

Gender Inequalities: National Evidence by Activity Sectors in the Portuguese Labour Market

Abstract

The gender occupational segregation is a negative phenomenon which still remains a common feature to the most diverse cultures and economies in the 21st century. One of the ways in which it is embodied is in wages and salary differences. Thus, this paper aims to identify and analyse the influence of the economic activities and the regional distribution of those same activities on the evolution of the average dissimilarity remuneration of Portuguese workers between 2010 and 2013. The variable under survey is the difference between the average monthly income, and the analysis was made by using the shift-share methodology. The productive structure and regional competitiveness have proven to be decisive in the wage gap.

Keywords: Gender wage inequalities, labour market, shift-share analysis, Portugal

1. Introduction

Despite the fact that both the evolution of female education levels are increasing, and female participation in the labour market has shown unprecedented progress, there are still many inequalities, both in terms of access by women to the labour market, in general, and to certain professions, in particular (horizontal segregation), and access to certain managerial positions (vertical segregation). There are also evidences of wage differences, which continue to persist, despite the continued introduction of measures promoting equal opportunities between genders.

Effectively, the status of women in the labour market is intertwined with various events, varying in the most diverse aspects, either geographical, cultural, historical, sociological or economic, among many others¹. Women entry into the paid labour market was not, and in many cultures and regions it is still not, well tolerated and still less consensual. The multiplicity of social roles that women play is closely related to the gender stereotype associated with them, and may be at the basis of these pernicious and persistent asymmetries.

In Portugal there is not much literature on this problem, but when there is – in an eminently sociological perspective and not from the point of view of management and administration – shows that wage discrimination is still a reality. “When we look the gender wage gap in the Portuguese labour market,

¹ Manuel Abrantes, “Fortalezas e Masmorras: A Persistência da Divisão Sexual das Profissões na Sociedade Contemporânea”, *Ex Aequo* 27, (2013): 113-27.

it is observed that, as in most European countries, these tend to be higher in the more qualified occupations and, more precisely, in the population with higher education. (...) This data is largely indicative of the gender segregation of the Portuguese labour market and the difficulties of accessing the higher positions in the different professional hierarchies by women”². Also in regional terms there are few studies that identify that there is a wage difference between men and women by region and that these differences are maintained over time³.

Thus, in this research, it is proposed to identify and analyse the influence of economic activity and regional distribution of such activities on the evolution of the average monthly pay gap between men and women. The investigation of the objectives identified above is achieved by using the data published by PORDATA on the data basis collected by the Ministry of Economy’s Strategy and Studies Office (*Gabinete de Estratégia e Estudos do Ministério da Economia – GEE/MEc*). The variable under study is the difference between the average monthly wage earned by male and female workers in the Portuguese economy for the period between 2010 and 2013. To the data will be applied the exploratory shift-share analysis, common in the regional analysis. This is a method of determining the components that explain variations of certain economic variables by three dimensions: national, regional and industrial. The shift-share analysis decomposes the absolute variation of the observed values for a variable, in a certain period of time and in a determined region, into three essential components that can explain such variation. These three components are denominated by (i) national component; (ii) structural or industrial component; and (iii) regional component (or competitiveness effect)⁴.

This article is presented as it follows: in section one this brief introduction is presented; the section two is dedicated to a brief literature review on wage discrimination between men and women. Section three presents and describes the variable under study as well as the shift-share methodology. In the next section (section four) the results obtained by applying the methodology to the collected data are presented and discussed. Finally the main conclusions are presented.

2. Literature Review

The increasing participation of women in the Portuguese labour market is intertwined, in a clear way, with the economic, historical, political, social and cultural contextualization of the country⁵. Effectively, we cannot forget that in a not too distant past, it was not well seen that the woman worked (in a paid work, it is noticed) outside of the home, since its place belonged to the sphere of the private, like caregiver zealous of the children, husband, home and even, in some cases, other dependent persons (parents-in-laws or even grandparents) who also belonged the household and were in charge of it. It was the husband’s responsibility, couple’s head, to bring home the livelihood of the home⁶, framing him in a public domain, happening either in the declared urban places or in rural areas, since the public versus private dichotomy is not indifferent to gender⁷. Actually, the family was admittedly one of the fundamental pillars of that time society. According to Preto⁸ in school textbooks could be read that: “in the family the boss is the

² Margarida Barroso, Magda Nico, Elisabete Rodrigues, “Género e Sociologia: Uma Análise das Desigualdades e dos Estudos de Género em Portugal”, *Sociologia Online* 4 (2011), 74-75.

³ João Pereira, Aurora Galego, “Regional Wage Differentials in Portugal: Static and Dynamic Approaches”, *Papers in Regional Science* 90 (3), (2011), 529-548.

⁴ Mustafa Dinc, “Regional and Local Economic Analysis Tools”, *The World Bank, Washington DC* (2002).

⁵ Abrantes, “Fortalezas”, 113-27.

⁶ Lina Coelho, “Mulheres, Família e Desigualdade em Portugal”, PhD Thesis in Economics. Coimbra: Faculdade de Economia da Universidade de Coimbra (2010).

⁷ Sofia Aboim, “Género e Modernidade: A Construção Pública do Privado”, in: *Itinerários: A Investigação Nos 25 Anos Do ICS*, ed. Sofia Aboim, Manuel Villaverde Cabral, Karin Wall, Sofia Aboim, and Filipe Carreira da Silva. Lisboa: Editora de Ciências Sociais (2008), 561-582.

⁸ Clara Valadas Preto, *A Situação Social Em Portugal, 1960-1995*. Instituto de Ciências Sociais, Universidade de Lisboa (1996).

father; in school, the boss is the teacher; in the church, the chief is the priest; in the Nation, the head is the Government”. The social roles assigned to men and women were distinct and demarcated⁹.

The absence of female participation in the paid labour market was often masked, since the work developed by women was clearly a complement to the exiguous male labour income, which in many cases was insufficient to maintain the entire household. Thus, it doesn't surprise, that the work not (directly) paid from the farming of land and domestic livestock, mostly by women, domestic and self-employed, constituted the differential increase in income that it was necessary and essential for families to survive in a market where paid work did not always abound. Thereby, and for a markedly long period of time, it was conceived, though not always free from some sultry contestation, that paid work was of male competence, and that the woman's income, from external labour, to exist, would be in case of need, and it should be perceived as a complement to man's income, and never superior.

Before the end of the twentieth century, two events occurred, which were built as two fundamental historical landmarks, and which greatly contributed to the massive entry, acceptance and permanence of women in the Portuguese paid labour market, which were the April Revolution in 1974, and the entry of Portugal to the European Economic Community (EEC) in 1986. The period after April 25th, 1974, along with the disruptive political, social and cultural contestation with the previous regime, was characterized by several nationalizations, and by a development of the tertiary sector to the detriment of the primary, which led to the emergence of jobs in the service sector, largely occupied by women, facilitating their access and entry into the paid labour market. Otherwise, and with the entry of Portugal to the then EEC, were emanated several laws that promoted its permanence and gradual integration in that market.

However, it is a fact that the recent focus on a service basis economy and, more specifically, the almost massive entry of women to the paid work that was generated in the tertiary sector allowed them a great achievement, which was the possibility of receiving a salary, on the other hand, has also become, and in parallel with what has occurred in other sectors of activity, generating wage asymmetries between men and women.

It is a fact that the gender segregation occupational exists¹⁰ and it is a systemic, negative, persistent, pernicious and transversal phenomenon, both in time and space, which is common to many countries, cultures and historical moments, claiming in a continuous way, as a source of inequality, discrimination and inefficiency in labour markets¹¹. This phenomenon consists in the unequal distribution or representation by men and women in the various professions or sectors of activity. Within its scope, it can still distinguish horizontal segregation from vertical segregation. While horizontal segregation refers to the different concentration of men and women between the different professions, vertical segregation refers to the unequal concentration of men and women between the different hierarchical levels, but within the same profession.

Related with vertical segregation, that is, when looking at the same profession, we can also enhance certain concepts that have become evident, and which are exemplary of the inequalities to which women are subjugate. Specifically, the existence of glass ceilings, last barrier, invisible but insurmountable, felt by women when they try to reach the highest place within a certain hierarchy without, however, achieving it¹²; and sticky floor, which represents the concentration and permanency of women at the base of the hierarchical pyramid.

⁹ M. V. L. Badgett, Nancy Folbre, “¿Quién Cuida de Los Demás? Normas Sociosexuales Y Consecuencias Económicas”, *Revista Internacional del Trabajo* 118 (3), (1999), 347-365.

¹⁰ Alice Monteiro Barros, “Cidadania, Relações de Género E Relações de Trabalho”, *Revista do Tribunal Regional do Trabalho* 47 (77), (2008), 67-83.

¹¹ Richard Anker, “La Segregación Profesional Entre Hombres y Mujeres”, *Revista Internacional del Trabajo* 16 (3), (1997), 343-70.

¹² Manuela Barreto, Michelle K. Ryan, and Michael T. Schmitt, *The Glass Ceiling in the 21st Century: Understanding Barriers to Gender Equality*. American Psychological Association (2009).

Occupational segregation, both horizontal and vertical, materializes in inequalities of opportunity, access and permanence in the labour market and also in wage inequalities, which entail discriminatory processes regarding to gender, and which may be intrinsic or extrinsic, both to the labour market itself and to the individual himself. The disparities are still considerable regarding to participation in paid work¹³.

There are several researches about wage inequality between men and women, but in this article in particular, stands out the 1st Report on Salary Differences by Branches of Activity¹⁴ and the works previously published by Ferreira¹⁵ and, in the past, by Kiker, Santos and de Oliveira¹⁶, which prove that wage inequalities are too evident, and that doesn't exist homogeneity in the wage distribution. Nowadays, and with the approximation of educational levels between men and women, and with the massive participation of women in the Portuguese paid labour market¹⁷, does not seem to justify the existence and persistence of these inequalities.

According to data from the National Statistics Institute¹⁸ (Instituto Nacional de Estatística 2012), in 2011, the year of the last census of the population in Portugal, existed more women graduate than men (754.337 women and 490.405 men). However, most part of the positions of leadership and appointment were occupied by men. The representativeness of women in Parliament is from one woman to three men. If we look at hospital and teaching institutions, management positions are mostly occupied by men. There are only three women deans in Portugal. Inequalities still remain despite the constant legislative changes, which promote gender equality, and which prohibit discrimination against women. The reasons for occupational segregation by gender are still to be explained.

Actually, “women’s increase in education and work experience have not been able to compensate the increase in the level of sexual segregation of employment structures nor the negative impact of transformations on the level of remuneration systems”¹⁹. Nevertheless, if the positive economic, social and cultural changes which have taken place since the country’s entry to the present European Union did not decreased the gender pay gap in the Portuguese economy, it is important to understand how such inequalities evolve during periods of lower growth and budgetary constraints such as the period after 2010. Primarily, it is important to understand if such discrimination is an eminently social phenomenon, or that changes in the productive structures are, in furthermore, important to comprehend such differences. Moreover to understand if, even in an economy, geographically small, such as Portugal, those wage differences are overall, or if there are some regional particularities that are important to emphasize as explanatory factors of the observed discrimination. It is important to keep in mind – wage gap between men and women it is a cultural phenomenon.

3. Methodology

3.1. Variable Under Survey

The variable under survey, in this particular case, which intends to understand how wage inequality between genders has evolved, in Portugal during a period dominated by strong budgetary restrictions, economic recession and a program of international support for the Portuguese economy, it is the monthly wage earned by an employee.

¹³ Ana Perista Heloísa Cardoso, Ana Brázia, Manuel Abrantes, and Pedro Perista, *Os Usos Do Tempo de Homens E de Mulheres Em Portugal*, (Lisboa: CESIS e CITE, 2016).

¹⁴ CIG, CITE, and GEE/ME, *I Relatório sobre Diferenciações Salariais por Ramos de Atividade* (Lisboa: CIG, CITE and GEE, 2014).

¹⁵ Virgínia Ferreira, *A Igualdade de Mulheres e Homens no Trabalho e no Emprego em Portugal: Políticas e Circunstâncias*, (Lisboa: CITE, 2010).

¹⁶ Billy Frazier Kiker, Maria C. Santos, and M. Mendes de Oliveira “Overeducation and Undereducation: Evidence for Portugal”, *Economics of Education Review* 16 (2), (1997), 111-125.

¹⁷ Sara Falcao Casaca, “Flexibilidad Laboral y Relaciones de Género en Portugal: Ambivalencias y Perplejidades”, *Asparkia* 20, (2009), 147-163.

¹⁸ Instituto Nacional de Estatística, “Estatísticas No Feminino: Ser Mulher Em Portugal”, *Destaque*. Lisboa (2012).

¹⁹ Ferreira, “A Igualdade”, 184.

The option to select the monthly wage over the official salary earned by both men and women is due to the fact that the monthly wage corresponds to the amount that the employee actually receives each month. Moreover, to the basic remuneration, it includes other remuneration paid by the employer, such as overtime hours of work, holiday allowance or premiums²⁰. The period of analysis refers to the four years between 2010 and 2013.

Being this a study that, besides the national dimension, addresses regional issues, related to the activity sectors, the choice of the analysed period was related to the introduction of the revision to the classification of the economic activity of the companies in 2008. Furthermore, the data analysed are in line with the 2013 version of the Nomenclature of Territorial Units for Statistics (NUTS). The introduction in the analysis of previous periods raises problems with break in the series that are not object of study in this research work.

Table 1, based on data collected on Pordata²¹, allows to observe the difference between the average wage obtained between men and women by five aggregate activity sectors – (1) Agriculture, animal production, hunt, forestry and fishery; (2) Industry, construction, energy and water; (3) Manufacturing industries (particularly); (4) Construction (particularly); e, (5) Services. The difference between the average monthly wages for the economy in general (total), without distinguishing the sectors of activity, is presented. The country is also divided by NUTs II – Norte, Centro, Área Metropolitana de Lisboa, Alentejo, Algarve and Madeira. Data for Açores were not available and will not be presented.

The table shows the differences observed at the beginning of the analysis period (2010) and at the end of that period (2013), in euros, presenting an indicator of the percentage evolution of the difference in the four years under analysis. Positive values of the difference between monthly average wages, by gender, indicate how much a man earns more than a woman. A positive growth rate in the period indicates whether discrimination increased or decreased over the study period.

Table 1. Difference in Average Wage Between Male and Female Workers by Region and Activity Sectors Between 2010 and 2013

| Sectors of Activity | Indicators | Portugal | | Norte | | centro | | Lisboa | | Alentejo | | Algarve | | Madeira | |
|--|-------------------------|----------|-------|-------|-------|--------|-------|--------|-------|----------|-------|---------|-------|---------|-------|
| | | 2010 | 2013 | 2010 | 2013 | 2010 | 2013 | 2010 | 2013 | 2010 | 2013 | 2010 | 2013 | 2010 | 2013 |
| Total | Values (€) | 248,5 | 251,6 | 199,1 | 209,7 | 222,8 | 221,9 | 344,6 | 337,2 | 259,3 | 273,7 | 184,6 | 168,6 | 266,3 | 253,4 |
| | Variation (2010-2013) % | 1,2 | | 5,3 | | -0,4 | | -2,1 | | 5,6 | | -8,7 | | -4,8 | |
| Agriculture, animal production, hunt, forestry and fishery | Values (€) | 148,2 | 133,7 | 153,8 | 118,8 | 151,8 | 141,9 | 244,9 | 210,7 | 119,6 | 107,1 | 130,4 | 184,7 | 240,8 | 52,3 |
| | Variation (2010-2013) % | -9,8 | | -22,8 | | -6,5 | | -14,0 | | -10,5 | | 41,6 | | -78,3 | |
| Industry, construction, energy and water | Values (€) | 250,5 | 268,8 | 228,4 | 245 | 238,8 | 252,7 | 151,9 | 158,6 | 280,8 | 300,2 | 108,7 | 125,5 | 200,3 | 217 |
| | Variation (2010-2013) % | 7,3 | | 7,3 | | 5,8 | | 4,4 | | 6,9 | | 15,5 | | 8,3 | |
| Manufacturing industries | Values (€) | 328,4 | 327,8 | 270,9 | 277 | 326,8 | 322,8 | 314,1 | 295,4 | 387,7 | 371,4 | 205 | 210,5 | 227,5 | 245,6 |
| | Variation (2010-2013) % | -0,2 | | 2,3 | | -1,2 | | -6,0 | | -4,2 | | 2,7 | | 0,0 | |
| Construction | Values (€) | -77,3 | -78,7 | -74,9 | -77,4 | -23,9 | -16,3 | -55,6 | -60,9 | -58,5 | -58,1 | 8,7 | 19,7 | -18,9 | -45,3 |
| | Variation (2010-2013) % | 1,8 | | 3,3 | | -31,8 | | 9,5 | | -0,7 | | 126,4 | | 139,7 | |
| Services | Values (€) | 311,4 | 297,8 | 230,1 | 229 | 229,9 | 212 | 404,5 | 377,7 | 260,4 | 264,6 | 211,1 | 179,5 | 290,5 | 282,2 |
| | Variation (2010-2013) % | -4,4 | | -0,5 | | -7,8 | | -6,6 | | 1,6 | | -15,0 | | -2,9 | |

Source: Self elaboration based on data collected in www.pordata.pt on June, the 7th, 2016

From the observation of the table it is noted that in the Portuguese economy and for all regions, not considering the sectors of activity, men always have a higher average monthly wage than women. However, with the exception of the Norte region, in all other regions there was a decrease in the difference between the average monthly wages. The economy, in general, follows the trend of the Norte region, with increased gender discrimination in terms of average monthly earnings.

The single activity sector where female workers have higher average monthly wages than male workers is in the construction sector (although the differences are not, in absolute terms, as significant as for the

²⁰ Pordata (2015), “Ganho Médio Mensal dos Trabalhadores por Conta de Outrem das Indústrias Transformadoras: Total e Por Nível de Qualificação”, <http://www.pordata.pt/> [date of access: 07.06.2016].

²¹ But whose responsibility is from Ministry of Economy's Strategy and Studies Office (*Gabinete de Estratégia e Estudos do Ministério da Economia – GEE / MEc*).

other sectors of activity). This situation also occurs for all regions under analysis, with the exception of Algarve. Furthermore, in terms of activity sectors, it is important to notice that it is verified that in most of the sectors and regions the differences between the average monthly earnings between men and women decreased in the four years under analysis – the exception is the generic sector of industry, construction, energy and water.

To understand if this evolution is determined by current economic conjuncture rather than influenced by regional development, specificities and productive structure requires the application of the shift-share methodology presented below.

3.2. Shift-share Analysis

The shift-share analysis, originally developed by Dunn²², it is a method of determining the components that explain variations of certain economic variables by three dimensions: national, regional and industrial. Being a simple and exploratory method of analysis very applied in the regional analysis it is particularly used to perceive the evolution of the levels of employment – and other social phenomena directly related to it, as is the case of wage discrimination, which is covered here – in consideration of national and structural and regional specificities that can influence their evolution at the regional / local level. The shift-share analysis decomposes the absolute variation of variable of the observed values, in a given period of time and in a particular region, in three essential components that can explain such variation. These three components are designated by (i) national component; (ii) structural or industrial component; and, (iii) regional component (or competitiveness effect)²³.

As a matter of fact, this method of analysis constitutes one of the most important statistical techniques for the analysis of regional development by presenting a regional and sectorial decomposition of such development²⁴. “This methodology makes it possible to distinguish those sectors that stand out favourably from those that lose competitiveness” being “an important element in the definition of regional development policies”²⁵.

Drawing attention to the issue, in this study, which is the analysis of wage discrimination in a regional perspective and by sector of activity, then it presents what each component will represent in the intended analysis.

The component corresponding to national growth (NC) measures the variations that should have occurred in the average monthly difference of the wage by gender if the behaviour of the variable had followed the behaviour of the variable at the national level. Thereby, indicates what should have been the variation verified for the difference in the average monthly wage by gender, in the region, if this difference had increased (decreased) at the same national growth rate. Which is, if the region had followed the general conditions and the overall economy trends.

The structural or industrial component (IC) measures the share of the variation in the average monthly wage difference by gender that can be attributed to the productive structure of the region. It reflects the influence of specialization on a structure whose level of discrimination grows above or below the national growth rate of wage discrimination between genders²⁶. A region that shares with the national economy a productive structure that discriminates against women will be subject to a structural effect that generates more discrimination.

The regional component that assesses the competitiveness of a given region (RC) measures the changes in the variable under survey due to the fact that the industrial structure of a region grows at a different rate

²² Edgar S. Dunn, “A Statistical and Analytical Technique for Regional Analysis”. *Papers in Regional Science* 6 (1), (1960), 97-112.

²³ Dinc, “Regional”.

²⁴ Alcina Nunes, Elisa Barros, “Evolução Do Desemprego Regional Em Portugal Entre 2004 E 2009: Aplicação Da Análise Shift-Share”, *Egitania Scientia* 10, (2012), 19-40.

²⁵ Paula Albuquerque, João Ferreira, “Envelhecimento, Emprego E Remunerações Nas Regiões Portuguesas: Uma Análise Shift-Share”, *EURE* 41 (122), (2015), 244.

²⁶ Dinc, “Regional”.

than the growth of the industrial structure of the national economy. This component shows the share of the variation in the remuneration inequality that is due to the competitive position of the region with respect to its productive structure. It should also be mentioned that the regional component does not, however, indicate the reasons for the sectors in the region to generate/reduce pay discrimination above/below the national average. It only shows the importance of analysing certain sectors in certain regions.

Considering D_{ir}^t the average monthly wage difference between men and women registered in sector i of the region r in the start of the period under analysis – the period from t (2010) to $t+k$ (2013) – and D_{in}^t the average monthly salary difference between men and women registered in the sector in the Portuguese economy. Therefore, we have the following:

- $d_{ir} = \frac{D_{ir}^{t+k}}{D_{ir}^t} - 1$ is the average monthly wage difference between men and women registered in the sector from region between the first observed moment (2010) and the second observed moment (2013);
- $d_{in} = \frac{D_{in}^{t+k}}{D_{in}^t} - 1$ is the average monthly wage gap between men and women in the sector, in the Portuguese economy, between the first observed moment (2010) and the second observed moment (2013), and;
- d_n is the average monthly wage gap between men and women for all sectors in the economy between the first observed moment (2010) and the second observed moment (2013).

Whereas, considering the notations presented, the shift-share analysis components described above are calculated as follows:

$$NC = \sum_i D_{ir}^t d_n \quad (1)$$

$$IC = \sum_i D_{ir}^t (d_{in} - d_n) \quad (2)$$

$$RC = \sum_i D_{ir}^t (d_{ir} - d_{in}) \quad (3)$$

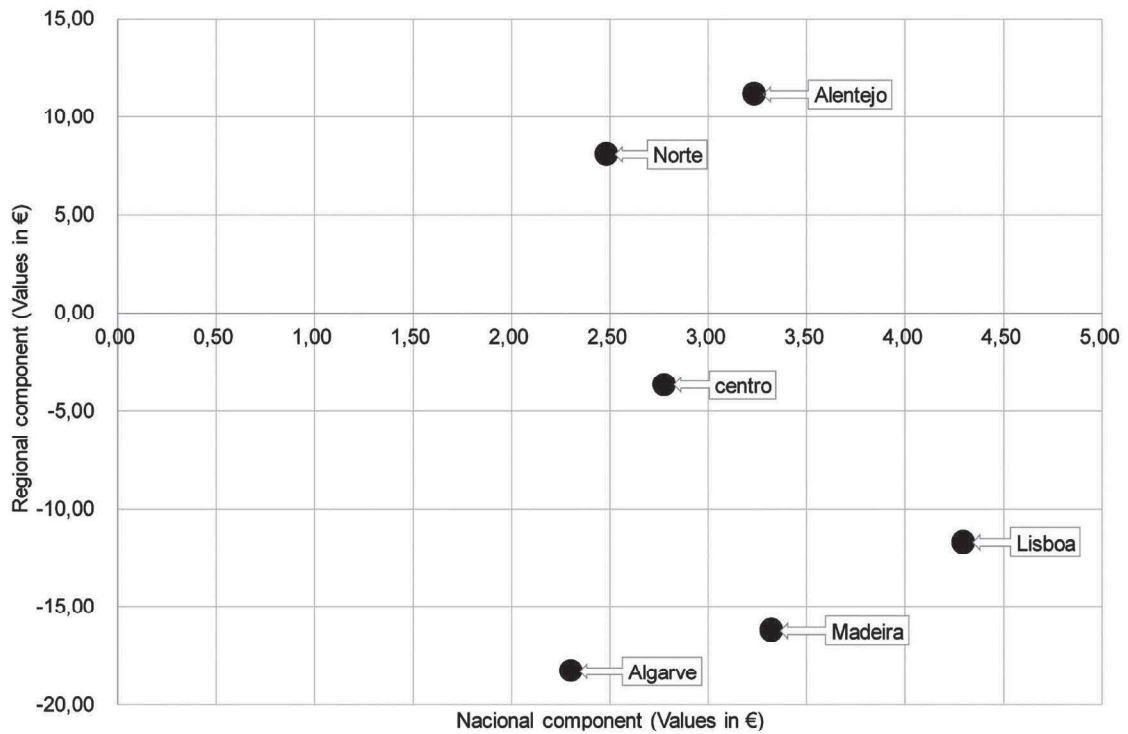
Given that, the total variation in the average monthly wage gap among men and women between 2010 and 2013 is given by the sum of the three components, which is:

$$D_r^{t+k} - D_r^t = \sum_i D_{ir}^t d_n + \sum_i D_{ir}^t (d_{in} - d_n) + \sum_i D_{ir}^t (d_{ir} - d_{in}) \quad (4)$$

4. Results

With the application of the shift-share analysis for the six regions under study, were calculated the variations in the average monthly wage gap between male and female workers in the Portuguese economy. The summary of these results can be seen in the following figures. The Figure 1 shows the six regions considering how much of the global remuneration discrimination, without considering the division of employees by sector of activity, is due to the regional component (variation in euros that would have been expected given the specificities of the region under analysis, measured on the vertical axis) or to the observed economic environment for the economy in general, which is, the national component (variation in euros that would have been expected given the economic specificities experienced by the Portuguese economy in the period between 2010 and 2013).

Figure 1. Decomposition of the Variation of the Wage Differential – National and Regional Effect by Region

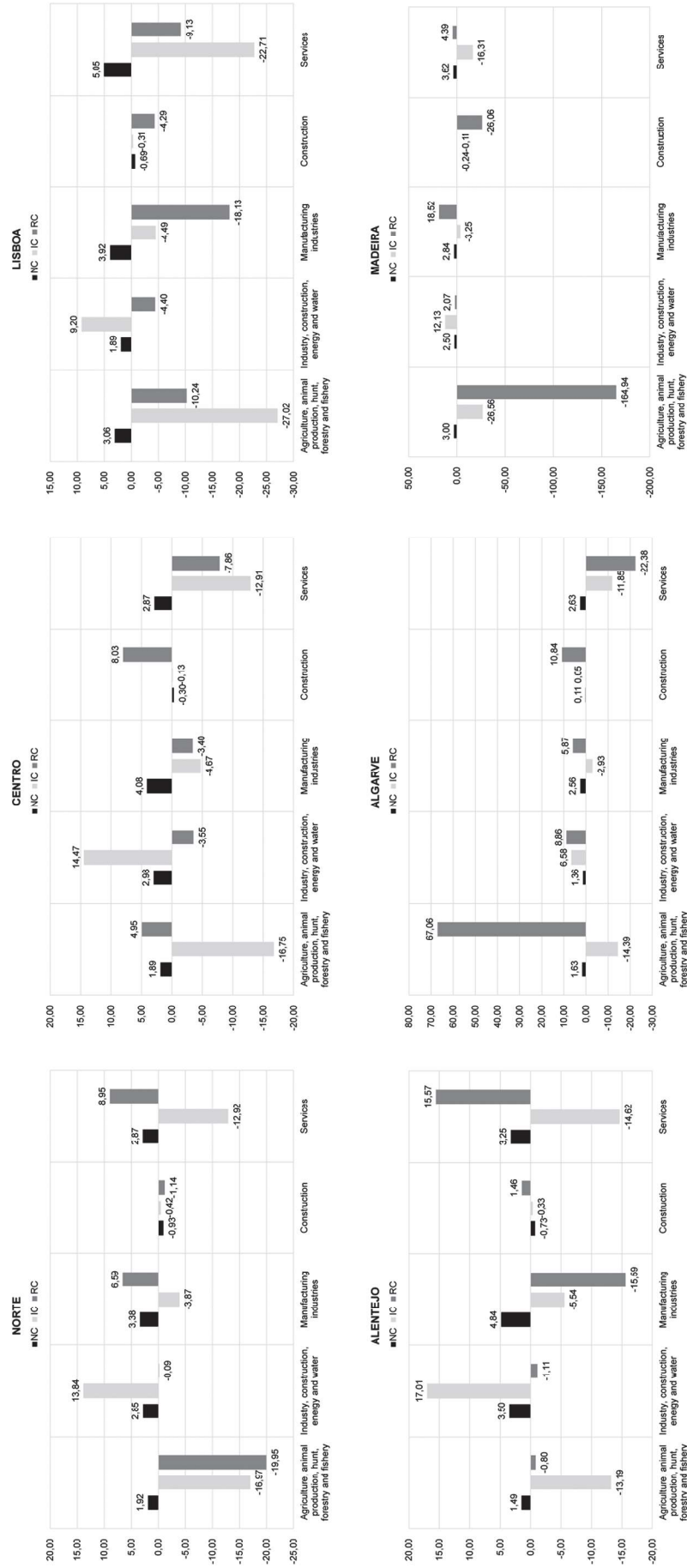


Source: Self elaboration based on data collected in www.pordata.pt on June, the 7th, 2016

We can observe that, regardless the activity sector considered, the difference in average monthly wages between men and women would increase (although not significantly, in euros) if the regions would follow the national trend. Lisboa would be the region where the difference would accentuate more (approximately 4,5 euros, on average per month) if it would follow the national trend. However, the competitiveness and the specificity of each region overlaps. Only in Norte and in Algarve regions, the difference between monthly wages increased given the regions specificity. In the regions Centro, Madeira and Algarve the difference between wages decreased, reducing the gender discrimination wage gap. It is noted that in Algarve the decrease between wages reaches around 20 euros per month. Algarve is the region which presents lower immunity to the national trend.

Figure 2 presents for each one of the six regions, the influence of each component on the evolution of the wage gap between male and female workers, by activity sectors. The sum of the three components correspond to the effective value of the variation of the average monthly wage between men and women. It is noted, that to facilitate the graphic reading, the negative values indicate a decrease of discrimination while the positive values indicate an increase of wage discrimination.

Figure 2. Decomposition of the Evolution of the Average Monthly Wage Gap Between Male and Female Workers – National, Regional and Industrial Effect – by Region



Source: Self elaboration based on data collected in www.pordata.pt on June, the 7th, 2016

From the analysis of Figure 2, it can be concluded that, although slightly, for the generality of the regions as well as for the generality of the activity sectors, following the national trend increases the wage discrimination between genders. With the exception of the construction sector in the regions Norte, Centro, Lisboa and Alentejo, the national component increases the difference (in euros) in monthly incomes between men and women.

Structural and regional components are overwhelming, in several regions and activity sectors, to the evolution in the difference in incomes between men and women. The region of Madeira is the only one which impacts of national, structural and regional evolution are very similar, compensating between themselves (with the exception of primary sector).

In the sector which includes agriculture, animal production, hunt, forestry and fishery, the structural effect is fundamental to the wage discrimination decrease to women in the regions of Lisboa, Centro, Norte and Alentejo. In this sector, the region competitive effect contributes, also, to discrimination decrease. It is noted, in this last component, the regions of Madeira, Norte and Lisboa. In contrast, the discrimination wage decrease it is more than compensated by the increase of that discrimination, given the effect from the regions of Centro and Algarve, essentially.

Other sector where the structural and regional components are fundamental for the evolution of the income gap between genders, is the service sector. These two components are fundamental in Algarve (where both present a similar trend in the sense of the reduction of the wage differential but the regional component is preponderant), in the regions Centro and Área Metropolitana de Lisboa (where there is the same trend to the discrimination decrease, but where the structural component is decisive) and in the regions of Norte and Alentejo (in these two cases, the structural component influences positively the discrimination decrease, but it is more than compensated by the regional component which, jointly, with the national component compensate the positive structural effect).

When reviewing the activity groups composed by industry, construction, energy and water (secondary sector, in general), the structural component it is determinant in the discrimination wage increase between genders. With the exception of Algarve and Madeira where this sector is less representative, in every other regions the wage discriminations increases. The national effect, in these sectors, when it is most significant in terms of absolute values, leads to a discrimination decrease, which is not enough to compensate the negative effect generate from regions productive structure. The most significant exception it is referred to the analysis of the sector which includes only the manufacturing sector – the region Área Metropolitana da Lisboa presents a very positive regional effect. This finding was due mainly to the fact that in this region being located the main offices of such industries and, consequently, also being located there the activities essentially related with the management and not with the production of those industries.

Shift-share analysis, being an exploratory analysis and prominently descriptive, is not relieved from criticism. Several limitations can be appointed to the results previously presented. Have been described only the variation of the wage difference between genders, divided by three different components, without identifying the factors that determined a larger ou smaller competitiveness from a region compared to others. However, it should not be neglect the importance of the application of this methodology to analyse which components can explain different regional variations to a certain phenomenon, in this case, the discrimination gap the women are still subjected.

5. Conclusions

As main conclusion of this research has shown the persistence and the increase of the wage discrimination that affects the collective feminine, comparatively to masculine, in Portugal, between 2010 and 2013 – period of profound budgetary restrictions, restrictive public policies in the labour market and economic recession. Effectively, when we analyse the Portuguese territory, with a regional decomposition by NUTs II (six regions), and with resource to shift-share analysis, it concludes that:

- Nevertheless the activity sector considered, the difference between average wages among men and women would increase (although less substantially in euros) if the regions would follow the national trend;
- The region that reveals larger wage gaps is the region of Lisboa, with a differential of 4,5 euros/month, in contrast with the region of Algarve which presents less immunity to national trend of wage discrimination increase;
- Structural and regional components are decisive, in several regions and activity sectors, to the evolution of the dissimilarity in wages between men and women;
- When reviewing the group of activities composed by industry, construction, energy and water, the structural component it is determinant in the increase of the wage segregation between genders, expanding the wage differential (between genders) in all Portuguese regions, with the exception of Algarve;
- The services sector shows that structural and regional components are fundamentals to the evolution of the wage differential between male and female workers.

Being this an eminently exploratory analysis, which does not identify the factors that lead to the fact that different components have diverse impacts, in the different regions and activity sectors, it is fundamental to observe that this research it is the starting point to an extensive analysis of the wage discrimination between Portuguese male and female workers. The leads released in this investigation will be developed in future works and allows, henceforth, alert to scientific community, society in general and politicians, in particular, to necessity to look to this reality not only from a national of a point of view, but also, as a regional point of view.

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