Public-private wage differentials and the distribution of skills across sectors

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Abstract

The extensive literature on public-private wage differentials points to the existence, especially at the low tail of the wage distribution, of a pay gap in favor of the public sector whose size varies significantly across countries. In this paper we provide a first attempt to investigate the implications of public-private wage differentials for the distribution of skills among these two sectors: if more favourable conditions in the public sector lessened the incentives of especially productive employees to work in the private sector, a negative selection among those working in the private sector could take place. In particular, we evaluate whether both formal skills and new measures of informal capabilities of the worker are correlated with his sector of employment, and what direction and magnitude this correlation has. Moreover, building on the results of a previous paper, we investigate whether a different remuneration of skills in public and private sectors affect the correlation. We cannot reject the hypothesis that larger wage differentials in favour of the public sector refrain especially productive employees from working in the private sector. These findings could have impact on labour market efficiency and macroeconomic outcomes, including competitiveness.

JEL classification: H50, J31, J45.

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1 Introduction

Extensive literature has documented the existence of significant public-private pay differentials in most industrialized countries. For an extensive review of the literature on public-private wage differentials see Giordano et al.(2011) and Depalo et al. (2013).

Despite the presence of common rules governing public finances in Europe, the evidence on public-private wage differential for these countries is mixed. Among others, Giordano et al. (2011) have investigated public/private pay differentials in Austria, Belgium, Germany, Spain, France, Greece, Ireland, Italy, Portugal and Slovenia. Their results, based on the EU-SILC dataset for the years 2004-07, point to the existence of a conditional pay gap in favour of the public sector, even after controlling for differences in employment characteristics between the two sectors, that is generally higher for women, at the low tail of the wage distribution, in the education and the public administration sectors rather than in the health sector. Their analysis has highlighted substantial heterogeneity across countries, with Greece, Ireland, Italy, Portugal and Spain exhibiting the highest public sector premia.

More recently, Depalo et al. (2013) have investigated the public-private wage differentials for men using the same data, at the mean and along the wage distribution. In particular, using Oaxaca (1973) and Blinder (1973) decomposition techniques, they have assessed how much of the pay differential between public and private sectors workers observed in various countries depends on differences in endowments, with particular attention to standard measures of job characteristics (such as education and job experience), and how much is attributable to differences in the remuneration of such endowments (that is, unexplained component of pay differential or premium/penalty in the public sector). Using recent techniques proposed by Firpo, Fortin, Lemiuex (2011) and Chernozhuckov, Fernandez-Val and Melly (2011), they have looked at different parts of the wage distribution and studied the contribution of specific covariates. They found that in all countries on average public sector employees earn higher wages than private sector employees. The size of the wage gap for male workers varies significantly across countries, and is relatively small in Belgium, France, Austria and Germany and high in Greece, Italy, Ireland, Portugal, Slovenia and Spain. It also varies along the wage distribution. For all countries, a wage differential in favour of the public sector is found at the lower part of the distribution. Similarly to the findings of other studies, the wage gap in favor of the public sector employees is attributed to larger premia at the bottom tail of the wage distributions and better endowments at high wage levels that compensate for smaller premia or even penalties from working in the public sector.

In Figure 1 we plot the ratio between compensation per employee in public and private sectors, obtained

using national accounts data, for the ten euro area countries examined in this paper since 1999. With the exception of France, Portugal and Slovenia, compensation per employee in the public sector is higher than in the private sector and has been growing faster than in the private sector. Significantly diverging dynamics are observed in Ireland, Spain, Greece, and, to a lesser extent, in Italy.

From an economic point of view, earning differentials across the two sectors can influence labor market efficiency. In particular, more attractive labour market conditions in the public sector might refrain especially productive employees from searching employment in the private sector. If more favourable conditions in the public sector or less attractive conditions in the private sector lessened the incentives of especially productive employees to work in the private sector, a negative selection among those working in the private sector could take place. If this were the case, a relatively low propensity of high skilled people to work in the private sector should be observed in economies where skills are better remunerated in the public sector than in the private sector.

In the current context, in which governments in many advanced countries, especially in Europe, are facing the challenge to reconcile the needs to restore safer fiscal positions and to sustain potential growth, it is particularly worthy to closely look at the implications of the determination of public sector wages for labour market efficiency and macroeconomic outcomes.[1]

In this paper we exploit the cross-country variation in public-private pay differentials found by Depalo et al. (2013) for the ten Euro area countries to investigate the possible implications of public sector wage premia for the distribution of skills of employees among the two sectors. In particular, we evaluate whether the existence of a public sector premium might induce more skilled workers to work in this sector. Although this aspect has received scarce attention in the existing literature, its consequences might be relevant for labour market efficiency, labour productivity and competitiveness.

More specifically, we evaluate whether both formal characteristics and alternative definitions of non-formal capabilities of the worker are correlated with the choice of sector of employment, and what direction and magnitude this correlation has. Moreover, we investigate whether the interaction of various defnitions of

[1] There is another channel through which wages in the public sector can influence labour market performances and macroeconomic outcomes. If wages in the public sector were to grow above and lead the private sector wages, closing that differential might negatively affect competitiveness via wage inflation. Empirical findings show a strong positive correlation between wages per employee in the public and the private sector for most OECD countries (Lamo, Pérez and Schuknecht, 2008). Moreover, empirical analysis using macro data (Lamo et al, 2011, Pérez and Sánchez, 2011) has shown that the determination of public wages do have some impact on the determination of private sector wages, even though this is consistent also with effects stemming from the private sector into the public sector (bi-directional links). More generally, empirical evidence on euro area countries and the euro area as a whole over the last 30 years shows pro-cyclical (with one/two-year lags) co-movements of government wage spending, compensation per employee and employment (Lamo et al., 2007). This is consistent with a political economy view of the behaviour of public wages, whereby governments find it harder in favourable economic conditions to resist pressures to raise employment, wages and thus wage expenditure. Similarly, in an economic downturn, government wage expenditure appears to be one of the tools for discretionary tightening, in order to limit deficit increases.

skills with the unexplained component of the wage differential might affect the probability of the employee to join the public sector. To the best of our knowledge, this is the first attempt to explore whether the existence of wage premium in the public sector is related to the distribution of skills across sectors.

The paper is organized as follows. In Section 2 we discuss the empirical approach adopted by Depalo et al. (2013) to estimate the wage premium and present their results from the mean and the quantile decomposition analyses. In Section 3 we investigate how differences in skills affect the probability to work in the public sector, and how a different remuneration of such skills in public and private sectors affects the correlation. Finally, Section 4 contains some concluding remarks.

2 Estimation and decomposition of the wage gap

2.1 Methodological approach

The method proposed by Oaxaca (1973) and Blinder (1973) allows to decompose the observed difference between public and private sector workers in the part attributable to the difference in the observed characteristics and that attributable to the difference in their coefficients. In a human capital model (Mincer, 1976), the former part represents a remuneration of the individual investment in her/his own human capital (endowment effect), the latter is a difference attributed to unobserved characteristics (a premium if positive, a penalty if negative).

The wage equation is defined as

$$y_s = x_s\beta_s + u_s \qquad s = \{0, 1\} \tag{1}$$

where s is the sector of employment, either private ($s = 0$) or public ($s = 1$). The difference between public and private wages in 1

$$y_1 - y_0 = x_1\beta 1 - x_0\beta 0 + u_1 - u_0$$

can de decomposed using Oaxaca (1973) and Blinder (1973) methodology. To this aim, add and subtract the term $x_0\beta_1$ from the above difference to obtain:

$$y_1 - y_0 = \underbrace{(x_1 - x_0)\beta 1}_{\text{endowment eff.}} + \underbrace{x_0(\beta_1 - \beta 0)}_{\text{premium}} + u_1 - u_0. \tag{2}$$

Eq. 2 is a very intuitive and parsimonious representation of the difference in the wage level between two groups. However, as the analysis at the mean may hide important differences of the wage differentials across the wage distribution, various researchers have investigated how Oaxaca (1973) and Blinder (1973) could be generalized. Closely related to our study is Juhn et al. (1983) that extends the method to the variance and Machado and Mata (2005) and Melly (2005) that extends the method to quantiles. It was only recently that two independent contribution by Fortin et al. (2011) and Chernozhukov et al. (2011) provided a unified framework that allows a generalization of the methodology to the entire distribution functions of the decomposition, thus encompassing the variance and quantiles.

As for the model specification, it is important to notice that "a researcher's choice of control variables implicitly reveals his or her attitude toward what constitutes discrimination in the labor market" (Oaxaca, 1973, pp 699) as a researcher can control for the intercept only or for as many covariates as the number of observations, obtaining the maximum discrimination in the former case and no discrimination in the latter. For this reason, a reference theoretical background is key for the interpretation of the results: our wage equation is a function of age (normalized to 47 years-old), years of labour market experience (the intercept refers to a man who has started working when 18 years old), education (reference is intermediate level), managerial position (the reference being non-supervisor) and whether full-time (the reference) or part-time.

In the present analysis the case of education, a set of dummy variables, is particularly interesting because we acknowledge that there exists an identification problem in the detailed decomposition and the selection of the references group is not neutral for the interpretation of the decomposition (see Jones, 1983). Our approach is equivalent to fixing the reference category and obtaining the results and then changing the reference category and obtaining the new set of results; once the combinations have been exhausted, we take the average so that what is the reference is now irrelevant.

2.2 Results from decomposition analysis

Using the methodology described in Section 2.1, Depalo et al. (2013) estimated the decompositions for the mean, quantiles and measures of dispersions (variance and Gini coefficient). As for the average, results are reported in Table 1.[2] The overall difference in the wage level between public and private sector exhibits a non trivial cross-country heterogeneity. On average it ranges from 5.6% in Belgium to 43% in Portugal. In particular, in Austria, Belgium, Germany and France it varies between 6% and 16%; in Italy, Ireland and

[2] More details and an in-depth discussion are available in Depalo et al. (2013). Table 1 in this paper is based on Table 4 in Depalo et al. (2013).

Slovenia it is around 30%; in Greece, Spain and Portugal it is above 35%. However, these differences do not inform about the determinants of the wage gap. When we condition on the set of covariates outlined in the previous section, we find that only in Ireland, Greece, Italy and Spain the largest part of the gap is not explained by workers' characteristics, with a premium larger than 17%; in the other countries our model specification is capable of explaining much of the wage schedule, with a premium smaller than 6% (with the exception of Portugal where it is 20%).

These results were checked against a number of possible falsification hypotheses, namely when alternative definitions of the dependent variable, the wage rate, or different age ranges are selected. Investigation of other potential forms that may bias the results (focus on large firms, full time workers and alternative private sector definitions) is also carried out in the analysis. Notwithstanding numerical differences, the qualitative results are largely confirmed. Quite interestingly, in some cases a dual labour market emerges. This is the case of younger versus older workers in Italy (where most of the unexplained component is attributable to older generations), or smaller versus larger firms in Germany, France and Slovenia, where larger firms are at advantage with respect to public sector. Apart from these differences and in the case where the comparison is limited to the financial sector (with respect to which the public sector is always at disadvantage), the results are qualitatively confirmed.

More in details it is worth noting that, as for the educational attainment, in Germany, France, Greece and Slovenia there is basically nor a premium nor a penalty from working in the public sector. However, in Austria, Spain, Ireland, Italy and Portugal there is a remarkable premium from working in the public sector when the worker attained the high educational level; in these cases (except for Italy), there is a penalty from the low educational level, although of a smaller magnitude than the premium from the high level (although in Portugal the two are balanced). A higher wage schedule for high skilled workers may be justified if they have more responsibilities than in the private sector. Since we controlled for a proxy of this with a dummy for being a manager, it is interesting to notice that i) apart from Belgium, there is always a penalty from being a manager in the public sector and that ii) such a penalty does not fully balance the high degree premium observed in Austria, Spain, Ireland, Italy (it does in Portugal). Eventually, there is a premium from being part-time in the public sector with respect to the private sector, probably as a consequence of the non linear budget schedule attached to part-time contracts that are thus discouraged, more in the private sector than in the public sector.

Exploiting the techniques in Fortin et al. (2011) and Chernozhukov et al. (2008), Depalo et al. (2013) were able to study the entire distribution function, distinguishing for the first time - to our knowledge -

between the contributions of each characteristic.

The wage differential is found to be lower at the right tail of the distribution than at the left tail. Results of the decomposition analysis show that this is due to the unexplained component of the overall gap (i.e., the premium), which decreases with the wage and becomes negative (i.e., a penalty) at the very high quantiles. In all countries, at the low tail of the distribution the portion of the public sector wage gap accounted by differences in the remuneration of the individual characteristics of the workers outweighs that attributable to differences in their characteristics, whereas, at the high tail wage differentials mainly owe to differences in the employees endowments.

Differences in educational attainment and job experience constitute the largest portion of the endowment effect at all quantiles and for all countries. The public-private wage differential also comes from a higher remuneration of education in the public sector towards the lower end of the wage distribution. At the high tail, instead, the remuneration of education in the public sector tends to be lower than in the private sector.

3 The probability to work in the public sector

In this section we evaluate whether various measures of skill are correlated with the worker's sector of employment, and what direction and magnitude this correlation has. Furthermore, we attempt to assess whether a different remuneration of such skills in public and private sectors affects this correlation. To this purpose, we exploit the results obtained by the decomposition analysis of the public-private wage differential presented in the previous section.

In particular, we are interested in evaluating if and how the existence of pay differentials has implcations on how skills distribute across sectors. The consequences of such a link might be very relevant. For example, if the existence of a premium in the public sector induced the most skilled workers to work in this sector and deterred especially productive employees from working in the private sector, the productivity in the private sector would be lower, especially in economies where such premium is higher.

Beside standard observable measures of human capital, such as work experience and educational level, we also investigate the importance of non-formal capabilities or skills of the employee.

The present analysis has to be considered as a tentative step to understanding the consequences, if any, of the public sector wage premium on the distribution of skills across sectors. It is far from being conclusive, as only correlations are estimated and no causation can be identified. Furthermore, to address this issue one should ideally use a dynamic model that accounts for the possibility that workers switch from one sector to

another. Unfortunately, our data are repeated cross-sections and do not make it possible to perform this analysis.

Data are taken from the European Union Statistics on Income and Living Conditions (EU-SILC) and refer to men and the years 2004–2007. We define a public sector worker if he is employed in one of the following sectors, according to the NACE (REV 1.1) classification: "Public administration and defence, compulsory social security", "Education" and "Health and social work".

In Table 2 we report some descriptive statistics of the key variables used in this section: labour market experience, marital status, educational attainment, health condition, and the availability at home of a PC. In the estimation also managerial status (i.e., supervising other colleagues) and type of work (i.e., whether part-time or full-time) are included among the regressors. For Germany, Greece and Ireland experience is not available and age is used instead.

On average, in the period 2000–2007, notable differences in the characteristics of public and private sector employees emerge from the data. Such differences also vary significantly across countries. In the public sector employees exhibit longer working experience and are generally more likely to be married than in the private sector (except in Germany, France and Portugal). In all countries public employees are better educated. The difference in educational attainments is particularly relevant in Greece, Spain and Slovenia, where the incidence of high-educated employees in the public sector exceeds by 30% that observed in the private sector. Health conditions do not vary significantly across sectors and no specific pattern emerges from the data. In contrast, the percentage of workers who declare to own a computer is systematically higher among public sector workers. In Spain, Greece and Portugal the difference is close to or higher than 20 percentage points.

3.1 Methodological approach

We perform our analysis in two steps. In the first step, following Mazar (2010), we consider a standard Mincerian wage regression, whose residuals are positively correlated with the workers' skills that are unobservable by the researcher but observable by his current employer.[3] In other words, the unexplained part of the wage, once observable worker's characteristics have been taken into account, is used as a proxy of the unobservable skills. Of course, the model specification plays a key role to distinguish between the explained

[3] Using data on Israel, the analysis by Mazar (2010) is based on the observation of employees who switched from the public sector to the private sector and viceversa. As the distribution of wage in the public sector in Israel (as in many other countries) is more compressed than in the private sector, the study investigates whether the more (less) skilled workers switch from public (private) sector to private (public) sector. The results do not reject the assumption that the more compressed distribution in the public sector rewards personal skills less than the less compressed distribution in the private sector and induces a positive selection among those moving from the public to the private sector.

and the unexplained part of the skills. We think that our specification is a fair compromise between established theoretical background and agnosticism towards discrimination.[4] More formally, we estimate our benchmark model, separately for each sector and each geographycal area:[5]

$$y_i = \beta X_i + A_i, \forall \{sector, area\} \tag{3}$$

where the residual A_i is assumed to represent the worker's non-formal skills. We focus here on average ability, which gives the same qualitative conclusions as with the median.

In the second step we pool the information concerning all the geographycal areas and both sectors and perform probit estimations, where the probability of working in the public sector is regressed against the usual human capital characteristics of the employee and our measure of unobservable skill:

$$Pr(s_i = 1|X_i) = \Phi(X_i\lambda_1 + \hat{A}_i\lambda_2 + \epsilon_i), \tag{4}$$

where the sector variable takes the value 1 if the employee works in the public sector, and the value 0 if he works in the private sector. Standard errors are adjusted using the method proposed by Reiss and Wolak (2001), which augments the variable of interest with a random number to adjust for SE. Although this approach would not solve an identification problem, it addresses an inference problem, as in our analysis.

In Figure 2 and Figure 3 we present the average and the Kernel density, respectively, of our estimated measure of unobservable skills in the public and the private sectors.

In all countries the density of unobservable capabilities is more compressed in the public sector than in the private sector. While the difference across sectors is negligible in some countries (especially, Italy and Spain), it is sizeable in others (notably, Germany).

If we interpret, as we do in this section, the residual term of the wage equation as the remuneration of non-formal skills, the fact that the unexplained component of the wage always exhibits a higher dispersion in the private sector than in the public sector suggests that in the private sector there are personal unobservable

[4]See Depalo et al. 2013 for a discussion of this model specification.

[5] We consider different regions within the same country in order to capture in the residual only individual characteristics, purging it as much as possible from local aggregate conditions. As far as the private sector is concerned, specific conditions at the local level may derive, for example, by differences in the sectoral composition of the labour force. Overall, the geographycal areas are 37. There are 3 in Austria (1 Oststerreich; 2 Sdsterreich; 3 Weststerreich); 3 in Belgium (1 Rgion de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest; 2 Vlaams Gewest; 3 Rgion wallonne); 6 in Germany (1 Baden-Wrttemberg; 2 Bayern; 3 Berlin, Brandenburg, Mecklenburg-Vorpommern, Sachsen, Sachsen -Anhalt, Thringen; 4 Bremen, Hamburg, Niedersachsen, Schleswig-Holstein; 5 Hessen, Rheinland-Pfalz, Saarland; 6 Nordrhein-Westfalen); 5 in Spain (1 Noroeste; 2 Noreste; 3 Centro; 4 Este; 5 Sur); 8 in France (1 le de France; 2 Bassin Parisien; 3 Nord-Pas-de-Calais; 4 Est; 5 Ouest; 6 Sud-Ouest; 7 Centre-Ouest; 8 Mditerrane); 4 in Greece (1 Voreia Ellada; 2 Kentriki Ellada; 3 Attiki; 4 Nisia Aigaiou, Kriti); 5 in Italy (1 Nord-Ovest; 2 Nord-Est; 3 Centro; 4 Sud; 5 Isole). Ireland, Portugal and Slovenia are not divided into sub-areas.

capabilities that are rewarded, while in the public sector they are either absent or not rewarded.

However, non-formal skills estimated using sector specific regressions might not be entirely comparable. Only if the generating process is the same between the two sectors the estimated non formal skills are perfectly comparable. Indeed, we have verified that the distribution functions of the non-formal skills for the two sectors are overlapping. Further, we have replicated the analysis in this section *pooling* the two sectors in equation 3 (and adding a sector dummy variable), which makes the skills comparable because estimated from the same distribution: the results are very similar to those presented here.

3.2 Empirical results

The results of the probit regression are reported in Table 3. As expected, being better educated and having a longer work experience increase the probability to work in the public sector. When the public sector wage premium is larger the chances to be employed in the public sector for a better educated worker increase even further (col. 1). This is true when we use both the overall unexplained pay differential and the unexplained differential in the remuneration of educational attainments (col. 2).

Turning to the unobservable skills (col. 4), our analysis suggests that on average higher non-formal skills (coefficient "Skill") increase the probability to work in the public sector. However, if we restrict the analysis only on employees with above the mean non-formal capabilities (coefficient "Smart"), the higher the skill the lower the probability to work in the public sector. In other words, while on average more skilled workers tend to work in the public sector, it is more likely that a worker with extremely high unobservable capabilities (that is a worker receiving a wage much higher than expected on the basis of his observable characteristics) is employed in the private sector than in the public sector.

As in the case of observable skills, larger public sector premia increase the probability to be employed in the public sector for workers with higher than average unobservable capabilities, or increase the probability that above average unobservable capabilities are rewarded in the public sector as well (col. 4). Whatever the interpretation is, this finding supports the idea that higher wage premia in favour of the public sector may lower the incentives for the most productive workers to search for a job in the private sector.

Assuming that the residual of the Mincerian wage equation indeed measures the worker's non-formal skills may be questionable. Thus, with the aim of providing some evidence supporting our interpretation of the residual, we investigate the role played by other variables, available in the survey, that may capture additional capabilities of the workers not already accounted for by standard formal measures of skills. We were able to select only two variables, whose correlation with the employee's actual skill might be significant,

although perhaps weak. One is the use of a PC at home; the other is worker's health status (col. 5–8). We expect both measures to be positively correlated with unobservable skills. Indeed, having a PC at home increases the probability to work in the public sector. Furthermore, this relationship is stronger in areas where the unexplained part of the public-private wage differential is larger. Instead, no conclusive indications comes from our second measure of non-formal skills.

4 Conclusions

Depalo et al. (2013) evaluated the public-private wage differential in ten euro area countries. Their results indicate that on average public sector employees earn higher wages than private sector employees. The gap varies significantly along the wage distribution and across countries. However, in all countries, at the low tail of the distribution the portion of the public sector wage gap accounted by differences in the remuneration of the individual characteristics of the workers outweighs that attributable to differences in their characteristics. This may affect the distribution of skills among public and private sectors and thereby the overall labor market efficiency.

Our findings indicate that we cannot reject the hypothesis that larger wage differentials in favor of the public sector might refrain especially productive employees from working in the private sector or, put it equivalently, encourage employees to work in the public sector. In fact, the probability to work in the public sector increases with skills. Furthermore, this positive correlation is found to be stronger where the public sector wage premium is higher. These findings could have impact on labour market efficiency and macroeconomic outcomes, including competitiveness. Further research, also accounting for other macro aspects of the economies, might shed more light into that relationship.

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Figure 1: The public/private pay gap.

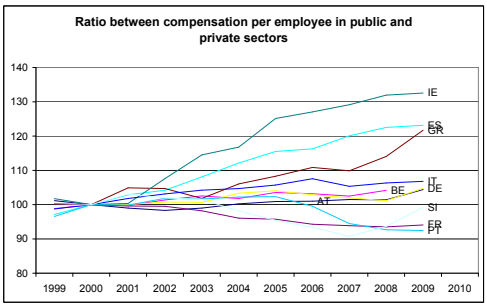

Figure 2: Average skills in public and private sectors.

Figure 3: Kernel density of skills in public and private sectors.

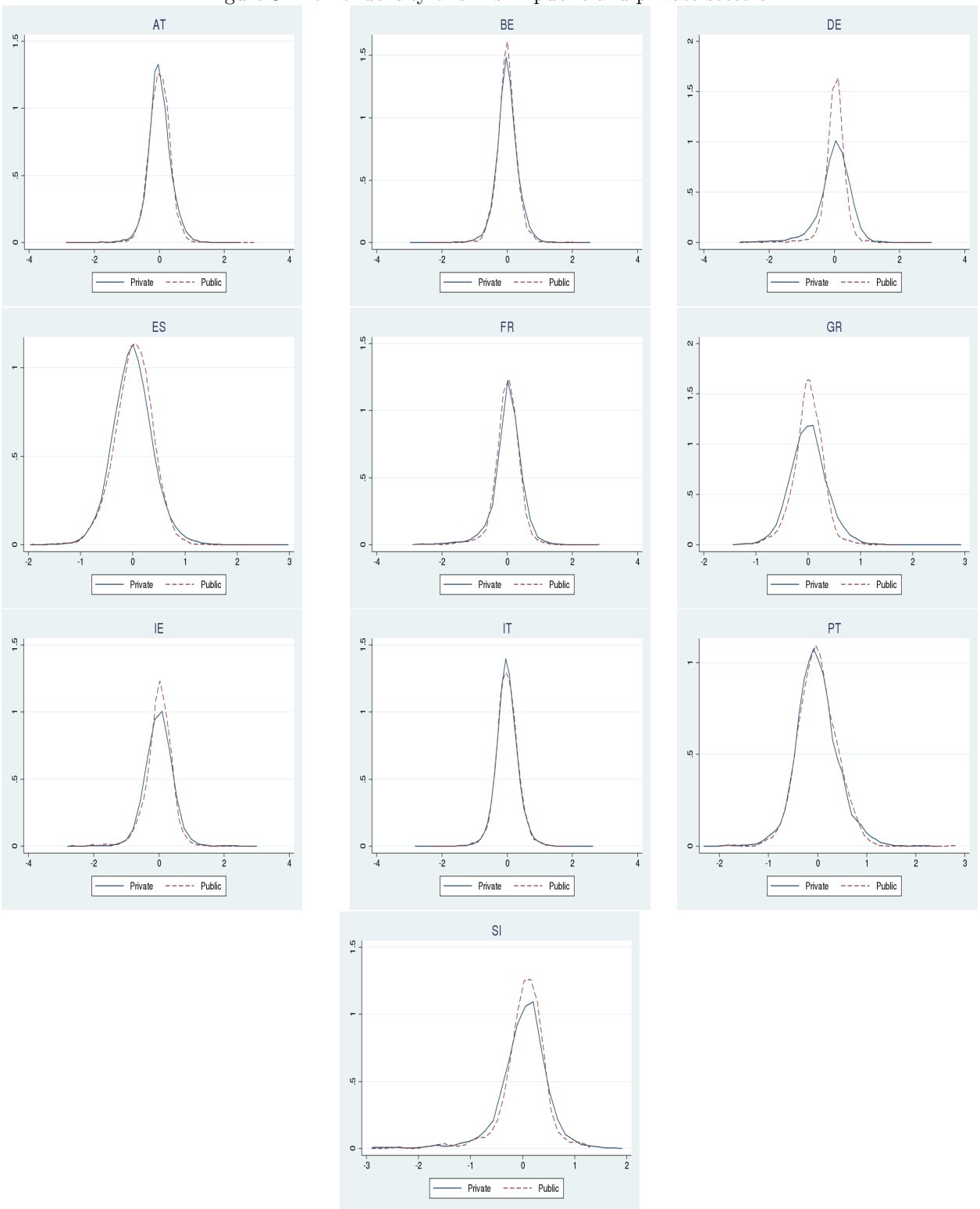

Table 1: Oaxaca decomposition.

Statistic	Austria	Belgium	Germany	Spain	France	Greece	Ireland	Italy	Portugal	Slovenia
overall										
Overall	0.158***	0.056***	0.141***	0.359***	0.107***	0.357***	0.317***	0.283***	0.430***	0.297***
Explained	0.098***	0.100***	0.120***	0.118***	0.071***	0.160***	0.143***	0.110***	0.230***	0.235***
Unexplained	0.060***	-0.044***	0.021*	0.241***	0.036***	0.197***	0.174***	0.173***	0.200***	0.062***
explained										
Low ed.	0.015***	0.016***	0.020***	0.050***	0.015***	0.026***	0.017***	0.049***	0.124***	0.048***
Med ed.	0.002*	0.004***	-0.002	0.000	0.004***	0.003***	0.003***	-0.001***	-0.002**	0.023***
High ed.	0.048***	0.047***	0.074***	0.056***	0.040***	0.048***	0.046***	0.050***	0.109***	0.153***
Experience	0.004***	0.017***	0.022***	0.005***	0.007***	0.040***	0.042***	0.014***	-0.006*	-0.004
Married	0.002***	0.001	-0.001	0.005***	-0.002	0.015***	0.011***	0.010***	-0.003***	0.001
Manager	0.028***	0.002	0.011***	0.006***	0.011***	0.024***	0.023***	0.013***	0.008**	0.003
Part-time	0.000	0.017***	-0.005***	0.002***	-0.000	0.010***	-0.002	0.003***	0.001	0.011***
unexplained										
Low ed.	-0.004***	0.006***	0.001	-0.012***	0.001	-0.002	-0.025***	0.001	-0.028***	-0.002
Med ed.	-0.008	0.005	-0.005	-0.011***	0.001	0.008*	-0.002	-0.011***	-0.001	0.036
High ed.	0.037***	-0.033***	-0.022*	0.061***	-0.003	-0.005	0.058***	0.007***	0.021***	-0.001
Experience	-0.014	0.004	-0.047***	-0.019***	-0.046***	-0.001	0.009	-0.003	-0.044***	-0.023
Married	0.030**	-0.002	-0.030*	0.008	-0.027**	-0.007	-0.004	-0.010	0.060***	0.039
Manager	-0.028***	0.017**	-0.031***	-0.019***	-0.030***	-0.050***	-0.027**	0.001	-0.016*	-0.012
Part-time	0.027***	0.007**	0.030***	0.014***	0.030***	0.053***	0.030***	0.031***	0.005*	0.000
Intercept	0.019	-0.018	0.139***	0.294***	0.065**	0.276***	0.088**	0.064***	0.180***	-0.015

Table 2: Descriptive statistics for key covariates in the probit model

Country	Sector	Experience	Low edu.	High edu.	Married	Good Health		Fair Health		Has PC	
						Yes	No	Yes	No	Yes	No
AT	Private	23.7	12.6	16.7	64.2	83.2	16.8	14.2	85.8	76.3	23.7
	Public	24.5	5.2	39.1	68.1	85.2	14.8	12.3	87.7	86.3	13.7
BE	Private	20.2	21.0	34.2	61.3	86.0	14.0	11.7	88.3	81.4	18.6
	Public	21.9	12.6	55.1	62.3	84.8	15.2	12.5	87.5	87.3	12.7
DE	Private	42.6	8.7	30.0	71.3	71.1	28.9	25.2	74.8	92.2	7.8
	Public	45.4	2.3	55.0	70.3	70.1	29.9	26.3	73.7	94.4	5.6
ES	Private	21.8	49.3	27.0	66.1	79.0	21.0	17.4	82.6	63.8	36.2
	Public	22.3	19.8	57.3	70.6	80.3	19.7	17.0	83.0	83.4	16.6
FR	Private	21.1	25.7	23.1	58.6	82.6	17.4	14.3	85.7	74.6	25.4
	Public	22.0	18.3	39.8	57.3	83.5	16.5	13.8	86.2	82.0	18.0
GR	Private	39.6	36.9	19.6	64.4	92.9	7.1	5.9	94.1	39.9	60.1
	Public	43.4	16.7	49.5	76.7	93.8	6.2	5.0	95.0	63.3	36.7
IE	Private	40.9	34.7	31.3	65.2	92.4	7.6	7.0	93.0	71.7	28.3
	Public	46.0	25.8	53.0	74.2	91.5	8.5	7.6	92.4	80.9	19.1
IT	Private	22.0	50.6	9.5	63.5	76.0	24.0	21.5	78.5	59.4	40.6
	Public	23.8	25.6	31.2	73.0	74.6	25.4	22.7	77.3	75.3	24.7
PT	Private	23.8	77.0	8.3	73.8	60.8	39.2	33.3	66.7	51.2	48.8
	Public	23.1	47.0	32.8	69.5	65.8	34.2	28.1	71.9	70.6	29.4
SI	Private	20.6	16.6	12.2	53.2	66.3	33.7	26.8	73.2	78.1	21.9
	Public	20.2	3.0	44.1	54.9	75.8	24.2	19.5	80.5	88.8	11.2

Table 3: Probability to work in the public sector as function of various covariates and skill indicators.

Statistic	Edu	Edu	Exp	Skill	PC	PC	Health	Health	All
Statistic	1	2	3	4	5	6	7	8	9
				Skills					
Sector									
Unex. & Low ed.	-1.208***								-1.325***
Low edu.	-0.254***	-0.404***	-0.418***	-0.419***	-0.368***	-0.358***	-0.412***	-0.412***	-0.197***
High edu.	0.501***	0.531***	0.532***	0.549***	0.508***	0.511***	0.531***	0.531***	0.501***
Exp.	0.022***	0.022***	0.019***	0.023***	0.023***	0.022***	0.022***	0.022***	0.020***
Exp. square	-0.000*	-0.000**	-0.000**	-0.000	-0.000	-0.000	-0.000**	-0.000**	-0.000
Married	-0.067***	-0.069***	-0.072***	-0.073***	-0.102***	-0.097***	-0.070***	-0.070***	-0.105***
Manager	-0.019	-0.018	-0.018	-0.020	-0.034***	-0.034***	-0.019	-0.019	-0.035***
Partime	0.436***	0.441***	0.443***	0.556***	0.450***	0.448***	0.447***	0.447***	0.561***
Unobservables	.	.	.	.					
Unex. & High ed.	0.355***								0.214*
Unex. ed. & Low ed.		-0.543							
Unex. ed. & High ed.		1.256***							
Unex. & Exper.			0.030***						0.038***
Unex. & Skill				-0.226					-0.256
Skill				0.408***					0.394***
Unex. & Smart				1.484***					1.244**
Smart				-1.060***					-1.062***
Has PC					0.240***	0.109***			0.153***
Unexpl. × PC						1.133***			0.784***
Good health							0.085**	0.056	0.024
Fair health							0.063*	0.025	-0.017
Unexpl. × Good health								0.323	0.324
Unexpl. × Fair health								0.427	0.415
Intercept	-1.144***	-1.143***	-1.137***	-0.992***	-1.310***	-1.268***	-1.211***	-1.202***	-1.175***

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