

Public-private sector wage gap in a group of European countries: an empirical perspective*

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Abstract

This paper investigates the impact of the great recession of 2007-2009 and the debt crisis on the evolution of wages in the public and the private sectors, and the changes in the public-private sector pay gap in a group of 26 EU countries. The results indicate that earnings decreased in both sectors in most of the analysed countries between 2008 and 2013. However, the decline in wages was mostly due to the differences in returns to workers' and jobs' characteristics while the endowment effect affected earnings in the opposite direction. The findings suggest that the overall public-private wage gap reduced or remained unchanged in the majority of the European countries over the crisis, which was due to diminishing differences in the observed characteristics of workers and their jobs as well as shrinking positive discrimination of public employees.

JEL classification: J31, J45, J48, E62

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1 INTRODUCTION

The great economic crisis of 2007-2009¹ is depicted as the most severe economic crisis since 'the great recession' of the 1930s. However, the recent downturn is associated not only with negative economic growth in the global economy but was followed by the indebtedness crisis, which touched most of the EU countries. An accelerated increase in public debt and a worsening fiscal position among the EU members impelled governments to implement fiscal consolidation measures in order to slow down further debt growth.

The unfavourable economic conditions also had a negative impact on the labour market in the EU – the unemployment rate in the EU-28 rose from 7% in 2008 to 10.9% in 2013, although there is a large cross-country heterogeneity in the response of the labour market; in the Southern European countries the unemployment rate more than doubled at that time. However, the adjustments in the labour market took place not only through the employment channel but also through changes in wages.

The decisions undertaken by the public and the private sector regarding employment and earnings policy differ as those sectors face differing goals, resources and limitations. The main objective of a private sector is to maximise its profits; hence, it endeavours to optimise wages and sets them at the level that reflects workers' productivity. Additionally, it can be expected that the private sector reacts more quickly to changes in economic conditions, especially if the role of trade unions in the wage bargaining process is limited. In contrast, in the case of the public sector, political considerations or fiscal fundamentals are likely to play an important role in wage-setting policy. On the one hand, the government can decide to overpay a particular group of workers, e.g. low-skilled ones, to set social norms. Moreover, trade unions actively participate in a collective bargaining process in many EU countries and, for example, can reject wage cuts in order to protect their members. Finally, the authorities are not able to adjust immediately the public sector wage bill in response to changes in the country's economic activity because the general government expenditure limits are determined in the state's budget act, which is traditionally prepared once per year.

The aim of this paper is to investigate how the public and the private sector responded to the slowdown of the early 2010s in economic activity and, related to this, the adjustment of general government expenditures that occurred in most of the European countries. Additionally, this study provides an answer to the question of the impact of the recession and austerity measures on the size of the public-private wage premium. For the purpose of my analysis, I use the EU-SILC data for the group of 26

¹According to the National Bureau of Economic Research (NBER), the recession in the US started in December 2007 and lasted till June 2009 but many EU countries faced negative growth also in next years.

EU member states and apply the modified version of the Oaxaca-Blinder decomposition to estimate the changes in earnings that took place between 2008 and 2013, separately, in the public and the private sector. Then, the evolution of the inter-sectoral pay gap over time is examined and its main drivers are identified.

The rest of the paper is organised as follows: Section 2 provides the literature review. The dataset is described in Section 3. Then, I present my empirical approach. Section 5 analyses the changes in wages over the crisis in the public and the private sectors as well as investigating the variation in the wage gap. Finally, Section 6 gives concluding remarks.

2 LITERATURE REVIEW

The existence of a public-private sector wage gap is a well-established fact in the literature, with the first studies dating back to the 1970s, see e.g. Smith (1976); Gunderson (1979). However, there are remarkable differences with respect to the size and the sign of gap depending on the countries analysed.

Most of the studies focused on developed economies are fairly unanimous and indicate that there is a positive wage premium paid to public sector workers, see e.g. Ehrenberg and Schwarz (1987); Bender (1998); Gregory and Borland (1999); Christofides and Michael (2013); de Castro et al. (2013). Earnings differentials are unequal along the wage distribution – usually, the least skilled workers are better rewarded by the public sector, the premium declines along the earnings distribution and is negative for the upper deciles (Melly, 2005; Giordano et al., 2011). The literature concentrated on developing countries is relatively scarce and provides more ambiguous results compared to advanced economies. The literature review prepared by Lausev (2014) dedicated to Central and Eastern European (CEE) countries provides evidence of a positive premium paid to private sector workers for both genders in the majority of post-Communist European countries. However, most of the studies reviewed focus on the transformation period, i.e. the late 1990s and early 2000s, while most of the CEE countries have achieved significant real and nominal convergence toward the 'old' EU countries in recent years. Hence, the conclusions drawn from those papers might no longer be valid as, due to the catching-up process, both the structure of the labour market and composition of wages in the CEE countries can be consistent with that in the Western European countries. This finding is confirmed by Christofides and Michael (2013) in their cross-country study that covers all EU countries – in most of them, public sector employees are better rewarded compared to their private sector counterparts.

Although the outbreak of the last economic crisis resulted in a revival of the considerations about the inter-sectoral pay differentials, there are few studies that revolve

around the evolution of wages in the public and private sectors over the recession or are aimed at assessing the impact of the economic downturn on the pay gap. Christopoulou and Monastiriotes (2016) focus on Greece, which seems to be a pretty natural research object as the recent global recession hit the Greek economy particularly hard and it has had to put up with an economic adjustment programme of unprecedented severity. Analysing the data from 2009 to 2013, the authors suggest that there are significant differences between sectors regarding the speed and size of adjustments in wages – earnings in the private sector were affected faster and, overall, more deeply in comparison to the public sector. Contrary to all expectations, the public wage premium increased at the beginning of the crisis and started to fall very slowly after 2011 but never declined below its 2009 level. Additionally, the reduction in public sector premium touched mostly well-skilled workers at the upper tail of earnings distributions.

Pérez et al. (2016) investigate the fiscal and macroeconomic effect of government wages and employment reforms, giving special attention to the Euro Area countries. By a comparison of the pay gaps in 2007 and 2012, they find evidence that the recent public wage restraint has contributed to the partial correction of the positive public-private pay differential in the Euro Area. Just like Christopoulou and Monastiriotes (2016), the authors conclude that the observed decline in pay gap was larger at the upper tail of income distribution than at the bottom.

The aforementioned results are just partly in line with the findings for Croatia. Rubil (2013), who studies the changes in wage gap between 2008 and 2011 on the basis of the data from the Labour Force Survey (LFS), concludes that the public-private pay differential increased in the analysed period, both at the mean and across the earnings distribution. However, the rise in the wage gap was primarily due to the growth in the gap-increasing wage structure effect.

3 DATA

The analysis is based on the European Union Statistic on Income and Living Conditions (EU-SILC) dataset, which nowadays is one of the most frequently used data sources in this field of studies, see e.g. (Christofides and Michael, 2013; Giordano et al., 2014). The data comprise a comprehensive set of information on an individual's personal and family characteristics and his/her working and living conditions, which enables one to estimate the wage differential between public and private sector workers. The unified methodology applied to collect the data in all countries that participate in this survey ensures comparability of the obtained results. The analysis covers 26 EU member states² and focuses on the changes in wages that occurred between 2008 and

²Croatia and Slovenia are excluded from the analysis due to data availability.

2013.

This study concentrates on comparison of wages between public and private sector workers. The major drawback of using the EU-SILC dataset for this purpose is that the EU-SILC questionnaire does not contain a question about the sector of employment itself. Therefore, I follow Depalo et al. (2015) and Christofides and Michael (2013), among others, and distinguish between public and private sector workers on the basis of NACE Rev.2 classification.³ In the literature, two main approaches of defining a public sector employer using EU-SILC data and NACE classification can be found. The public sector is either an aggregation of 'Public Administration and Defence, Compulsory Social Security' (Section O), 'Education' (Section P), and 'Human Health and Social Work Activities' (Section Q) or it is restricted just to the first of the aforementioned sectors. In this analysis, the broader definition of a public sector is used.

The dependent variable is defined as a natural logarithm of an hourly wage. The employee's hourly wage is computed with the use of gross annual employee cash or near cash income divided by the number of months worked during a year and number of hours usually worked in a week. Additionally, I assume that there are four weeks in a month. The potential advantage of using an annual income instead of a monthly wage as a base for computing an hourly wage arises from the fact that it includes all supplementary payments such as 13th or 14th month payments, bonuses, holiday pay, etc., which might constitute a pretty large share of annual income, especially in the case of public sector employees. Even though, in theory, respondents are obliged to include these payments while giving their monthly earnings, it seems probable that people do not internalise such payments as a part of their monthly income and tend to report their contracted gross monthly wage. Additionally, the latter variable is collected for a smaller number of countries comparing to an annual income. The hourly gross wage is deflated in 2013 Euro currency using each country's Harmonized Index of Consumer Prices (HICP).

The set of explanatory variables used in my analysis can be divided into two categories: worker's characteristics and job's characteristics. The first group of covariates consists of: gender, age, and age squared⁴, level of educational attainment, marital status, and number of children in a household that are below 18 years old. The set of job features includes: firm size, type of contract (temporary/permanent and full-

³The classification NACE Rev.2 has been used since 2008, before the classification NACE Rev.1.1 was in force.

⁴The variable denoting professional experience is unavailable for all analysed countries. Therefore, for consistency reasons, working experience is approximated by age squared.

time/part-time), and position (working as a manager)^{5 6}.

In order to make the results comparable across years and countries, additional constraints are imposed on the sample. The study is restricted to employees who are older than 25 and younger than 60 years old.⁷ Additionally, I exclude those who are still in education, collect pension benefits, work in the agricultural sector, or are in army. Due to the fact that, in many countries, public sector jobs are not open to foreigners, they are also withdrawn from the sample. Finally, all observations with missing values for variables of interest are also excluded.

Table 1 presents the unadjusted real wages in 2008 and 2013. Regardless of the sector of employment, significant regional differences among the analysed countries can be observed. Luxembourg and Denmark are characterised by the highest hourly wages, exceeding 30 Euro. At the opposite extreme are post-Communist countries from Central and Eastern Europe, with average earnings of around 2.50 Euro in Romania and Bulgaria and 5.00 Euro in countries like Latvia or Poland. Between 2008 and 2013 the most dramatic decline in a real hourly wage was reported in Greece – wages dropped by 25.9% in the private sector and by 38.7% in the public sector at that time. In contrast, the highest growth in wages was observed in Ireland (13.4%) and Denmark (13.2%) in the private sector and in Estonia (19.0%) in the public sector.

Table 1: Real hourly wage in the public and the private sectors in 2008 and 2013

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HU
PUBLIC SECTOR													
2008	23.3	22.2	2.5	18.6	5.8	17.8	29.1	5.8	17.3	18.5	20.2	16.2	5.6
2013	21.5	22.8	2.4	17.4	5.5	18.1	29.4	6.9	10.6	15.6	22.4	15.8	3.8
PRIVATE SECTOR													
2008	21.3	21.4	2.5	12.8	5.7	18.7	28.0	6.6	11.6	13.4	21.4	16.6	4.7
2013	22.1	22.1	2.5	12.3	5.7	18.3	31.7	7.1	8.6	12.1	22.5	17.7	3.8
	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SK	UK
PUBLIC SECTOR													
2008	30.6	20.4	5.0	41.0	6.3	8.2	26.4	6.7	11.7	3.0	21.4	4.4	19.4
2013	29.4	16.5	4.5	38.5	4.8	8.9	24.1	5.7	9.1	2.2	19.7	4.9	18.3
PRIVATE SECTOR													
2008	23.2	15.1	5.1	31.5	5.4	8.5	26.4	5.6	7.4	2.6	23.4	4.5	19.7
2013	26.3	15.2	4.3	30.8	5.3	8.7	24.4	4.7	7.3	2.0	22.5	4.8	20.4

⁵For consistency reasons, regional dummies are not included in earnings regressions as they are not available for all analysed countries. The regression results do not differ significantly if regional effects are taken into account.

⁶The completed list of independent variables and their definitions are presented in table A.1.

⁷The upper age limit is set at 60 to avoid the problem of using country-specific retirement age, as well as the problem of having to adjust the retirement age in time due to pension reforms, which were recently introduced in many European countries and are aimed at increasing the retirement age.

4 EMPIRICAL APPROACH

For the purpose of my analysis, I follow the approach proposed by Oaxaca (1973) and Blinder (1973), which belongs to a group of relatively flexible methods that allow one to analyse not only differences in earnings between two distinct group of workers but also to investigate wage evolution in time.

In the most general form, the Oaxaca-Blinder decomposition is based on two separate earnings equation of a Mincerian type (Mincer, 1974), which take the following form:

$$w_{gi} = \mathbb{E}(w_{gi}|\mathbf{X}_i) = \beta_{gi}\mathbf{X}_i + \varepsilon_{gi}, \quad g = \{PUB, PRIV\}, \quad i = 1, \dots, N \quad (1)$$

where w_g denotes the natural logarithm of an hourly wage expressed in 2013 real prices in sector g , \mathbf{X} is the vector of explanatory variables measuring a range of individual and job characteristics, β_g represents the corresponding vector of coefficients in sector g , ε_g is the i.i.d. error term in sector g and $\mathbb{E}(\varepsilon_g) = 0^8$.

In the next step, the raw wage differential (R) between public and private sector workers can be decomposed into two components – the 'explained' part that is attributable to differences in observed characteristics and the 'unexplained' portion that results from differences in coefficients. The Oaxaca-Blinder decomposition in the most general form proposed by Oaxaca and Ransom (1994) can be written as follows:

$$\begin{aligned} R &= \mathbb{E}(w_{PUB}) - \mathbb{E}(w_{PRIV}) = \mathbb{E}(X_{PUB})'\beta_{PUB} - \mathbb{E}(X_{PRIV})'\beta_{PRIV} = \\ &= \underbrace{[\mathbb{E}(X_{PUB}) - \mathbb{E}(X_{PRIV})]'\beta^*}_{\text{endowments}} + \underbrace{\mathbb{E}(X_{PUB})'(\beta_{PUB} - \beta^*) + \mathbb{E}(X_{PRIV})'(\beta^* - \beta_{PRIV})}_{\text{coefficients}} \end{aligned} \quad (2)$$

where β^* is traditionally called a non-discriminatory coefficient vector and its form depends on the researcher's belief concerning the nature of discrimination. Taking the assumption that public sector workers are the advantaged group, equation 2 in its estimated form can be rewritten as:

$$\hat{R}_g = \bar{w}_{PUB} - \bar{w}_{PRIV} = \underbrace{(\bar{X}_{PUB} - \bar{X}_{PRIV})'\hat{\beta}_{PUB}}_{\text{endowments}} + \underbrace{\bar{X}'_{PRIV}(\hat{\beta}_{PUB} - \hat{\beta}_{PRIV})}_{\text{coefficients}} \quad (3)$$

As has been mentioned before, the relatively large flexibility of the Oaxaca-Blinder decomposition allows one to investigate not only the differences in earnings between two distinct groups of workers but also to examine the changes in wages in time (see

⁸In order to simplify the notation i subscript is omitted.

equation 4). My interest lies in assessing the impact of the recent economic crisis on wage differences. For this reason, I estimate the changes in earnings between public and private sector employees before (t_0) and after (t_1) the outbreak of the crisis – 2008 is defined as the pre-crisis period and 2013 as the post-crisis period. Since I want to isolate the changes with respect to the pre-crisis period (t_0), the benchmark coefficient is defined as $\hat{\beta}_{t_0}$.

$$\hat{R}_t = \bar{w}_{t_1} - \bar{w}_{t_0} = (\bar{X}_{t_1} - \bar{X}_{t_0})\hat{\beta}_{t_0} + (\hat{\beta}_{t_1} - \hat{\beta}_{t_0})\bar{X}_{t_1} \quad (4)$$

where t_1 and t_0 denote compared years.

The first term of the right-hand side of equation 4 is interpreted as the part of the raw changes of wages over time that can be explained by differences in observed characteristics, while the second term is attributable to changes in coefficients between compared time periods. As mentioned in the previous section, economic conditions play a crucial role in wage-setting policy in the case of the private sector, while fiscal fundamentals and political considerations are important factors that affect wages in the public sector. Due to the fact that the public sector does not adjust automatically to the improvement or worsening of economic conditions in the labour market, changes in the wages and salaries policy of the government, e.g. wage bill freeze or rise in wages for a particular group of workers, seem to be the only reason for that worker's characteristics to be differently evaluated by the government. In other words, focusing on changes over time in public sector wages, the unexplained component reflects switch in wage policy. Consequently, the unexplained component of the private sector part indicates the changes due to economic conditions, as wages in the private sector should adapt to the situation in the labour market.

The investigated time period (2008-2013) is specific at least due to two reasons. On the one hand, a worsening of the fiscal position in most of the EU countries resulted in the adoption of fiscal consolidation measures. According to Pérez et al. (2016), although the containment of the public wage bill played a subdued role in the period of fiscal retrenchment (2010-2014), it was accounted for 15% of the improvement in the structural general government budget balance-to-GDP ratio between 2010 and 2014 for the whole EU. Thus, changes in coefficients between 2008 and 2013 in the case of the public sector can measure the effectiveness of the implemented public employment and wage policies that were mainly aimed at public wage bill reduction⁹. On the other hand, this was also a time of significant slowdown in economic activity in most of the EU countries. For this reason, changes in coefficients over time in the private sector reflect the impact of recession on wages.

⁹A detailed description of implemented policy measures with a direct impact on the general government sector wage bill can be found in Pérez et al. (2016)

The change of the wage gap in time can be considered from two perspectives. It can be seen as the difference between the public-private pay gap in time (between time t_1 and t_0) or as the difference in earnings over time between two groups of workers (public and private sector workers).

$$\begin{aligned}\widehat{\Delta R} &= \widehat{\Delta R}_g = (\bar{w}_{t_1,PUB} - \bar{w}_{t_1,PRIV}) - (\bar{w}_{t_0,PUB} - \bar{w}_{t_0,PRIV}) = \\ &= (\bar{w}_{t_1,PUB} - \bar{w}_{t_0,PUB}) - (\bar{w}_{t_1,PRIV} - \bar{w}_{t_0,PRIV}) = \widehat{\Delta R}_t\end{aligned}\quad (5)$$

The aim of this analysis is not only to assess the changes of wages within given sectors but also to analyse the main drivers that force the evolution of a wage gap in time. For this purpose, equation 5 can be further decomposed in the spirit of Oaxaca and Blinder. It is possible to isolate the part of changes in the pay differential that are due to differences in observed characteristics and due to changes in returns.

$$\begin{aligned}\widehat{\Delta R} &= (\bar{w}_{t_1,PUB} - \bar{w}_{t_0,PUB}) - (\bar{w}_{t_1,PRIV} - \bar{w}_{t_0,PRIV}) = \\ &= \underbrace{[(\bar{X}_{t_1,PUB} - \bar{X}_{t_0,PUB})\hat{\beta}_{t_0,PUB}] + \underbrace{(\hat{\beta}_{t_1,PUB} - \hat{\beta}_{t_0,PUB})\bar{X}_{t_1,PUB}}_{\text{changes in public due to returns}}}_{\text{changes in public due to characteristics}} - \\ &- \underbrace{[(\bar{X}_{t_1,PRIV} - \bar{X}_{t_0,PRIV})\hat{\beta}_{t_0,PRIV}] + \underbrace{(\hat{\beta}_{t_1,PRIV} - \hat{\beta}_{t_0,PRIV})\bar{X}_{t_1,PRIV}}_{\text{changes in private due to returns}}}_{\text{changes in private due to characteristics}}\end{aligned}\quad (6)$$

Taking into account the fact that changes in wage policy are responsible for differences in the wage gap due to coefficients in the case of the public sector and that economic conditions force changes in the wage gap due to coefficients in the private sector, equation 6 can be rewritten as follows:

$$\begin{aligned}\widehat{\Delta R} &= (\bar{w}_{t_1,PUB} - \bar{w}_{t_0,PUB}) - (\bar{w}_{t_1,PRIV} - \bar{w}_{t_0,PRIV}) = \\ &= \underbrace{[(\bar{X}_{t_1,PUB} - \bar{X}_{t_0,PUB})\hat{\beta}_{t_0,PUB} - (\bar{X}_{t_1,PRIV} - \bar{X}_{t_0,PRIV})\hat{\beta}_{t_0,PRIV}] +}_{\text{changes in wage gap due to characteristics}} \\ &+ \underbrace{(\hat{\beta}_{t_1,PUB} - \hat{\beta}_{t_0,PUB})\bar{X}_{t_1,PUB}}_{\text{changes in wage gap due to wage policy}} - \underbrace{(\hat{\beta}_{t_1,PRIV} - \hat{\beta}_{t_0,PRIV})\bar{X}_{t_1,PRIV}}_{\text{changes in wage gap due to economic conditions}}\end{aligned}\quad (7)$$

To understand the source of changes in wages over time, I decompose the wage differential into components describing the contribution of groups of characteristics – namely, the impact of workers’ and jobs’ attributes are distinguished. However, there is still a remaining issue that has to be considered in analysing the results of a detailed decomposition. The contribution of separate groups of characteristics for the unexplained component depends on the nature of continuous variables¹⁰ and a choice

¹⁰The contributions to the unexplained component depend on an arbitrary scaling decision in the

of reference category in the case of categorical variables, see e.g. Jones (1983); Jones and Kelley (1984); Oaxaca and Ransom (1999); Yun (2005). To avoid problems with the interpretation of the results, the changes in wages due to differences in coefficients are presented without performing a detailed decomposition of this part. The detailed decomposition of the explained component is less troublesome as the total contribution of the categorical variable is unaffected by the choice of the base category.

5 RESULTS

Tables 2-4 present the results of the decompositions of changes in wages that occurred between 2008 and 2013. In most of the countries, real hourly wages in the public sector were significantly lower in 2013 compared to the pre-crisis period. However, the size of the total reduction ranges from 0.066 log points (6.4%) in the Czech Republic to 0.451 log points (36.3%) in Greece and is remarkably larger in the case of peripheral Euro Area countries such as Portugal, Italy, Greece, and Spain, where it exceeds 15%. The latter finding is in line with expectations and reflects exceptional adjustments of the public sector wage bill, i.e. its freeze or reduction, in this group of EU countries. Additionally, countries that did not adopt any strategies aimed at public wage bill containment, such as Denmark, Finland, and Malta recorded an increase of earnings in the public sector that ranged from 1.3% to 7.5%.

The results for the private sector are more ambiguous – the number of countries that reported a decrease in wages is smaller than in the case of the public sector (there was a significant reduction of wages in 15 and 9 countries in the public and the private sector, respectively). Furthermore, in most countries the changes in time in the private sector are less pronounced compared to the public sector, e.g. in Greece, which is a country in which earnings shrank the most, the average hourly wage dropped by 24.0% in the private sector compared to 36.3% in the public sector over the analysed period. It is worth mentioning that in less than 30% of EU member states the deterioration (improvement) in wages is greater (smaller) in the private sector than in the public sector. Additionally, Austria and France are the only countries in which earnings did not follow a similar pattern but, rather, moved in opposite direction – a decline of wages in the public sector was accompanied by their growth in the private sector. These findings provide evidence of considerable spill-over effects and linkages in the wage-setting process between the two sectors. Moreover, they can suggest either a deeper reaction of the public sector to the recession in many EU countries or can be a sign that adjustments in both sectors are not implemented simultaneously. To be

case of continuous variables that do not have natural zero points, see e.g. Jones (1983); Jones and Kelley (1984)

specific, earnings in the private sector might start slowly to recover as the labour market conditions improve, while the wage bill in the public sector can still be frozen due to further fiscal consolidation needs or low wage pressure in the public sector.

Regardless of the sector analysed, the observed decline in earnings over the crisis is more than fully explained by changes in coefficients, while in most cases the endowment effect affects the changes in wages in an opposite direction. In fact, Bulgaria, Hungary, and Sweden are the only countries in which the explained component is negative, but only in the case of the public sector. The results of a detailed decomposition suggest that positive changes in observed characteristics are mostly attributable to workers' features in the public sector, while job characteristics play an important role in rising wages over time in the private sector. These findings indicate an improvement in the quality of the workforce that might have been due either to productivity growth of so far employed people or dismissal of the least productive workers. Additionally, one can conclude that despite the slowdown in economic activity, working conditions remain unchanged in a country's public sector or even improved, in some cases, in its private sector.

Tables 5-7 present the estimates of a public-private sector pay differential in 2013 and 2008. In a majority of the analysed countries public employees were better rewarded, both in 2013 and 2008, in comparison to their private sector counterparts. In fact, the raw difference in earnings was in favour of private sector workers only in Denmark, France, and Sweden in 2013 and in Estonia, Finland, and Sweden in 2008. However, there is a huge heterogeneity in the size of the overall pay difference among the EU countries. Indeed, the smallest but still significantly positive difference between earnings of public and private sector employees was recorded in Belgium in 2008 (2.9%) and 2013 (3.4%); Greece and Cyprus can be found at the opposite end with a wage difference of 49.2% (Greece) in 2008 and 44.5% (Cyprus) in 2013. The positive contribution of the endowment component in a majority of countries indicates that observed characteristics are in favour of public sector workers. Additionally, the results of a detailed decomposition suggest that differences in personal characteristics rather than working conditions play a crucial role in wage differentiation. As mentioned before, the difference in earnings due to coefficients is interpreted as a public-private sector wage premium. The presented findings imply the existence of a regional pattern – the unexplained component is larger in Southern European countries, such as Cyprus (28.4% in 2013) or Spain (17.1% in 2013), while it is much lower in Western European and Central and Eastern European countries, e.g. Belgium, Denmark, or Austria and the Czech Republic, Estonia, or Romania (the coefficient is insignificant in all of the mentioned countries in 2013). Finally, there are three countries in which the positive public sector wage premium diminished in the analysed period: the Czech Republic,

Italy, and Portugal.

The overall public-private pay difference decreased or remained unchanged in the majority of European countries between 2013 and 2008; in fact, the wage differential grew significantly only in Germany, Estonia, and Malta (the raw change in pay gap equalled 16.8% in Estonia, 6.0% in Malta, and 4.1% in Germany). The largest adjustments in earnings of public and private sector employees are observed in countries that have faced considerable fiscal consolidations, e.g. Latvia (21.5%), Italy (16.7%), or Greece (16.2%). Hence, wages in the public sector adjusted more deeply in those countries that recorded a decline in wages over the analysed period. The endowment effect works in favour of a downward wage gap adjustment. Therefore, the difference in observed characteristics between public and private sector workers diminishes in time. Additionally, for countries in which the explained component contributes positively to changes in earnings in time, this finding provides evidence of a larger improvement in the quality of the workforce in the private sector than in the public sector. The overall change in earnings is mostly explained by the changes in returns to employees' and jobs' characteristics (it explains at least 68% of the total difference in pay gap), which indicate that modification of wages policy in the government sector driven by fiscal considerations as well as changes in economic activity play an important role in pay gap reduction. Bearing in mind the fact that the unexplained component of decomposition over time is, in most cases, of a negative sign in both analysed sectors, it suggests that the adjustment of returns to characteristics is larger in the public sector compared to the private sector. In other words, the decline in wages in the public sector due to introduced fiscal measures, i.e. wage bill freeze or cut, and is greater than a drop in earnings in the private sector, which reflects worsening economic conditions. Additionally, it also provides evidence of a decreasing positive premium of public employees. This implies that people employed in the public sector could have been overpaid before the crisis. The necessity of fiscal consolidation forced the authorities to modify wages and set them at a level that better reflects workers' productivity.

In order to test the robustness of the obtained results as well as to investigate whether there were any differences in the evolution of the wages pay gap over time between genders, separate estimations for males and females are done (tables A.2-A.15). Generally, the results are in line with the findings for the total sample and do not indicate notable differences between genders. Over the analysed period, wages declined or remained unchanged in a majority of countries both for men and women. However, the drop in earnings was larger in the case of men in those countries that faced the sharpest reduction in wages, such as Greece, Latvia, or Spain. Comparing the unexplained component of a public-private pay gap, one can conclude that if pay differentials are in favour of public sector employees, generally, they are larger for women

than for men (Malta and Romania are the only exceptions). The opposite statement is true for men – if private sector workers are better rewarded than their public sector counterparts, then the gap is higher for men. Similarly, as for the total sample, the decline in the raw pay gap was mostly attributable to changes in coefficients, while the differences in observed characteristics had no significant impact on the reduction of a wage gap.

Table 2: Changes in wages over time, Oaxaca-Blinder decomposition

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
PUBLIC SECTOR										
t_1	3.054*** (0.012)	0.725*** (0.034)	1.625*** (0.014)	3.333*** (0.015)	2.791*** (0.012)	1.759*** (0.025)	3.231*** (0.023)	2.253*** (0.018)	2.611*** (0.017)	2.608*** (0.017)
t_0	3.015*** (0.012)	0.799*** (0.022)	1.692*** (0.011)	3.320*** (0.016)	2.786*** (0.010)	1.629*** (0.026)	3.260*** (0.037)	2.704*** (0.025)	2.779*** (0.016)	2.684*** (0.013)
Difference	0.039** (0.016)	-0.074* (0.040)	-0.066*** (0.018)	0.013*** (0.022)	0.006 (0.015)	0.129*** (0.036)	-0.029 (0.044)	-0.451*** (0.030)	-0.168*** (0.023)	-0.076*** (0.022)
Explained	0.038*** (0.008)	-0.047* (0.027)	0.018* (0.010)	0.048** (0.014)	-0.003 (0.010)	0.055** (0.021)	0.056** (0.024)	0.088*** (0.023)	0.022 (0.014)	-0.011 (0.010)
Worker	0.033*** (0.003)	-0.036* (0.022)	0.018** (0.008)	0.024** (0.010)	0.002 (0.008)	0.046** (0.018)	0.051** (0.021)	0.064*** (0.018)	0.026** (0.010)	0.015** (0.007)
Job	0.004 (0.009)	-0.010 (0.009)	0.000 (0.004)	0.024 (0.009)	-0.006 (0.005)	0.009 (0.009)	0.005 (0.009)	0.024** (0.011)	-0.005 (0.007)	-0.026*** (0.007)
Unexplained	0.002 (0.326)	-0.028 (0.031)	-0.084*** (0.016)	-0.035 (0.022)	0.009 (0.014)	0.074** (0.032)	-0.085** (0.037)	-0.538*** (0.023)	-0.190*** (0.020)	-0.065*** (0.021)
N	2,881	1,113	2,441	1,082	5,437	1,478	1,448	1,940	3,839	4,461
PRIVATE SECTOR										
t_1	3.021*** (0.010)	0.744*** (0.018)	1.627*** (0.008)	3.375*** (0.020)	2.750*** (0.009)	1.685*** (0.021)	3.073*** (0.021)	2.031*** (0.015)	2.319*** (0.012)	2.729*** (0.013)
t_0	2.986*** (0.010)	0.744*** (0.014)	1.642*** (0.008)	3.270*** (0.015)	2.784*** (0.008)	1.711*** (0.019)	2.971*** (0.025)	2.304*** (0.017)	2.410*** (0.012)	2.690*** (0.010)
Difference	0.034** (0.014)	0.000 (0.023)	-0.015 (0.011)	0.105*** (0.025)	-0.034*** (0.012)	-0.026 (0.028)	0.102*** (0.032)	-0.274*** (0.022)	-0.091*** (0.017)	0.039** (0.017)
Explained	0.029*** (0.008)	0.000 (0.013)	0.023*** (0.006)	0.069*** (0.014)	0.006 (0.007)	0.039*** (0.014)	0.129*** (0.020)	0.082*** (0.016)	0.024** (0.010)	0.037*** (0.008)
Worker	0.032*** (0.006)	0.023*** (0.009)	0.018*** (0.005)	0.051*** (0.011)	0.005 (0.004)	0.016 (0.010)	0.097*** (0.017)	0.066*** (0.011)	0.048*** (0.007)	0.023*** (0.005)
Job	-0.003 (0.004)	-0.023*** (0.007)	0.005 (0.003)	0.018** (0.008)	0.002 (0.005)	0.023*** (0.008)	0.032*** (0.011)	0.016* (0.008)	-0.024*** (0.006)	0.014*** (0.005)
Unexplained	0.006 (0.012)	0.000 (0.021)	-0.038*** (0.010)	0.036 (0.027)	-0.041*** (0.011)	-0.064** (0.025)	-0.027 (0.028)	-0.355*** (0.018)	-0.115*** (0.015)	0.003 (0.015)
N	4,091	3,885	8,341	1,543	10,463	4,051	2,468	3,269	8,967	7,328

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table 3: Changes in wages over time, Oaxaca-Blinder decomposition

	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
	PUBLIC SECTOR									
t_1	2.726*** (0.011)	2.712*** (0.025)	1.435*** (0.020)	1.338*** (0.029)	3.534*** (0.020)	1.197*** (0.018)	2.124*** (0.020)	3.117*** (0.015)	2.934*** (0.019)	1.599*** (0.015)
t_0	2.908*** (0.012)	2.773*** (0.029)	1.667*** (0.026)	1.422*** (0.033)	3.555*** (0.029)	1.537*** (0.015)	2.054*** (0.020)	3.207*** (0.014)	3.007*** (0.021)	1.745*** (0.016)
Difference	-0.182*** (0.016)	-0.061 (0.038)	-0.232*** (0.033)	-0.084* (0.044)	-0.021 (0.035)	-0.340*** (0.024)	0.070** (0.028)	-0.090*** (0.020)	-0.072** (0.028)	-0.145*** (0.022)
Explained	0.030*** (0.010)	0.033 (0.029)	0.036 (0.024)	0.088*** (0.033)	0.007 (0.021)	-0.045*** (0.016)	0.001 (0.018)	-0.033** (0.016)	-0.012 (0.018)	0.069*** (0.014)
Worker	0.037*** (0.008)	0.038* (0.022)	0.028 (0.020)	0.071*** (0.026)	0.002 (0.020)	-0.015 (0.012)	-0.006 (0.015)	-0.016 (0.011)	0.005 (0.015)	0.073*** (0.013)
Job	-0.007 (0.005)	-0.005 (0.013)	0.008 (0.010)	0.017 (0.013)	0.005 (0.007)	-0.030*** (0.009)	0.007 (0.008)	-0.017** (0.008)	-0.016* (0.009)	-0.004 (0.004)
Unexplained	-0.212*** (0.014)	-0.094*** (0.027)	-0.268*** (0.029)	-0.172*** (0.032)	-0.028 (0.029)	-0.295*** (0.019)	0.069** (0.028)	-0.057** (0.023)	-0.061** (0.026)	-0.215*** (0.019)
N	4,757	1,242	1,539	1,606	1,552	3,161	742	2,541		3,765
	PRIVATE SECTOR									
t_1	2.598*** (0.008)	2.345*** (0.016)	1.440*** (0.018)	1.256*** (0.022)	3.312*** (0.019)	1.191*** (0.011)	2.057*** (0.014)	3.062*** (0.032)	2.942*** (0.014)	1.385*** (0.010)
t_0	2.596*** (0.008)	2.416*** (0.016)	1.430*** (0.022)	1.389*** (0.020)	3.347*** (0.021)	1.379*** (0.011)	2.044*** (0.017)	3.145*** (0.015)	2.865*** (0.016)	1.515*** (0.010)
Difference	0.002 (0.011)	-0.071*** (0.023)	0.009 (0.029)	-0.132*** (0.030)	-0.035 (0.028)	-0.188*** (0.015)	0.012 (0.022)	-0.083** (0.035)	0.078*** (0.021)	-0.130*** (0.015)
Explained	0.032*** (0.006)	0.026* (0.014)	0.092*** (0.017)	0.036** (0.018)	-0.008 (0.019)	-0.004 (0.009)	0.005 (0.010)	0.030* (0.016)	0.037*** (0.012)	0.035*** (0.009)
Worker	0.030*** (0.004)	0.034*** (0.011)	0.038*** (0.013)	0.019 (0.015)	0.002 (0.015)	0.000 (0.007)	0.010 (0.008)	0.030** (0.013)	0.029*** (0.010)	0.040*** (0.007)
Job	0.002 (0.004)	-0.008 (0.006)	0.054*** (0.011)	0.017** (0.008)	-0.010 (0.009)	-0.005 (0.004)	-0.005 (0.005)	0.000 (0.006)	0.008 (0.006)	-0.005 (0.005)
Unexplained	-0.031*** (0.010)	-0.097*** (0.019)	-0.083*** (0.026)	-0.168*** (0.026)	-0.028 (0.024)	-0.183*** (0.013)	0.007 (0.022)	-0.113*** (0.030)	0.041** (0.019)	-0.164*** (0.013)
N	13,130	3,189	3,203	3,855	1,664	7,194	2,135	3,257	4,580	10,230

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table 4: Changes in wages over time, Oaxaca-Blinder decomposition

	PT	RO	SK	FI	SE	UK
PUBLIC SECTOR						
t_1	2.025*** (0.023)	0.702*** (0.026)	1.480*** (0.014)	3.020*** (0.016)	2.863*** (0.025)	2.781*** (0.013)
t_0	2.206*** (0.035)	0.980*** (0.028)	1.402*** (0.012)	2.948*** (0.014)	2.943*** (0.021)	2.745*** (0.033)
Difference	-0.180*** (0.042)	-0.278*** (0.039)	0.078*** (0.018)	0.072*** (0.021)	-0.080** (0.032)	0.036 (0.036)
Explained	0.095*** (0.035)	-0.076 (0.049)	0.012 (0.009)	0.038*** (0.012)	-0.031* (0.018)	0.037 (0.023)
Worker	0.079** (0.032)	-0.068 (0.048)	0.022*** (0.007)	0.032*** (0.010)	-0.006 (0.011)	0.035** (0.014)
Job	0.016** (0.008)	-0.008 (0.008)	-0.010*** (0.004)	0.007 (0.006)	-0.025* (0.014)	0.003 (0.013)
Unexplained	-0.275*** (0.027)	-0.202*** (0.054)	0.066*** (0.017)	0.034* (0.019)	-0.049 (0.032)	-0.001 (0.029)
N	1,821	1,205	2,711	1,611	1,563	2,143
PRIVATE SECTOR						
t_1	1.791*** (0.014)	0.593*** (0.013)	1.454*** (0.010)	3.023*** (0.011)	2.983*** (0.020)	2.790*** (0.013)
t_0	1.801*** (0.019)	0.811*** (0.019)	1.410*** (0.009)	2.984*** (0.011)	2.996*** (0.018)	2.800*** (0.028)
Difference	-0.010 (0.024)	-0.218*** (0.023)	0.044*** (0.014)	0.038** (0.016)	-0.013 (0.027)	-0.010 (0.030)
Explained	0.129*** (0.016)	-0.044 (0.030)	0.002 (0.006)	0.026*** (0.009)	0.027** (0.013)	-0.015 (0.019)
Worker	0.091*** (0.013)	-0.031 (0.028)	0.004 (0.005)	0.024*** (0.006)	0.035*** (0.011)	0.014*** (0.013)
Job	0.038*** (0.008)	-0.013*** (0.004)	-0.002 (0.003)	0.002 (0.006)	-0.008 (0.007)	-0.029 (0.011)
Unexplained	-0.139*** (0.022)	-0.174*** (0.024)	0.042*** (0.012)	0.012 (0.013)	-0.040 (0.025)	0.006 (0.026)
N	4,105	5,979	6,379	3,421	2,474	3,861

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table 5: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
	2013									
<i>wPUB</i>	3.054*** (0.012)	0.725*** (0.034)	1.625*** (0.014)	3.333*** (0.015)	2.791*** (0.012)	1.759*** (0.025)	3.231*** (0.023)	2.253*** (0.018)	2.611*** (0.017)	2.608*** (0.017)
<i>wPRIV</i>	3.021*** (0.010)	0.744*** (0.008)	1.627*** (0.008)	3.375*** (0.020)	2.750*** (0.009)	1.685*** (0.021)	3.073*** (0.021)	2.031*** (0.015)	2.319*** (0.012)	2.729*** (0.013)
Difference	0.033** (0.015)	-0.019 (0.038)	-0.001 (0.016)	-0.042* (0.025)	0.041*** (0.015)	0.073** (0.033)	0.159*** (0.031)	0.223*** (0.023)	0.292*** (0.021)	-0.121*** (0.022)
Explained	0.045*** (0.010)	0.065*** (0.023)	0.007 (0.013)	0.014 (0.021)	0.055*** (0.010)	0.099*** (0.027)	0.083*** (0.022)	0.141*** (0.017)	0.134*** (0.016)	-0.009 (0.013)
Worker	0.034*** (0.009)	0.046** (0.020)	0.016 (0.011)	0.031* (0.018)	0.047*** (0.008)	0.022 (0.022)	0.069*** (0.018)	0.119*** (0.014)	0.083*** (0.011)	-0.002 (0.011)
Job	0.011* (0.006)	0.020** (0.009)	-0.009 (0.006)	-0.017 (0.023)	0.008 (0.007)	0.077*** (0.013)	0.014 (0.011)	0.022** (0.009)	0.051*** (0.010)	-0.007 (0.009)
Unexplained	-0.012 (0.015)	-0.085** (0.037)	-0.009 (0.016)	-0.056 (0.035)	-0.013 (0.014)	-0.026 (0.033)	0.076** (0.031)	0.082*** (0.022)	0.158*** (0.021)	-0.112*** (0.024)
N	3,325	2,157	4,764	1,154	7,428	2,813	2,061	2,443	5,865	5,364
	2008									
<i>wPUB</i>	3.015*** (0.012)	0.799*** (0.022)	1.692*** (0.011)	3.320*** (0.016)	2.786*** (0.010)	1.629*** (0.026)	3.260*** (0.037)	2.704*** (0.025)	2.779*** (0.016)	2.684*** (0.013)
<i>wPRIV</i>	2.986*** (0.010)	0.744*** (0.014)	1.642*** (0.008)	3.270*** (0.015)	2.784*** (0.008)	1.711*** (0.019)	2.971*** (0.025)	2.304*** (0.017)	2.410*** (0.012)	2.690*** (0.010)
Difference	0.029* (0.015)	0.055** (0.026)	0.050*** (0.014)	0.051** (0.022)	0.002 (0.013)	-0.082*** (0.032)	0.289*** (0.045)	0.400*** (0.030)	0.369*** (0.020)	-0.006 (0.016)
Explained	0.040*** (0.011)	0.148*** (0.022)	0.010 (0.012)	0.058*** (0.021)	0.035*** (0.009)	-0.036 (0.024)	0.134*** (0.031)	0.130*** (0.022)	0.128*** (0.016)	0.045*** (0.010)
Worker	0.036*** (0.010)	0.117*** (0.019)	0.014 (0.010)	0.042** (0.020)	0.028*** (0.007)	-0.062*** (0.020)	0.097*** (0.026)	0.120*** (0.017)	0.102*** (0.012)	0.013* (0.008)
Job	0.005 (0.007)	0.031*** (0.009)	-0.004 (0.005)	0.017** (0.008)	0.008 (0.006)	0.026** (0.010)	0.037*** (0.014)	0.010 (0.010)	0.027*** (0.008)	0.032*** (0.007)
Unexplained	-0.012 (0.015)	-0.093*** (0.028)	0.040*** (0.014)	-0.008 (0.027)	-0.034*** (0.012)	-0.045 (0.033)	0.154*** (0.045)	0.270*** (0.027)	0.240*** (0.021)	-0.051*** (0.017)
N	3,647	2,841	6,018	1,471	8,472	2,716	1,855	2,766	6,941	6,425

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table 6: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition

	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
	2013									
<i>wPUB</i>	2.726*** (0.011)	2.712*** (0.025)	1.435*** (0.020)	1.338*** (0.029)	3.534*** (0.020)	1.197*** (0.018)	2.124*** (0.020)	3.117*** (0.015)	2.934*** (0.019)	1.599*** (0.015)
<i>wPRIV</i>	2.598*** (0.008)	2.345*** (0.016)	1.440*** (0.018)	1.256*** (0.022)	3.312*** (0.019)	1.191*** (0.011)	2.057*** (0.014)	3.062*** (0.032)	2.942*** (0.014)	1.385*** (0.010)
Difference	0.128*** (0.014)	0.368*** (0.029)	-0.005 (0.027)	0.082** (0.036)	0.222*** (0.026)	0.006 (0.021)	0.067*** (0.025)	0.055 (0.035)	-0.008 (0.023)	0.214*** (0.018)
Explained	0.122*** (0.012)	0.118*** (0.021)	0.114*** (0.023)	0.039 (0.028)	0.003 (0.019)	0.083*** (0.018)	0.007 (0.012)	0.001 (0.032)	-0.027* (0.017)	0.161*** (0.014)
Worker	0.074*** (0.009)	0.073*** (0.014)	0.078*** (0.020)	-0.001 (0.022)	-0.002 (0.016)	0.100*** (0.015)	0.012 (0.010)	0.056 (0.041)	0.011 (0.016)	0.104*** (0.012)
Job	0.048*** (0.006)	0.045*** (0.014)	0.036*** (0.010)	0.040*** (0.013)	0.005 (0.011)	-0.017** (0.008)	-0.005 (0.005)	-0.055 (0.045)	-0.038*** (0.012)	0.056*** (0.007)
Unexplained	0.006 (0.015)	0.250*** (0.026)	-0.119*** (0.028)	0.043 (0.035)	0.219*** (0.024)	-0.077*** (0.022)	0.061** (0.025)	0.054 (0.041)	0.019 (0.024)	0.054*** (0.019)
N	8,417	2,388	2,554	2,592	1,761	5,168	1,576	2,799	3,272	6,915
	2008									
<i>wPUB</i>	2.908*** (0.012)	2.773*** (0.029)	1.667*** (0.026)	1.422*** (0.033)	3.555*** (0.029)	1.537*** (0.015)	2.054*** (0.020)	3.207*** (0.014)	3.007*** (0.021)	1.745*** (0.016)
<i>wPRIV</i>	2.596*** (0.008)	2.416*** (0.016)	1.430*** (0.022)	1.389*** (0.020)	3.347*** (0.021)	1.379*** (0.011)	2.044*** (0.017)	3.145*** (0.015)	2.865*** (0.016)	1.515*** (0.010)
Difference	0.311*** (0.014)	0.358*** (0.033)	0.237*** (0.034)	0.033 (0.038)	0.207*** (0.035)	0.158*** (0.019)	0.009 (0.026)	0.062*** (0.020)	0.142*** (0.026)	0.230*** (0.019)
Explained	0.147*** (0.011)	0.089*** (0.025)	0.139*** (0.027)	0.029 (0.026)	-0.032 (0.026)	0.177*** (0.017)	-0.008 (0.015)	0.057*** (0.018)	0.072*** (0.018)	0.192*** (0.016)
Worker	0.096*** (0.009)	0.067*** (0.018)	0.089*** (0.023)	-0.008 (0.022)	0.011 (0.022)	0.162*** (0.015)	0.007 (0.012)	0.048** (0.020)	0.057*** (0.016)	0.138*** (0.014)
Job	0.051*** (0.006)	0.022 (0.015)	0.050*** (0.012)	0.037*** (0.010)	-0.043*** (0.015)	0.015** (0.006)	-0.014* (0.009)	0.009 (0.016)	0.016* (0.009)	0.054*** (0.006)
Unexplained	0.164*** (0.015)	0.269*** (0.030)	0.098*** (0.036)	0.004 (0.035)	0.239*** (0.033)	-0.019 (0.019)	0.017 (0.027)	0.005 (0.023)	0.070*** (0.026)	0.038* (0.021)
N	9,470	2,043	2,188	2,869	1,455	5,187	1,301	2,999	3,216	7,080

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table 7: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition

	PT	RO	SK	FI	SE	UK
	2013					
<i>w_{PUB}</i>	2.025*** (0.023)	0.702*** (0.026)	1.480*** (0.014)	3.020*** (0.016)	2.863*** (0.025)	2.781*** (0.013)
<i>w_{PRIV}</i>	1.791*** (0.014)	0.593*** (0.013)	1.454*** (0.010)	3.023*** (0.011)	2.983*** (0.020)	2.790*** (0.013)
Difference	0.234*** (0.026)	0.109*** (0.028)	0.026 (0.017)	-0.003 (0.020)	-0.120*** (0.032)	-0.009 (0.018)
Explained	0.203*** (0.022)	0.101*** (0.019)	0.018 (0.013)	-0.013 (0.016)	-0.042 (0.026)	0.074*** (0.014)
Worker	0.159*** (0.019)	0.098*** (0.018)	0.022* (0.012)	0.007 (0.012)	-0.011 (0.023)	0.052*** (0.012)
Job	0.045*** (0.009)	0.003 (0.005)	-0.004 (0.004)	-0.020* (0.010)	-0.031* (0.016)	0.022*** (0.007)
Unexplained	0.031 (0.024)	0.008 (0.028)	0.008 (0.018)	0.010 (0.021)	-0.078** (0.039)	-0.083*** (0.020)
N	3,662	3,405	4,325	2,562	1,642	5,160
	2008					
<i>w_{PUB}</i>	2.206*** (0.035)	0.980*** (0.028)	1.402*** (0.012)	2.948*** (0.014)	2.943*** (0.021)	2.745*** (0.033)
<i>w_{PRIV}</i>	1.801*** (0.019)	0.811*** (0.019)	1.410*** (0.009)	2.984*** (0.011)	2.996*** (0.018)	2.800*** (0.028)
Difference	0.405*** (0.039)	0.169*** (0.034)	-0.008 (0.014)	-0.037** (0.018)	-0.054** (0.027)	-0.055 (0.042)
Explained	0.242*** (0.030)	0.145*** (0.024)	-0.008 (0.011)	-0.031** (0.015)	0.028 (0.023)	0.014 (0.037)
Worker	0.184*** (0.025)	0.145*** (0.024)	-0.013 (0.010)	0.006 (0.011)	-0.007 (0.023)	0.050* (0.029)
Job	0.058*** (0.012)	-0.001 (0.004)	0.005 (0.004)	-0.038*** (0.009)	0.035** (0.016)	-0.035 (0.022)
Unexplained	0.163*** (0.035)	0.024 (0.028)	0.000 (0.015)	-0.005 (0.017)	-0.082** (0.037)	-0.069 (0.043)
N	2,264	3,779	4,765	2,470	2,395	844

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table 8: Changes in public-private sector wage differentials, Oaxaca-Blinder

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
Δ gap	0.005 (0.020)	-0.074* (0.043)	-0.051** (0.021)	-0.093*** (0.030)	0.040** (0.017)	0.155*** (0.044)	-0.130** (0.058)	-0.177*** (0.036)	-0.077** (0.030)	-0.116*** (0.027)
Δ explained	0.009 (0.013)	-0.047* (0.027)	-0.006 (0.012)	-0.021 (0.023)	-0.010 (0.010)	0.016 (0.022)	-0.073** (0.036)	0.006 (0.024)	-0.002 (0.016)	-0.048*** (0.012)
Δ unexplained	-0.004 (0.018)	-0.028 (0.035)	-0.046** (0.018)	-0.072** (0.031)	0.049*** (0.017)	0.139*** (0.039)	-0.057 (0.052)	-0.183*** (0.032)	-0.074*** (0.025)	-0.068*** (0.026)
wage policy	0.002 (0.014)	-0.028 (0.033)	-0.084*** (0.016)	-0.035* (0.019)	0.009 (0.014)	0.074*** (0.029)	-0.085** (0.040)	-0.538*** (0.023)	-0.190*** (0.019)	-0.065*** (0.020)
economic conditions	0.006 (0.012)	0.000 (0.021)	-0.038*** (0.009)	0.036 (0.027)	-0.041*** (0.010)	-0.064** (0.027)	-0.027 (0.030)	-0.355*** (0.019)	-0.115*** (0.015)	0.003 (0.015)
	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
Δ gap	-0.183*** (0.022)	0.010 (0.042)	-0.242*** (0.042)	0.049 (0.049)	0.015 (0.047)	-0.152*** (0.027)	0.058* (0.034)	-0.007 (0.047)	-0.150*** (0.032)	-0.016 (0.026)
Δ explained	-0.002 (0.013)	0.007 (0.032)	-0.056** (0.028)	0.053 (0.035)	0.015 (0.030)	-0.041** (0.020)	-0.004 (0.023)	-0.063*** (0.023)	-0.048** (0.020)	0.035** (0.017)
Δ unexplained	-0.181*** (0.020)	0.003 (0.030)	-0.186*** (0.037)	-0.004 (0.041)	0.000 (0.038)	-0.111*** (0.021)	0.062* (0.037)	0.055 (0.042)	-0.102*** (0.033)	-0.051** (0.024)
wage policy	-0.212* (0.016)	-0.094*** (0.027)	-0.268*** (0.035)	-0.172*** (0.034)	-0.028 (0.030)	-0.295*** (0.020)	0.069** (0.030)	-0.057*** (0.021)	-0.061** (0.025)	-0.215*** (0.020)
economic conditions	-0.031*** (0.010)	-0.097*** (0.019)	-0.083*** (0.024)	-0.168*** (0.024)	-0.028 (0.024)	-0.183*** (0.013)	0.007 (0.023)	-0.113*** (0.036)	0.041** (0.020)	-0.164*** (0.011)
	PT	RO	SK	FI	SE	UK				
Δ gap	-0.170*** (0.044)	-0.060 (0.049)	0.034 (0.022)	0.034 (0.022)	-0.067 (0.046)	0.046 (0.047)				
Δ explained	-0.035 (0.036)	-0.032 (0.056)	0.010 (0.011)	0.012 (0.016)	-0.058*** (0.021)	0.052* (0.029)				
Δ unexplained	-0.136*** (0.028)	-0.029 (0.060)	0.024 (0.019)	0.021 (0.020)	-0.009 (0.040)	-0.007 (0.037)				
wage policy	-0.275*** (0.024)	-0.202*** (0.053)	0.066*** (0.017)	0.034** (0.016)	-0.049 (0.032)	-0.001 (0.028)				
economic conditions	-0.139*** (0.019)	-0.174*** (0.026)	0.042*** (0.012)	0.012 (0.011)	-0.040 (0.026)	0.006 (0.025)				

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Bootstrapped clustered standard errors applied (100 replications).

6 CONCLUSIONS

This paper studies the impact of the last economic crisis on the evolution of wages in the public and the private sector and the changes of the inter-sectoral wage gap in a group of European countries. Using the EU-SILC data and the modified Oaxaca-Blinder decomposition method, I formally tested to what extent the worsening of economic conditions and implemented austerity measures affected earnings between 2008 and 2013.

As expected, the results provide evidence that real wages declined over the crisis and that the decrease in wages was especially remarkable in the peripheral Euro Area countries. The study shows that deterioration in earnings can be mostly attributable to the differences in returns to human capital and other wage determinants, while the positive impact of the endowment effect suggests an improvement in the quality of workers. This last finding indicates that workers' productivity increased over time or employers decided either to hire more productive people or to dismiss the least-skilled workers.

The comparison of the public-private wage differences in 2013 and 2008 indicates that in most of the analysed countries public sector workers earn more than their private sector counterparts. However, a large part of the difference in earnings results from the superior characteristics of public sector workers. Additionally, there is a positive public sector wage premium, but mostly in the Southern European countries, while the unexplained component remains insignificant for most of the Western, Central and Eastern European countries.

The overall public-private wage gap declined or remained unchanged in the majority of the European countries over the analysed period, and both differences the endowment component and differences in returns to workers' and jobs' characteristics contributed to this drop. On the one hand, it suggests that the differences in the human capital and other wage determinants became less noticeable; on the other hand, it provides evidence of a decreasing positive premium of public employees. Additionally, the findings show that modification of wage policy in the public sector driven by fiscal considerations as well as slowdown in economic activity played an important role in pay gap reduction.

Even though the decrease in earnings during the crisis could be anticipated and economically justified, it is still perceived as a negative and undesired phenomenon by employees. However, the reduction of the public-private pay gap that was accompanied by the wage decline in the last recession should generally have a positive impact on the economy. Firstly, wage cuts increased the competitiveness of private companies and helped to narrow fiscal imbalances. Additionally, the relative attractiveness of being employed in the public sector against the private sector decreased. This factor can

prevent the gathering of well-skilled workers in the public sector that constantly overpays its employees. The drop in attractiveness of a public sector employment is partly reflected in the diminishing differences in the observed characteristics of employees – in the past, the public sector was able to lure better educated and more experienced people in comparison to the private sector, so the differences in average characteristics were more noticeable. Finally, the reduction or freeze of wages in the public sector enabled the EU countries to consolidate public finances and improve their fiscal positions. The expected limited willingness to increase earnings of public sector employees in the near future should help to constrain public expenditures.

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A APPENDIX

Table A.1: Variables description – wage equation

Variable	Description
Hourly wage	Continuous variable. Hourly earnings in euro in 2013 real prices (annual income/(4*number of hours worked per week*number of months worked per year)).
Demographic characteristics	
Age	Continuous variable. Age at the income reference period.
Female	Dummy variable. 1 if female, 0 otherwise
Child	Count variable. Number of children younger than 18 years old.
Cohabiting	Dummy variable. 1 if married or cohabiting, 0 otherwise.
Education	
Primary (reference)	Dummy variable. 1 if no education, pre-primary education or primary education, 0 otherwise.
Secondary	Dummy variable. 1 if lower secondary education or upper secondary education, 0 otherwise.
Post-secondary	Dummy variable. 1 if post-secondary non-tertiary education, 0 otherwise.
Tertiary	Dummy variable. 1 if first or second stage of tertiary education, 0 otherwise.
Labour	
Firm small (reference)	Dummy variable. 1 if number of persons working at the local units equal to or lower than 10, 0 otherwise.
Firm medium	Dummy variable. 1 if number of persons working at the local unit ranges between 11 and 49 persons, 0 otherwise.
Firm big	Dummy variable. 1 if number of persons working at the local unit exceeds 50, 0 otherwise.
Permanent	Dummy variable. 1 if a person has a permanent job/work contract of unlimited duration, 0 otherwise.
Supervisory	Dummy variable. 1 if a person works at managerial position, 0 otherwise.
Full-time	Dummy variable. 1 if a person is an employee and self declares to be full-time employee, 0 otherwise.

Table A.2: Changes in wages over time – male, Oaxaca-Blinder decomposition

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
PUBLIC SECTOR										
t_1	3.130*** (0.021)	1.029*** (0.055)	1.829*** (0.023)	3.368*** (0.028)	2.935*** (0.019)	2.015*** (0.056)	3.364*** (0.037)	2.316*** (0.027)	2.716*** (0.025)	2.743*** (0.025)
t_0	3.085*** (0.019)	0.992*** (0.039)	1.909*** (0.022)	3.418*** (0.033)	2.910*** (0.018)	1.880*** (0.062)	3.410*** (0.050)	2.788*** (0.035)	2.927*** (0.020)	2.786*** (0.017)
Difference	0.045 (0.028)	0.036 (0.068)	-0.081** (0.032)	-0.051 (0.043)	0.025 (0.026)	0.134 (0.084)	-0.046 (0.062)	-0.472*** (0.044)	-0.210*** (0.032)	-0.043 (0.030)
Explained	0.043** (0.017)	-0.009 (0.045)	0.001 (0.020)	0.053* (0.029)	-0.011 (0.020)	0.080* (0.048)	0.092* (0.050)	0.067* (0.036)	-0.015 (0.017)	0.024 (0.016)
Worker	0.044*** (0.015)	-0.015 (0.032)	0.020 (0.012)	0.031 (0.023)	-0.004 (0.018)	0.070** (0.034)	0.075* (0.039)	0.042* (0.026)	-0.007 (0.013)	0.029*** (0.010)
Job	-0.001 (0.007)	0.006 (0.027)	-0.019 (0.014)	0.022 (0.022)	-0.007 (0.005)	0.010 (0.033)	0.016 (0.027)	0.024 (0.019)	-0.008 (0.010)	-0.005 (0.011)
Unexplained	0.002 (0.025)	0.045 (0.057)	-0.081*** (0.029)	-0.104** (0.042)	0.036* (0.019)	0.054 (0.076)	-0.138** (0.054)	-0.539*** (0.034)	-0.196*** (0.029)	-0.067** (0.028)
N	925	294	596	258	1,833	284	449	811	1,348	1,245
PRIVATE SECTOR										
t_1	3.057*** (0.011)	0.835*** (0.022)	1.746*** (0.010)	3.394*** (0.027)	2.868*** (0.011)	1.852*** (0.030)	3.152*** (0.027)	2.086*** (0.020)	2.408*** (0.016)	2.814*** (0.015)
t_0	3.026*** (0.012)	0.871*** (0.018)	1.759*** (0.009)	3.327*** (0.019)	2.915*** (0.010)	1.902*** (0.022)	3.090*** (0.032)	2.398*** (0.021)	2.528*** (0.014)	2.777*** (0.010)
Difference	0.032* (0.016)	-0.036 (0.028)	-0.013 (0.013)	0.068** (0.033)	-0.048*** (0.015)	-0.050 (0.037)	0.062 (0.042)	-0.313*** (0.029)	-0.121*** (0.021)	0.037** (0.018)
Explained	0.032*** (0.010)	-0.024 (0.015)	0.024*** (0.007)	0.058*** (0.013)	-0.004 (0.009)	0.018 (0.016)	0.122*** (0.028)	0.100*** (0.021)	0.025* (0.015)	0.031*** (0.009)
Worker	0.031*** (0.007)	0.009 (0.008)	0.018*** (0.005)	0.034*** (0.013)	0.000 (0.005)	-0.002 (0.012)	0.102*** (0.023)	0.075*** (0.015)	0.044*** (0.008)	0.020*** (0.006)
Job	0.001 (0.006)	-0.033*** (0.011)	0.006 (0.004)	0.024** (0.012)	-0.004 (0.007)	0.019* (0.011)	0.020 (0.014)	0.025** (0.012)	-0.019* (0.011)	0.011* (0.006)
Unexplained	0.000 (0.015)	-0.012 (0.026)	-0.037*** (0.012)	0.009 (0.037)	-0.043*** (0.014)	-0.067** (0.034)	-0.060* (0.035)	-0.413*** (0.025)	-0.146*** (0.022)	0.006 (0.016)
N	2,577	2,029	4,897	910	6,089	2,121	1,396	1,942	5,162	4,292

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.3: Changes in wages over time – male, Oaxaca-Blinder decomposition

IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
PUBLIC SECTOR									
t_1	2.800*** (0.019)	1.539*** (0.044)	1.482*** (0.054)	3.568*** (0.029)	1.204*** (0.038)	2.218*** (0.024)	3.207*** (0.026)	3.050*** (0.032)	1.714*** (0.029)
t_0	2.967*** (0.020)	1.838*** (0.039)	1.577*** (0.069)	3.635*** (0.036)	1.598*** (0.030)	2.117*** (0.025)	3.329*** (0.028)	3.107*** (0.036)	1.783*** (0.033)
Difference	-0.167*** (0.028)	-0.298*** (0.067)	-0.075 (0.088)	-0.067 (0.046)	-0.394*** (0.049)	0.101*** (0.035)	-0.123*** (0.038)	-0.056 (0.048)	-0.069 (0.044)
Explained	0.034* (0.020)	0.032 (0.056)	0.036 (0.068)	0.007 (0.033)	-0.051 (0.038)	-0.025* (0.014)	-0.047 (0.040)	-0.031 (0.029)	0.112*** (0.029)
Worker	0.039** (0.016)	0.005 (0.043)	0.021 (0.049)	-0.002 (0.030)	0.002 (0.020)	-0.025* (0.014)	-0.024 (0.026)	-0.009 (0.025)	0.102*** (0.027)
Job	-0.005 (0.010)	0.028 (0.029)	0.016 (0.034)	0.009 (0.012)	-0.052* (0.027)	0.001 (0.002)	-0.023 (0.019)	-0.022* (0.012)	0.010 (0.011)
Unexplained	-0.200*** (0.025)	-0.082** (0.035)	-0.111 (0.077)	-0.074** (0.037)	-0.343*** (0.038)	0.125*** (0.035)	-0.076* (0.041)	-0.025 (0.046)	-0.181*** (0.037)
N	1,535	442	352	664	844	376	746	604	873
PRIVATE SECTOR									
t_1	2.666*** (0.010)	1.561*** (0.024)	1.387*** (0.029)	3.372*** (0.023)	1.267*** (0.014)	2.097*** (0.015)	3.081*** (0.044)	3.050*** (0.017)	1.447*** (0.013)
t_0	2.651*** (0.010)	1.597*** (0.031)	1.519*** (0.029)	3.437*** (0.024)	1.439*** (0.014)	2.094*** (0.018)	3.202*** (0.016)	2.997*** (0.021)	1.591*** (0.013)
Difference	0.015 (0.014)	-0.119*** (0.029)	-0.132*** (0.041)	-0.065* (0.034)	-0.172*** (0.020)	0.003 (0.024)	-0.121*** (0.047)	0.053** (0.027)	-0.144*** (0.019)
Explained	0.039*** (0.008)	0.061*** (0.019)	0.026 (0.022)	-0.033 (0.023)	-0.002 (0.012)	0.013 (0.011)	0.014 (0.023)	0.025 (0.016)	0.019* (0.011)
Worker	0.034*** (0.005)	0.014 (0.015)	0.018 (0.019)	-0.011 (0.018)	0.001 (0.009)	0.010 (0.009)	0.020 (0.019)	0.020 (0.013)	0.027*** (0.008)
Job	0.006 (0.006)	0.046*** (0.014)	0.008 (0.011)	-0.022* (0.013)	-0.003 (0.006)	0.003 (0.006)	-0.007 (0.008)	0.005 (0.008)	-0.008 (0.006)
Unexplained	-0.024* (0.013)	-0.131*** (0.026)	-0.158*** (0.038)	-0.032 (0.029)	-0.170*** (0.018)	-0.010 (0.023)	-0.135*** (0.037)	0.027 (0.024)	-0.163*** (0.016)
N	7,893	1,799	2,077	1,098	4,025	1,413	2,193	2,680	5,904

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.4: Changes in wages over time – male, Oaxaca-Blinder decomposition

	PT	RO	SK	FI	SE	UK
PUBLIC SECTOR						
t_1	2.202*** (0.039)	0.875*** (0.040)	1.608*** (0.023)	3.158*** (0.030)	2.956*** (0.052)	2.969*** (0.023)
t_0	2.324*** (0.055)	1.082*** (0.044)	1.569*** (0.022)	3.126*** (0.032)	2.960*** (0.031)	3.040*** (0.069)
Difference	-0.122* (0.067)	-0.207*** (0.060)	0.040 (0.032)	0.032 (0.044)	-0.004 (0.060)	-0.071 (0.073)
Explained	0.117** (0.051)	-0.165* (0.085)	0.005 (0.020)	0.051* (0.031)	0.012 (0.029)	-0.078* (0.046)
Worker	0.096** (0.042)	-0.153* (0.085)	0.017 (0.015)	0.032 (0.022)	0.018 (0.018)	0.005 (0.027)
Job	0.021 (0.019)	-0.012 (0.011)	-0.013 (0.012)	0.019 (0.020)	-0.006 (0.021)	-0.082** (0.037)
Unexplained	-0.239*** (0.050)	-0.042 (0.096)	0.035 (0.032)	-0.019 (0.034)	-0.016 (0.057)	0.006 (0.055)
N	524	361	638	347	339	562
PRIVATE SECTOR						
t_1	1.899*** (0.018)	0.643*** (0.015)	1.561*** (0.013)	3.075*** (0.014)	3.050*** (0.022)	2.877*** (0.015)
t_0	1.928*** (0.024)	0.884*** (0.028)	1.515*** (0.010)	3.049*** (0.014)	3.052*** (0.018)	2.917*** (0.034)
Difference	-0.029 (0.030)	-0.241*** (0.032)	0.046*** (0.016)	0.026 (0.020)	-0.002 (0.028)	-0.041 (0.037)
Explained	0.113*** (0.019)	-0.070 (0.055)	-0.004 (0.007)	0.017 (0.012)	0.023 (0.015)	-0.045** (0.022)
Worker	0.084*** (0.016)	-0.052 (0.051)	-0.002 (0.005)	0.018** (0.007)	0.031*** (0.011)	0.000 (0.015)
Job	0.029*** (0.010)	-0.018** (0.008)	-0.002 (0.004)	-0.001 (0.008)	-0.008 (0.010)	-0.045*** (0.015)
Unexplained	-0.142*** (0.029)	-0.171*** (0.038)	0.050*** (0.015)	0.009 (0.016)	-0.025 (0.026)	0.005 (0.033)
N	2,248	3,436	3,737	2,088	1,587	2,318

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.5: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition – male

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
	2013									
<i>wPUB</i>	3.130*** (0.021)	1.029*** (0.055)	1.829*** (0.023)	3.368*** (0.028)	2.935*** (0.019)	2.015*** (0.056)	3.364*** (0.037)	2.316*** (0.027)	2.716*** (0.025)	2.743*** (0.025)
<i>wPRIV</i>	3.037*** (0.011)	0.835*** (0.022)	1.746*** (0.010)	3.394*** (0.027)	2.868*** (0.011)	1.852*** (0.030)	3.152*** (0.027)	2.086*** (0.020)	2.408*** (0.016)	2.814*** (0.015)
Difference	0.073*** (0.023)	0.193*** (0.059)	0.082*** (0.025)	-0.026 (0.039)	0.068*** (0.022)	0.162** (0.063)	0.213*** (0.046)	0.230*** (0.033)	0.309*** (0.029)	-0.072** (0.029)
Explained	0.088*** (0.014)	0.141*** (0.031)	0.142*** (0.019)	0.046 (0.038)	0.117*** (0.015)	0.295*** (0.046)	0.161*** (0.030)	0.164*** (0.024)	0.165*** (0.021)	0.078*** (0.018)
Worker	0.077*** (0.011)	0.104*** (0.027)	0.139*** (0.016)	0.059** (0.027)	0.089*** (0.011)	0.185*** (0.037)	0.094*** (0.024)	0.141*** (0.019)	0.100*** (0.014)	0.061*** (0.011)
Job	0.011* (0.006)	0.037** (0.019)	0.003 (0.009)	-0.014 (0.028)	0.028*** (0.010)	0.110*** (0.028)	0.067*** (0.020)	0.023* (0.013)	0.065*** (0.015)	0.017 (0.013)
Unexplained	-0.015 (0.021)	0.053 (0.054)	-0.060** (0.025)	-0.072 (0.058)	-0.049** (0.019)	-0.133** (0.063)	0.052 (0.044)	0.066** (0.032)	0.143*** (0.028)	-0.149*** (0.029)
N	1,626	1,009	2,387	512	3,623	1,232	972	1,306	2,928	2,379
	2008									
<i>wPUB</i>	3.085*** (0.019)	0.992*** (0.039)	1.909*** (0.022)	3.418*** (0.033)	2.910*** (0.018)	1.880*** (0.062)	3.410*** (0.050)	2.788*** (0.035)	2.927*** (0.020)	2.786*** (0.017)
<i>wPRIV</i>	3.026*** (0.012)	0.871*** (0.018)	1.759*** (0.009)	3.327*** (0.019)	2.915*** (0.010)	1.902*** (0.022)	3.090*** (0.032)	2.398*** (0.021)	2.528*** (0.014)	2.777*** (0.010)
Difference	0.060*** (0.022)	0.122*** (0.043)	0.150*** (0.024)	0.092** (0.038)	-0.005 (0.020)	-0.022 (0.066)	0.321*** (0.059)	0.390*** (0.040)	0.398*** (0.025)	0.009 (0.020)
Explained	0.097*** (0.014)	0.182*** (0.028)	0.156*** (0.019)	0.108*** (0.034)	0.120*** (0.013)	0.111*** (0.035)	0.189*** (0.043)	0.216*** (0.030)	0.210*** (0.019)	0.096*** (0.012)
Worker	0.073*** (0.011)	0.116*** (0.023)	0.131*** (0.015)	0.076** (0.030)	0.082*** (0.009)	0.024 (0.031)	0.146*** (0.035)	0.173*** (0.024)	0.156*** (0.014)	0.055*** (0.009)
Job	0.025*** (0.009)	0.066*** (0.014)	0.025*** (0.010)	0.032* (0.019)	0.038*** (0.008)	0.087*** (0.021)	0.043** (0.020)	0.042*** (0.014)	0.055*** (0.012)	0.041*** (0.009)
Unexplained	-0.037* (0.022)	-0.060 (0.039)	-0.006 (0.024)	-0.016 (0.049)	-0.125*** (0.018)	-0.133** (0.067)	0.132*** (0.051)	0.175*** (0.035)	0.188*** (0.025)	-0.087*** (0.018)
N	1,876	1,314	3,106	656	4,299	1,173	873	1,447	3,582	3,158

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.6: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition – male

	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
	2013									
<i>wPUB</i>	2.800*** (0.019)	2.823*** (0.036)	1.539*** (0.044)	1.482*** (0.054)	3.568*** (0.029)	1.204*** (0.038)	2.218*** (0.024)	3.207*** (0.026)	3.050*** (0.031)	1.714*** (0.029)
<i>wPRIV</i>	2.666*** (0.010)	2.419*** (0.020)	1.561*** (0.024)	1.387*** (0.029)	3.372*** (0.023)	1.267*** (0.014)	2.097*** (0.015)	3.081*** (0.044)	3.050*** (0.017)	1.447*** (0.013)
Difference	0.134*** (0.021)	0.405*** (0.041)	-0.022 (0.050)	0.095 (0.061)	0.196*** (0.037)	-0.063 (0.041)	0.121*** (0.029)	0.126*** (0.051)	0.000 (0.036)	0.267*** (0.032)
Explained	0.166*** (0.016)	0.184*** (0.032)	0.177*** (0.037)	0.148*** (0.040)	0.039 (0.025)	0.118*** (0.033)	0.011 (0.011)	0.088 (0.055)	0.007 (0.026)	0.259*** (0.023)
Worker	0.111*** (0.011)	0.110*** (0.022)	0.142*** (0.030)	0.080*** (0.031)	0.032 (0.020)	0.141*** (0.021)	0.014 (0.009)	0.109*** (0.040)	0.058*** (0.015)	0.164*** (0.018)
Job	0.055*** (0.011)	0.074*** (0.021)	0.035* (0.020)	0.067*** (0.020)	0.007 (0.013)	-0.023 (0.021)	-0.003 (0.006)	-0.021 (0.030)	-0.051*** (0.019)	0.095*** (0.013)
Unexplained	-0.032 (0.021)	0.221*** (0.037)	-0.199*** (0.048)	-0.052 (0.055)	0.157*** (0.032)	-0.181*** (0.038)	0.110*** (0.028)	0.038 (0.056)	-0.007 (0.038)	0.008 (0.031)
N	4,308	1,185	1,035	1,134	928	2,400	942	1,387	1,650	3,282
	2008									
<i>wPUB</i>	2.967*** (0.020)	2.910*** (0.039)	1.838*** (0.050)	1.557*** (0.069)	3.635*** (0.036)	1.598*** (0.030)	2.117*** (0.025)	3.329*** (0.028)	3.107*** (0.036)	1.783*** (0.033)
<i>wPRIV</i>	2.651*** (0.010)	2.537*** (0.020)	1.597*** (0.031)	1.519*** (0.029)	3.437*** (0.024)	1.439*** (0.014)	2.094*** (0.018)	3.202*** (0.016)	2.997*** (0.021)	1.591*** (0.013)
Difference	0.315*** (0.023)	0.373*** (0.043)	0.240*** (0.059)	0.038 (0.075)	0.198*** (0.044)	0.159*** (0.034)	0.023 (0.031)	0.127*** (0.032)	0.109*** (0.042)	0.192*** (0.036)
Explained	0.193*** (0.015)	0.148*** (0.033)	0.223*** (0.043)	0.118*** (0.040)	-0.038 (0.037)	0.196*** (0.028)	0.015 (0.017)	0.127*** (0.028)	0.130*** (0.023)	0.234*** (0.023)
Worker	0.122*** (0.012)	0.097*** (0.022)	0.184*** (0.036)	0.060* (0.032)	0.012 (0.026)	0.177*** (0.023)	0.020 (0.014)	0.133*** (0.023)	0.106*** (0.019)	0.165*** (0.019)
Job	0.070*** (0.009)	0.051** (0.020)	0.039** (0.020)	0.058** (0.023)	-0.050** (0.023)	0.020* (0.012)	-0.005 (0.009)	-0.006 (0.013)	0.025* (0.013)	0.069*** (0.011)
Unexplained	0.123*** (0.021)	0.225*** (0.039)	0.017 (0.059)	-0.080 (0.062)	0.236*** (0.040)	-0.038 (0.028)	0.008 (0.033)	0.001 (0.031)	-0.021 (0.039)	-0.042 (0.035)
N	5,120	1,056	838	1,295	834	2,469	847	1,552	1,634	3,495

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.7: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition – male

	PT	RO	SK	FI	SE	UK
	2013					
<i>w_{PUB}</i>	2.202*** (0.039)	0.875*** (0.040)	1.608*** (0.023)	3.158*** (0.030)	2.956*** (0.051)	2.969*** (0.023)
<i>w_{PRIV}</i>	1.899*** (0.018)	0.643*** (0.015)	1.561*** (0.013)	3.075*** (0.014)	3.050*** (0.022)	2.877*** (0.015)
Difference	0.303*** (0.043)	0.233*** (0.043)	0.047* (0.027)	0.083** (0.033)	-0.094* (0.056)	0.092*** (0.028)
Explained	0.259*** (0.032)	0.137*** (0.028)	0.110*** (0.020)	0.101*** (0.024)	0.065 (0.040)	0.151*** (0.018)
Worker	0.188*** (0.026)	0.132*** (0.028)	0.105*** (0.017)	0.085*** (0.017)	0.078*** (0.025)	0.108*** (0.014)
Job	0.071*** (0.017)	0.005 (0.007)	0.004 (0.007)	0.016 (0.017)	-0.013 (0.028)	0.043*** (0.010)
Unexplained	0.044 (0.040)	0.096** (0.046)	-0.062** (0.026)	-0.018 (0.027)	-0.159*** (0.061)	-0.058** (0.027)
N	1,672	1,803	2,043	1,256	793	2,480
	2008					
<i>w_{PUB}</i>	2.324*** (0.054)	1.082*** (0.044)	1.569*** (0.022)	3.126*** (0.032)	2.960*** (0.031)	3.040*** (0.069)
<i>w_{PRIV}</i>	1.928*** (0.024)	0.884*** (0.028)	1.515*** (0.010)	3.049*** (0.014)	3.052*** (0.018)	2.917*** (0.034)
Difference	0.396*** (0.060)	0.198*** (0.052)	0.054** (0.024)	0.077** (0.035)	-0.092*** (0.036)	0.123 (0.077)
Explained	0.256*** (0.044)	0.197*** (0.030)	0.110*** (0.016)	0.063** (0.030)	0.059** (0.030)	0.198*** (0.046)
Worker	0.177*** (0.036)	0.191*** (0.030)	0.089*** (0.013)	0.080*** (0.016)	0.083*** (0.021)	0.121*** (0.035)
Job	0.079*** (0.020)	0.005 (0.008)	0.021*** (0.007)	-0.017 (0.021)	-0.024 (0.020)	0.077*** (0.027)
Unexplained	0.140*** (0.048)	0.001 (0.041)	-0.056** (0.024)	0.014 (0.032)	-0.151*** (0.042)	-0.075 (0.072)
N	1,100	1,994	2,332	1,179	1,133	400

Note: ***, **, * and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.8: Changes in public-private sector wage differentials – male, Oaxaca-Blinder

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
Δ gap	0.013 (0.034)	0.072 (0.072)	-0.067** (0.035)	-0.118** (0.055)	0.073*** (0.028)	0.184** (0.087)	-0.108 (0.070)	-0.160*** (0.050)	-0.090** (0.038)	-0.080** (0.035)
Δ explained	0.011 (0.023)	0.015 (0.051)	-0.024 (0.021)	-0.006 (0.039)	-0.007 (0.021)	0.063 (0.054)	-0.030 (0.064)	-0.034 (0.045)	-0.040* (0.022)	-0.007 (0.020)
Δ unexplained	0.002 (0.030)	0.057 (0.063)	-0.044 (0.032)	-0.113* (0.058)	0.080*** (0.023)	0.121 (0.090)	-0.078 (0.065)	-0.126*** (0.044)	-0.050 (0.039)	-0.074** (0.033)
wage policy	0.002 (0.026)	0.045 (0.059)	-0.081*** (0.031)	-0.104** (0.042)	0.036* (0.019)	0.054 (0.083)	-0.138** (0.058)	-0.539*** (0.035)	-0.196*** (0.026)	-0.067** (0.029)
economic conditions	-0.000 (0.014)	-0.012 (0.024)	-0.037*** (0.012)	0.009 (0.042)	-0.043*** (0.013)	-0.067** (0.0333)	-0.060 (0.036)	-0.413*** (0.026)	-0.146*** (0.027)	0.006 (0.016)
	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
Δ gap	-0.182*** (0.031)	0.032 (0.057)	-0.262*** (0.080)	0.058 (0.098)	-0.003 (0.054)	-0.222*** (0.056)	0.098** (0.045)	-0.002 (0.068)	-0.109* (0.057)	0.075 (0.048)
Δ explained	-0.006 (0.023)	-0.018 (0.045)	-0.029 (0.063)	0.010 (0.079)	0.039 (0.047)	-0.049 (0.043)	-0.038* (0.020)	-0.061 (0.045)	-0.056* (0.033)	0.093*** (0.034)
Δ unexplained	-0.176*** (0.026)	0.050 (0.039)	-0.233*** (0.064)	0.048 (0.084)	-0.042 (0.041)	-0.174*** (0.041)	0.135*** (0.048)	0.059 (0.057)	-0.052 (0.054)	-0.018 (0.045)
wage policy	-0.200*** (0.024)	-0.0819** (0.032)	-0.3303*** (0.061)	-0.111 (0.078)	-0.074** (0.035)	-0.343*** (0.041)	0.126*** (0.042)	-0.076* (0.043)	-0.025 (0.048)	-0.181*** (0.043)
economic conditions	-0.024* (0.013)	-0.131*** (0.024)	-0.010*** (0.030)	-0.158*** (0.039)	-0.032 (0.027)	-0.170*** (0.016)	-0.010 (0.0225)	-0.135*** (0.045)	0.027 (0.023)	-0.163*** (0.015)
	PT	RO	SK	FI	SE	UK				
Δ gap	-0.093 (0.074)	0.035 (0.074)	-0.007 (0.037)	0.006 (0.048)	-0.002 (0.059)	-0.031 (0.071)				
Δ explained	0.004 (0.058)	-0.095 (0.108)	0.008 (0.019)	0.034 (0.032)	-0.011 (0.037)	-0.032 (0.062)				
Δ unexplained	-0.097 (0.060)	0.130 (0.109)	-0.015 (0.038)	-0.028 (0.036)	0.009 (0.059)	0.001 (0.064)				
wage policy	-0.239*** (0.050)	-0.042 (0.097)	0.035 (0.035)	-0.019 (0.034)	-0.016 (0.057)	0.006 (0.056)				
economic conditions	-0.142*** (0.027)	-0.171*** (0.043)	0.050*** (0.015)	0.009 (0.016)	-0.025 (0.028)	0.005 (0.032)				

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Bootstrapped clustered standard errors applied (100 replications).

Table A.9: Changes in wages over time – female, Oaxaca-Blinder decomposition

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
PUBLIC SECTOR										
t_1	3.018*** (0.013)	0.617*** (0.037)	1.556*** (0.016)	3.319*** (0.017)	2.716*** (0.014)	1.692*** (0.026)	3.169*** (0.027)	2.206*** (0.022)	2.551*** (0.022)	2.557*** (0.021)
t_0	2.978*** (0.014)	0.721*** (0.025)	1.619*** (0.012)	3.288*** (0.018)	2.714*** (0.012)	1.570*** (0.027)	3.186*** (0.046)	2.648*** (0.032)	2.689*** (0.020)	2.641*** (0.016)
Difference	0.040** (0.019)	-0.105** (0.044)	-0.064*** (0.020)	0.031 (0.024)	0.002 (0.019)	0.122*** (0.038)	-0.017 (0.054)	-0.442*** (0.038)	-0.138*** (0.030)	-0.085*** (0.027)
Explained	0.039*** (0.010)	-0.046 (0.030)	0.019** (0.009)	0.043*** (0.016)	0.013 (0.012)	0.048** (0.022)	0.052* (0.032)	0.091*** (0.018)	0.066*** (0.018)	-0.014 (0.012)
Worker	0.031*** (0.009)	-0.036 (0.025)	0.019** (0.008)	0.017* (0.010)	0.009 (0.010)	0.040** (0.019)	0.046* (0.025)	0.068*** (0.022)	0.064*** (0.014)	0.012 (0.008)
Job	0.008** (0.004)	-0.010 (0.010)	0.000 (0.005)	0.026** (0.012)	0.004 (0.006)	0.008 (0.010)	0.006 (0.014)	0.024* (0.013)	0.003 (0.009)	-0.026*** (0.008)
Unexplained	0.001 (0.016)	-0.059 (0.036)	-0.082*** (0.017)	-0.012 (0.025)	-0.011 (0.019)	0.074** (0.033)	-0.069 (0.044)	-0.533*** (0.030)	-0.204*** (0.026)	-0.071*** (0.026)
N	1,956	819	1,845	824	3,604	3,604	999	1,129	2,491	3,216
PRIVATE SECTOR										
t_1	2.961*** (0.018)	0.640*** (0.024)	1.457*** (0.012)	3.342*** (0.026)	2.579*** (0.014)	1.491*** (0.027)	2.964*** (0.032)	1.947*** (0.020)	2.196*** (0.017)	2.619*** (0.024)
t_0	2.913*** (0.016)	0.608*** (0.020)	1.468*** (0.011)	3.183*** (0.022)	2.582*** (0.013)	1.503*** (0.026)	2.824*** (0.032)	2.162*** (0.023)	2.236*** (0.018)	2.562*** (0.017)
Difference	0.048** (0.024)	0.032 (0.032)	-0.012 (0.016)	0.158*** (0.034)	-0.003 (0.019)	-0.012 (0.037)	0.141*** (0.045)	-0.215*** (0.030)	-0.040 (0.025)	0.057* (0.029)
Explained	0.037*** (0.012)	0.019 (0.018)	0.028*** (0.008)	0.079*** (0.023)	0.026*** (0.009)	0.038** (0.017)	0.120*** (0.028)	0.054*** (0.020)	0.041*** (0.013)	0.061*** (0.013)
Worker	0.037*** (0.009)	0.030** (0.013)	0.024*** (0.006)	0.071*** (0.018)	0.015*** (0.006)	0.017 (0.012)	0.082*** (0.022)	0.054*** (0.014)	0.059*** (0.009)	0.033*** (0.009)
Job	-0.001 (0.007)	-0.012 (0.010)	0.004 (0.004)	0.008 (0.014)	0.011* (0.007)	0.021** (0.010)	0.038* (0.019)	0.000 (0.011)	-0.019* (0.008)	0.029*** (0.010)
Unexplained	0.011 (0.023)	0.013 (0.029)	-0.040*** (0.014)	0.080** (0.034)	-0.030* (0.017)	-0.050 (0.034)	0.021 (0.042)	-0.269*** (0.011)	-0.080*** (0.023)	-0.004 (0.027)
N	1,514	1,856	3,444	633 4,374	1,930	1,072	1,327 3,805	3,036		

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.10: Changes in wages over time – female, Oaxaca-Blinder decomposition

	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
	PUBLIC SECTOR									
t_1	2.692*** (0.013)	2.656*** (0.031)	1.406*** (0.023)	1.299*** (0.033)	3.508*** (0.025)	1.194*** (0.019)	2.046*** (0.029)	3.073*** (0.017)	2.884*** (0.022)	1.562*** (0.017)
t_0	2.877*** (0.014)	2.692*** (0.036)	1.613*** (0.029)	1.381*** (0.036)	3.488*** (0.038)	1.514*** (0.017)	1.967*** (0.029)	3.147*** (0.016)	2.956*** (0.025)	1.732*** (0.018)
Difference	-0.185*** (0.019)	-0.036 (0.048)	-0.208*** (0.037)	-0.082* (0.049)	0.020 (0.045)	-0.320*** (0.025)	0.078* (0.041)	-0.074*** (0.023)	-0.072** (0.033)	-0.170*** (0.025)
Explained	0.030*** (0.011)	0.064* (0.037)	0.037 (0.026)	0.092** (0.039)	0.019 (0.029)	-0.040** (0.017)	0.042 (0.034)	-0.026 (0.017)	0.004 (0.021)	0.056*** (0.016)
Worker	0.037*** (0.008)	0.061** (0.028)	0.040* (0.023)	0.073** (0.032)	0.021 (0.026)	-0.021 (0.014)	0.019 (0.027)	-0.015 (0.012)	0.014 (0.018)	0.062*** (0.014)
Job	-0.006 (0.006)	0.003 (0.018)	-0.002 (0.011)	0.020 (0.015)	-0.002 (0.012)	-0.019** (0.008)	0.024 (0.017)	-0.011 (0.008)	-0.011 (0.011)	-0.006 (0.004)
Unexplained	-0.216*** (0.017)	-0.099*** (0.033)	-0.246*** (0.032)	-0.174*** (0.034)	0.001 (0.037)	-0.280*** (0.022)	0.036 (0.044)	-0.048* (0.027)	-0.075** (0.031)	-0.226*** (0.021)
N	3,222	800	1,203	1,254	888	2,317	366	1,795	1,304	2,892
	PRIVATE SECTOR									
t_1	2.493*** (0.013)	2.248*** (0.021)	1.310*** (0.024)	1.088*** (0.030)	3.189*** (0.029)	1.089*** (0.016)	1.981*** (0.027)	3.016*** (0.026)	2.770*** (0.021)	1.302*** (0.014)
t_0	2.505*** (0.012)	2.252*** (0.023)	1.282*** (0.028)	1.228*** (0.028)	3.149*** (0.035)	1.300*** (0.014)	1.938*** (0.036)	3.005*** (0.031)	2.670*** (0.023)	1.407*** (0.015)
Difference	-0.012 (0.018)	-0.005 (0.031)	0.027 (0.037)	-0.140*** (0.041)	0.040 (0.046)	-0.211*** (0.021)	0.042 (0.044)	0.011 (0.041)	0.100*** (0.031)	-0.105*** (0.021)
Explained	0.027*** (0.009)	0.053*** (0.020)	0.104*** (0.023)	0.045* (0.023)	0.040 (0.028)	-0.005 (0.012)	-0.020 (0.027)	0.059** (0.024)	0.025 (0.022)	0.064*** (0.014)
Worker	0.027*** (0.006)	0.055*** (0.016)	0.044** (0.017)	0.022 (0.019)	0.039 (0.024)	-0.001 (0.010)	-0.019 (0.025)	0.044** (0.020)	0.020 (0.019)	0.065*** (0.010)
Job	0.000 (0.005)	-0.002 (0.009)	0.060*** (0.015)	0.023* (0.013)	0.001 (0.011)	-0.004 (0.006)	-0.001 (0.009)	0.015 (0.013)	0.005 (0.008)	-0.001 (0.006)
Unexplained	-0.038** (0.016)	-0.058** (0.025)	-0.077** (0.035)	-0.185*** (0.036)	0.000 (0.040)	-0.206*** (0.019)	0.062 (0.047)	-0.049 (0.039)	0.075** (0.035)	-0.168*** (0.019)
N	5,237	1,390	1,666	1,778	556	3,169	722	1,064	1,900	4,326

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.1.1: Changes in wages over time – female, Oaxaca-Blinder decomposition

	PT	RO	SK	FI	SE	UK
PUBLIC SECTOR						
t_1	1.956*** (0.024)	0.637*** (0.028)	1.440*** (0.016)	2.982*** (0.018)	2.834*** (0.028)	2.705*** (0.015)
t_0	2.160*** (0.041)	0.934*** (0.032)	1.348*** (0.013)	2.895*** (0.015)	2.937*** (0.025)	2.662*** (0.035)
Difference	-0.204*** (0.048)	-0.297*** (0.043)	0.091*** (0.020)	0.087*** (0.023)	-0.103*** (0.037)	0.043 (0.038)
Explained	0.081** (0.041)	-0.040 (0.056)	0.023** (0.009)	0.039*** (0.011)	-0.052** (0.022)	0.045** (0.023)
Worker	0.067* (0.038)	-0.033 (0.055)	0.030*** (0.008)	0.035*** (0.009)	-0.009 (0.013)	0.027* (0.015)
Job	0.014* (0.008)	-0.007 (0.011)	-0.007* (0.004)	0.004 (0.005)	-0.044** (0.018)	0.018 (0.015)
Unexplained	-0.285*** (0.029)	-0.257*** (0.064)	0.068*** (0.020)	0.048** (0.021)	-0.051 (0.038)	-0.002 (0.034)
N	1,297	844	2,073	1,264	1,224	1,581
PRIVATE SECTOR						
t_1	1.659*** (0.019)	0.520*** (0.016)	1.299*** (0.015)	2.934*** (0.018)	2.851*** (0.041)	2.647*** (0.020)
t_0	1.636*** (0.024)	0.710*** (0.019)	1.251*** (0.014)	2.887*** (0.016)	2.889*** (0.040)	2.604*** (0.041)
Difference	0.023 (0.031)	-0.190*** (0.025)	0.048** (0.020)	0.047** (0.024)	-0.038 (0.057)	0.043 (0.046)
Explained	0.157*** (0.022)	-0.018 (0.032)	0.017* (0.009)	0.036** (0.014)	0.025 (0.027)	0.010 (0.030)
Worker	0.105*** (0.018)	-0.007 (0.031)	0.020*** (0.007)	0.026*** (0.010)	0.036 (0.024)	0.034 (0.023)
Job	0.052*** (0.012)	-0.011* (0.006)	-0.003 (0.005)	0.010 (0.009)	-0.011 (0.012)	-0.025 (0.017)
Unexplained	-0.134*** (0.028)	-0.172*** (0.033)	0.031* (0.019)	0.011 (0.020)	-0.063 (0.055)	0.034 (0.039)
N	1,857	2,543	2,642	1,333	887	1,543

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. t_1 and t_0 denote 2013 and 2008, respectively. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.12: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition – female

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
	2013									
<i>wPUB</i>	3.018*** (0.013)	0.617*** (0.037)	1.556*** (0.016)	3.319*** (0.017)	2.716*** (0.014)	1.692*** (0.026)	3.169*** (0.027)	2.206*** (0.022)	2.551*** (0.022)	2.557*** (0.021)
<i>wPRIV</i>	2.961*** (0.018)	0.640*** (0.024)	1.457*** (0.012)	3.342*** (0.026)	2.579*** (0.014)	1.491*** (0.027)	2.964*** (0.032)	1.947*** (0.020)	2.196*** (0.017)	2.619*** (0.024)
Difference	0.057** (0.022)	-0.023 (0.044)	0.099*** (0.020)	-0.023 (0.031)	0.137*** (0.020)	0.200*** (0.037)	0.205*** (0.042)	0.259*** (0.030)	0.355*** (0.028)	-0.063** (0.031)
Explained	0.069*** (0.016)	0.122*** (0.029)	0.092*** (0.015)	0.028 (0.021)	0.129*** (0.012)	0.191*** (0.027)	0.120*** (0.030)	0.153*** (0.023)	0.209*** (0.021)	0.042*** (0.015)
Worker	0.051*** (0.011)	0.102*** (0.026)	0.082*** (0.012)	0.027 (0.018)	0.081*** (0.009)	0.101*** (0.020)	0.123*** (0.024)	0.122*** (0.019)	0.128*** (0.016)	0.041*** (0.011)
Job	0.018* (0.009)	0.020* (0.012)	0.010 (0.008)	0.001 (0.010)	0.048*** (0.008)	0.090*** (0.016)	-0.003 (0.017)	0.031*** (0.012)	0.081*** (0.013)	0.001 (0.009)
Unexplained	-0.012 (0.019)	-0.145*** (0.045)	0.007 (0.020)	-0.051* (0.028)	0.008 (0.018)	0.009 (0.038)	0.086** (0.042)	0.106*** (0.031)	0.146*** (0.028)	-0.104*** (0.031)
N	1,699	1,148	2,377	642	3,805	1,581	1,089	1,137	2,937	2,985
	2008									
<i>wPUB</i>	2.978*** (0.014)	0.721*** (0.025)	1.619*** (0.012)	3.288*** (0.018)	2.714*** (0.012)	1.570*** (0.027)	3.186*** (0.046)	2.648*** (0.032)	2.689*** (0.020)	2.641*** (0.016)
<i>wPRIV</i>	2.913*** (0.016)	0.608*** (0.020)	1.468*** (0.011)	3.183*** (0.022)	2.582*** (0.013)	1.503*** (0.026)	2.824*** (0.032)	2.162*** (0.023)	2.236*** (0.018)	2.562*** (0.017)
Difference	0.066*** (0.021)	0.113*** (0.032)	0.151*** (0.016)	0.104*** (0.028)	0.132*** (0.018)	0.067* (0.037)	0.362*** (0.057)	0.486*** (0.039)	0.454*** (0.024)	0.079*** (0.024)
Explained	0.060*** (0.014)	0.256*** (0.031)	0.096*** (0.013)	0.124*** (0.025)	0.104*** (0.011)	0.097*** (0.024)	0.178*** (0.040)	0.151*** (0.028)	0.178*** (0.024)	0.116*** (0.015)
Worker	0.051*** (0.010)	0.218*** (0.027)	0.091*** (0.012)	0.115*** (0.022)	0.057*** (0.008)	0.079*** (0.019)	0.124*** (0.031)	0.153*** (0.022)	0.145*** (0.015)	0.056*** (0.009)
Job	0.009 (0.010)	0.039*** (0.013)	0.005 (0.005)	0.009 (0.011)	0.046*** (0.007)	0.018 (0.014)	0.054** (0.025)	-0.002 (0.013)	0.033** (0.013)	0.060*** (0.012)
Unexplained	0.006 (0.019)	-0.143*** (0.038)	0.055*** (0.017)	-0.020 (0.029)	0.028* (0.017)	-0.031 (0.037)	0.184*** (0.065)	0.335*** (0.036)	0.276*** (0.033)	-0.037* (0.022)
N	1,771	1,527	2,912	815	4,173	1,543	982	1,319	3,359	3,267

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.13: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition – female

	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	
	2013										
<i>wPUB</i>	2.692*** (0.013)	2.656*** (0.031)	1.406*** (0.023)	1.299*** (0.033)	3.508*** (0.025)	1.194*** (0.019)	2.046*** (0.029)	3.073*** (0.017)	2.884*** (0.022)	1.562*** (0.017)	
<i>wPRIV</i>	2.493*** (0.013)	2.248*** (0.021)	1.310*** (0.024)	1.088*** (0.030)	3.189*** (0.029)	1.089*** (0.016)	1.981*** (0.027)	3.016*** (0.026)	2.770*** (0.021)	1.302*** (0.014)	
Difference	0.199*** (0.018)	0.408*** (0.038)	0.097*** (0.033)	0.211*** (0.045)	0.319*** (0.038)	0.105*** (0.025)	0.065* (0.039)	0.057* (0.032)	0.113*** (0.031)	0.260*** (0.022)	
Explained	0.158*** (0.016)	0.154*** (0.027)	0.198*** (0.026)	0.153*** (0.033)	0.066** (0.028)	0.142*** (0.020)	0.021 (0.024)	0.018 (0.022)	0.075*** (0.019)	0.197*** (0.017)	
Worker	0.088*** (0.013)	0.120*** (0.018)	0.142*** (0.023)	0.123*** (0.025)	0.055** (0.022)	0.153*** (0.019)	0.027 (0.019)	0.008 (0.018)	0.044*** (0.017)	0.140*** (0.013)	
Job	0.070*** (0.010)	0.034* (0.018)	0.056*** (0.013)	0.030* (0.017)	0.011 (0.016)	-0.011 (0.010)	-0.006 (0.012)	0.010 (0.013)	0.031*** (0.010)	0.057*** (0.010)	
Unexplained	0.041** (0.021)	0.254*** (0.033)	-0.101*** (0.033)	0.058 (0.041)	0.253*** (0.035)	-0.037 (0.029)	0.044 (0.038)	0.040 (0.032)	0.038 (0.031)	0.063*** (0.023)	
N	4,109	1,203	1,519	1,458	833	2,768	634	1,412	1,622	3,633	
	2008										
<i>wPUB</i>	2.877*** (0.014)	2.692*** (0.036)	1.615*** (0.029)	1.381*** (0.036)	3.488*** (0.038)	1.514*** (0.017)	1.967*** (0.029)	3.147*** (0.016)	2.956*** (0.025)	1.732*** (0.018)	
<i>wPRIV</i>	2.505*** (0.012)	2.252*** (0.023)	1.282*** (0.028)	1.228*** (0.028)	3.149*** (0.035)	1.300*** (0.014)	1.938*** (0.036)	3.005*** (0.031)	2.670*** (0.023)	1.407*** (0.015)	
Difference	0.373*** (0.018)	0.440*** (0.043)	0.333*** (0.040)	0.153*** (0.046)	0.340*** (0.051)	0.214*** (0.022)	0.029 (0.046)	0.142*** (0.035)	0.285*** (0.034)	0.326*** (0.023)	
Explained	0.173*** (0.015)	0.157*** (0.031)	0.227*** (0.032)	0.121*** (0.028)	0.077** (0.033)	0.215*** (0.019)	-0.010 (0.032)	0.150*** (0.028)	0.124*** (0.026)	0.282*** (0.020)	
Worker	0.113*** (0.013)	0.144*** (0.024)	0.161*** (0.025)	0.101*** (0.022)	0.079** (0.031)	0.196*** (0.018)	-0.004 (0.031)	0.103*** (0.020)	0.069*** (0.023)	0.218*** (0.018)	
Job	0.060*** (0.008)	0.013 (0.018)	0.066*** (0.018)	0.020 (0.014)	-0.002 (0.013)	0.019** (0.008)	-0.006 (0.012)	0.047*** (0.016)	0.055*** (0.014)	0.064*** (0.010)	
Unexplained	0.200*** (0.020)	0.283*** (0.037)	0.106** (0.044)	0.032 (0.041)	0.263*** (0.047)	-0.001 (0.023)	0.039 (0.047)	-0.008 (0.032)	0.161*** (0.040)	0.043* (0.026)	
N	4,350	987	1,350	1,574	621	2,718	454	1,447	1,582	3,585	

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.14: Public-private sector wage gap in 2013 and 2008, Oaxaca-Blinder decomposition – female

	PT	RO	SK	FI	SE	UK
	2013					
<i>w_{PUB}</i>	1.956*** (0.024)	0.637*** (0.028)	1.440*** (0.016)	2.982*** (0.018)	2.834*** (0.028)	2.705*** (0.015)
<i>w_{PRIV}</i>	1.659*** (0.019)	0.520*** (0.016)	1.299*** (0.015)	2.934*** (0.018)	2.851*** (0.041)	2.647*** (0.020)
Difference	0.298*** (0.031)	0.117*** (0.033)	0.141*** (0.021)	0.049* (0.025)	-0.018 (0.049)	0.058** (0.025)
Explained	0.274*** (0.028)	0.149*** (0.025)	0.100*** (0.015)	0.022 (0.018)	0.060** (0.030)	0.139*** (0.018)
Worker	0.231*** (0.024)	0.142*** (0.023)	0.089*** (0.014)	0.039*** (0.011)	0.054** (0.025)	0.106*** (0.014)
Job	0.043*** (0.012)	0.007 (0.008)	0.012* (0.007)	-0.017 (0.013)	0.006 (0.018)	0.032*** (0.010)
Unexplained	0.023 (0.031)	-0.032 (0.032)	0.041* (0.022)	0.027 (0.026)	-0.078* (0.045)	-0.081*** (0.026)
N	1,990	1,602	2,282	1,306	849	2,680
	2008					
<i>w_{PUB}</i>	2.160*** (0.041)	0.934*** (0.032)	1.348*** (0.013)	2.895*** (0.015)	2.937*** (0.025)	2.662*** (0.035)
<i>w_{PRIV}</i>	1.636*** (0.024)	0.710*** (0.019)	1.251*** (0.014)	2.887*** (0.016)	2.889*** (0.040)	2.604*** (0.041)
Difference	0.525*** (0.047)	0.224*** (0.038)	0.098*** (0.019)	0.008 (0.022)	0.047 (0.047)	0.058 (0.054)
Explained	0.345*** (0.037)	0.200*** (0.026)	0.093*** (0.013)	0.012 (0.016)	0.111*** (0.031)	0.123*** (0.046)
Worker	0.275*** (0.032)	0.194*** (0.025)	0.074*** (0.011)	0.028*** (0.010)	0.082*** (0.028)	0.119*** (0.038)
Job	0.070*** (0.016)	0.006 (0.005)	0.019*** (0.005)	-0.016 (0.011)	0.029** (0.015)	0.003 (0.022)
Unexplained	0.180*** (0.044)	0.024 (0.034)	0.005 (0.019)	-0.004 (0.019)	-0.064 (0.046)	-0.065 (0.059)
N	1,164	1,785	2,433	1,291	1,262	444

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Robust clustered standard errors applied. Dependent variable: log of hourly wage in Euro in 2013 real prices.

Table A.15: Changes in public-private sector wage differentials – female, Oaxaca-Blinder

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR
Δ gap	-0.009 (0.030)	-0.136** (0.056)	-0.052* (0.028)	-0.127*** (0.037)	0.005 (0.029)	0.134*** (0.050)	-0.157** (0.071)	-0.227*** (0.055)	-0.098** (0.044)	-0.142*** (0.039)
Δ explained	0.002 (0.013)	-0.064* (0.033)	-0.009 (0.013)	-0.035 (0.027)	-0.014 (0.016)	0.010 (0.029)	-0.068 (0.042)	0.037 (0.034)	0.026 (0.019)	-0.075*** (0.018)
Δ unexplained	-0.0108 (0.0292)	-0.072 (0.049)	-0.0427* (0.0254)	-0.0916** (0.0408)	0.0187 (0.0272)	0.1237*** (0.0473)	-0.089 (0.058)	-0.264*** (0.0412)	-0.124*** (0.035)	-0.067* (0.036)
wage policy	0.001 (0.015)	-0.059 (0.039)	-0.082*** (0.018)	-0.012 (0.025)	-0.011 (0.020)	0.074** (0.036)	-0.069* (0.041)	-0.533*** (0.028)	-0.204*** (0.027)	-0.071** (0.028)
economic conditions	0.011 (0.025)	0.013 (0.032)	-0.040*** (0.0145)	0.0797** (0.0326)	-0.030* (0.0174)	-0.050 (0.031)	0.021 (0.046)	-0.269*** (0.027)	-0.080*** (0.021)	-0.004 (0.026)
	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL
Δ gap	-0.174*** (0.029)	-0.031 (0.062)	-0.236*** (0.046)	0.058 (0.066)	-0.020 (0.063)	-0.109*** (0.029)	0.036 (0.056)	-0.085* (0.046)	-0.172*** (0.049)	-0.066** (0.029)
Δ explained	0.004 (0.014)	0.010 (0.044)	-0.067** (0.032)	0.048 (0.048)	-0.021 (0.045)	-0.034* (0.020)	0.062 (0.050)	-0.085*** (0.029)	-0.021 (0.029)	-0.008 (0.021)
Δ unexplained	-0.178*** (0.026)	-0.042 (0.048)	-0.169*** (0.043)	0.010 (0.048)	0.001 (0.054)	-0.075*** (0.027)	-0.026 (0.063)	0.000 (0.049)	-0.151*** (0.053)	-0.058** (0.025)
wage policy	-0.216*** (0.018)	-0.099** (0.039)	-0.246*** (0.029)	-0.174*** (0.032)	0.001 (0.035)	-0.280*** (0.023)	0.036 (0.057)	-0.048* (0.028)	-0.075** (0.033)	-0.226*** (0.021)
economic conditions	-0.038** (0.017)	-0.058** (0.027)	-0.077** (0.030)	-0.185*** (0.038)	0.000 (0.042)	-0.206*** (0.021)	0.062 (0.054)	-0.049 (0.035)	0.075** (0.038)	-0.168*** (0.018)
	PT	RO	SK	FI	SE	UK				
Δ gap	-0.227*** (0.053)	-0.107** (0.0514)	0.043 (0.029)	0.041 (0.031)	-0.065 (0.067)	-0.000 (0.056)				
Δ explained	-0.077* (0.046)	-0.022 (0.070)	0.006 (0.012)	0.003 (0.019)	-0.078** (0.036)	0.035 (0.037)				
Δ unexplained	-0.151*** (0.038)	-0.085 (0.079)	0.037 (0.028)	0.037 (0.027)	0.012 (0.067)	-0.035 (0.053)				
wage policy	-0.285*** (0.030)	-0.257*** (0.066)	0.068*** (0.021)	0.048*** (0.019)	-0.051 (0.040)	-0.002 (0.019)				
economic conditions	-0.134*** (0.027)	-0.172*** (0.031)	0.031 (0.020)	0.011 (0.020)	-0.063 (0.050)	0.034 (0.042)				

Note: ***, ** and * denote significance at 1%, 5% and 10%, respectively. Bootstrapped clustered standard errors applied (100 replications).