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Crisis and austerity: threat for women 's employment in the European regions

Crisis y austeridad: amenaza para el empleo femenino en las regiones europeas

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Abstract: The objective of the study is to explore the relation between unemployment rates for men and women and the variation in public employment at regional level. To this end, a number of indicators are presented for the descriptive analysis of unemployment at regional level in the EU-15 and results are mapped. The main conclusion is that the marked sectoral segregation of employment by sex and the role of employment in the public sector for women should be taken into account when designing employment policies. On the contrary, employment growth in certain sectors and cuts in public spending in others introduce a bias that can boost male employment while delaying the recovery of feminine employment.

Key words: crisis, sectoral segregation by sex, European regions.

Resumen: El objetivo del trabajo es explorar la relación entre las tasas de paro de mujeres y de hombres, y la variación en el empleo público a escala regional. Para ello se plantean diversos indicadores orientados al análisis descriptivo del desempleo a nivel regional en el ámbito de la UE-15 y se hace una mapificación de los resultados. La principal conclusión es que la importante segregación sectorial del empleo por sexo y el papel que desempeña el empleo en el sector público en el trabajo femenino deben ser tomados en cuenta a la hora de diseñar las políticas laborales. De lo contrario, el fomento del empleo en ciertos sectores y/o los recortes de gasto público en otros incorporan un sesgo que puede estar impulsando el empleo masculino y retrasando la recuperación del femenino.

Palabras clave: crisis, desempleo femenino, segregación sectorial por sexo, regiones europeas.

Introduction

The effects of the economic crisis and the subsequent adjustment policies implemented in Europe, have not been felt in the same manner in all the territories, nor in all the population groups. Regarding the latter, some significant differences must be noted, differences by age, income, and sex, which is the aspect this work focuses on.

Due to the crisis, and around the implemented austerity measures, a significant amount of scientific production that explores the impact suffered by men and women has emerged. These are works that underscore the relevance of a gendered crisis analysis, specifically the Great Recession, which started in 2008 (Smith and Villa, 2013; Rubery, 2015).

The research has firstly focused on studying the impacts of the fall of the economic activity regarding men's and women's employment, which is completely determined by the existence of a strong sectoral segregation by sex (Martínez-Tola and de la Cal, 2017). Secondly, the analysis has addressed the effects of the economic policies, essentially budgetary, under the gender lens.

The aim of this survey is to deepen the knowledge of the current tendencies so that it is possible to identify more clearly the situation in the European regions situations concerning male and female unemployment, after the impact of the crisis and the budgetary adjustment policies effected in Europe.

It is a relevant outcome, since it demonstrates the need for dealing insightfully with the regional and gender impact of the general public policies that, in many cases, just aggravates the already existing inequalities and complicates to a larger extent the achievement of stable rebound in the short and medium term, as well as the objectives of gender equality in the labor sphere.

For that, in the second section, the relations literature states between the economic crisis, the austerity policies, and the evolvement of unemployment in the European economies, are presented from a gender perspective, in order to establish the principal observable tendencies on women's and men's unemployment at a regional scale for the 2007-2014 period.

The fourth section deals with the gender gap in unemployment, from the male and female unemployment rate, to a first classification according to the higher or lower increase of such rates. In the fifth section of the study, the role that the evolution of public regional employment has had in the differences noticed on unemployment, to finish with a conclusion that brings together the main ideas developed in this paper.

Crisis, austerity policy and its effects on employment

Thus far, the general analyses produced refer to the fact that the current crisis might be affecting female employment in a very different way than the previous ones (at the beginning of the 80's and the 90's), since it has hit before and harder (Smith and Villa, 2013: 224; Martínez-Tola and de la Cal, 2017).

There is reference to three classic hypotheses to explain these different impacts: the replace of female employment by male employment during the crisis, the former being the cheaper; the sectoral segregation of male and female employment that protects women in recessions from being concentrated in certain sectors; and the one of the damping effect, which submits to the female labor entering the labor market during boom periods (added worker) and leaving the labor market during the crises (discouraged worker) (Humphries, 1988, quoted on Smith and Villa, 2013).

These effects occur at once between different groups of women and subsectors. Differences regarding their intensity are detected by country. A recent survey for the cases of Spain and Italy (Addabbo *et al*, 2015) concludes that the added worker effect is important among the female Spanish workers, and that it is more significant when the couple is unemployed or working part-time. On the contrary, Italy is one of the few OECD countries in which the discouraged worker effect is stronger than the added worker effect among women.

Thus, these recent analyses regarding the impact of the crisis on male and female employment (Smith and Villa, 2013) are more accurate than those mentioned before, at least in two aspects. The first one, pointing to the importance of a perspective of medium and long term, and not focusing only on the initial impacts of the recession. That has shown that during the first years of the 2009 crisis, as a consequence of the strongly masculine sectoral decline, unemployment increased mainly among men, whilst women were relatively "protected", since the sectors where they usually work did not enter the crisis those first years and because of their bigger presence on public employment.

Later, the crisis extended to all economic sectors, affecting female employment negatively. This increased even more with the budget cuts that reduced demand and penalized public employment. The sequence is not the same for all the European economies, since some of them, as the Irish, suffered since the first stage of the crisis (2008-2010) the cuts in the public spending, and the freezing of public employment (Barry and Conroy, 2013).

On a global scale, there are three phases: the fiscal stimulus (2008-2009), the start of the fiscal contraction (2010-2012) and the intensification of fiscal contraction (2013-2015).

The second one, trying to keep on how the employment rebound would happen once the crisis was overcome. Specifically it is about evaluating how future transactions would occur from employment to unemployment, which could be very different among men and women, and could involve unemployment for a long time (Martínez and de la Cal, 2017).

Other interesting areas of research suggest that the changes on labor market are being carried out without considering its effects on gender equality in the labor market. It is possible that many of the changes that have been made, may reduce the protection of vulnerable workers, and increase the segmentation. Particularly, the European Trade Union Institute has stated among these changes, the decentralization of the collective negotiation that allows a greater wage dispersion, and wage deduction in the collective agreements; the real and nominal reduction of minimum wage; the promotion of subcontracting in public services, etcetera.

Besides reducing the protection for groups that are worst placed in the labor market, where women prevail, work conditions worsen for the well-placed groups such as public servers, who are mainly women.

As stated before, the analyses have also focused on studying the effects of budgetary austerity on female employment and unemployment. The first European reaction to the 2008 financial crisis was to trust the Keynesian formulas, supporting the public budget expansion in order to stabilize the economy. However, the bailout of banks by the states with the following deficit public increase made some of these states to bailout and go trough fiscal consolidation processes.

The austerity policies have been mandatory for those states, though in other states it did not happen the same. That may show we are just witnessing another neoliberal response to the crisis we have gone trough since 1980, or, as some call it, the *austerity version* of the deflationary policies (Galvez and Rodríguez, 2013:120).

The analyses show that austerity measures are not fairly distributed among the populations, that homes with lower income and aged people turn out to be the most affected (Ginn, 2013). There are four important roles of the social state whose contraction is especially significant for women and the progress of gender equality (Rubery, 2015): the State as a support for the rent; as a provider of free or subsidized public services; as a direct employer; and as a protector against commercialization of the society. Each of these

roles or State intervention areas has both direct and indirect effects on female employment and unemployment, which is the focus of this work.

Regarding the role of the State as a rent source, the immediate effects of subsidiary cuts on children, unemployment or senior subsidy on the population, increase among women. The reason is that the existent female employment model of lower remuneration, career disruption, etcetera, involves a greater women dependence on benefits and subsidies, and thus, a bigger vulnerability against social wage cuts (Marquez and de la Cal, 2017).

The case of the UK outlines that cuts in social benefits affect women more, since these benefits are more common among women because of their lower income, compared to the men's (subsidy for housing rent and heating system). As a result, single-parent families (90% headed by women) and single pensioners fare the two groups that have seen reduced the most their annual medium rent in 2010 (Ginn, 2013).

The reduction of public services that support the social reproduction can involve a growth of female employment, mainly unpaid work. The increase of unpaid work in houses, along with the unequal share of housework between men and women, causes many women to leave the labor market during the crisis (Gálvez and Rodríguez, 2012). Besides affecting them as public services users, the cuts related to education, health and social services affect them as employees, since a high number of women employment is in the public sector.

The role of the public sector as employer promotes gender equality, which happens because of the rise in womens' labor participation and the reduction of the wage gap by gender. In addition, this has also contributed to the rise of the category of women employment. Recent surveys (Grimshaw et al., 2012) concerning the case of five countries¹ show that due to the greater worker women concentration in the public sector, it is possible that he austerity measures have a disproportioned effect on female employment.

The protection against commercialization of the society and the preservation of the public sphere are regarded as necessary to progress with gender equality. Austerity is supposed to be a threat to the public sphere, since it criticizes the wellness aspirations of the State, because of the resources cuts, and the reinvention of the assets and public markets as merchandise (Rubery, 2015).

It is important to highlight a series of works that study the setback on gender and equality during the crisis. For the Spanish economy, this would happen due to both, the cuts on the public budget, and the setback on equality laws and the elimination of equality institutions. An incidence of

¹ Between 67 and 74% for the case of Sweden, UK, Germany, Hungary and France.

these processes can be noted, regarding to the ideological orientation of the governing party (Paleo y Alonso, 2014).

Barry and Conroy's study of Ireland (2013) deals with the rollback of established structures for equality encouragement and its in government departments, as well as budget cuts in order to promote equality for women between 2008 and 2010. However, for some authors such as Rubery (2015), the deterioration of gender equality policies had begun before the crisis. In fact, it is said that it lost attention in 2000, and that it was no longer a foundation of the European Employment Strategy since 2003 (Rubery, 2015).

A series of works point that crisis effects over gender equality could have more than economic and labor effects. Specifically, the reprivatization of the care, as a consequence of public services cuts, could imply a "return to home" for women, as a submission and social control key means (Gálvez and Rodríguez, 2013). That would involve some reorientation of the equality agenda, in which maternity would have a central role.

For the case of Spain, some new equality autonomous laws focus on maternity protection, support for pregnant women and the role of a woman as a mother; whereas men are practically absent. This represents a Copernicus shift regarding previous equality laws that had evolved towards rational equality concepts, which implied the transformation of both genders (Paleo and Alonso, 2014:56).

From a union point of view, it has been said that gender equality issues should be negotiated during austerity times. It is also said that equality could work as a wedge to support the rebound of the innovative collective negotiation and thus, the renovation and revitalization of trade unionism (Briskin, 2014).

We will finish referring to the approaches that point to the need of an analysis and implementation of gender-sensitive policies, which unfortunately did not occur during the crisis. The sequence and incidence of the crisis are different for men and women; therefore an approach such as this has a lot to offer to the rebound of employment for both men and women (Bettio and Verashchagina, 2013; Villa and Smith, 2010: 53).

Unemployment in the European regions

A convergence process in the unemployment rates in Europe has been identified in the last few years, in a context of unemployment general rise. However, some regions have shown positive tendencies regarding

employment creation and growth, which has led to a bigger divergence in aggregate terms, which results in tensions between the countries more and less affected by the crisis (Crescenzi *et al.*, 2016).

Thus, though the remarkable contrast between central and peripheral European countries, there are important differences within the countries as well. In this respect, the center of Portugal, the South of Spain and Italy, the central area of Greece, the old eastern Germany and the north of England and Scotland have been strongly hit by the crisis in terms of employment destruction. On the other hand, northern Italy, Madrid and northern Spain, the southeast of the UK, southern Germany and the three Nordic capitals have responded better to the crisis than their countries. (Fratesi and Rodríguez-Pose, 2016).

In general terms, the impact of the crisis regarding employment, have made gender differences decrease, though the adjustment happened in an undesired respect (Bettio and Sansonetti, 2015). This is because the most affected productive sectors are some of the more masculinized; the rise of male unemployment has made it closer to the women rates, which used to be higher. However, the different characteristics of the territories make the regional realities, after a 7 years period of crisis, not homogeneous in a European level (Addabbo *et al.*, 2015: 504-505).

According to Eurostat (2007 and 2014), the unemployment rate in the European Union has increased 3.5 points (from a 7 to a 10,5%); for men, there has been a 4 points increase (from 6,4 to 10,4%) and for women a 2,8 points increase (from 7,8 to 10,6%). Thus, the tendency of an approach to the unemployment rate can be confirmed, though female unemployment was and continues to be bigger than the male, and has occurred in a context marked by the rise of unemployment for both.

Female unemployment has increased in regions of the peripheral countries, some of which had previous high rates; in 2014 there were high values in the Greek regions and the south regions of Spain and Italy. For men, from lower unemployment rates than women in most cases, in 2014 the higher rates were in the southern regions of Spain, with high rates in other Spanish, Greek and Italian regions as well, where unemployment rates are especially high. It is important to highlight the improvement experienced by some northern regions of Germany, whose unemployment rates descend significantly throughout the period considered.

The regional scenario for unemployment rates in 2014 reflects a greater similarity between men and women situations, and at the same time a central zone of reduced unemployment rates is identified; a first ring of regions with

diverse situations marked by lower rates and a third dimension, formed by the Spanish, Greek and southern Italian regions where unemployment rates are particularly high.

In the first stage of the crisis (2007-2010), the female unemployment rate increased significantly in the Spanish and Irish regions. In the second stage (2010-2014), the higher increase of that rate occurred in the Greek regions, and the south of Italy and Netherlands. Thus, throughout the studied period, unemployment rates have experienced a higher increase in the Spanish regions (mainly the eastern), as well as the Greek, Italian, Irish and Dutch.

The bigger reductions in unemployment rates are in the German, Belgian and Austrian regions. The male unemployment rate during the first stage of unemployment affected significantly the Spanish and Irish regions, and the Greek and Italian regions during the second stage. In the 2007-2014 period, Greece, Spain and northern Italy were the most affected regions by the increase of male unemployment (maps 1, 2, 3, and 4).²

One of the outcomes of the tendencies explained before, shows that the relation between the male and female unemployment rate in the European regions have become narrower.³ By the first year, in 77% of the regions female rates were higher than male; while that percentage reduced to the 50% in 2014. Even though this outcome contributes to having a general idea of a decrease in labor gender inequalities -since this also happens with the convergence regarding employment rate and, in many countries, regarding wages-, in most regions such confluence occurs in a context marked by unemployment and precarization in the working conditions.

Thus, the arrival of gender equality entails the danger of being displaced if the efforts are put in recovering male employment, which, if occurs, would be based on jobs with more precarious conditions than those destroyed during the crisis (OCDE, 2012):

Relation between male and female unemployment in regions of the EU

The gender gap for unemployment rate is usually defined as the difference between the female and male rate, and it is expressed in percentage points as unit of measure. In most cases in recent times, this gap used to result in a

² Tables and maps are in the Appendix, at the end of this article (Editor's note).

³ In fact, in 2007, the corelation rate between them was 0,664 (p<0,001), and in 2014 it became 0,958 (p<0,001), which shows an approximation between both rates in the regional field.

positive outcome, since female unemployment was bigger than male, and it was measured in percentage points.

This survey aims to raise the gender differences in this area to relative terms; so the ratio or gender gap shall be calculated as the ratio between male and female unemployment rate. Thus, there will always be a positive outcome, and the unit will represent the equality of unemployment rates, while the higher than 1 would show a bigger female unemployment than male for the region considered.

This indicator emphasizes the relation between both rates, which allows having a better interpretation of its evolution throughout time. Its main problem is that there could be an improvement of the gender gap in a context where unemployment rates are high for both groups, though this also occurs with the gap calculated by rates difference. Additionally, it results in situations where there is a similar gap for regions with absolute unemployment rates, which makes it necessary to analyze this kind of indicators as well as the absolute values to conduct a more accurate interpretation.

The Greek, Italian and Spanish regions present a bigger gender gap in 2007 and 2014, though the tendency of its reduction is confirmed over time. At the other side, by 2014, the gender gap had lower values than 1 in many regions, which would allow to show that men unemployment rates surpasses women's, which occurs in all Finnish, Irish, Swedish, German and Danish regions.

In 2007, the bigger differences were found in some Greek regions, where women unemployment rate is 4 times higher than men's. Likewise, the Italian region of Veneto, whose gap is also high but has much lower rates, is also in this group.

On the other side, with more reduced gaps, are UK and German regions, where men unemployment rates are even twice higher than women's, remaining both in low levels in British regions (Merseyside, Hampshire and Isle of Wight, East Yorkshire and Northern Lincolnshire, Cheshire, Greater Manchester, South Yorkshire, Tees Valley and Durham). For the German regions (Bremen and Berlin), these levels are especially high for both men and women.

After the economic crisis and the adjustment policies, it can be noticed that the situation is significantly different. The measure of women unemployment rates stands at around 10,5%, with a record of minimum values in the German region of Oberpfalz (2,3%), and maximum in the Spanish region of Andalusia (37,3%). For men, the measure of unemployment rate

stands in 9,8%, with the maximum in Andalusia (37,3%) and the minimum in Unterfranken, Germany (2,5%). The gender gap stands around 1 (rates equality), with a maximum in the Italian region of Veneto (1,7) and a minimum in Dorset and Somerset, UK (0,55).

By 2014, the Greek regions remained in the ranking for the regions with bigger gender gaps in unemployment rates, though this year the Italian region Veneto ranked the first place. It is important to say that other countries regions with high gender gaps in unemployment rates, present much lower rates than the Greek regions.

Among the regions with lower gender gaps in 2014, are the British, where male unemployment rates are higher than female. Also among them are the Dutch region Zeeland and the German region Miinster.

The ratio or gender gap in unemployment rate has decreased in 86% of the regions considered (and has increased in 28 cases); though this relative improvement could happen in many ways (Table 1 and Map 5). In most cases (116 regions), the smaller gap occurs because male unemployment rate has increased more than female, and that is the case of the Spanish and Italian regions, and most regions of Portugal, France, Sweden, Denmark and Ireland.

However there are 38 regions where the gap or gender ratio reduces in a context marked by a decrease of unemployment rate (particularly in this case, the decrease of the female rate is bigger than the male, which results in its convergence). Such is the situation of most German regions, therefore that could be considered a reality of this economy. Finally, among the regions where there is a decrease of gender differences, there is a group formed by 19 regions belonging to different countries (UK, France, Austria, Belgium) in which there is a record of a decrease in female unemployment rate and an increase in the male rate.

On the other side, there are 28 regions where female unemployment rate moves away from the male during these seven years, due to the bigger increase in female rate rather than the male rate. They are essentially British regions, though there are some examples in France, Portugal, Denmark and Germany. It is important to say they represent 14% of the analyzed territories, and there is a strong national component, since 20 of them belong to the UK.

Therefore we can say there is a general tendency during this period for an approach to male and female unemployment rates in the European regions, although the differential element would be related to the way it is produced: by an increase in the unemployment rates for both genders or due to a bigger decrease in female unemployment rates than the male's.

If the British regions, which present a variety of specific situations and characteristics, are excluded from the analysis, it can be noted that there is a general tendency to the decrease of the unemployment rates, though it is necessary to distinguish two scenarios.

On one side, there are the central European regions, where there has been a decrease in the rates during the last few years, and therefore, the convergence has emerged in a positive context. On the other side, there are some peripheral regions where the adjustment has occurred in an undesired way, with considerable increases in unemployment rates for both men and women. Nevertheless, even in the first case it would be essential to study deeply the working conditions of current jobs.

Relation between the evolution of public employment and the gender gap in unemployment

One of the main arguments for explaining the impact of the crisis on male and female employment is labor segregation, understood as the bigger employment concentration in different sectors and, particularly, public employment. Thus, since 2010 European countries implemented adjustment policies and the budget adjustment they involve, which led to different situations depending on the country. For that reason, this section focuses on the 2010-2014 period, when adjustment of public employment started to emerge.

It can be proved that the setback in public employment is bigger in Greece (-13,6%), Spain (-4,2%) and the Netherlands (-5,6%); whereas in Denmark, Ireland and Italy there is stagnation in the number of employed people. For women, the principal setbacks occur in Greece, Netherlands, Spain and Denmark; while for men, the worst numbers are in Greece, Netherlands, Belgium and Portugal (Table 2).

There are considerable regional differences in the countries with employment evolution, though the setback in the Greek, Dutch, Spanish and Italian, highlights due to its magnitude.

Considering he classification of the regions previously presented, the regions where the gender gap increases (most of them British), public employment has also increased 2,2%; and in the regions where this gap has decreased, public employment has increased 1,5%. Focusing on the second group with a smaller gender gap, in the regions where unemployment rates increase (type 2), public employment has backtracked 0,7%, whereas public employment has increased 6,7% in the regions where unemployment (type 4) has decreased.

The regions belonging to type 6 (reduction of female rate and increase of male rate) experience an increase of 3,6% in public employment between 2010 and 2014. Although this analysis cannot establish a temporal and causal relation between these circumstances, the tendencies show that in the regions that are most affected by the crisis, there is a reduction or stagnation of public employment that, undoubtedly contributes to deepen the existent labor problem. In addition, as this kind of employment implies a support for quality employment for women, labor options for them would be lower provided deepening in this sensed in the regional, national and European governments.

The relation between the increase of women unemployment rate during the 2010-2014 period and the variation of public employment is significant and negative. The regions with higher unemployment rates and public employment cuts are most of the Greek, Italian, Dutch and Spanish. Also, some French regions where decreases in public employment have been more significant, present important increases of women unemployment rates (Map 6).

The relation between the increase of men unemployment rate and the variation of public employment is also relevant -though it is stronger for women-, and it also presents a reversed relation (Map 7). It highlights the situation of the Greek, Spanish, and Italian regions, as well as some Dutch and French, where public employment cuts have been especially difficult.

The biggest impact of the adjustment in public employment lies in women, for not only their presence is predominant, but also because there are various elements involved in this adjustment. The horizontal segregation is also noticed in public employment (bigger presence of women in education, health or social services, for example), their lower representation in high positions, as well as their different contractual relations (women occupy the majority of not lower positions) affect them negatively due to those adjustments.

To sum up, the information for the European regions confirms that the adjustment in public employment during the 2010-2014 period is strongly related to the increase of women unemployment rather than male. Thus, in most regions in Greece and Netherlands, there has been a reduction of public employment along with a significant increase of male and female unemployment rates.

Although the public employment destruction has not been as significant as it was in Greece, for the Spanish regions, the increases of unemployment in regional economies have been very high. In Germany and the UK there

is a wide variety of situations in terms of increase or reduction of public employment for a situation of reduction of unemployment rates.

Conclusions

During the last years, after the outbreak of the economic and financial crisis in 2008, a lot of indicators show a convergence in men and women labor conditions, though this results must be contextualized so that there can be an accurate interpretation of the current processes.

Thus, it is proved there is an approach to unemployment rates in the European regions, although there are important differences to mention. Generally speaking, there is a polarized reality in which the European peripheral regions follow the pattern of closure of gender gaps, due to a higher increase of male, and not female, unemployment; whereas in central European regions (mostly German, but also French, Austrian and Belgian), the closure of the gap occurs because a significant setback in female unemployment rates.

Even though in many cases the employment rate gap between men and women reduced, that does not mean a positive result regarding gender equality, but it shows the worsening situation of men.

Despite the fact that these results offer a general idea of a decrease tendency in labor inequality –since it also occurs with the convergence regarding employment rates, and in many countries, wage rates- in most regions, this confluence occurs in a context marked by the increase of unemployment and a precarization of labor conditions.

Thus, it is possible that the objectives of the gender equality agenda in the labor conditions will eventually occupy a subordinate position or disappear among the employment opportunities in masculinized sectors. This approach results inaccurate, especially if the adjustment in female employment could have not be finished yet, and women employment opportunities and conditions, precarious themselves, could be significantly hampered during the following years.

It is important to intercede for a detailed analysis with a gender perspective on the effects of the crisis and the medium and long-term adjustment measures for men and women employment; that could show the underlying tendencies, and be a foundation for the design of general economic policies and specifically labor policies for the different sectors of government to implement. In such context, the evolution of public employment constitutes a specially relevant field of study, since it represents a base for quality employment for women, and would determine not only their possibilities of employment, but their labor conditions regarding their in and outs of the labor market as well.

The budget cuts and their impact on public employment are not homogeneous in a European scale, though most countries have implemented this kind of policies since 2010. It will be necessary to have a detailed monitoring on the effects of these policies on men and women. Thus, during the 2010-2014 period some differential patterns on public employment can be observed, though some adjustments will be more accurately observed the following years.

A first approximation to the issue gives a general outlook that supports the big impact of women employment variation in the public sector on women's unemployment rate for the European regions. Worthy of note is the situation of the Greek, Dutch, Spanish and Italian regions, where reductions on public employment have been accompanied by high women unemployment rates. It could be said that the bigger adjustments have occurred in the communities that have been most affected by the crisis, so that the unemployment rise is not only related to this circumstance.

However, instead of helping to improve this situation, public employment cut contributed to worsen it, and it affects women mostly. This bigger impact would be caused not only because most women work on public sectors such as education, health, social services, etc., which have suffered significant budget cuts during the last years, but also because their position inside public administration is more vulnerable than men's, working on lower-status, temporary jobs.

Linked to this, the transitions from employment to unemployment are highly important for this analysis, since it is possible that reducing employment possibilities in general and quality employment on the public sector, it would be harder for women to get a quality job; gender differences would increase in some quality employment indicators that should be especially considered and studied.

An interesting future line would be to standardize the regions' characteristics according to their performance regarding the evolution of men and women unemployment rates gap during the crisis. It would be exploring whether the rise or/and reduction of men and women unemployment rate gap is caused by the change in the number of public jobs. Some previous works (Elomäki, 2012; Leschke and Jepsen, 2012) have confirmed that

some austerity policies, particularly personnel reductions or wage cuts where women role is important (health or education), have a negative impact on gender equality in some countries of the European Union.

It would be an attempt to prove if it is possible to conclude the same for some regional labor markets, and to know the specific characteristics of these. The distribution of the negative effects of the crisis has important spatial components, such as those mentioned in previous works. It seems that those negative effects have become less perceived in the economically weak regions of the European Union and the USA, where there is a high concentration of public jobs (Kitson *et al*, 2011).

The women's bigger dependence on these jobs would mean the effects of austerity policies would have a sectorial-spatial component, which would involve a gender component completely unfavorable for women.

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Appendix

Table 1
Typology of regions

	Greater gap	Lower gap
Rise of women unemployment rates and _	19 regions	116 regions
rise of men unemployment rates	(Type 1)	(Type 2)
Decrease in women unemployment rates _	2 regions	38 regions
and decrease of men unemployment rates	(Type 3)	(Type 4)
Rise of women unemployment rates and _	7 regions	
decrease of men unemployment rates	(Type 5)	-
Decrease of women unemployment rates		19 regions
and rise of men unemployment rates	-	(Type 6)
	28 regions	173 regions

Sourcee: Own elaboration based on Eurostart data (2007 and 2010).

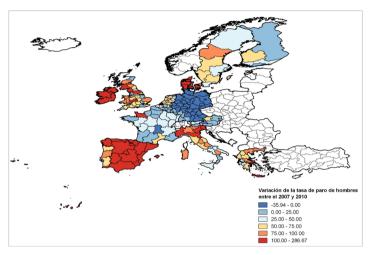
Table 2

Public employment evolution according to sex in EU-15 countries, 2007--2014 (thousands and %)

	Wc	Women public employment	mployment		Men public employment	ployment
	2010	2014	Var. 2010-2014	2010	2014	Var. 2010-2014
Belgium	958,6	1.005,5	4,9	471,7	459,6	-2,6
Denmark	643,8	636,0	-1,2	262,9	275,3	4,7
Germany	6.451,7	7.019,6	8,8	3.275,2	3.342,4	2,1
Ireland	353,6	353,0	-0,2	138,4	140,5	1,5
Greece	520,6	440,1	-15,5	417,1	370,4	-11,2
Spain	2.473,9	2.388,8	-3,4	1.573,5	1.488,3	-5,4
France	5.175,4	5.657,0	9,3	2.517,7	2.590,3	2,9
Italy	2.778,6	2.823,6	1,6	1.801,8	1.773,6	-1,6
Luxembourg	36,4	43,6	19,8	27,9	31,5	12,9
Netherlands	1.695,5	1.600,5	-5,6	777,2	732,8	-5,7
Austria	605,2	643,8	6,4	314,2	315,3	0,4
Portugal	687,3	721,0	4,9	333,5	332,7	-0,2
Finland	516,1	529,5	2,6	153,4	159,1	3,7
Sweden	1.081,5	1.139,4	5,4	377,3	432,4	14,6
UK	6.193,1	6.400,9	3,4	2.645,2	2.695,9	1,9

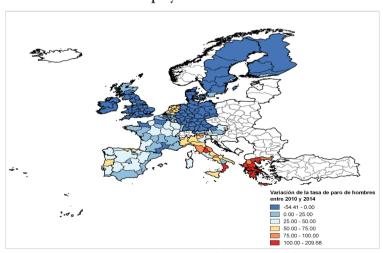
Source: Own elaboration based on Eurostat data (2010 and 2014).

 $$\operatorname{Map}\ 1$$ Variation in men unemployment rate between 2007 and 2010



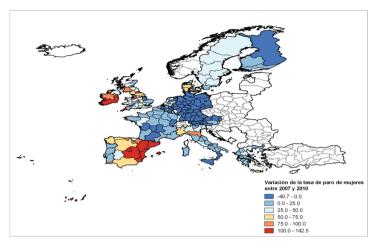
Source: Own elaboration based on Eurostat data (2007 and 2010).

 $$\operatorname{Map} 2$$ Variation in men unemployment rate between 2010 and 2014



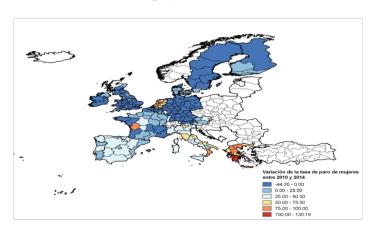
Source: Own elaboration based on Eurostat data (2010 and 2014).

 $$\operatorname{Map} 3$$ Variation in women unemployment rate between 2007 and 2010



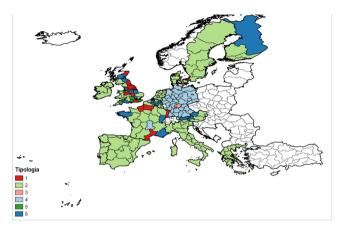
Source: Own elaboration based on Eurostat data (2007 and 2010).

 $$\operatorname{Map}\ 4$$ Variation in women unemployment rate between 2010 and 2014



Source: Own elaboration based on Eurostat data (2010 and 2014).

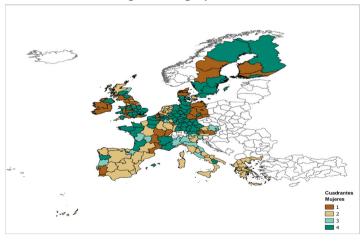
 $$\operatorname{Map} 5$$ Typology of the UE-15 regions according to the $\emph{ratio}/\mbox{gender}$ gap



Source: Own elaboration based on Eurostat data (2007 and 2010).

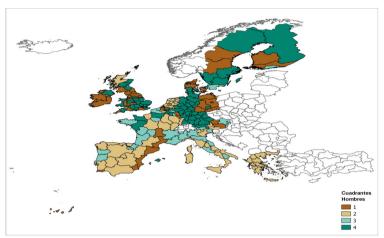
Map 6

Regions classificatin according to the relation between the women unemployment rate variation and the public employment rate variation (2010-2014)



Source: Own elaboration based on Eurostat data (2010 and 2014).

 $$\operatorname{Map} 7$$ Regions classificatin according to the relation between the men unemployment rate variation and the public employment rate variation (2010-2014)



Source: Own elaboration based on Eurostat data (2010 and 2014).

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