(0.009)	(0.009)	(0.008)	(0.007)
Unexplained	0.095***	0.136***	0.091***	0.108***	0.074***	0.081***	0.077***
	(0.006)	(0.011)	(0.012)	(0.012)	(0.014)	(0.014)	(0.012)
Observations	26,931	5,841	5,823	5,623	6,383	6,072	7,924

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table 7: Log Hourly Wages and Oaxaca-Blinder Decomposition of Gender Log Hourly Wage Gap, Public-Contest Selected Employees – Young Sample 18-34

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Differential							
Male Wages (Log Hourly Wages)	2.054***	1.988***	2.005***	2.066***	2.052***	2.035***	2.172***
	(0.015)	(0.033)	(0.027)	(0.030)	(0.039)	(0.030)	(0.028)
Female Wages (Log Hourly Wages)	2.185***	2.083***	2.142***	2.217***	2.184***	2.241***	2.229***
	(0.010)	(0.021)	(0.023)	(0.025)	(0.022)	(0.024)	(0.022)
Difference	-0.131***	-0.094**	-0.137***	-0.151***	-0.132***	-0.206***	-0.057
	(0.018)	(0.039)	(0.036)	(0.039)	(0.045)	(0.038)	(0.035)
Decomposition							
Explained	-0.149***	-0.164**	-0.098**	-0.128**	-0.157***	-0.160***	
	(0.025)	(0.064)	(0.050)	(0.060)	(0.054)	(0.049)	
Unexplained	0.017	0.070	-0.039	-0.024	0.024	-0.047	
	(0.031)	(0.077)	(0.062)	(0.072)	(0.069)	(0.058)	
Observations	2,088	576	484	394	517	444	851

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table 8: Log Hourly Wages and Oaxaca-Blinder Decomposition of Gender Log Hourly Wage Gap, Not Public-Contest Selected Employees – Young Sample 18-34

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Differential							
Male Wages (Log Hourly Wages)	1.835***	1.775***	1.778***	1.832***	1.852***	1.869***	1.934***
	(0.005)	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)
Female Wages (Log Hourly Wages)	1.819***	1.711***	1.756***	1.811***	1.860***	1.903***	1.933***
	(0.006)	(0.010)	(0.010)	(0.010)	(0.014)	(0.014)	(0.013)
Difference	0.016**	0.064***	0.022	0.021	-0.007	-0.033*	0.002
	(0.007)	(0.013)	(0.013)	(0.014)	(0.017)	(0.017)	(0.016)
Decomposition							
Explained	-0.049***	-0.073***				-0.059***	
	(0.006)	(0.011)				(0.014)	
Unexplained	0.065***	0.138***				0.026	
	(0.009)	(0.016)				(0.022)	
Observations	14,368	3,061	3,154	3,015	3,563	3,207	3,703

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

5 Accounting for Double Sample Selection: Model and Results

The GPG disappears when employees are recruited by public contests and even reverses in favor of women among public-contest selected employees aged 34 or younger. This may be due to the fairness of the public-contest selection mechanism rewarding women's characteristics as men's. However, the selection process into public-contest or non public-contest recruitment may be non-random and different for men and women. The selection rule depends on two individual decisions; the work decision and the entry choice (recruitment by public contest or not). Our setup refers to the case of a censored probit, i.e. *partial partial observability* in the sense of Meng and Schmidt (1985): the output of the first decision is always observed, but the output of the second decision is observed if and only if the individual is in employment. In the model, the individual's work and entry decision are estimated simultaneously. The selection into employment may depend on positive factors such as individual ability, motivation or educational quality that raise both the probability of being employed and the level of wages but are omitted in the estimation of the earnings equation as these factors are unobservable. Additionally, we need to correct for any possible endogeneity bias that may result when the individual decision for public-contest recruitment also depends on the individual work decision. The selection rules are described by the following relations:

$$\text{Employment Selection:} \qquad Y_{iW}^{*} = Z_i^{'}\gamma + u_{iW} \tag{2}$$

$$\text{Public-Contest Selection:} \qquad Y_{iR}^{*} = Q_i^{'}\alpha + u_{iR} \tag{3}$$

where Y_{iW}^{*} represents the unobservable index function underlying individual i's decision whether to work or not and Y_{iR}^{*} represents the unobservable index function underlying individual i's decision to use the channel of public contest or not; with Z_i and Q_i being $K_z \times 1$ and $K_Q \times 1$ vectors of explanatory variables, respectively; and the error terms u_i are assumed to be $N(0,1)$ with $cov(u_W, u_R) = \rho$.[16] The model is completed with wage equations for paid-employees. We estimate the model separately for the recruitment method chosen as well as for the female and male sample. The model can also be consistently estimated by Maximum Likelihood Estimation (MLE). Yet, the number of parameters to be estimated is rather large and by using FMLE we run into many convergence failures of the optimization methods. Therefore, we follow Tunali (1986) and Sorensen (1989) in extending the Heckman (1976, 1979) and Lee (1979, 1983) procedure by including selectivity coefficients as explanatory variables in the wage regression. The method proposed by Tunali (1986) is a two-step procedure that in the first step estimates equations (2) and (3) via MLE in order to obtain consistent estimates of the correction or selectivity terms, $\bar{\lambda}_W$ and $\bar{\lambda}_R$. This procedure allows wages to be generated through multiple selection rules explicitly recognizing the roles of both the work and the recruitment decision for the determination of the individual's employment status.

[16] Further details on the methodology can be found in Appendix C.

In Appendix B, in Table B16 and Tables B17–B22, the estimation results of the bivariate probit regression for men and women are outlined. The parameter ρ measuring the correlation of the residuals from the two models shows that the unobservable parts of the two equations are strongly and positively correlated for both, men and women. Hence, it is important to model the two decisions jointly. The estimated values for ρ suggest that there are positive and significant selection (or truncation) effects and that those who select into public-contest employment receive higher wages than a randomly chosen individual not selected into public-contest recruitment with a similar set of characteristics would receive.

The identification strategy of the employment decision consists in using the indicator variables *Kids* and *Kids_10* as instruments. The intuition behind is that women with children and in particular with young children spend a significant amount of time with child-rearing and -caring and hence have a lower probability of accepting wage offers (Martins, 2001; Mulligan and Rubinstein, 2008; Lee, 2009; Chang, 2011). On the contrary, men with children or young children have higher employment probability. This derives from the persistence of the male breadwinner and mother caretaker model in particular in Southern European countries like Italy, Greece or Spain (Minguez, 2004).

Similarly, we add the dummy *Partner_Works*[17] only to the employment equation following the literature that finds a strong relationship between the decision of women to work and spousal income (Devereux, 2004; Bar et al., 2015). These regressors are assumed to affect individual reservation earnings and are excluded from both the earnings and the recruitment-choice equations as they should not affect the level of wages or individual preferences for a particular recruitment method directly.

We include an indicator variable controlling for whether the individual has the Italian citizenship or not in the employment equation (and in the wage equation) as there may be earnings as well as employment discrimination based on different cultural backgrounds of the individuals (Neuman and Oaxaca, 2003; Piazzalunga, 2015).[18]

Additionally, controls for the individual's geographic position are included in the employment equation (as well as in the wage equation) as the probability of finding a job may increase significantly from the South to the Centre and the North of Italy. We do not include the dummies *North* and *Centre* in the recruitment equation as public contests do not differ across regions but are organized centrally. Similarly, whether an individual lives in Northern, Central or Southern Italy should not affect the probability of public-contest admission.

Variables measuring the level of work satisfaction (including the level of satisfaction with the working climate, the job stability, the working time and the task at the current job) are included both in the recruitment-choice equation and in the wage equation as they are assumed to affect,

[17]The dummy variable *Partner_Works* is equal to one if the partner of the individual is employed and zero otherwise.

[18]The indicator variable *Italian* is not included in the recruitment equation as the general requirement for participation in a public contest (in particular in the public sector) is to hold the Italian citizenship and hence the indicator variable *Italian* does often not vary for public-contest selected individuals.

besides the level of wages, the individual's propensity of being employed by public contest.

To identify the public-contest entry decision, we make use of the indicator variables *Reloc* and *Risp*. *Reloc* indicates whether the individual relocated for his or her current job. In general, public contests -both in the public and in the private sector -are organized at a central level and refer to workplace located in different regions. Therefore, the decision to participate in a public contest implies a willingness to relocate.

The indicator variable *Risp* accounts for whether the individual answered questions on the public services provided as the infrastructure and the quality of health services provided. We assume that individuals responding to such questions are more caring for others or more interested in changing the current level of public services. Thus, they may be more prone to public-contest selection as there is a strong correlation between public-sector employment and public-contest recruitment. In addition, it may imply an inner consciousness for fairness and an aversion against discriminatory behavior of any kind and consequently higher probability to choose public-contest recruitment.[19] Both instrumental variables are excluded from the earnings and the employment equations as they should not affect marginal productivity or reservation earnings.

Table 9 presents the results of the test proposed by Huber and Mellace (2014) based on the joint satisfaction of the two assumptions of exclusion restriction (i.e. the identification of at least one variable affecting the selection but not the outcome process) and additive separability of the errors in the selection process. To test the multiple inequality constraints derived by Huber and Mellace (2014) the method of Chen and Szroeter (2014) is performed.[20] Column 2 in Table 9 shows the complier or defier share whose absolute value is negatively related to the power of the test.[21] The third column of Table 9 reports the standardized maximum of the mean constraints; a negative value or zero implies that no constraint is violated while the converse is true for positive value. The last column in Table 9 reports the *p-value* of the Chen and Szroeter (2014) test for the mean-based constraint.

For the employment selection equation (2) we test wether the dummy variables for having children (*Kids*) and young children (*Kids_10*) satisfy the identifying assumptions. In line with the findings of Huber and Mellace (2014) we confirm that the identifying assumptions are not violated when relying on young children (*Kids_10*) as instrument. However, when we consider the variable for having children (*Kids*) the identifying assumptions are easily violated.

For the public-contest selection equation (3) we test for the validity as instruments of the

[19]We assume that public-sector employment is particularly interesting for individuals concerned about the quality of public services provided.

[20]The inequality constraints in Huber and Mellace (2014) represent an extension to sample selection models of the conditions for testing instrument validity in the LATE framework, see (Huber and Mellace, 2015).

[21]Following the terminology of Angrist et al. (1996) the population is divided in four types according to the the reaction of selection to the instrument. Considering a binary instrument, the compliers are selected where the instrument is equal to 1 but not when the instrument is equal to 0. The defiers are selected when the instrument is equal to zero and are not selected when the instrument is equal to 1. The value in the second column in Table 9 provides the complier share when it is positive and the defier share when it is negative.

Table 9: Test for Validity of Instrument in Sample Selection Models of Huber and Mellace (2014)

(1)	(2)	(3)	(4)
Instrument	Share of Compliers	Standardized distance	P-value
Kids	0.1497	0.0553	0.000
Kids_10	0.0261	-0.0385	0.998
Risp	-0.0294	0.0301	0.000
Reloc	0.3693	-0.4130	1.000

variables *Risp* and *Reloc*, respectively. Our results suggest that the identifying assumptions are violated for the former variable but cannot be rejected for the latter. Therefore, the test procedure of Huber and Mellace (2014) support the evidence that two variables proposed are valid instruments.

In the second step, the (double) selection-corrected wage equations are estimated. Adding the selection terms $\bar{\lambda}_W$ and $\bar{\lambda}_R$ to the earnings equations allows us to consistently estimate the earnings for public-contest and non public-contest selected individuals, respectively (Lee, 1983; Tunali, 1986):

$$\overline{ln(W_G^m)} = \bar{X}_G^{m\prime}\hat{\beta}_G^m + \hat{\delta}_{W,G}^m\bar{\lambda}_{W,G}^m + \hat{\delta}_{R,G}^m\bar{\lambda}_{R,G}^m \tag{4}$$

where $m = (PC, NPC)$, $m = PC$ controls for individuals selected by public contest and $m = NPC$ for individuals not selected by public contest, and $G = (F, M)$, where $G = F$ accounts for female and $G = M$ for male. Following Heinze et al. (2003), when considering sample selection, the decomposition in equation (1) becomes:

$$\begin{aligned}\overline{ln(W_M^m)} - \overline{ln(W_F^m)} = {} & (\bar{X}_M^{m\prime} - \bar{X}_F^{m\prime})\hat{\beta}_M^m + \bar{X}_F^{m\prime}(\hat{\beta}_M^m - \hat{\beta}_F^m) \\ & + (\hat{\delta}_{W,M}^m\bar{\lambda}_{W,M}^m - \hat{\delta}_{W,F}^m\bar{\lambda}_{W,F}^m) + (\hat{\delta}_{R,M}^m\bar{\lambda}_{R,M}^m - \hat{\delta}_{R,F}^m\bar{\lambda}_{R,F}^m)\end{aligned} \tag{5}$$

The double selection mechanism may reveal benefits from selection through public contest for men and women. If the selection effect of both the employment decision and the recruitment decision is significant and positive, women and men selected by public contest should have higher unobserved characteristics and wages than women and men with the same observed characteristics not selected by public contest.

Table 10 defines the four selection variables considered in this study and presents the coefficient estimates of the selection terms for both men and women in the full sample.[22] First, we analyze the coefficients of the selection terms for the employment decision; λ_W^{PC} and λ_W^{NPC}. The positive significant effect of both terms shows the presence of sample selection bias, that is, individuals in employment are paid more than otherwise observationally identical unemployed

[22]The complete wage regressions with selection variables for both the panel and cross sections are provided in Appendix B, Table B23 and Tables B24–B29.

individuals. This means that those unobserved characteristics raising the probability of being employed also increase wages. If not positive, the coefficient estimate of the selectivity variable λ_W is generally not statistically significant,[23] that is, employees not selected (or selected) by public contest have almost the same unobserved characteristics and wage offers than unemployed individuals.

In the sample of individuals recruited by public contest, the positive sign of the estimated coefficient of λ_R^{PC} indicates that those unobserved positive characteristics raising the probability of winning a contest also increase wages. Hence, individuals that are recruited by public contest are endowed with better unobserved characteristics and wages than individuals not recruited by public contest would have obtained if they were recruited by public contest. On the contrary, as expected, the coefficient estimate for the selectivity variable λ_R^{NPC} is negative and (generally) statistically significant. This implies that employees recruited without public contest possess lower levels of unobserved characteristics and wage offers than individuals actually selected by public contest.

To sum up, we find evidence that individuals recruited by public contest have better unobserved characteristics and earnings than other employees with similar observed characteristics.

The results shown in Table 10 strengthen the results found in Section 4 that public contests are merit-based selection methods. The coefficients of λ_R^{PC}, positive and significant, confirm that women selected by public contest have better unobserved characteristics than women not selected by public contest. The male coefficients of λ_R^{PC} are, in general, not statistically significant; men do neither receive a wage premium nor a wage penalty from public-contest recruitment. All in all, the positive effect from public-contest selection is more pronounced for women than for men.

6 Counterfactual GPG Adjusted for Double Selection

In Section 4 we have shown that the GPG in the case of public-contest recruitment is reduced to zero (see Table 5). In the case of non public-contest recruitment, the coefficients effect was identified to be the main driver of a positive and significant GPG. In order to verify the robustness of these results in the presence of selection bias, we compute the Counterfactual Pay Gap (CPG) adjusted for (double) selectivity bias for individuals not selected by public contests.[24] In particular, the CPG adjusted for double selection is given by:

$$CPG^m = \bar{X}_F^{m\prime}(\hat{\beta}_M^m - \hat{\beta}_F^m) + (\hat{\delta}_{W,M}^m - \hat{\delta}_{W,F}^m)\bar{\lambda}_{W,F}^m + (\hat{\delta}_{R,M}^m - \hat{\delta}_{R,F}^m)\bar{\lambda}_{R,F}^m \tag{6}$$

where $m = (PC, NPC)$.

Table 11 shows the estimated adjusted difference in pay between men and women not hired by public contest after having corrected for selectivity bias. For individuals not selected by pub-

[23] Except for women not selected by public contest in 2006 and men not selected by public contest in 2011.

[24] As in the case of public contest recruitment, the GPG – except for 2005 – is zero and thus no additional insights can be gained by looking at the CPG for public-contest recruited individuals.

Table 10: Selection Variables – Definition and Values

Year	Panel		2005		2006		2008		2010		2011		2014	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
λ_W^{PC}														
measures the selection bias	0.126***	0.209*	0.019	0.375*	0.047	0.469**	0.033	0.272	0.077	-0.168	-0.018	0.451*	-0.055	0.233
from the *work decision*	(0.035)	(0.111)	(0.045)	(0.210)	(0.080)	(0.219)	(0.084)	(0.252)	(0.104)	(0.422)	(0.110)	(0.261)	(0.104)	(0.291)
for those selected														
by public contest														
λ_R^{PC}														
measures the selection bias	0.179***	-0.009	0.118**	-0.085	0.178**	0.088	0.206**	-0.099	0.116	0.041	0.165	0.094	0.181**	-0.027
from the *recruitment decision*	(0.035)	(0.039)	(0.053)	(0.070)	(0.088)	(0.077)	(0.082)	(0.098)	(0.089)	(0.096)	(0.102)	(0.097)	(0.088)	(0.084)
for those selected														
by public contest														
Observations	8,116	6,798	1,987	1,692	1,715	1,767	1,586	1,392	1,621	1,416	1,656	1,249	2,665	1,739
λ_W^{NPC}														
measures the selection bias	-0.041	-0.013	0.009	-0.050	-0.109**	0.006	-0.065	-0.006	0.023	-0.041	0.162	-0.297***	0.010	0.074
from the *work decision*	(0.032)	(0.043)	(0.037)	(0.072)	(0.053)	(0.081)	(0.054)	(0.074)	(0.087)	(0.089)	(0.101)	(0.080)	(0.092)	(0.115)
for those NOT selected														
by public contest														
λ_R^{NPC}														
measures the selection bias	-0.305**	-0.169***	-0.115**	-0.097*	-0.220***	-0.123**	-0.338***	-0.168***	-0.313***	-0.251***	-0.506***	-0.363***	-0.346***	-0.116
from the *recruitment decision*	(0.034)	(0.032)	(0.058)	(0.055)	(0.059)	(0.061)	(0.060)	(0.061)	(0.089)	(0.077)	(0.090)	(0.070)	0.088)	(0.086)
for those NOT selected														
by public contest														
Observations	11,282	15,649	2,526	3,315	2,368	3,455	2,370	3,253	2,588	3,795	2,512	3,560	3,428	4,496

Robust standard errors in parentheses

$***p < 0.01, **p < 0.05, *p < 0.1$

lic contest, the counterfactual analysis corrected for selectivity bias confirms the results obtained before. In both cases, with and without taking into account the correction for selectivity bias, the unexplained part turns out to be the most important driver of the GPG in the case of non public-contest selection. The estimation results predict that women in non public-contest jobs earn between 3.3% (in 2011)[25] and 12.5% (in 2005) less than they would earn if they were remunerated as men. Hence, in the case of non public-contest recruitment, a non-trivial pay disparity between women and men still exists even after adjusting for selectivity and productivity-related characteristics.

Table 11: CPG Adjusted for Double Selection, Not Public-Contest Selected Employees – Full Sample 18-64

Year	Panel	2005	2006	2008	2010	2011	2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Difference	0.100***	0.140***	0.126***	0.106***	0.084***	0.049***	0.065***
	(0.006)	(0.011)	(0.011)	(0.011)	(0.013)	(0.013)	(0.011)
Counterfactual	0.109***	0.125***	0.109***	0.124***	0.086***	0.033	0.105***
	(0.013)	(0.028)	(0.032)	(0.030)	(0.025)	(0.025)	(0.021)
Observations	26,931	5,841	5,823	5,623	6,383	6,072	7,924

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

[25] In 2011, the CPG is statistically not significant.

7 Public- versus Private-Sector Recruitment

The institutional rules and practices that typically apply to public-sector employment to some extent insulate public-sector jobs from the uncertainties of labor market forces. Public-sector jobs are generally more stable over time and more tightly linked to experience and education than private-sector jobs. Overall, this higher degree of job security for civil servants comes along with higher barriers to entry into public employment. Differences in entry requirements, wage-setting practices, contract types and career paths between the public and the private sector affect the public-private sector gap in both pay and lifetime values. In the 1980's, permanent hiring without public contests of pro-tempore workers[26] and ope legis promotions has increased recruitment in general and in particular recruitment without public contests in the public sector (Craveri, 2016). Pay increases for public-sector employees were automatic until the reform of 1993.[27] Since then, remuneration is determined by employee collective agreements. Automatic wage increases and career promotions linked to seniority were substituted with more discretionary, selective and performance-related mechanisms. After changes in public employment in the 2000's[28] for the purpose of optimizing labor productivity and in order to make the organization of public-sector employment more flexible, hiring on open-ended contracts and flexible forms of employment are now allowed in the public administration. Moreover, collective agreements regulating fixed-term contracts, training contracts, and the supply of temporary labor are now possible. Hence, institutional differences between the public and private sector persist, but are decreasing nowadays (Postel Vinay, 2015).

Prior to looking at the GPG by hiring method in the public and private sector, respectively, we examine the selection behavior by gender and sector into public-contest recruitment. The results in Table 12 show that the coefficient of the selection correction term λ is positive and significant only for women in the public sector, while it is insignificant for men in the public sector and for both men and women working in the private sector. These results confirm that only women (and not men) selected by public contest and working in the public sector possess better unobserved characteristics than unselected women, either working in the public or private sector. As both male and female coefficients of the selection term are insignificant in the private sector, neither men nor women possess better unobserved characteristics than unselected individuals and do not receive a wage premium from public-contest recruitment in the private sector.

[26] i.e. individuals in temporary employment

[27] The main changes were introduced by legislative decree 29/1993, and subsequently by legislative decrees 396/1997, 80/1998 and 387/1998, with consequences on the status of public-sector employees, their employment relationships and personnel policies.

[28] In particular: law 133/2008 and the legislative decree 150/2009.

Table 12: OLS Estimates of Log Hourly Wages adjusted for Public-Contest Selection and Probit Regression, by Sector

Year	Panel							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Public Sector				Private Sector			
	Women		Men		Women		Men	
	OLS	Probit	OLS	Probit	OLS	Probit	OLS	Probit
Variables	Lhwage	Public Contest	Lhwage	Public Contest	Lhwage	Public Contest	Lhwage	Public Contest
Exper	0.014***		0.017***		0.011		0.021***	
	(0.002)		(0.002)		(0.006)		(0.006)	
Exper2	-0.000**		-0.000***		-0.000		-0.000**	
	(0.000)		(0.000)		(0.000)		(0.000)	
Tenure	0.001**		0.003***		0.002		0.002	
	(0.001)		(0.001)		(0.002)		(0.002)	
Educ	0.244***	0.455***	0.178***	0.344***	0.118***	0.303***	0.137***	0.265***
	(0.019)	(0.024)	(0.018)	(0.023)	(0.041)	(0.038)	(0.040)	(0.028)
Max_D_Mark	0.016		0.051***		-0.040		0.083	
	(0.013)		(0.018)		(0.056)		(0.079)	
Contract_Type	-0.011		0.075***		-0.050		-0.077	
	(0.017)		(0.026)		(0.058)		(0.080)	
Work_Climate	-0.009	-0.046**	0.016***	-0.051**	0.003	-0.035	-0.024	-0.012
	(0.006)	(0.021)	(0.006)	(0.022)	(0.017)	(0.032)	(0.017)	(0.027)
Work_Stab	0.022**	0.201***	0.011	0.150***	0.012	0.198***	-0.000	0.181***
	(0.009)	(0.015)	(0.009)	(0.019)	(0.021)	(0.028)	(0.021)	(0.022)
Work_Time	0.005	-0.003	0.003	0.009	0.020	0.006	0.007	0.004
	(0.006)	(0.021)	(0.007)	(0.023)	(0.016)	(0.032)	(0.018)	(0.026)
Work_Task	0.017***	-0.011	0.016**	0.027	-0.004	-0.083**	-0.015	-0.017
	(0.006)	(0.021)	(0.007)	(0.023)	(0.018)	(0.034)	(0.018)	(0.028)
Intermed_Prof	0.143***		-0.053***		0.074		0.013	
	(0.019)		(0.013)		(0.048)		(0.033)	
Manager	0.268***		0.132***		0.164***		0.164***	
	(0.020)		(0.016)		(0.056)		(0.045)	
North	-0.050***		-0.002		0.035		0.055**	
	(0.009)		(0.010)		(0.030)		(0.027)	
Centre	-0.036***		0.012		0.093***		0.116***	
	(0.010)		(0.012)		(0.033)		(0.034)	
Home_Time	0.006***		0.004***		0.001		-0.000	
	(0.001)		(0.001)		(0.004)		(0.005)	
Married	0.054***	0.222***	0.021	0.276***	-0.002	0.116**	0.030	0.005
	(0.012)	(0.033)	(0.016)	(0.041)	(0.031)	(0.055)	(0.032)	(0.049)
Italian	0.041		-0.183		0.251		0.694**	
	(0.089)		(0.343)		(0.164)		(0.351)	
Homeowner	0.025**	0.107**	0.016	0.101**	-0.033	0.260***	0.010	0.164***
	(0.013)	(0.042)	(0.014)	(0.045)	(0.044)	(0.071)	(0.043)	(0.055)
Educ_Fath5	0.020		-0.004		-0.015		-0.061	
	(0.015)		(0.018)		(0.048)		(0.061)	
Educ_Moth5	0.042**		-0.061**		0.281***		0.083	
	(0.019)		(0.028)		(0.076)		(0.082)	
Age		0.027***		0.020***		0.037***		0.035***
		(0.001)		(0.002)		(0.002)		(0.002)
Reloc		0.271***		0.350***		0.620***		0.454***

		(0.057)		(0.051)		(0.088)		(0.061)
Risp		-0.068*		0.042		0.062		0.119**
		(0.037)		(0.043)		(0.058)		(0.048)
λ	0.195**		-0.092		0.003		0.011	
	(0.079)		(0.081)		(0.076)		(0.091)	
Constant	0.633***	-2.840***	1.294***	-2.365***	1.143***	-4.692***	0.834	-4.814***
	(0.182)	(0.153)	(0.375)	(0.151)	(0.407)	(0.240)	(0.564)	(0.178)
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sectoral Dummies Yes	Yes	No	Yes	No	Yes	No	Yes	No
Observations	9,945	9,945	8,044	8,044	9,453	9,453	14,403	14,403

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Notes: The results are estimated using a standard Heckman two-step selection model.

We calculate the GPG by entry channel for the public sector only, in order to show that the disappearance of the wage gap is due to the mechanism of public contests and not due to public-sector employment. The decomposition results for the public sector are shown in Table 13. The results of the previous analysis are confirmed: in the case of public-contest recruitment the GPG is not statistically different from zero, while in the case of non public-contest recruitment, even in the public sector, there is a positive and statistically significant GPG. Moreover, in the case of non-public contest recruitment, the unexplained or coefficients part is again the main driver of the wage gap. This suggests that the disappearance of the GPG among public-contest selected employees is not entirely driven by the institutional environment of the public sector. In fact, without the mechanism of public-contest selection, a significant and positive GPG for public-sector employees is found.

Next, we analyze whether the effect of public contest on the vanishing of the GPG works also in institutional frameworks different from the public sector. Therefore, we analyze the GPG by recruitment method for the private sector only. Table 14 presents the decomposition result by public-contest recruitment for the private sector. We find a positive and significant GPG, regardless of whether individuals are selected by public contest or not. Moreover, the difference in pay between men and women is even higher for public-contest selected employees in the private sector compared to non public-contest selected individuals. In both subsamples, the unexplained as well as the explained part are positive and statistically significant. Thus, the mechanism of public contests as gender-fair and merit-based screening devices requires specific institutional environments that are given in the public sector. Even though, the institutional background is not the only factor contributing to the success of merit-based and gender-fair screening via public-contests (there is a positive and significant GPG among public servants not selected by public contest), it is a crucial one.

Table 13: Log Hourly Wages and Oaxaca-Blinder Decomposition of Gender Log Hourly Wage Gap – Public Sector

Year	Panel	
	(1)	(2)
	Public-Contest Selected Employees	Not Public-Contest Selected Employees
Differential		
Male Wages (Log Hourly Wages)	2.366***	2.180***
	(0.006)	(0.011)
Female Wages (Log Hourly Wages)	2.367***	2.129***
	(0.005)	(0.011)
Difference	-0.001	0.052***
	(0.007)	(0.015)
Decomposition		
Explained		-0.024**
		(0.012)
Unexplained		0.075***
		(0.017)
Observations	13,595	4,394

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

Table 14: Log Hourly Wages and Oaxaca-Blinder Decomposition of Gender Log Hourly Wage Gap – Private Sector

Year	Panel	
	(1)	(2)
	Public-Contest Selected Employees	Not Public-Contest Selected Employees
Differential		
Male Wages (Log-Hourly Wages)	2.289***	1.974***
	(0.014)	(0.004)
Female Wages (Log-Hourly Wages)	2.122***	1.843***
	(0.014)	(0.005)
Difference	0.167***	0.131***
	(0.020)	(0.006)
Decomposition		
Explained	0.029*	0.032***
	(0.017)	(0.004)
Unexplained	0.138***	0.099***
	(0.023)	(0.006)
Observations	1,319	22,537

Robust standard errors in parentheses
$***p < 0.01, **p < 0.05, *p < 0.1$

8 Conclusion

This paper analyzes the effect of hiring methods on the GPG in Italy. We decompose the GPG in an explained and an unexplained component using the Oaxaca-Blinder decomposition approach. The estimates are then corrected for double sample selectivity using the *partial partial observability* approach by Meng and Schmidt (1985). Thus, the decision to enter in employment as well as the individual's entry decision are modeled simultaneously. Employment selection may be particularly relevant in Italy given especially pronounced gender differences in labor force participation. Similarly, public-contest selection may be non-random and different for men and women. In fact, public-contest recruitment may be preferred by women given less potential for discriminatory behavior in the hiring process. Consequently, failure to account for (double) sample selection leads to inconsistent estimates of the gender-specific wage equations as well as of the components of the GPG.

Our results suggest that public contests reduce the conditions for gender discrimination to flourish and represent a merit-based and gender-fair mechanism for performance appraisal. They are merit-based because employees hired by public contest hold better observable and unobservable characteristics than unselected employees. The procedures are gender-fair because among public-contest selected employees, there is no gender-related penalty on wages.

We show that recruitment carried out by public contests erases the GPG in the full sample of individuals aged 18-64, and even reverses the gap in favor of women among young employees (aged 18-34 years). The relatively strong wage gap in favor of young women is only explained by endowments, i.e. by the fact that women have better observable characteristics than men. The reversal of the GPG observed among public-contest selected young employees vanishes in the full sample, even in the case of public-contest recruitment. This is because the career path erodes the head start that young women receive by public-contest recruitment. This result is in line with the literature finding that women are less often promoted and have generally more breaks in their careers due to childbearing and -care (e.g. Blackaby et al., 2005; Niederle and Vesterlund, 2007; Fortin, 2008; Heilman and Okimoto, 2008; Bertrand, 2011). In the case of employees not hired by public contest, the component accounting for discrimination is the main driver of the disparity in pay. Even after adjusting the unexplained component of the Oaxaca-Blinder decomposition for double selection into the sample (i.e. estimating the CPG), we still find a substantial GPG for non public-contest selected individuals. The robust CPG underpins the result that public-contest recruitment significantly impacts on gender differences in pay. These results suggest that institutional selection mechanisms such as public contests may offer a way for merit-based and gender-fair wage setting.

By decomposing our results by sector of employment we find, on the one hand, that public contests represent a necessary but not sufficient condition for merit-based and gender-fair recruitment. On the other hand, we find that the institutional environment of the public sector, too, is a necessary but not sufficient condition for making public contests merit-based and

gender-fair screening devices. These two factors taken together, that is institutional selection mechanisms of public contests and the institutional environment of the public sector, cause the disappearance of the GPG. In fact, the GPG disappears in the case of selection by public contest and public-sector employment. In contrast, we find a significant and positive gap among non public-contest hired individuals in the public sector.

Our results raise some questions. As we show that public contest selected women (and not men) if employed in the public sector (and not in the private sector) have better unobserved characteristics than unselected women working in the same sector, the first question is why women and not men, if working in the public sector and selected by public contest, possess better unobservable characteristics than the unselected ones. We argue that it is because the public sector traditionally attracts women with the best productive characteristics by offering jobs with working conditions that facilitate reconciliation and career continuity (Blau, Ferber, and Winkler, 2006). In Italy, these non monetary returns offered by the public sector 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 represents the main resource to reconcile work and family activities (Solera and Bettio, 2013).

Solera and Bettio (2013) argue that Italian women invest in education because of these reconciliation returns rather than for monetary incentives. In a context where publicly subsidized care is rationed, gender role norms are still strong, and employment opportunities for graduates are comparatively poor, returns in reconciliation result particularly attractive for the female labor force. When public-sector jobs offer leaves, career interruptions and short or flexible working hours that reduce the organizational cost of combining work and career and increase non-wage compensation, entering public employment may represent the first choice for the 'best' women. In particular, these returns have been shown to reduce the wage cost of motherhood (Mandel and Semyonov, 2006). In our data, 72% in the public sector of all female employees compared to 53.4% in the private sector are mothers. Moreover, as we find that in the public sector the GPG vanishes when employees are selected through public contests, but remains positive and significant among unselected employees, a second issue is why among unselected employees working in the public sector the unexplained component emerges as the main driver of the GPG. We argue that it is because job positions for which the competition rules of public contests do not apply grew steadily in Italy since the end of the last century. In the 1980's, hiring of pro tempore workers and ope legis promotions has increased recruitment without public contests in the public sector of the economy (Craveri, 2016). In particular, legislative acts regulating recruitment in public employment by mechanisms different from public contests were adopted by a wave of reforms starting in the 1980's. These reforms aimed to reorganize public-sector employment in Italy (Carinci et al., 2003) making promotion without a public contest possible. The reform was emphasized in particular in the public administration as well as in the educational and health sectors. It is worth noting that, after changes in public employment in the 2000's for the purpose of optimizing labor organization and productivity, hiring on non-

standard wage contracts and other flexible forms of employment (temporary contracts, job on call, stage, work-and-training-contacts) were allowed in the public administration (Postel Vinay, 2015). Among these employees, the public contests transparent and controlled procedure that protects competitors from gender discrimination does not apply. Consequently, the unexplained part of the GPG results positive and significant. Finally, we find in our data a positive and significant GPG for the private sector, regardless of whether individuals are selected by public contest or not. In this sector, the unexplained component of the GPG is even higher for public-contest selected employees than for unselected ones. This result raises the question why the same virtuous rules that govern a public contest do not select the best women and do not curtail the unexplained component of the GPG when public contests take place in the private sector of the economy. We argue that it is because, the spare non-wage benefits offered by the private sector are not as attractive as the reconciliation returns of public employment for the best women. Although on average wages in the public sector are slightly higher than those in the private sector, top positions are better paid in the latter. It is precisely in those jobs where the action of stereotypes such as 'think manager, think male' increases the GPG and highlights the existence of glass ceiling (Schein and Davidson, 1993). Castagnetti and Rosti (2013) show that the unexplained component of the GPG increases in line with the expected influence of stereotypes. Our data confirm this result. The unexplained part in the executives sample is 86.7%, while it is 68.3% among non-executives employees.

Our conclusion is that neither public employment nor public contests are sufficient condition to eliminate gender wage discrimination. However, taken together, these two conditions can achieve the disappearance of the GPG among public-contest selected employees.

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Appendix

A Definition of Variables

Table A1: Definition of Variables

Variable Name	Definition
	Dependent Variables
Net_ Hourly_Wage	Hourly wages in Euros and net of taxes and social security contributions
Log_Hourly_Wage	The natural log of net hourly earnings; wages are in Euros and net of taxes and social security contributions
Employment	One if the respective individual decided to accept a wage offer, i.e. to enter in employment, zero if (voluntarily) unemployed
Public_Contest	One if individual entered via public contest in the current job, zero otherwise *Public_Contest* is also used as independent variable
	Independent Variables
Female	One if the respective individual is a woman, zero otherwise
Contfem	Interactive effect of the dummy variables *Public_Contest* and *Female*, i.e. one if the respective employee entered via public contest in his or her current job and is female, zero otherwise
Exper	Number of years of work experience
Exper2	*Exper* squared
Tenure	Number of years worked for current employer
Educ	Number of years of schooling completed
University_Degree	One if the respective individual has graduated from university, zero otherwise
Max_D_Mark	One if the maximum degree mark was attained, i.e. *110 e lode*, in the case of graduation from university, zero otherwise
North	One if the respective individual lives and works in the North of Italy, zero otherwise
Centre	One if the respective individual lives and works in the Centre of Italy, zero otherwise
Age	Age of the respective individual (in years)
Age5064	One if the age of the respective individual is between 50 and 64 years, zero otherwise
Married	One if the respective individual is married, zero otherwise
Italian	One if the respective individual holds the Italian citizenship, zero otherwise
Hometime	Years the respective individual spent out of the labor force

Educ_Moth5	One if the mother's education is equal to *University_Degree*, i.e. the mother holds a university degree, zero otherwise
Educ_Fath5	One if the father's education is equal to *University_Degree*, i.e. the father holds a university degree, zero otherwise
Kids	One if the respective 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, *Kids_10* is equal to one if there is at least one child below the age of three in the household, zero otherwise
Homeowner	One if the respective individual owns a house, zero otherwise This inlcudes bank loan-financed houses
Partner_Works	One if the partner of the respective individual is employed, zero otherwise
Risp	One if the respective individual responds to questions on the quality of public services, zero otherwise
Reloc	One if the respective individual relocated in order to take the current job, zero otherwise
Work_Climate	Level of statisfaction with working climate at current job $\in (0, 4)$, where 4 is the highest level of satisfaction and 0 the lowest
Work_Stab	Level of statisfaction with stability of current job $\in (0, 4)$, where 4 is the highest level of satisfaction and 0 the lowest
Work_Time	Level of statisfaction with working time at current job
Work_Task	Level of statisfaction with tasks at current job $\in (0, 4)$, where 4 is the highest level of satisfaction and 0 the lowest
Contract_Type	One if the respective 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_Prof	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
Sec_02 - Sec_15	Sectoral dummies for employment in manufacturing, energy, construction, tourism, commerce, transport, communication, financial activities, service industry, public administration, education, health, sciences and family services, respectively
Public_Sector	Dummy variable for public-sector employment; one if the respective individual is employed in the public sector, zero otherwise
Year_1-Year_5	Year dummies, one if year = 2005, 2006, 2008, 2010, 2011, respectively, and zero otherwise

Selection Correction Terms

λ_W^{PC}	Measures the selection bias from the work decision for those selected by public contest
λ_R^{PC}	Measures the selection bias from the recruitment decision for those selected by public contest.
λ_W^{NPC}	Measures the selection bias from the work decision for those not selected by public contest
λ_R^{NPC}	Measures the selection bias from the recruitment decision for those not selected by public contest

B Descriptive Statistics Cross Sections and Further Estimation Outcome

Table B1: Descriptive Statistics Cross Sections

Year	2005				2006				2008			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Public-Contest Selected Employees		Not Public-Contest Selected Employees		Public-Contest Selected Employees		Not Public-Contest Selected Employees		Public-Contest Selected Employees		Not Public-Contest Selected Employees	
Variables	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.
Female	0.540	0.499	0.433	0.496	0.493	0.500	0.407	0.491	0.533	0.4990	0.4215	0.4938
Educ	3.346	0.646	2.897	0.707	3.359	0.639	2.933	0.704	3.403	0.6233	2.9948	0.7156
University_Degree[a]	0.435	0.496	0.173	0.378	0.443	0.497	0.193	0.395	0.474	0.4994	0.2356	0.4244
Max_D_Mark	0.095	0.293	0.029	0.167	0.095	0.293	0.029	0.166	0.076	0.2643	0.0212	0.1439
Exper	24.053	10.459	16.815	12.568	24.639	10.484	16.200	12.597	25.509	10.5136	16.2659	13.0295
Tenure	19.045	10.705	10.469	10.487	19.628	10.765	9.957	10.521	20.693	11.0043	10.9641	11.1586
Married	0.739	0.439	0.512	0.500	0.742	0.437	0.474	0.499	0.744	0.4366	0.4635	0.4987
Kids	0.788	0.409	0.810	0.392	0.744	0.437	0.434	0.496	0.750	0.4330	0.4261	0.4946
Kids_10[b]	0.070	0.255	0.080	0.271	0.190	0.392	0.168	0.374	0.145	0.3526	0.1428	0.3499
Age	47.064	9.880	37.035	12.192	47.779	9.900	36.612	12.237	49.161	9.8433	37.2170	12.5640
Public_Sector	0.921	0.270	0.161	0.368	0.916	0.277	0.144	0.351	0.904	0.2952	0.1590	0.3657
Contract_Type	0.923	0.267	0.829	0.376	0.929	0.256	0.788	0.409	0.932	0.2521	0.7736	0.4185
Manager	0.442	0.497	0.111	0.314	0.352	0.478	0.105	0.307	0.244	0.4296	0.1149	0.3189
Intermed_Prof	0.453	0.498	0.490	0.500	0.527	0.499	0.497	0.500	0.636	0.4811	0.4964	0.5000
Observations	3,679		5,841		3,482		5,823		2,978		5,623	

Year	2010				2011				2014			
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Variables	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.	Mean	Std.Dev.
Female	0.534	0.499	0.406	0.491	0.570	0.495	0.414	0.493	0.605	0.489	0.433	0.496
Educ	3.393	0.625	3.002	0.701	3.401	0.615	2.990	0.699	3.429	0.593	3.078	0.698
Universtiy_Degree[a]	0.467	0.499	0.231	0.422	0.468	0.499	0.224	0.417	0.481	0.500	0.277	0.447
Max_D_Mark	0.111	0.314	0.041	0.198	0.081	0.273	0.034	0.182	0.056	0.230	0.026	0.160
Exper	25.273	11.522	16.220	13.062	25.506	11.342	16.397	13.001	24.734	11.843	18.136	12.879
Tenure	20.717	11.693	10.818	11.057	21.076	11.596	11.038	11.120	20.782	11.882	12.614	11.384
Married	0.708	0.455	0.450	0.498	0.724	0.447	0.446	0.497	0.760	0.427	0.546	0.498
Kids	0.717	0.451	0.409	0.492	0.734	0.442	0.424	0.494	0.723	0.448	0.491	0.500
Kids_10[b]	0.149	0.356	0.137	0.344	0.145	0.352	0.144	0.351	0.138	0.345	0.160	0.367
Age	48.380	10.730	36.863	12.682	48.769	10.620	37.503	12.553	47.864	11.590	39.352	12.325
Public_Sector	0.900	0.301	0.161	0.367	0.899	0.302	0.172	0.378	0.915	0.279	0.193	0.395
Contract_Type	0.924	0.266	0.779	0.415	0.925	0.264	0.779	0.415	0.945	0.228	0.832	0.374
Manager	0.391	0.488	0.168	0.374	0.418	0.493	0.187	0.390	0.527	0.499	0.192	0.394
Intermed_Prof	0.466	0.499	0.416	0.493	0.450	0.498	0.377	0.485	0.386	0.487	0.454	0.498
Observations	3,037		6,383		2,905		6,072		4,404		7,924	

[a] *The dummy variable University_Degree is not used in the regression analysis in both the panel and the cross sections. It is presented for illustration of the variation of university graduation in the data only.*

[b] *In 2005, Kids_10 is equal to one if there is at least one child below the age of three in the household.*

Table B2: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – Panel

Year	Panel					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.068***	0.128***				
	(0.006)	(0.016)				
Female	-0.104***	-0.069***	-0.064***	-0.008	-0.104***	-0.069***
	(0.005)	(0.008)	(0.006)	(0.021)	(0.005)	(0.008)
Contfem	0.040***	0.050***				
	(0.008)	(0.019)				
Exper	0.018***	0.020***	0.014***	0.016**	0.018***	0.020***
	(0.001)	(0.003)	(0.001)	(0.008)	(0.001)	(0.003)
Exper2	-0.000***	-0.000***	-0.000***	-0.001	-0.000***	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.003***	0.006***	0.002***	0.001	0.004***	0.007***
	(0.000)	(0.001)	(0.000)	(0.003)	(0.000)	(0.001)
Educ	0.148***	0.098***	0.196***	0.100***	0.126***	0.100***
	(0.004)	(0.007)	(0.006)	(0.019)	(0.005)	(0.008)
Max_D_Mark	0.047***	0.051***	0.029**	0.049*	0.043***	0.044**
	(0.009)	(0.016)	(0.012)	(0.027)	(0.015)	(0.020)
Contract_Type	0.040***	0.034***	0.004	-0.018	0.042***	0.038***
	(0.007)	(0.008)	(0.015)	(0.025)	(0.007)	(0.009)
Work_Climate	0.000	-0.004	0.002	0.003	-0.000	-0.005
	(0.003)	(0.005)	(0.004)	(0.012)	(0.004)	(0.005)
Work_Stab	0.005*	0.005	0.008*	0.026**	0.005	0.004
	(0.003)	(0.004)	(0.004)	(0.012)	(0.003)	(0.005)
Work_Time	0.017***	0.028***	0.005	0.017	0.022***	0.029***
	(0.003)	(0.004)	(0.004)	(0.011)	(0.003)	(0.005)
Work_Task	0.014***	0.009*	0.018***	0.002	0.012***	0.010*
	(0.003)	(0.005)	(0.004)	(0.012)	(0.004)	(0.005)
Intermed_Prof	0.037***	0.023***	0.008	0.012	0.055***	0.026***
	(0.005)	(0.008)	(0.009)	(0.025)	(0.006)	(0.008)
Manager	0.158***	0.060***	0.155***	0.077**	0.139***	0.054***
	(0.007)	(0.013)	(0.011)	(0.030)	(0.010)	(0.015)
North	0.028***	0.066***	-0.022***	-0.033*	0.057***	0.082***
	(0.005)	(0.008)	(0.006)	(0.019)	(0.006)	(0.009)
Centre	0.011**	0.037***	-0.006	-0.029	0.026***	0.049***
	(0.005)	(0.010)	(0.008)	(0.023)	(0.007)	(0.010)
Home_Time	0.006***	0.013***	0.004***	0.010***	0.007***	0.013***
	(0.000)	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)
Married	0.051***	0.048***	0.036***	0.085***	0.056***	0.045***
	(0.005)	(0.008)	(0.007)	(0.019)	(0.006)	(0.009)
Italian	0.061**	0.029	0.074	0.117	0.065**	0.027
	(0.026)	(0.032)	(0.067)	(0.185)	(0.028)	(0.033)
Homeowner	0.027***	0.011	0.021**	-0.014	0.031***	0.015
	(0.005)	(0.009)	(0.009)	(0.022)	(0.006)	(0.010)
Educ_Fath5	0.012	-0.026*	0.006	-0.033	0.008	-0.026
	(0.009)	(0.014)	(0.012)	(0.027)	(0.013)	(0.017)
Educ_Moth5	0.008	0.024	0.019	0.006	0.003	0.025
	(0.012)	(0.016)	(0.018)	(0.036)	(0.016)	(0.018)
Constant	0.942***	1.066***	1.038***	1.285***	0.957***	1.040***
	(0.034)	(0.053)	(0.077)	(0.220)	(0.039)	(0.056)
Sectoral Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41,845	16,456	14,914	2,088	26,931	14,368
R-squared	0.380	0.170	0.342	0.210	0.243	0.115

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B3: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – 2005

Year	2005					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest and Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.062***	0.070**				
	(0.014)	(0.035)				
Female	-0.132***	-0.138***	-0.105***	-0.050	-0.137***	-0.139***
	(0.010)	(0.014)	(0.013)	(0.045)	(0.010)	(0.014)
Contfem	0.025	0.062				
	(0.015)	(0.040)				
Exper	0.019***	0.020***	0.014***	0.032*	0.020***	0.018***
	(0.002)	(0.005)	(0.003)	(0.017)	(0.002)	(0.006)
Exper2	-0.000***	-0.000	-0.000**	-0.001	-0.000***	-0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Tenure	0.002***	0.001	0.002**	-0.010*	0.002***	0.004*
	(0.001)	(0.002)	(0.001)	(0.005)	(0.001)	(0.002)
Educ	0.167***	0.154***	0.200***	0.199***	0.145***	0.149***
	(0.008)	(0.014)	(0.012)	(0.038)	(0.010)	(0.015)
Max_D_Mark	0.048**	0.020	0.027	0.005	0.048	0.002
	(0.020)	(0.037)	(0.025)	(0.068)	(0.033)	(0.043)
Contract_Type	0.035**	0.035**	0.010	0.042	0.035**	0.031*
	(0.014)	(0.017)	(0.031)	(0.061)	(0.015)	(0.018)
Work_Climate	0.006	-0.007	0.003	-0.027	0.007	-0.002
	(0.006)	(0.009)	(0.009)	(0.024)	(0.007)	(0.010)
Work_Stab	0.007	-0.003	0.011	-0.004	0.006	-0.001
	(0.005)	(0.007)	(0.008)	(0.026)	(0.006)	(0.007)
Work_Time	0.012**	0.028***	-0.003	0.046*	0.022***	0.024***
	(0.005)	(0.008)	(0.009)	(0.023)	(0.007)	(0.009)
Work_Task	0.020***	0.028***	0.023***	0.048**	0.016**	0.023**
	(0.006)	(0.009)	(0.008)	(0.024)	(0.008)	(0.010)
Intermed_Prof	0.030***	0.017	-0.003	-0.053	0.051***	0.028*
	(0.010)	(0.014)	(0.019)	(0.046)	(0.012)	(0.015)
Manager	0.251***	0.097***	0.268***	0.077	0.200***	0.088**
	(0.017)	(0.031)	(0.025)	(0.063)	(0.024)	(0.037)
North	0.047***	0.086***	-0.012	-0.049	0.087***	0.111***
	(0.009)	(0.015)	(0.013)	(0.037)	(0.011)	(0.016)
Centre	0.042***	0.060***	0.023	-0.022	0.065***	0.079***
	(0.011)	(0.018)	(0.016)	(0.047)	(0.015)	(0.020)
Home_Time	0.007***	0.014***	0.005***	0.008	0.008***	0.015***
	(0.001)	(0.003)	(0.002)	(0.007)	(0.001)	(0.003)
Married	0.036***	0.086***	0.016	0.147***	0.045***	0.070***
	(0.010)	(0.019)	(0.014)	(0.044)	(0.013)	(0.021)
Italian	0.019	-0.004	0.290		0.009	-0.002
	(0.059)	(0.086)	(0.232)		(0.061)	(0.086)
Homeowner	0.017*	-0.035**	0.013	-0.050	0.017	-0.030
	(0.010)	(0.017)	(0.016)	(0.042)	(0.013)	(0.018)
Educ_Fath5	0.017	-0.012	-0.005	0.010	0.034	-0.010
	(0.019)	(0.033)	(0.026)	(0.063)	(0.029)	(0.040)
Educ_Moth5	-0.004	0.013	-0.030	-0.094	0.020	0.035
	(0.026)	(0.038)	(0.039)	(0.081)	(0.035)	(0.042)
Constant	0.788***	0.791***	0.677***	0.700***	0.788***	0.797***
	(0.075)	(0.120)	(0.246)	(0.201)	(0.085)	(0.123)
Sectoral Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,520	3,637	3,679	576	5,841	3,061
R-squared	0.442	0.238	0.385	0.250	0.314	0.171

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B4: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – 2006

Year	2006					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest and Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.060***	0.102***				
	(0.014)	(0.033)				
Female	-0.096***	-0.067***	-0.043***	0.033	-0.101***	-0.070***
	(0.010)	(0.015)	(0.013)	(0.042)	(0.011)	(0.015)
Contfem	0.047***	0.059				
	(0.015)	(0.037)				
Exper	0.018***	0.021***	0.016***	0.039**	0.018***	0.019***
	(0.002)	(0.005)	(0.003)	(0.016)	(0.002)	(0.005)
Exper2	-0.000***	-0.000	-0.000***	-0.002**	-0.000***	-0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Tenure	0.003***	0.004*	0.002*	-0.000	0.004***	0.005**
	(0.001)	(0.002)	(0.001)	(0.006)	(0.001)	(0.002)
Educ	0.137***	0.088***	0.185***	0.101***	0.112***	0.089***
	(0.008)	(0.013)	(0.012)	(0.037)	(0.010)	(0.014)
Max_D_Mark	0.034	0.056	-0.022	0.005	0.093**	0.066
	(0.021)	(0.040)	(0.025)	(0.065)	(0.038)	(0.050)
Contract_Type	0.041***	0.045***	-0.011	-0.024	0.048***	0.050***
	(0.014)	(0.016)	(0.032)	(0.051)	(0.015)	(0.017)
Work_Climate	-0.001	-0.010	-0.003	-0.009	0.001	-0.008
	(0.006)	(0.010)	(0.009)	(0.028)	(0.007)	(0.010)
Work_Stab	0.006	0.007	0.017*	0.034	0.003	0.005
	(0.005)	(0.008)	(0.010)	(0.025)	(0.006)	(0.008)
Work_Time	0.017***	0.026***	0.009	0.017	0.019***	0.025***
	(0.006)	(0.008)	(0.010)	(0.027)	(0.007)	(0.008)
Work_Task	0.020***	0.025**	0.020**	0.034	0.020***	0.022**
	(0.006)	(0.010)	(0.009)	(0.025)	(0.007)	(0.010)
Intermed_Prof	0.045***	0.049***	0.002	0.008	0.071***	0.056***
	(0.010)	(0.015)	(0.018)	(0.043)	(0.012)	(0.016)
Manager	0.198***	0.082***	0.177***	0.127**	0.177***	0.068**
	(0.016)	(0.029)	(0.024)	(0.057)	(0.022)	(0.035)
North	0.017**	0.053***	-0.038***	-0.039	0.054***	0.069***
	(0.009)	(0.015)	(0.013)	(0.036)	(0.012)	(0.016)
Centre	-0.005	0.032*	-0.038**	-0.090*	0.025*	0.052***
	(0.011)	(0.016)	(0.017)	(0.051)	(0.013)	(0.017)
Home_Time	0.007***	0.014***	0.005***	0.001	0.008***	0.016***
	(0.001)	(0.003)	(0.001)	(0.007)	(0.001)	(0.003)
Married	0.043***	0.026	0.034**	0.070	0.044***	0.021
	(0.010)	(0.018)	(0.014)	(0.045)	(0.014)	(0.020)
Italian	0.078	0.032	-0.247***		0.097*	0.040
	(0.050)	(0.056)	(0.087)		(0.050)	(0.056)
Homeowner	0.026***	0.019	0.013	-0.020	0.030**	0.023
	(0.010)	(0.018)	(0.016)	(0.048)	(0.012)	(0.019)
Educ_Fath5	0.026	-0.007	0.027	-0.029	0.027	0.004
	(0.018)	(0.029)	(0.024)	(0.057)	(0.026)	(0.034)
Educ_Moth5	0.017	0.018	0.019	-0.025	0.003	0.022
	(0.022)	(0.029)	(0.035)	(0.074)	(0.029)	(0.031)
Constant	0.858***	0.942***	1.257***	1.085***	0.859***	0.917***
	(0.066)	(0.096)	(0.114)	(0.228)	(0.073)	(0.100)
Sectoral Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,305	3,638	3,482	484	5,823	3,154
R-squared	0.427	0.204	0.351	0.246	0.292	0.133

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B5: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – 2008

Year	2008					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest and Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.056***	0.134***				
	(0.013)	(0.032)				
Female	-0.111***	-0.089***	-0.066***	-0.014	-0.115***	-0.094***
	(0.010)	(0.014)	(0.014)	(0.043)	(0.010)	(0.014)
Contfem	0.037**	0.027				
	(0.016)	(0.039)				
Exper	0.017***	0.010	0.012***	-0.013	0.017***	0.012
	(0.002)	(0.007)	(0.003)	(0.015)	(0.002)	(0.008)
Exper2	-0.000***	-0.000	-0.000	0.001	-0.000***	-0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Tenure	0.003***	0.007**	0.001	0.002	0.004***	0.008**
	(0.001)	(0.003)	(0.001)	(0.006)	(0.001)	(0.003)
Educ	0.146***	0.117***	0.209***	0.075	0.119***	0.123***
	(0.008)	(0.013)	(0.013)	(0.046)	(0.009)	(0.014)
Max_D_Mark	0.056**	0.085***	0.008	0.058	0.088***	0.091**
	(0.022)	(0.033)	(0.029)	(0.065)	(0.032)	(0.036)
Contract_Type	0.029**	0.036**	0.034	-0.018	0.025*	0.043***
	(0.013)	(0.015)	(0.034)	(0.050)	(0.015)	(0.016)
Work_Climate	-0.011**	-0.008	-0.016*	-0.016	-0.008	-0.007
	(0.005)	(0.009)	(0.009)	(0.027)	(0.006)	(0.009)
Work_Stab	0.019***	0.016*	0.008	0.029	0.023***	0.014
	(0.005)	(0.008)	(0.009)	(0.030)	(0.006)	(0.009)
Work_Time	0.023***	0.030***	0.018*	0.041**	0.024***	0.029***
	(0.005)	(0.008)	(0.009)	(0.021)	(0.007)	(0.009)
Work_Task	0.011*	0.013	0.008	-0.033	0.012*	0.018*
	(0.005)	(0.009)	(0.009)	(0.026)	(0.007)	(0.009)
Intermed_Prof	0.050***	0.023	0.027	0.039	0.065***	0.025
	(0.010)	(0.017)	(0.020)	(0.062)	(0.012)	(0.018)
Manager	0.138***	0.006	0.134***	0.087	0.126***	-0.008
	(0.017)	(0.032)	(0.025)	(0.082)	(0.025)	(0.037)
North	0.023**	0.072***	-0.029**	-0.073	0.053***	0.090***
	(0.009)	(0.016)	(0.014)	(0.049)	(0.012)	(0.017)
Centre	0.013	0.064***	-0.027	-0.017	0.040***	0.074***
	(0.011)	(0.020)	(0.017)	(0.052)	(0.015)	(0.022)
Home_Time	0.005***	0.013***	0.002	0.003	0.007***	0.014***
	(0.001)	(0.003)	(0.002)	(0.008)	(0.001)	(0.003)
Married	0.049***	0.051***	0.011	0.048	0.066***	0.059***
	(0.009)	(0.014)	(0.015)	(0.038)	(0.012)	(0.016)
Italian	0.041	0.021	0.047	-0.059	0.047	0.024
	(0.055)	(0.073)	(0.110)	(0.264)	(0.059)	(0.078)
Homeowner	0.035***	0.038**	0.011	-0.000	0.045***	0.041**
	(0.012)	(0.019)	(0.024)	(0.061)	(0.014)	(0.020)
Educ_Fath5	0.038**	0.009	0.027	-0.120	0.041	0.031
	(0.019)	(0.031)	(0.025)	(0.074)	(0.027)	(0.035)
Educ_Moth5	-0.007	0.009	0.051	0.086	-0.036	-0.009
	(0.026)	(0.033)	(0.044)	(0.100)	(0.031)	(0.034)
Constant	0.972***	0.978***	1.152***	1.886***	0.959***	0.906***
	(0.068)	(0.103)	(0.143)	(0.440)	(0.075)	(0.107)
Sectoral Dummies	Yes	Yes	Yes	Yes		
Observations	8,601	3,409	2,978	394	5,623	3,015
R-squared	0.426	0.225	0.335	0.282	0.302	0.163

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B6: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – 2010

Year	2010					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest and Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.076***	0.112***				
	(0.015)	(0.040)				
Female	-0.093***	-0.043**	-0.068***	-0.030	-0.089***	-0.040**
	(0.012)	(0.018)	(0.016)	(0.053)	(0.013)	(0.018)
Contfem	0.031*	0.038				
	(0.018)	(0.045)				
Exper	0.020***	0.018**	0.019***	-0.005	0.019***	0.020**
	(0.002)	(0.008)	(0.003)	(0.015)	(0.002)	(0.009)
Exper2	-0.000***	-0.000	-0.000***	-0.000	-0.000***	-0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)
Tenure	0.003***	0.012***	0.003***	0.016***	0.004***	0.012***
	(0.001)	(0.003)	(0.001)	(0.006)	(0.001)	(0.003)
Educ	0.140***	0.090***	0.184***	0.079*	0.122***	0.093***
	(0.010)	(0.018)	(0.015)	(0.043)	(0.013)	(0.020)
Max_D_Mark	0.070***	0.087***	0.056**	0.089*	0.066**	0.086**
	(0.020)	(0.032)	(0.025)	(0.046)	(0.032)	(0.040)
Contract_Type	0.035**	0.031*	0.011	0.002	0.035**	0.033*
	(0.016)	(0.018)	(0.038)	(0.057)	(0.017)	(0.020)
Work_Climate	-0.004	-0.006	0.003	-0.002	-0.008	-0.006
	(0.006)	(0.012)	(0.009)	(0.022)	(0.009)	(0.013)
Work_Stab	0.002	0.002	-0.008	0.013	0.006	0.001
	(0.006)	(0.010)	(0.010)	(0.026)	(0.007)	(0.011)
Work_Time	0.020***	0.028**	0.005	0.013	0.026***	0.030**
	(0.007)	(0.012)	(0.010)	(0.023)	(0.009)	(0.013)
Work_Task	0.012*	-0.002	0.011	-0.055*	0.012	0.005
	(0.007)	(0.013)	(0.010)	(0.030)	(0.009)	(0.014)
Intermed_Prof	0.029**	0.000	-0.001	0.068	0.046***	-0.002
	(0.012)	(0.019)	(0.021)	(0.048)	(0.014)	(0.020)
Manager	0.122***	0.038	0.108***	0.088	0.113***	0.032
	(0.016)	(0.029)	(0.025)	(0.057)	(0.022)	(0.034)
North	0.035***	0.067***	-0.002	0.009	0.054***	0.075***
	(0.011)	(0.020)	(0.015)	(0.043)	(0.015)	(0.022)
Centre	0.007	0.018	0.000	-0.010	0.016	0.020
	(0.012)	(0.022)	(0.018)	(0.054)	(0.017)	(0.024)
Home_Time	0.006***	0.013***	0.004**	0.012*	0.007***	0.012***
	(0.001)	(0.003)	(0.002)	(0.007)	(0.001)	(0.003)
Married	0.057***	0.040**	0.049***	0.086**	0.057***	0.033
	(0.010)	(0.018)	(0.015)	(0.040)	(0.014)	(0.020)
Italian	0.007	0.062	0.156	0.131	-0.001	0.059
	(0.037)	(0.044)	(0.198)	(0.359)	(0.038)	(0.044)
Homeowner	0.045***	0.036	0.074**	0.060	0.037**	0.032
	(0.015)	(0.024)	(0.031)	(0.076)	(0.018)	(0.025)
Educ_Fath5	-0.020	-0.066**	-0.006	-0.077	-0.040	-0.063*
	(0.020)	(0.032)	(0.026)	(0.064)	(0.029)	(0.037)
Educ_Moth5	0.013	0.026	0.028	0.104	0.009	0.006
	(0.028)	(0.037)	(0.039)	(0.077)	(0.036)	(0.042)
Constant	1.017***	1.018***	0.980***	1.350***	1.039***	0.979***
	(0.058)	(0.103)	(0.217)	(0.451)	(0.069)	(0.110)
Sectoral Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,420	4,080	3,037	517	6,383	3,563
R-squared	0.315	0.117	0.316	0.242	0.183	0.075

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B7: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – 2011

Year	2011					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest and Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.101***	0.111***				
	(0.015)	(0.031)				
Female	-0.079***	-0.024	-0.058***	0.108**	-0.080***	-0.023
	(0.013)	(0.019)	(0.015)	(0.051)	(0.013)	(0.019)
Contfem	0.023	0.105***				
	(0.019)	(0.039)				
Exper	0.012***	0.014*	0.009***	0.017	0.013***	0.013
	(0.002)	(0.008)	(0.003)	(0.015)	(0.002)	(0.008)
Exper2	-0.000***	-0.001	-0.000	-0.001	-0.000***	-0.001
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Tenure	0.004***	0.008***	0.003***	0.009	0.004***	0.007**
	(0.001)	(0.003)	(0.001)	(0.007)	(0.001)	(0.003)
Educ	0.162***	0.074***	0.216***	0.116**	0.139***	0.072***
	(0.010)	(0.019)	(0.016)	(0.047)	(0.012)	(0.020)
Max_D_Mark	0.025	0.022	0.047*	0.080	-0.015	0.004
	(0.021)	(0.035)	(0.025)	(0.055)	(0.035)	(0.042)
Contract_Type	0.043***	0.031	0.015	-0.005	0.044**	0.037*
	(0.016)	(0.019)	(0.033)	(0.061)	(0.018)	(0.020)
Work_Climate	0.006	0.004	0.010	0.057**	0.005	-0.004
	(0.007)	(0.013)	(0.009)	(0.027)	(0.009)	(0.014)
Work_Stab	-0.002	-0.001	0.005	0.011	-0.004	-0.000
	(0.006)	(0.010)	(0.010)	(0.028)	(0.007)	(0.010)
Work_Time	0.007	0.019	0.006	-0.012	0.008	0.023*
	(0.007)	(0.012)	(0.010)	(0.026)	(0.009)	(0.013)
Work_Task	0.003	0.000	0.011	-0.038	-0.001	0.004
	(0.006)	(0.011)	(0.009)	(0.026)	(0.008)	(0.012)
Intermed_Prof	0.022*	0.033*	0.008	-0.048	0.036**	0.039*
	(0.012)	(0.019)	(0.022)	(0.050)	(0.014)	(0.020)
Manager	0.106***	0.081***	0.121***	-0.023	0.085***	0.088***
	(0.016)	(0.029)	(0.025)	(0.058)	(0.021)	(0.032)
North	0.034***	0.078***	-0.008	-0.021	0.056***	0.094***
	(0.011)	(0.020)	(0.016)	(0.046)	(0.015)	(0.022)
Centre	0.023*	0.033	0.026	-0.041	0.027	0.045*
	(0.013)	(0.023)	(0.018)	(0.052)	(0.017)	(0.025)
Home_Time	0.008***	0.012***	0.007***	0.009	0.009***	0.012***
	(0.001)	(0.003)	(0.002)	(0.007)	(0.001)	(0.003)
Married	0.054***	0.067***	0.058***	0.114***	0.051***	0.064***
	(0.011)	(0.021)	(0.016)	(0.040)	(0.016)	(0.025)
Italian	0.158***	0.063	-0.016	-0.441***	0.174***	0.071
	(0.058)	(0.084)	(0.194)	(0.143)	(0.060)	(0.086)
Homeowner	0.027*	-0.006	0.030	-0.062	0.025	0.001
	(0.015)	(0.025)	(0.022)	(0.060)	(0.019)	(0.027)
Educ_Fath5	0.012	-0.028	0.030	0.030	-0.007	-0.047
	(0.021)	(0.034)	(0.031)	(0.060)	(0.029)	(0.040)
Educ_Moth5	0.006	0.051	-0.035	-0.053	0.036	0.070*
	(0.028)	(0.036)	(0.052)	(0.077)	(0.034)	(0.040)
Constant	0.905***	1.198***	1.074***	1.986***	0.946***	1.161***
	(0.078)	(0.124)	(0.210)	(0.265)	(0.087)	(0.131)
Sectoral Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,977	3,651	2,905	444	6,072	3,207
R-squared	0.302	0.111	0.314	0.228	0.158	0.069

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B8: OLS Estimates of Log Hourly Wages with Indicator Variable *Public_Contest* and Interactive Effect *Contfem* – 2014

Year	2014					
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Full Sample including Individuals Aged 18-64	Individuals Aged 18-34	Individuals Hired by Public Contest and Aged 18-64	Individuals Hired by Public Contest and Aged 18-34	Individuals not Hired by Public Contest and Aged 18-64	Individuals not Hired by Public Contest and Aged 18-34
Public_Contest	0.072***	0.119***				
	(0.013)	(0.030)				
Female	-0.087***	-0.048***	-0.073***	-0.027	-0.085***	-0.050***
	(0.011)	(0.017)	(0.013)	(0.034)	(0.011)	(0.017)
Contfem	0.014	0.019				
	(0.016)	(0.037)				
Exper	0.014***	0.020***	0.006**	0.015	0.016***	0.023***
	(0.002)	(0.007)	(0.003)	(0.014)	(0.002)	(0.008)
Exper2	-0.000***	-0.001**	-0.000	-0.000	-0.000***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Tenure	0.003***	0.004	0.003***	-0.009	0.004***	0.007**
	(0.001)	(0.003)	(0.001)	(0.006)	(0.001)	(0.003)
Educ	0.122***	0.059***	0.151***	0.141***	0.110***	0.050***
	(0.008)	(0.015)	(0.012)	(0.033)	(0.010)	(0.017)
Max_D_Mark	0.006	0.003	0.032	-0.044	-0.025	0.017
	(0.023)	(0.034)	(0.025)	(0.076)	(0.042)	(0.038)
Contract_Type	0.053***	0.048**	0.138***	0.202***	0.022	0.020
	(0.015)	(0.021)	(0.031)	(0.052)	(0.017)	(0.023)
Work_Climate	-0.006	-0.005	-0.005	-0.010	-0.007	-0.003
	(0.005)	(0.011)	(0.008)	(0.024)	(0.007)	(0.012)
Work_Stab	0.004	0.004	-0.010	-0.041**	0.009	0.013
	(0.005)	(0.010)	(0.008)	(0.020)	(0.007)	(0.011)
Work_Time	0.016***	0.024**	0.019**	0.030	0.016**	0.022**
	(0.005)	(0.010)	(0.008)	(0.023)	(0.007)	(0.011)
Work_Task	0.011*	-0.005	0.017**	0.016	0.007	-0.010
	(0.006)	(0.011)	(0.009)	(0.025)	(0.008)	(0.013)
Intermed_Prof	0.039***	0.033*	-0.030	0.035	0.063***	0.037*
	(0.011)	(0.019)	(0.020)	(0.062)	(0.012)	(0.020)
Manager	0.220***	0.162***	0.218***	0.203***	0.193***	0.153***
	(0.015)	(0.028)	(0.024)	(0.072)	(0.020)	(0.031)
North	0.021**	0.044**	-0.019	0.031	0.045***	0.047**
	(0.009)	(0.018)	(0.014)	(0.039)	(0.013)	(0.020)
Centre	-0.011	-0.019	-0.015	-0.006	-0.004	-0.022
	(0.011)	(0.021)	(0.015)	(0.049)	(0.014)	(0.023)
Home_Time	0.004***	0.001	0.003**	-0.002	0.004***	0.002
	(0.001)	(0.003)	(0.001)	(0.006)	(0.001)	(0.003)
Married	0.043***	0.045***	-0.001	-0.008	0.060***	0.060***
	(0.009)	(0.016)	(0.014)	(0.033)	(0.012)	(0.018)
Italian	0.040	0.020	-0.099	-0.081	0.060	0.026
	(0.040)	(0.075)	(0.075)	(0.113)	(0.043)	(0.077)
Homeowner	0.012	0.002	0.039*	-0.001	0.001	0.006
	(0.013)	(0.019)	(0.023)	(0.041)	(0.015)	(0.020)
Educ_Fath5	0.022	0.028	0.006	0.001	0.030	0.038
	(0.017)	(0.027)	(0.022)	(0.049)	(0.024)	(0.032)
Educ_Moth5	-0.007	0.003	-0.024	-0.067	0.006	0.016
	(0.022)	(0.034)	(0.032)	(0.060)	(0.030)	(0.039)
Constant	1.193***	1.457***	1.422***	1.492***	1.184***	1.444***
	(0.059)	(0.112)	(0.105)	(0.209)	(0.071)	(0.121)
Sectoral Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	12,328	4,554	4,404	851	7,924	3,703
R-squared	0.262	0.119	0.264	0.126	0.157	0.077

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B9: OLS Estimates of Log Hourly Wages by Age and Gender – Panel

Year	Panel			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.111***	0.066***	0.183***	0.115***
	(0.008)	(0.007)	(0.014)	(0.017)
Exper	0.015***	0.020***	0.014***	0.024***
	(0.001)	(0.001)	(0.005)	(0.004)
Exper2	-0.000***	-0.000***	-0.000	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.003***	0.003***	0.007***	0.006***
	(0.000)	(0.000)	(0.002)	(0.002)
Educ	0.155***	0.138***	0.101***	0.094***
	(0.006)	(0.005)	(0.011)	(0.010)
Max_D_Mark	0.037***	0.048***	0.050**	0.034
	(0.012)	(0.016)	(0.020)	(0.028)
Contract_Type	0.014	0.072***	0.006	0.061***
	(0.010)	(0.009)	(0.012)	(0.011)
Work_Climate	-0.001	0.002	0.002	-0.009
	(0.004)	(0.004)	(0.007)	(0.007)
Work_Stab	0.002	0.010***	-0.001	0.012**
	(0.004)	(0.004)	(0.006)	(0.006)
Work_Time	0.016***	0.018***	0.031***	0.026***
	(0.004)	(0.004)	(0.007)	(0.006)
Work_Task	0.014***	0.013***	0.010	0.006
	(0.004)	(0.004)	(0.007)	(0.007)
Intermed_Prof	0.072***	0.017***	0.054***	0.012
	(0.009)	(0.006)	(0.013)	(0.010)
Manager	0.180***	0.155***	0.086***	0.051***
	(0.012)	(0.010)	(0.021)	(0.018)
North	0.008	0.045***	0.073***	0.061***
	(0.007)	(0.006)	(0.013)	(0.010)
Centre	0.005	0.016**	0.056***	0.023*
	(0.008)	(0.007)	(0.014)	(0.013)
Home_Time	0.006***	0.007***	0.011***	0.015***
	(0.001)	(0.001)	(0.002)	(0.002)
Married	0.043***	0.052***	0.048***	0.068***
	(0.006)	(0.007)	(0.011)	(0.013)
Italian	0.040	0.075*	0.023	0.028
	(0.034)	(0.039)	(0.049)	(0.033)
Homeowner	0.026***	0.028***	0.013	0.015
	(0.008)	(0.007)	(0.013)	(0.012)
Educ_Fath5	0.015	0.009	-0.039*	-0.014
	(0.012)	(0.013)	(0.021)	(0.020)
Educ_Moth5	0.048***	-0.036**	0.075***	-0.021
	(0.017)	(0.017)	(0.025)	(0.021)
Constant	0.895***	0.891***	1.004***	1.046***
	(0.048)	(0.047)	(0.081)	(0.062)
Sectoral Dummies	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes
Observations	19,398	22,447	8,090	8,366
R-squared	0.405	0.364	0.209	0.130

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B10: OLS Estimates of Log Hourly Wages by Age and Gender – 2005

Year	2005			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.072***	0.075***	0.143***	0.057
	(0.015)	(0.016)	(0.029)	(0.038)
Exper	0.017***	0.020***	0.014	0.024***
	(0.002)	(0.002)	(0.009)	(0.006)
Exper2	-0.000***	-0.000***	-0.000	-0.001*
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.002*	0.002**	0.001	0.001
	(0.001)	(0.001)	(0.003)	(0.003)
Educ	0.182***	0.152***	0.174***	0.134***
	(0.012)	(0.011)	(0.021)	(0.018)
Max_D_Mark	0.054**	0.028	0.063	-0.103
	(0.024)	(0.035)	(0.044)	(0.067)
Contract_Type	0.022	0.050***	0.018	0.046**
	(0.020)	(0.019)	(0.026)	(0.023)
Work_Climate	0.000	0.012	-0.001	-0.012
	(0.008)	(0.008)	(0.013)	(0.014)
Work_Stab	0.003	0.010*	-0.007	0.005
	(0.007)	(0.006)	(0.010)	(0.010)
Work_Time	0.005	0.019**	0.009	0.048***
	(0.008)	(0.007)	(0.012)	(0.011)
Work_Task	0.022***	0.016**	0.033**	0.018
	(0.008)	(0.008)	(0.014)	(0.012)
Intermed_Prof	0.063***	0.015	0.050**	0.004
	(0.017)	(0.012)	(0.021)	(0.019)
Manager	0.254***	0.268***	0.110**	0.099**
	(0.026)	(0.022)	(0.044)	(0.039)
Sec_2	0.067**	0.091***	0.080**	0.043
North	0.051***	0.045***	0.150***	0.035*
	(0.014)	(0.011)	(0.024)	(0.018)
Centre	0.042***	0.044***	0.119***	0.010
	(0.016)	(0.014)	(0.027)	(0.025)
Home_Time	0.008***	0.006***	0.014***	0.015***
	(0.001)	(0.001)	(0.004)	(0.003)
Married	0.030**	0.040***	0.071***	0.116***
	(0.013)	(0.014)	(0.026)	(0.028)
Italian	0.017	0.024	-0.001	-0.024
	(0.089)	(0.049)	(0.141)	(0.041)
Homeowner	0.007	0.028**	-0.040	-0.021
	(0.014)	(0.014)	(0.025)	(0.023)
Educ_Fath5	0.025	0.006	-0.007	-0.014
	(0.025)	(0.029)	(0.045)	(0.050)
Educ_Moth5	0.015	-0.020	0.045	0.009
	(0.037)	(0.037)	(0.057)	(0.050)
Constant	0.667***	0.772***	0.593***	0.865***
	(0.117)	(0.073)	(0.196)	(0.101)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	4,513	5,007	1,877	1,760
R-squared	0.456	0.431	0.292	0.193

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B11: OLS Estimates of Log Hourly Wages by Age and Gender – 2006

Year	2006			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.114***	0.054***	0.160***	0.100***
	(0.017)	(0.016)	(0.031)	(0.037)
Exper	0.018***	0.018***	0.020***	0.022***
	(0.002)	(0.002)	(0.007)	(0.006)
Exper2	-0.000***	-0.000***	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.002**	0.004***	0.003	0.005
	(0.001)	(0.001)	(0.003)	(0.003)
Educ	0.132***	0.138***	0.086***	0.088***
	(0.012)	(0.010)	(0.017)	(0.018)
Max_D_Mark	0.037	0.025	0.101**	-0.041
	(0.024)	(0.037)	(0.041)	(0.087)
Contract_Type	0.030	0.060***	0.055**	0.039*
	(0.019)	(0.019)	(0.022)	(0.023)
Work_Climate	-0.006	0.001	-0.004	-0.017
	(0.008)	(0.008)	(0.013)	(0.014)
Work_Stab	0.005	0.010	0.000	0.014
	(0.007)	(0.007)	(0.011)	(0.012)
Work_Time	0.015*	0.019**	0.029**	0.023**
	(0.008)	(0.008)	(0.012)	(0.010)
Work_Task	0.016**	0.020**	0.020	0.026*
	(0.008)	(0.008)	(0.013)	(0.014)
Intermed_Prof	0.077***	0.025*	0.075***	0.042**
	(0.017)	(0.013)	(0.021)	(0.021)
Manager	0.212***	0.203***	0.141***	0.054
	(0.026)	(0.021)	(0.044)	(0.039)
North	0.005	0.024**	0.067***	0.040**
	(0.014)	(0.011)	(0.023)	(0.019)
Centre	-0.022	0.006	0.051**	0.014
	(0.016)	(0.014)	(0.024)	(0.023)
Home_Time	0.005***	0.009***	0.011***	0.018***
	(0.001)	(0.002)	(0.004)	(0.004)
Married	0.033**	0.042***	0.019	0.045
	(0.013)	(0.015)	(0.023)	(0.030)
Italian	0.052	0.059	0.001	0.042
	(0.074)	(0.051)	(0.089)	(0.066)
Homeowner	0.028*	0.022	0.021	0.018
	(0.015)	(0.013)	(0.022)	(0.028)
Educ_Fath5	0.018	0.040	-0.046	0.042
	(0.023)	(0.027)	(0.038)	(0.047)
Educ_Moth5	0.037	-0.012	0.030	0.002
	(0.030)	(0.032)	(0.039)	(0.043)
Constant	0.849***	0.832***	0.888***	0.957***
	(0.099)	(0.077)	(0.143)	(0.127)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	4,083	5,222	1,779	1,859
R-squared	0.457	0.408	0.269	0.147

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B12: OLS Estimates of Log Hourly Wages by Age and Gender – 2008

Year	2008			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.083***	0.060***	0.164***	0.107***
	(0.016)	(0.015)	(0.029)	(0.035)
Exper	0.015***	0.018***	0.013	0.004
	(0.002)	(0.002)	(0.008)	(0.012)
Exper2	-0.000***	-0.000***	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.001)
Tenure	0.004***	0.002***	0.009**	0.006
	(0.001)	(0.001)	(0.004)	(0.005)
Educ	0.158***	0.133***	0.121***	0.110***
	(0.012)	(0.010)	(0.020)	(0.017)
Max_D_Mark	0.057**	0.046	0.104***	0.034
	(0.028)	(0.034)	(0.037)	(0.066)
Contract_Type	0.006	0.054***	0.003	0.068***
	(0.019)	(0.019)	(0.022)	(0.022)
Work_Climate	-0.008	-0.017**	0.000	-0.017
	(0.007)	(0.007)	(0.012)	(0.012)
Work_Stab	0.013*	0.029***	0.007	0.030***
	(0.007)	(0.007)	(0.012)	(0.011)
Work_Time	0.032***	0.015*	0.040***	0.019
	(0.007)	(0.008)	(0.010)	(0.013)
Work_Task	0.006	0.015**	0.008	0.017
	(0.008)	(0.007)	(0.013)	(0.013)
Intermed_Prof	0.091***	0.031**	0.050*	0.011
	(0.019)	(0.013)	(0.028)	(0.022)
Manager	0.152***	0.146***	0.021	0.010
	(0.029)	(0.022)	(0.050)	(0.043)
North	0.016	0.032***	0.104***	0.044**
	(0.014)	(0.012)	(0.023)	(0.021)
Centre	0.015	0.015	0.105***	0.029
	(0.018)	(0.015)	(0.028)	(0.029)
Home_Time	0.005***	0.005***	0.014***	0.011***
	(0.001)	(0.001)	(0.004)	(0.004)
Married	0.039***	0.052***	0.036**	0.086***
	(0.012)	(0.015)	(0.018)	(0.025)
Italian	0.074	0.009	0.079	-0.028
	(0.085)	(0.058)	(0.117)	(0.069)
Homeowner	0.034*	0.037**	0.029	0.050*
	(0.019)	(0.016)	(0.023)	(0.030)
Educ_Fath5	0.032	0.045*	0.005	0.019
	(0.027)	(0.026)	(0.043)	(0.045)
Educ_Moth5	0.081**	-0.103***	0.089*	-0.078*
	(0.038)	(0.034)	(0.049)	(0.044)
Constant	0.773***	1.026***	0.744***	1.089***
	(0.109)	(0.078)	(0.157)	(0.129)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	3,956	4,645	1,742	1,667
R-squared	0.469	0.397	0.300	0.157

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B13: OLS Estimates of Log Hourly Wages by Age and Gender – 2010

Year	2010			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.108***	0.079***	0.156***	0.106**
	(0.017)	(0.017)	(0.030)	(0.042)
Exper	0.016***	0.024***	0.012	0.024**
	(0.003)	(0.003)	(0.013)	(0.009)
Exper2	-0.000***	-0.000***	-0.000	-0.001
	(0.000)	(0.000)	(0.001)	(0.001)
Tenure	0.003***	0.003***	0.017***	0.007*
	(0.001)	(0.001)	(0.005)	(0.004)
Educ	0.143***	0.133***	0.098***	0.086***
	(0.015)	(0.013)	(0.030)	(0.023)
Max_D_Mark	0.040	0.105***	0.045	0.162***
	(0.026)	(0.030)	(0.041)	(0.052)
Contract_Type	0.005	0.069***	-0.019	0.079***
	(0.023)	(0.021)	(0.029)	(0.023)
Work_Climate	-0.009	-0.000	-0.009	-0.005
	(0.009)	(0.009)	(0.018)	(0.017)
Work_Stab	-0.001	0.008	-0.003	0.011
	(0.009)	(0.008)	(0.016)	(0.013)
Work_Time	0.015	0.025***	0.030	0.026*
	(0.011)	(0.009)	(0.019)	(0.015)
Work_Task	0.018*	0.006	0.004	-0.009
	(0.010)	(0.010)	(0.018)	(0.018)
Intermed_Prof	0.058***	0.012	0.038	-0.020
	(0.022)	(0.014)	(0.033)	(0.022)
Manager	0.156***	0.107***	0.087*	0.006
	(0.028)	(0.021)	(0.045)	(0.040)
North	0.015	0.051***	0.067**	0.069***
	(0.017)	(0.014)	(0.033)	(0.024)
Centre	0.007	0.004	0.024	0.013
	(0.018)	(0.017)	(0.033)	(0.030)
Home_Time	0.005***	0.006***	0.010**	0.016***
	(0.001)	(0.001)	(0.005)	(0.004)
Married	0.061***	0.040**	0.049**	0.044*
	(0.014)	(0.016)	(0.025)	(0.026)
Italian	0.020	-0.029	0.075	0.003
	(0.052)	(0.055)	(0.066)	(0.056)
Homeowner	0.026	0.061***	-0.000	0.075**
	(0.023)	(0.021)	(0.034)	(0.034)
Educ_Fath5	0.003	-0.041	-0.073	-0.067
	(0.028)	(0.027)	(0.047)	(0.043)
Educ_Moth5	-0.024	0.051	-0.001	0.069
	(0.039)	(0.041)	(0.051)	(0.055)
Constant	0.981***	0.978***	0.997***	1.003***
	(0.084)	(0.083)	(0.157)	(0.133)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	4,209	5,211	1,913	2,167
R-squared	0.333	0.309	0.140	0.103

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B14: OLS Estimates of Log Hourly Wages by Age and Gender – 2011

Year	2011			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.138***	0.087***	0.219***	0.105***
	(0.019)	(0.015)	(0.035)	(0.032)
Exper	0.005*	0.018***	-0.003	0.029***
	(0.003)	(0.002)	(0.013)	(0.008)
Exper2	-0.000	-0.000***	0.000	-0.001***
	(0.000)	(0.000)	(0.001)	(0.000)
Tenure	0.005***	0.003***	0.012***	0.003
	(0.001)	(0.001)	(0.004)	(0.003)
Educ	0.149***	0.163***	0.041	0.094***
	(0.016)	(0.013)	(0.030)	(0.024)
Max_D_Mark	0.013	0.025	-0.008	0.053
	(0.026)	(0.038)	(0.046)	(0.053)
Contract_Type	0.017	0.070***	-0.006	0.058**
	(0.024)	(0.021)	(0.033)	(0.023)
Work_Climate	0.006	0.008	0.019	-0.007
	(0.009)	(0.010)	(0.019)	(0.018)
Work_Stab	-0.004	0.005	-0.004	0.005
	(0.009)	(0.008)	(0.016)	(0.011)
Work_Time	-0.002	0.010	0.009	0.024
	(0.010)	(0.010)	(0.017)	(0.017)
Work_Task	-0.000	0.004	0.007	-0.008
	(0.009)	(0.009)	(0.018)	(0.014)
Intermed_Prof	0.072***	0.000	0.089**	0.013
	(0.023)	(0.015)	(0.036)	(0.022)
Manager	0.171***	0.070***	0.150***	0.039
	(0.028)	(0.021)	(0.049)	(0.036)
North	0.004	0.060***	0.031	0.113***
	(0.018)	(0.014)	(0.034)	(0.023)
Centre	0.023	0.025	0.027	0.041
	(0.020)	(0.016)	(0.040)	(0.027)
Home_Time	0.006***	0.010***	0.013***	0.011***
	(0.002)	(0.001)	(0.005)	(0.004)
Married	0.041***	0.062***	0.057**	0.096***
	(0.015)	(0.018)	(0.028)	(0.035)
Italian	0.167***	0.113	0.177**	-0.090
	(0.060)	(0.132)	(0.085)	(0.173)
Homeowner	0.034	0.021	0.003	-0.015
	(0.023)	(0.020)	(0.040)	(0.029)
Educ_Fath5	0.027	-0.002	-0.051	-0.022
	(0.033)	(0.027)	(0.062)	(0.036)
Educ_Moth5	0.038	-0.017	0.120*	0.013
	(0.045)	(0.035)	(0.063)	(0.040)
Constant	0.987***	0.832***	1.211***	1.251***
	(0.100)	(0.150)	(0.161)	(0.214)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	4,168	4,809	1,617	2,034
R-squared	0.303	0.316	0.137	0.101

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B15: OLS Estimates of Log Hourly Wages by Age and Gender – 2014

Year	2014			
	(1)	(2)	(3)	(4)
	Individuals Aged 18-64		Individuals Aged 18-34	
Variables	Women	Men	Women	Men
Public_Contest	0.086***	0.076***	0.142***	0.123***
	(0.013)	(0.014)	(0.026)	(0.032)
Exper	0.009***	0.019***	0.022**	0.017*
	(0.002)	(0.002)	(0.010)	(0.009)
Exper2	-0.000**	-0.000***	-0.001**	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.003***	0.003***	-0.001	0.009**
	(0.001)	(0.001)	(0.004)	(0.004)
Educ	0.112***	0.127***	0.049**	0.071***
	(0.012)	(0.011)	(0.023)	(0.020)
Max_D_Mark	0.032	-0.041	0.007	-0.006
	(0.023)	(0.053)	(0.043)	(0.052)
Contract_Type	0.038*	0.072***	0.043	0.048*
	(0.022)	(0.021)	(0.031)	(0.027)
Work_Climate	-0.005	-0.008	-0.012	0.001
	(0.008)	(0.007)	(0.017)	(0.014)
Work_Stab	-0.002	0.012	-0.005	0.015
	(0.007)	(0.008)	(0.013)	(0.014)
Work_Time	0.027***	0.006	0.043***	0.006
	(0.008)	(0.007)	(0.015)	(0.012)
Work_Task	0.008	0.013	0.001	-0.010
	(0.009)	(0.008)	(0.019)	(0.014)
Intermed_Prof	0.066***	0.025*	0.041	0.031
	(0.018)	(0.013)	(0.032)	(0.024)
Manager	0.279***	0.170***	0.181***	0.149***
	(0.025)	(0.020)	(0.047)	(0.033)
North	-0.008	0.055***	0.042	0.049**
	(0.014)	(0.013)	(0.026)	(0.023)
Centre	-0.036**	0.018	-0.023	-0.009
	(0.015)	(0.015)	(0.032)	(0.028)
Home_Time	0.003**	0.005***	-0.003	0.005
	(0.001)	(0.001)	(0.004)	(0.003)
Married	0.029**	0.054***	0.050**	0.051**
	(0.013)	(0.013)	(0.022)	(0.023)
Italian	0.025	0.051	-0.009	0.068
	(0.056)	(0.051)	(0.103)	(0.102)
Homeowner	0.021	0.001	-0.001	0.009
	(0.018)	(0.018)	(0.027)	(0.026)
Educ_Fath5	-0.013	0.065***	-0.009	0.060
	(0.023)	(0.024)	(0.040)	(0.037)
Educ_Moth5	0.006	-0.027	0.018	-0.013
	(0.031)	(0.031)	(0.051)	(0.044)
Constant	1.219***	1.096***	1.517***	1.312***
	(0.086)	(0.077)	(0.166)	(0.148)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	6,093	6,235	2,254	2,300
R-squared	0.284	0.249	0.136	0.107

Robust standard errors in parentheses
$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B16: Bivariate Probit Estimation by Gender – Panel

Year	Panel			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.066***	0.025***	0.044***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)
Educ	0.804***	0.493***	0.528***	0.217***
	(0.015)	(0.010)	(0.013)	(0.011)
Married	0.138***	-0.060**	0.300***	0.528***
	(0.023)	(0.025)	(0.024)	(0.030)
Homeowner	0.164***	0.088***	0.088***	0.193***
	(0.027)	(0.018)	(0.025)	(0.021)
Age5064		0.789***		0.345***
		(0.030)		(0.030)
Italian		0.259***		0.246***
		(0.059)		(0.093)
North		0.797***		0.776***
		(0.016)		(0.017)
Centre		0.499***		0.504***
		(0.019)		(0.021)
Partner_Works		0.036*		0.128***
		(0.021)		(0.026)
Kids		-0.172***		0.153***
		(0.024)		(0.026)
Kids_10		-0.152***		-0.023
		(0.024)		(0.034)
Work_Climate	-0.026**		-0.063***	
	(0.013)		(0.012)	
Work_Stab	0.166***		0.233***	
	(0.010)		(0.011)	
Work_Time	0.082***		0.057***	
	(0.013)		(0.012)	
Work_Task	-0.032**		0.000	
	(0.014)		(0.013)	
Reloc	0.417***		0.442***	
	(0.039)		(0.029)	
Risp	0.051**		0.123***	
	(0.023)		(0.023)	
Constant	-7.000***	-3.123***	-5.638***	-1.506***
	(0.100)	(0.081)	(0.085)	(0.108)
ρ	0.618***		-1.506***	
	(0.055)		(0.108	
Year Dummies	Yes	Yes	Yes	Yes
Observations	39,345		33,538	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B17: Bivariate Probit Estimation by Gender – 2005

Year	2005			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.061***	0.006***	0.035***	-0.009***
	(0.002)	(0.002)	(0.002)	(0.003)
Educ	0.791***	0.511***	0.506***	0.209***
	(0.030)	(0.019)	(0.026)	(0.023)
Married	0.151***	-0.259***	0.261***	0.491***
	(0.050)	(0.052)	(0.048)	(0.056)
Homeowner	0.182***	0.275***	0.255***	0.456***
	(0.051)	(0.037)	(0.047)	(0.047)
Age5064		1.396***		0.557***
		(0.057)		(0.064)
Italian		0.242**		-0.026
		(0.106)		(0.190)
North		0.748***		0.797***
		(0.030)		(0.037)
Centre		0.421***		0.420***
		(0.036)		(0.043)
Partner_Works		0.231***		0.091*
		(0.043)		(0.051)
Kids		-0.469***		-0.008
		(0.044)		(0.046)
Kids_10		0.393***		0.009
		(0.049)		(0.086)
Work_Climate	-0.009		-0.028	
	(0.029)		(0.027)	
Work_Stab	0.131***		0.228***	
	(0.021)		(0.021)	
Work_Time	-0.025		-0.050**	
	(0.027)		(0.024)	
Work_Task	-0.003		-0.030	
	(0.029)		(0.026)	
Reloc	0.550***		0.446***	
	(0.062)		(0.045)	
Risp	0.174***		0.132***	
	(0.047)		(0.045)	
Constant	-6.182***	-2.560***	-4.594***	-0.592***
	(0.184)	(0.139)	(0.148)	(0.219)
ρ	0.571***		1.324***	
	(0.079)		(0.216)	
Observations	10,744		7,648	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B18: Bivariate Probit Estimation by Gender – 2006

Year	2006			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.062***	0.005*	0.038***	-0.008***
	(0.002)	(0.003)	(0.002)	(0.003)
Educ	0.823***	0.454***	0.490***	0.185***
	(0.032)	(0.021)	(0.026)	(0.023)
Married	0.021	-0.261***	0.329***	0.367***
	(0.054)	(0.056)	(0.049)	(0.065)
Homeowner	0.275***	0.331***	0.131***	0.350***
	(0.054)	(0.041)	(0.048)	(0.047)
Age5064		0.904***		0.475***
		(0.063)		(0.066)
Italian		0.318***		0.071
		(0.117)		(0.176)
North		0.692***		0.653***
		(0.032)		(0.036)
Centre		0.472***		0.468***
		(0.040)		(0.046)
Partner_Works		0.167***		0.129**
		(0.045)		(0.051)
Kids		-0.121**		0.155**
		(0.056)		(0.065)
Kids_10		-0.255***		0.129**
		(0.049)		(0.065)
Work_Climate	-0.059**		-0.094***	
	(0.028)		(0.025)	
Work_Stab	0.172***		0.307***	
	(0.022)		(0.023)	
Work_Time	0.100***		0.051**	
	(0.028)		(0.025)	
Work_Task	-0.039		-0.034	
	(0.030)		(0.026)	
Reloc	0.360***		0.510***	
	(0.097)		(0.062)	
Risp	0.104**		0.097**	
	(0.050)		(0.046)	
Constant	-6.546***	-2.344***	-4.997***	-0.565***
	(0.190)	(0.154)	(0.159)	(0.203)
ρ	0.786***		1.339***	
	(0.114)		(0.252)	
Observations	8,702		7,703	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B19: Bivariate Probit Estimation by Gender – 2008

Year	2008			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.066***	0.011***	0.045***	-0.005*
	(0.002)	(0.003)	(0.002)	(0.003)
Educ	0.760***	0.499***	0.503***	0.243***
	(0.034)	(0.022)	(0.028)	(0.025)
Married	0.123**	0.011	0.308***	0.558***
	(0.049)	(0.058)	(0.053)	(0.070)
Homeowner	0.211***	0.217***	0.113*	0.164***
	(0.067)	(0.042)	(0.059)	(0.047)
Age5064		0.914***		0.562***
		(0.068)		(0.073)
Italian		0.333***		0.278
		(0.120)		(0.183)
North		0.840***		0.814***
		(0.034)		(0.039)
Centre		0.471***		0.538***
		(0.041)		(0.049)
Partner_Works		-0.044		0.014
		(0.049)		(0.058)
Kids		-0.168***		0.298***
		(0.059)		(0.073)
Kids_10		-0.205***		-0.132*
		(0.052)		(0.072)
Work_Climate	0.005		-0.130***	
	(0.027)		(0.025)	
Work_Stab	0.131***		0.255***	
	(0.023)		(0.024)	
Work_Time	0.120***		0.124***	
	(0.027)		(0.026)	
Work_Task	-0.054*		-0.011	
	(0.028)		(0.026)	
Reloc	0.395***		0.408***	
	(0.084)		(0.067)	
Risp	0.040		0.061	
	(0.054)		(0.054)	
Constant	-6.758***	-2.857***	-5.458***	-1.220***
	(0.209)	(0.159)	(0.180)	(0.208)
ρ	0.664***		1.114***	
	(0.111)		(0.239)	
Observations	8,280		7,016	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B20: Bivariate Probit Estimation by Gender – 2010

Year	2010			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.064***	0.021***	0.042***	0.003
	(0.002)	(0.003)	(0.002)	(0.002)
Educ	0.787***	0.445***	0.512***	0.260***
	(0.033)	(0.021)	(0.026)	(0.022)
Married	0.125***	0.085	0.203***	0.417***
	(0.046)	(0.055)	(0.046)	(0.061)
Homeowner	0.144**	0.117***	0.173***	0.206***
	(0.063)	(0.040)	(0.057)	(0.043)
Age5064		0.748***		0.395***
		(0.066)		(0.065)
Italian		0.221**		0.340**
		(0.099)		(0.140)
North		0.815***		0.652***
		(0.032)		(0.033)
Centre		0.466***		0.397***
		(0.039)		(0.040)
Partner_Works		0.038		0.163***
		(0.047)		(0.051)
Kids		-0.251***		0.253***
		(0.057)		(0.062)
Kids_10		-0.064		-0.226***
		(0.051)		(0.064)
Work_Climate	-0.046*		-0.026	
	(0.028)		(0.024)	
Work_Stab	0.160***		0.205***	
	(0.022)		(0.021)	
Work_Time	0.118***		0.067***	
	(0.028)		(0.025)	
Work_Task	-0.054*		-0.022	
	(0.029)		(0.027)	
Reloc	0.377***		0.401***	
	(0.083)		(0.052)	
Risp	0.029		0.116***	
	(0.047)		(0.042)	
Constant	-6.568***	-2.927***	-5.374***	-1.623***
	(0.196)	(0.136)	(0.155)	(0.166)
ρ	0.620***		13.550	
	(0.122)		(17.754)	
Observations	9,204		8,579	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B21: Bivariate Probit Estimation by Gender – 2011

Year	2011			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.060***	0.028***	0.044***	0.001
	(0.003)	(0.003)	(0.002)	(0.002)
Educ	0.832***	0.460***	0.559***	0.221***
	(0.034)	(0.020)	(0.030)	(0.023)
Married	0.180***	-0.069	0.306***	0.452***
	(0.048)	(0.050)	(0.053)	(0.062)
Homeowner	0.063	0.126***	0.163**	0.213***
	(0.069)	(0.042)	(0.064)	(0.045)
Age5064		0.689***		0.576***
		(0.065)		(0.067)
Italian		-0.014		0.344**
		(0.104)		(0.163)
North		0.698***		0.664***
		(0.032)		(0.034)
Centre		0.377***		0.453***
		(0.038)		(0.041)
Partner_Works		0.117***		0.161***
		(0.041)		(0.052)
Kids		-0.155***		0.254***
		(0.054)		(0.067)
Kids_10		-0.062		0.069
		(0.048)		(0.069)
Work_Climate	-0.036		-0.008	
	(0.030)		(0.028)	
Work_Stab	0.180***		0.224***	
	(0.023)		(0.024)	
Work_Time	0.108***		0.039	
	(0.032)		(0.030)	
Work_Task	-0.019		-0.014	
	(0.031)		(0.029)	
Reloc	0.360***		0.426***	
	(0.086)		(0.068)	
Risp	0.030		0.150***	
	(0.051)		(0.051)	
Constant	-6.689***	-2.958***	-5.749***	-1.594***
	(0.242)	(0.147)	(0.181)	(0.186)
ρ	0.393***		1.077***	
	(0.132)		(0.269)	
Observations	9,347		8,236	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B22: Bivariate Probit Estimation by Gender – 2014

Year	2014			
	(1)	(2)	(3)	(4)
	Women		Men	
Variables	Public-Contest	Employment	Public-Contest	Employment
Age	0.044***	0.018***	0.031***	0.010***
	(0.002)	(0.002)	(0.002)	(0.002)
Educ	0.693***	0.566***	0.536***	0.366***
	(0.031)	(0.017)	(0.024)	(0.019)
Married	0.340***	0.047	0.405***	0.525***
	(0.038)	(0.037)	(0.040)	(0.046)
Homeowner	0.226***	0.107***	0.159***	0.146***
	(0.057)	(0.035)	(0.052)	(0.038)
Age5064		0.457***		0.201***
		(0.048)		(0.051)
Italian		0.037		0.435***
		(0.081)		(0.098)
North		0.712***		0.685***
		(0.026)		(0.029)
Centre		0.432***		0.441***
		(0.032)		(0.035)
Partner_Works		0.162***		0.155***
		(0.029)		(0.036)
Kids		-0.112***		0.010
		(0.041)		(0.049)
Kids_10		-0.048		0.121**
		(0.038)		(0.050)
Work_Climate	-0.050**		-0.030	
	(0.022)		(0.021)	
Work_Stab	0.254***		0.217***	
	(0.019)		(0.020)	
Work_Time	0.051**		0.078***	
	(0.022)		(0.021)	
Work_Task	-0.017		-0.033	
	(0.025)		(0.023)	
Reloc	0.371***		0.439***	
	(0.063)		(0.050)	
Risp	0.044		0.112**	
	(0.045)		(0.045)	
Constant	-5.766***	-3.104***	-5.184***	-2.441***
	(0.200)	(0.116)	(0.148)	(0.133)
ρ	0.343***		1.298***	
	(0.093)		(0.295)	
Observations	13,129		10,584	

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B23: OLS Estimates by Gender with Selection Variables – Panel

Year	Panel			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.020***	0.019***	0.012***	0.018***
	(0.002)	(0.002)	(0.002)	(0.001)
Exper2	-0.000**	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.002***	0.003***	0.005***	0.003***
	(0.001)	(0.001)	(0.001)	(0.000)
Educ	0.322***	0.203***	0.089***	0.101***
	(0.018)	(0.017)	(0.019)	(0.011)
Max_D_Mark	0.015	0.049***	0.045**	0.021
	(0.012)	(0.017)	(0.019)	(0.021)
Contract_Type	-0.011	0.065***	0.011	0.070***
	(0.017)	(0.025)	(0.011)	(0.009)
Work_Climate	-0.008	0.011*	0.006	0.001
	(0.005)	(0.006)	(0.005)	(0.005)
Work_Stab	0.024***	0.016*	-0.014***	-0.001
	(0.006)	(0.008)	(0.005)	(0.004)
Work_Time	0.015***	0.004	0.014**	0.022***
	(0.005)	(0.006)	(0.005)	(0.004)
Work_Task	0.014***	0.014**	0.012**	0.010**
	(0.005)	(0.006)	(0.006)	(0.005)
Intermed_Prof	0.146***	-0.043***	0.071***	0.043***
	(0.018)	(0.012)	(0.011)	(0.008)
Manager	0.271***	0.135***	0.134***	0.138***
	(0.019)	(0.015)	(0.015)	(0.012)
North	-0.034***	0.021*	0.124***	0.120***
	(0.012)	(0.011)	(0.019)	(0.019)
Centre	-0.020*	0.035***	0.089***	0.060***
	(0.012)	(0.013)	(0.016)	(0.015)
Home_Time	0.012***	0.005***	0.004***	0.007***
	(0.001)	(0.001)	(0.001)	(0.001)
Married	0.050***	0.055***	0.013	0.083***
	(0.009)	(0.016)	(0.011)	(0.016)
Italian	0.040	0.152	0.074**	0.090**
	(0.080)	(0.244)	(0.036)	(0.041)
Homeowner	0.037***	0.027**	0.048***	0.051***
	(0.011)	(0.013)	(0.010)	(0.009)
Educ_Fath5	0.013	-0.008	0.003	0.013
	(0.014)	(0.018)	(0.018)	(0.016)

Educ_Moth5	0.051***	-0.043	0.050**	-0.025
	(0.019)	(0.026)	(0.021)	(0.018)
λ_W^{PC}	0.126***	0.209*		
	(0.035)	(0.111)		
λ_R^{PC}	0.179***	-0.009		
	(0.035)	(0.039)		
λ_W^{NPC}			-0.041	-0.013
			(0.032)	(0.043)
λ_R^{NPC}			-0.305***	-0.169***
			(0.034)	(0.032)
Constant	-0.034	0.676**	0.894***	0.848***
	(0.162)	(0.292)	(0.115)	(0.089)
Sectoral Dummies	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes
Observations	8,116	6,798	11,282	15,649
R-squared	0.373	0.335	0.206	0.262

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B24: OLS Estimates by Gender with Selection Variables – 2005

Year	2005			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.017***	0.011**	0.013***	0.020***
	(0.004)	(0.005)	(0.003)	(0.002)
Exper2	-0.000*	-0.000*	-0.000**	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.001	0.003**	0.003**	0.001*
	(0.001)	(0.001)	(0.001)	(0.001)
Educ	0.271***	0.142***	0.103***	0.095***
	(0.036)	(0.034)	(0.036)	(0.022)
Max_D_Mark	0.014	0.041	0.093**	-0.043
	(0.025)	(0.035)	(0.040)	(0.042)
Contract_Type	-0.045	0.115**	0.032	0.040**
	(0.032)	(0.047)	(0.021)	(0.019)
Work_Climate	0.001	0.013	0.006	0.014
	(0.011)	(0.013)	(0.011)	(0.009)
Work_Stab	0.030***	-0.021	-0.011	-0.002

	(0.010)	(0.016)	(0.009)	(0.008)
Work_Time	-0.011	0.009	0.020*	0.028***
	(0.010)	(0.012)	(0.010)	(0.008)
Work_Task	0.007	0.020*	0.010	0.022***
	(0.009)	(0.010)	(0.009)	(0.007)
Intermed_Prof	0.081**	-0.035	0.076***	0.036**
	(0.037)	(0.026)	(0.020)	(0.015)
Manager	0.338***	0.259***	0.143***	0.238***
	(0.039)	(0.036)	(0.032)	(0.025)
North	-0.033	0.017	0.134***	0.060*
	(0.021)	(0.022)	(0.026)	(0.034)
Centre	-0.016	0.075***	0.115***	0.039
	(0.021)	(0.025)	(0.025)	(0.025)
Home_Time	0.010***	0.001	0.004	0.006***
	(0.003)	(0.003)	(0.003)	(0.002)
Married	0.032*	0.003	0.022	0.043*
	(0.019)	(0.029)	(0.021)	(0.026)
Italian	0.003	0.981***	0.026	0.008
	(0.195)	(0.356)	(0.064)	(0.068)
Homeowner	0.011	0.034	0.004	0.008
	(0.021)	(0.029)	(0.022)	(0.024)
Educ_Fath5	0.023	-0.047	0.021	0.042
	(0.028)	(0.037)	(0.039)	(0.034)
Educ_Moth5	-0.049	0.004	0.089*	-0.027
	(0.040)	(0.055)	(0.051)	(0.041)
λ_W^{PC}	0.019	0.375*		
	(0.045)	(0.210)		
λ_R^{PC}	0.118**	-0.085		
	(0.053)	(0.070)		
λ_W^{NPC}			0.009	-0.050
			(0.037)	(0.072)
λ_R^{NPC}			-0.115**	-0.097*
			(0.058)	(0.055)
Constant	0.379	0.317	0.866***	1.009***
	(0.316)	(0.455)	(0.182)	(0.145)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	1,987	1,692	2,526	3,315
R-squared	0.406	0.384	0.266	0.338

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B25: OLS Estimates by Gender with Selection Variables – 2006

Year	2006			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.023***	0.016***	0.013***	0.016***
	(0.005)	(0.005)	(0.003)	(0.003)
Exper2	-0.000**	-0.000*	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.000	0.003**	0.004***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Educ	0.289***	0.215***	-0.022	0.074***
	(0.057)	(0.037)	(0.037)	(0.023)
Max_D_Mark	-0.025	-0.021	0.129***	0.057
	(0.027)	(0.033)	(0.040)	(0.045)
Contract_Type	-0.006	0.035	0.037*	0.067***
	(0.038)	(0.051)	(0.020)	(0.020)
Work_Climate	-0.012	-0.005	0.004	0.009
	(0.011)	(0.013)	(0.011)	(0.010)
Work_Stab	0.029**	0.039*	-0.016	-0.016
	(0.015)	(0.021)	(0.010)	(0.010)
Work_Time	0.025**	0.006	-0.002	0.022**
	(0.012)	(0.012)	(0.010)	(0.009)
Work_Task	0.012	0.017	0.023**	0.024**
	(0.012)	(0.012)	(0.012)	(0.010)
Intermed_Prof	0.127***	-0.044*	0.087***	0.062***
	(0.039)	(0.024)	(0.020)	(0.015)
Manager	0.264***	0.192***	0.150***	0.174***
	(0.043)	(0.034)	(0.035)	(0.025)
North	-0.046*	-0.022	0.029	0.078**
	(0.025)	(0.021)	(0.032)	(0.032)
Centre	-0.077***	0.017	0.016	0.035
	(0.025)	(0.024)	(0.029)	(0.029)
Home_Time	0.009**	0.010***	-0.001	0.006***
	(0.004)	(0.003)	(0.002)	(0.002)
Married	0.047**	0.049	0.033	0.049
	(0.020)	(0.031)	(0.024)	(0.031)
Italian	-0.252		0.098	0.085
	(0.233)		(0.067)	(0.076)
Homeowner	0.029	0.041	0.012	0.017
	(0.027)	(0.025)	(0.024)	(0.024)
Educ_Fath5	0.030	0.021	0.002	0.050
	(0.028)	(0.035)	(0.035)	(0.032)

Educ_Moth5	0.048	-0.045	0.025	-0.005
	(0.038)	(0.054)	(0.045)	(0.039)
λ_W^{PC}	0.047	0.469**		
	(0.080)	(0.219)		
λ_R^{PC}	0.178**	0.088		
	(0.088)	(0.077)		
λ_W^{NPC}			-0.109**	0.006
			(0.053)	(0.081)
λ_R^{NPC}			-0.220***	-0.123**
			(0.059)	(0.061)
Constant	0.406	0.599*	1.440***	0.976***
	(0.484)	(0.326)	(0.203)	(0.164)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	1,715	1,767	2,368	3,455
R-squared	0.376	0.359	0.234	0.317

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B26: OLS Estimates by Gender with Selection Variables – 2008

Year	2008			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.017***	0.012**	0.009***	0.014***
	(0.005)	(0.006)	(0.003)	(0.002)
Exper2	-0.000	-0.000*	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.001	0.001	0.005***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Educ	0.309***	0.178***	-0.016	0.054**
	(0.053)	(0.046)	(0.036)	(0.023)
Max_D_Mark	0.021	-0.015	0.069	0.093*
	(0.030)	(0.040)	(0.043)	(0.054)
Contract_Type	0.018	0.106*	0.001	0.051***
	(0.037)	(0.057)	(0.020)	(0.019)
Work_Climate	-0.019*	0.003	-0.001	-0.006
	(0.011)	(0.014)	(0.009)	(0.009)
Work_Stab	0.020*	-0.006	-0.008	0.012
	(0.012)	(0.021)	(0.009)	(0.010)

Work_Time	0.049***	-0.011	0.009	0.009
	(0.013)	(0.015)	(0.010)	(0.009)
Work_Task	-0.001	0.007	0.015	0.018**
	(0.011)	(0.012)	(0.010)	(0.009)
Intermed_Prof	0.208***	-0.035	0.087***	0.058***
	(0.045)	(0.026)	(0.020)	(0.016)
Manager	0.271***	0.112***	0.123***	0.127***
	(0.049)	(0.033)	(0.032)	(0.026)
North	-0.085***	0.049**	0.102***	0.059*
	(0.028)	(0.024)	(0.035)	(0.035)
Centre	-0.058**	0.026	0.090***	0.036
	(0.027)	(0.027)	(0.029)	(0.030)
Home_Time	0.008*	0.002	-0.002	0.002
	(0.004)	(0.004)	(0.003)	(0.002)
Married	0.038*	0.011	0.039**	0.060*
	(0.021)	(0.037)	(0.019)	(0.031)
Italian	0.065	-0.160	0.122*	0.031
	(0.140)	(0.331)	(0.069)	(0.072)
Homeowner	0.027	0.008	0.019	0.039**
	(0.031)	(0.030)	(0.023)	(0.019)
Educ_Fath5	0.033	0.016	0.012	0.059*
	(0.031)	(0.036)	(0.033)	(0.031)
Educ_Moth5	0.117***	-0.082	0.044	-0.097***
	(0.041)	(0.054)	(0.038)	(0.037)
λ_W^{PC}	0.033	0.272		
	(0.084)	(0.252)		
λ_R^{PC}	0.206**	-0.099		
	(0.082)	(0.098)		
λ_W^{NPC}			-0.065	-0.006
			(0.054)	(0.074)
λ_R^{NPC}			-0.338***	-0.168***
			(0.060)	(0.061)
Constant	0.167	1.609***	1.376***	1.263***
	(0.458)	(0.557)	(0.214)	(0.172)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	1,586	1,392	2,370	3,253
R-squared	0.373	0.351	0.309	0.300

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B27: OLS Estimates by Gender with Selection Variables – 2010

Year	2010			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.017***	0.029***	0.009*	0.017***
	(0.005)	(0.006)	(0.004)	(0.003)
Exper2	-0.000	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.003**	0.003*	0.003**	0.003***
	(0.001)	(0.002)	(0.002)	(0.001)
Educ	0.230***	0.228***	0.003	0.029
	(0.059)	(0.050)	(0.055)	(0.031)
Max_D_Mark	0.050*	0.080*	0.030	0.099**
	(0.027)	(0.041)	(0.043)	(0.046)
Contract_Type	0.015	0.029	-0.001	0.077***
	(0.038)	(0.057)	(0.026)	(0.021)
Work_Climate	-0.008	0.012	-0.003	-0.002
	(0.012)	(0.015)	(0.014)	(0.010)
Work_Stab	0.001	0.000	-0.025*	-0.015
	(0.014)	(0.021)	(0.013)	(0.010)
Work_Time	0.016	0.008	-0.000	0.024**
	(0.014)	(0.017)	(0.014)	(0.010)
Work_Task	0.016	-0.004	0.024*	0.011
	(0.012)	(0.016)	(0.015)	(0.011)
Intermed_Prof	0.115***	-0.042	0.062**	0.041**
	(0.040)	(0.030)	(0.026)	(0.018)
Manager	0.216***	0.090**	0.136***	0.091***
	(0.044)	(0.035)	(0.034)	(0.025)
North	-0.027	0.039*	0.118**	0.083**
	(0.034)	(0.024)	(0.055)	(0.036)
Centre	0.003	-0.005	0.064	0.028
	(0.030)	(0.029)	(0.042)	(0.030)
Home_Time	0.008**	0.005	-0.002	0.002
	(0.004)	(0.004)	(0.004)	(0.002)
Married	0.071***	0.029	0.039	0.040
	(0.021)	(0.031)	(0.024)	(0.034)
Italian	-0.014	0.459	0.057	-0.044
	(0.245)	(0.392)	(0.083)	(0.081)
Homeowner	0.057*	0.101**	0.008	0.045*
	(0.030)	(0.039)	(0.029)	(0.025)
Educ_Fath5	0.032	-0.060	-0.043	-0.036
	(0.033)	(0.041)	(0.045)	(0.037)

Educ_Moth5	0.022	0.035	-0.041	0.068*
	(0.044)	(0.064)	(0.051)	(0.041)
λ_W^{PC}	0.077	-0.168		
	(0.104)	(0.422)		
λ_R^{PC}	0.116	0.041		
	(0.089)	(0.096)		
λ_W^{NPC}			0.023	-0.041
			(0.087)	(0.089)
λ_R^{NPC}			-0.313***	-0.251***
			(0.089)	(0.077)
Constant	0.519	0.353	1.428***	1.391***
	(0.524)	(0.606)	(0.323)	(0.234)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	1,621	1,416	2,588	3,795
R-squared	0.357	0.303	0.148	0.221

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B28: OLS Estimates by Gender with Selection Variables – 2011

Year	2011			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.012**	0.014**	-0.007	0.014***
	(0.006)	(0.006)	(0.004)	(0.003)
Exper2	-0.000	-0.000	0.000	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.002	0.004***	0.006***	0.002*
	(0.001)	(0.001)	(0.002)	(0.001)
Educ	0.285***	0.268***	-0.057	0.012
	(0.069)	(0.051)	(0.061)	(0.029)
Max_D_Mark	0.044	0.042	-0.041	0.011
	(0.032)	(0.046)	(0.046)	(0.049)
Contract_Type	-0.001	0.082	0.016	0.074***
	(0.039)	(0.056)	(0.027)	(0.020)
Work_Climate	-0.002	0.019	0.022	0.006
	(0.013)	(0.015)	(0.015)	(0.011)
Work_Stab	0.027*	0.018	-0.057***	-0.022**
	(0.017)	(0.021)	(0.013)	(0.010)

Work_Time	0.007	0.016	-0.027*	0.006
	(0.016)	(0.016)	(0.015)	(0.011)
Work_Task	0.010	0.007	-0.004	0.005
	(0.014)	(0.015)	(0.015)	(0.011)
Intermed_Prof	0.133***	-0.038	0.086***	0.018
	(0.042)	(0.029)	(0.027)	(0.018)
Manager	0.247***	0.068**	0.134***	0.053**
	(0.044)	(0.033)	(0.033)	(0.024)
North	-0.031	0.028	0.149***	-0.005
	(0.036)	(0.028)	(0.053)	(0.035)
Centre	0.024	0.032	0.100**	-0.029
	(0.031)	(0.030)	(0.039)	(0.030)
Home_Time	0.011**	0.010***	-0.003	0.002
	(0.005)	(0.004)	(0.004)	(0.002)
Married	0.056**	0.138***	-0.018	-0.065*
	(0.025)	(0.041)	(0.026)	(0.036)
Italian	-0.013		0.198***	0.082
	(0.188)		(0.073)	(0.083)
Homeowner	0.013	0.044	0.052*	-0.028
	(0.034)	(0.037)	(0.031)	(0.025)
Educ_Fath5	0.037	0.011	-0.014	-0.013
	(0.036)	(0.043)	(0.046)	(0.034)
Educ_Moth5	-0.035	0.000	0.129**	0.001
	(0.046)	(0.061)	(0.056)	(0.039)
λ_W^{PC}	-0.018	0.451*		
	(0.110)	(0.261)		
λ_R^{PC}	0.165	0.094		
	(0.102)	(0.097)		
λ_W^{NPC}			0.162	-0.297***
			(0.101)	(0.080)
λ_R^{NPC}			-0.506***	-0.363***
			(0.090)	(0.070)
Constant	0.515	0.368	1.535***	1.764***
	(0.569)	(0.463)	(0.366)	(0.211)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	1,656	1,249	2,512	3,560
R-squared	0.314	0.359	0.141	0.208

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

Table B29: OLS Estimates by Gender with Selection Variables – 2014

Year	2014			
	(1)	(2)	(3)	(4)
	Individuals Hired by by Public Contest and Aged 18-64		Individuals Not Hired by by Public Contest and Aged 18-64	
Variables	Women	Men	Women	Men
Exper	0.008*	0.010**	0.005	0.018***
	(0.004)	(0.004)	(0.003)	(0.003)
Exper2	0.000	-0.000*	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Tenure	0.003**	0.003*	0.004***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Educ	0.230***	0.121***	-0.042	0.103**
	(0.056)	(0.043)	(0.056)	(0.040)
Max_D_Mark	0.017	0.064	0.034	-0.123**
	(0.032)	(0.046)	(0.042)	(0.049)
Contract_Type	0.115***	0.202***	-0.004	0.050**
	(0.037)	(0.051)	(0.022)	(0.021)
Work_Climate	-0.013	-0.005	0.005	-0.007
	(0.011)	(0.012)	(0.011)	(0.009)
Work_Stab	0.014	-0.003	-0.038***	-0.004
	(0.017)	(0.017)	(0.013)	(0.010)
Work_Time	0.039***	-0.009	0.017*	0.003
	(0.010)	(0.013)	(0.010)	(0.009)
Work_Task	0.016	0.012	-0.000	0.016*
	(0.011)	(0.013)	(0.011)	(0.010)
Intermed_Prof	0.063	-0.054**	0.096***	0.048***
	(0.043)	(0.027)	(0.021)	(0.016)
Manager	0.326***	0.163***	0.238***	0.152***
	(0.044)	(0.034)	(0.028)	(0.023)
North	-0.062	0.022	0.051	0.138***
	(0.038)	(0.026)	(0.048)	(0.052)
Centre	-0.076**	0.060**	0.009	0.057
	(0.030)	(0.027)	(0.036)	(0.039)
Home_Time	0.006*	0.003	-0.005	0.004*
	(0.003)	(0.003)	(0.003)	(0.002)
Married	0.020	0.032	0.002	0.074
	(0.026)	(0.039)	(0.023)	(0.049)
Italian	-0.059	-0.139	0.046	0.121*
	(0.150)	(0.140)	(0.053)	(0.069)
Homeowner	0.089***	-0.007	-0.035	0.005
	(0.031)	(0.032)	(0.025)	(0.023)
Educ_Fath5	-0.001	0.023	-0.030	0.081***
	(0.031)	(0.037)	(0.034)	(0.031)

Educ_Moth5	-0.031	-0.008	0.042	-0.035
	(0.039)	(0.049)	(0.038)	(0.037)
λ_W^{PC}	-0.055	0.233		
	(0.104)	(0.291)		
λ_R^{PC}	0.181**	-0.027		
	(0.088)	(0.084)		
λ_W^{NPC}			0.010	0.074
			(0.092)	(0.115)
λ_R^{NPC}			-0.346***	-0.116
			(0.087)	(0.086)
Constant	0.631	1.593***	1.804***	0.999***
	(0.473)	(0.415)	(0.332)	(0.312)
Sectoral Dummies	Yes	Yes	Yes	Yes
Observations	2,665	1,739	3,428	4,496
R-squared	0.273	0.286	0.146	0.174

Robust standard errors in parentheses

$***p < 0.01$, $**p < 0.05$, $*p < 0.1$

C Methodological Issues

The probabilities of observing a positive labor income given recruitment through public contests or recruitment through other channels are given below:

$$Pr(Y_W^* > 0, Y_R^* > 0) = Pr(u_W > -Z^{'}\gamma, u_R > -Q^{'}\alpha) = G(Z^{'}\gamma, Q^{'}\alpha, \rho) \tag{7}$$

$$Pr(Y_W^* > 0, Y_R^* \leq 0) = Pr(u_W > -Z^{'}\gamma, u_R \leq -Q^{'}\alpha) = G(Z^{'}\gamma, -Q^{'}\alpha, -\rho) \tag{8}$$

where $G(.)$ is the standard bivariate normal distribution and ρ is the correlation coefficient between the two selection rules. The subscript W identifies the work decision while R identifies the recruitment decision. Under the assumption that the two selection rules are not independent, that is $\rho \neq 0$, maximum likelihood of the bivariate probit leads to the following selection terms for public-contest selected employees, i.e. with $m = PC$:

$$\lambda_W^{PC} = \frac{f(Z^{'}\gamma)F[\frac{Q^{'}\alpha - \rho Z^{'}\gamma}{\sqrt{1-\rho^2}}]}{G(Z^{'}\gamma, Q^{'}\alpha, \rho)} \tag{9}$$

$$\lambda_R^{PC} = \frac{f(Q^{'}\alpha)F[\frac{Z^{'}\gamma - \rho Q^{'}\alpha}{\sqrt{1-\rho^2}}]}{G(Z^{'}\gamma, Q^{'}\alpha, \rho)} \tag{10}$$

Similarly, for the subsample of non-public-contest selected individuals, i.e. with $m = NPC$, the corresponding selection terms are given by:

$$\lambda_W^{NPC} = \frac{f(Z^{'}\gamma)F[-\frac{Q^{'}\alpha - \rho Z^{'}\gamma}{\sqrt{1-\rho^2}}]}{G(Z^{'}\gamma, -Q^{'}\alpha, -\rho)} \tag{11}$$

$$\lambda_R^{NPC} = \frac{-f(Q^{'}\alpha)F[\frac{Z^{'}\gamma - \rho Q^{'}\alpha}{\sqrt{1-\rho^2}}]}{G(Z^{'}\gamma, -Q^{'}\alpha, -\rho)} \tag{12}$$

$f(.)$ is the standard normal density function, while $F(.)$ is the standard normal distribution function and ρ is the correlation coefficient between the two selection rules.

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