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# Gender inequalities in job quality during the recession

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### Introduction

Recent studies acknowledge that job quality alludes to the level of objective and subjective wellbeing that workers express, feel and have in their jobs (Davoine et al., 2008; Drobnic and Guillén, 2011; Gallie et al., 2012; Guillén and Dahl, 2009; Kalleberg et al., 2007; Kalleberg, 2009). It is understood as an umbrella concept that links some core working life dimensions with worker wellbeing (Hauff and Kirchner, 2014). Such wellbeing is not limited to job characteristics; it has also effects on firms, on issues outside work (e.g., work-life balance) and on the workers' future prospects. This standpoint that interprets job quality from the worker's wellbeing perspective suggests a clearly multidimensional delimitation (European Commission, 2008), provided that it involves very broad working life explanatory foundations and consequences that go beyond what happens in the workplace. In this regard, literature has interpreted job quality as: "an overall state of satisfaction that includes objective aspects of material wellbeing, satisfactory relationships with the physical and social environment, and objectively perceived health; and subjective aspects of physical, psychological and social wellbeing" (Author 2 et al., 2016: 618). This definition integrates both a multidimensional (including jobs, workers and firms) and an interdisciplinary (micro and macroeconomic, psychological and sociological) approach (Brown et al., 2012; Findlay et al., 2013). Thus, job quality provides and promotes sustainable work and economic growth in a reinforced competitive environment (Gallie, 2007, Green, 2006).

The onset and deepening of the economic crisis has done nothing but increase the tension between job quantity and quality (Erhel *et al.*, 2012; Leschke *et al.*, 2012). In this context, most recent research has noted the emergence of new problems associated with the labour structural change (Osterman, 2013; Gallie, 2017), such as the existence of growing inequalities in job quality (Green *et al.*, 2013), especially the rise of gender inequalities (Leschke and Watt, 2014), and the different effects of gender-related equality policies depending on the socioeconomic position of women (Mandel, 2012).

Broadly speaking, gender equality is achieved when men and women enjoy the same rights and opportunities in every aspect of society, and when everyone's behaviours, aspirations and needs are equally valued and promoted, regardless of gender (Eurofound, 2013). Within this context, the literature shows that gender equality is linked to the attainment of higher rates of female employment and fewer gender-based salary gaps (Fortin, 2005), with a more equitable division of household chores (Fuwa, 2004) and less gender segregation in terms of education (Charles and Bradley, 2002). Low recognition of women's work reinforces gender inequalities through the emergence of various types of discrimination (Cloutier *et al.*, 2009), such as women's unequal access to better wages (Johansson *et al.*, 2005; Mandel and Semyonov, 2005), promotion possibilities (Raley *et al.*, 2006), or uneven distribution of domestic and professional work (Tremblay, 2012). Even in the most egalitarian societies, where there is less contrast in the attributes of jobs available to men and women, women do not have the same opportunities to participate and progress as their male counterparts (Mühlau, 2011).

Linking gender disparities with some individual indicators of job quality, the literature has begun to make significant contributions, especially when the effects of the recent economic crisis have begun to be analysed (Mustosmäki *et al.*, 2016). According to various job quality indicators, like training, promotion opportunities, working conditions, wages, and job autonomy or participation, notable gender gaps have been found (Gallie, 2013a; Mandel, 2012). Nevertheless, these previous studies have several limitations. First, many of the studies are restricted both to aggregate and cross-sectional data, or rather short time perspective due to a lack of available data, and thus provide limited possibilities to make conclusions about job quality trends before and during the recession. Second, most existing research only analyses some partial indicators of job quality, and there is little evidence about the multidimensional effects of job quality from a gender perspective. In this regard, the main contribution of the present research revolves around the use of a multi-dimensional and micro-level approach during the first years of the last economic crists. This way, we have been able to examine some gender gaps in the evolution of a whole set of explanatory dimensions of job quality during this concrete period of time.

With the aim of providing new empirical evidence on gender inequalities in job quality, this article analyses Spanish workers' perception of the quality of their jobs during the first period of the economic crisis (2008-2010). More specifically, we aim at identifying the main gender disparities in explaining job quality and analyse their trends during the first years of the economic crisis. For the analysis, we have used the microdata from the Spanish Quality of Working Life Survey (2010 was the last year for which data were available). This source of information provides very comprehensive data on the perceptions of working men and women, taking into consideration the multiple dimensions of their job and family situation. As a result of a broad set of explanatory dimensions that go beyond the workplace quality analysis, we took a multidimensional perspective (Martel and Dupuis, 2006; Muñoz de Bustillo *et al.*, 2011; Findlay *et al.*, 2013). Thus, we defined and built a composite indicator (with 5 dimensions and 31 subjective and objective indicators) to identify the determinants of job quality analyse how these explanatory dimensions have evolved across gender.

The analysis of gender-related job quality in Spain is relevant for several reasons. In recent years, the Spanish labour market has deteriorated ostensibly as a result of the economic crisis. That is, there has been a rapid rise in unemployment, which currently stands about 20% of the working-age population, and more than 800,000 jobs have been destroyed (Author 2 *et al.*, 2016). In addition, there has been a marked deterioration in working conditions, which particularly manifest themselves as wage cuts, work precariousness, and poorer work organization and promotion conditions (Economic and Social Council, 2017). However, the economic crisis has also led to lower work intensity, more opportunities to achieve work-life balance and an increase in social relations within firms. Also, the economic crisis has had severe negative influences on several indicators of women's professional progression: employment, wages, availability of public care services and access to economic and managerial power (Castaño, 2015). Thus, since the onset of the economic crisis and despite the drastic reduction in employment (more acute among men than among women), there is relatively little research tackling these gender differences and how they relate to multidimensionality of job quality at times of recession (Eurofound, 2013; European Commission, 2015).

#### Literature review and hypotheses

The fact that men obtain better jobs than women from formal employment is well documented in the literature: men's employment is more stable, their salaries are higher and they have more opportunities for advancement and access to lucrative jobs (Blau *et al.*, 2006; Petit and Hook, 2009; Stier, 2012). Going beyond wages, recent research has added a wide variety of job-related characteristics (e.g., job discretion, autonomy, flexibility, skills, physical and emotional conditions, working conditions, job security, industrial relations or work-life balance) in explaining job quality (Muñoz de Bustillo *et al.*, 2011; Findlay *et al.*, 2013). Using this conceptual framework, new research has focused on the existence of a broad range of gender disparities in job quality before and during the economic crisis (Erhel *et al.*, 2012; Leschke *et al.*, 2012; Eurofound, 2013).

#### Gender and job quality during the economic boom

A first relevant conclusion obtained by research on this topic has been that, although gender differences decreased during the economic boom, they continue to systematically favour men.

In a seminal work, Burchell *et al.* (2007) collected comparative data in 31 European countries and found gender inequalities in the majority of aspects related to working conditions. This study highlights inequalities in terms of occupation, activity sector, number of hours worked, wages, health risks in the workplace, unequal division of home care responsibilities, a shift towards part-time jobs for women and fewer possibilities to work the expected hours, for getting promotion or for attaining managerial positions. Using the same data, Smith *et al.* (2008) also observed that women had a higher probability of occupying jobs involving monotonous and straightforward tasks, whereas problem-solving and learning were characteristics of jobs mainly occupied by men. These circumstances reinforce the gap in the development of opportunities, with men having a higher propensity to have more job autonomy. When considering the occupational category, higher levels of autonomy are found among men working in white-collar jobs.

In the same line, and in a comparative analysis for a 26 European countries, Mühlau (2011) found significant advantages for men with regard to training, promotion opportunities, work complexity, autonomy and participation, co-worker support and hours worked outside normal working hours. In contrast, men perceived health risks in the workplace more intensely than women did. Similarly, women exercised less discretion when doing their job and had a lower propensity to influence an organization's decisions. In addition, Stier and Yaish (2014) using data from 31 countries confirmed that during the economic boom, the gender gap in job quality dimensions (such as work content, job security and time autonomy) narrowed. Nevertheless, men continued to enjoy significant advantages in achievement, time autonomy and emotional conditions (such as stress or arriving home exhausted).

On the other hand, the literature conducted before the economic crisis also shows that the intersection of gender and occupational position had a significant effect on the explanation of job quality (Green *et al.*, 2013). Female-dominated occupations (such as primary school teaching or nursing) were characterized by lower wages and fewer promotion opportunities than male-dominated occupations (such as engineering or computer science) (Levanon *et al.*, 2009; Padavic and Reskin, 2002). Similarly, women tended to have less access to managerial positions and had a higher presence in part-time jobs. These part time jobs were usually associated with poor job quality, although the results in terms of job satisfaction are inconclusive (Burchell *et al.*, 2007; Gallie *et al.*, 2016).

Stier and Yaish (2014) have also confirmed gender-related occupational segregation. By occupational category, white-collar workers (men and women) had higher job quality than blue-collar workers. Among white-collar workers, no significant gender differences in job

security or job content were observed. In contrast, emotional conditions were favourable to men. Among blue-collar workers, women reported lower levels of job security and job content quality. In a long run research carried out in Finland, Mustosmäki *et al.* (2016) highlight clear gender disparities in explaining job quality by occupational class. Regarding white-collar workers, and as opposed to 1977, in 2013 upper white-collar women have attained the same level of job quality as their male counterparts. However, the gender gap in job quality persist tightly between the blue and lower white-collar men and women. According to previous research on the persistence of gender gap in job quality in Scandinavian countries (Gallie, 2003, 2007), blue and lower white-collar men have better opportunities than their female counterparts for professional development and influence on their work and job training.

Beyond the European context, Cloutier *et al.* (2009) showed a narrowing of the gender gap in job quality in Quebec (Canada). This reduction of gender differences was particularly significant among childless employees and people with higher educational levels. However, significant differences in terms of income, skills and working hours for some employees, especially women with low educational levels, persisted. The results of a subsequent study comparing Quebec and the United Kingdom (Cloutier, 2012) confirmed this narrowing of the gender gap in both territories during the years of the economic boom.

This expectation of maintaining gender-related job inequalities despite economic boom constitutes the starting point of our research and as such is summarized in the first hypothesis: *H1*. Although gender disparities narrowed during the economic boom in Spain, they continue to systematically favour men.

# Gender inequalities in job quality during the recession

Within the context of gender inequalities in job quality during the economic crisis, literature suggests that the recession could have further widened some gender disparities (Eurofound, 2013; European Commission, 2015). In a multidimensional comparison across 27 European countries between years 2005 and 2010, Erhel *et al.* (2012) observed a slight deterioration in the job quality composite indicator, which was slightly more pronounced for women. Despite women experience better working conditions in terms of working time and higher work-life balance, they are more affected by involuntary non-standard (part-time and fixed-term) employment and, on average, receive lower wages than men. Comparing the gender results of a multidimensional job quality indicator across 27 European countries in 2010, Leschke *et al.* (2012) and Leschke and Watt (2014) obtained similar evidence. As a result of the deterioration

in wages and standard forms of employment, women have a lower overall job quality than men. Interestingly, the working conditions and job security (such as work intensity, physical working conditions and autonomy at work) and job security (subjective perception of likelihood of losing the job in the next 6 months), and work-life balance (workers who say that their working hours fit in well, or very well, with family/social commitments) and working time (share of employees working more than 48 hours a week and the average of the percentage ok workers on shift work, week-end work, evening work and night work) are favourable to women.

In a study of the Irish labour market, Russell *et al.* (2014) obtained also important new evidence about gender differences in job quality during the recession. First, since the start of the recession, there has been a degree of convergence between genders in part-time work (before it was much more common among women than among men). This phenomenon has been interpreted as a downgrading of working conditions rather than gender equalization. Second, men expressed greater fear of job loss than women did. Third, during the recession, the gender gap in wages widened, especially for female employees in the public sector. Fourth, greater gender inequality was observed in job control. Last, work pressure increased considerably for women although initially it was much lower for them. Unfortunately, the potential effects of occupations, and particularly how they are organized in each country, make it difficult to compare results across countries and draw practical conclusions (Stier and Yaish, 2014).

Recent research conducted in Spain shows that job quality improved during the first years of the economic recession (Anton *et al.*, 2015; Author 2 *et al.*, 2016). Despite this improvement, the fall in wages and the substantial increase in non-standard forms of employment would have driven gender inequalities. On the other hand, working conditions and job security, and work-life balance and working time would have been maintained in similar terms that before the recession (Leschke and Watt, 2014). However, some specific research based on large samples of Spanish workers also highlights the deterioration of women's working conditions and work organisation during the recession (Castaño, 2016; García-Mainar *et al.*, 2016) This literature has shown that women tend to congregate in the worst paid and precarious jobs, with involuntary part-time and in lower categories. In light of the arguments outlined above, it is expected that:

*H2*. Gender inequalities in the job quality increase during the recession, basically as a result of a deterioration in extrinsic rewards, work organisation and working conditions.

#### **Data and methods**

Understanding the factors determining gender-related job quality raises two particular difficulties. First, the approach to the concept requires a multidimensional perspective, given that it is not usually captured in a single variable. In fact, performing partial analyses of various dimensions of the variable is the most common approach observed in the revised literature. However, this type of partial analysis has the disadvantage of not taking a full snapshot of the explanatory determinants (Leschke and Watt, 2014), which leads to the second difficulty: the use of an econometric modelling. In other words, job quality can be interpreted as a latent, non-observable construct that requires the application of econometric techniques enabling the use of this type of not directly measurable variables. In the empirical literature, Structural Equation Modelling (SEM) analyses with latent variables have been frequently used in the literature to overcome this challenge (Author 2 *et al.*, 2016).

### Sample and descriptive statistics

The first step that needs to be taken to establish a structural equation model that explains gender-related job quality in Spain is to construct its indicators (Handel, 2005; Olsen *et al.*, 2010). We used microdata from the Quality of Working Life Survey (ECVT, as abbreviated in Spanish) for 2008 (first year of economic crisis) and 2010 (the latest available data). Data was collected in the final quarters of 2008 and 2010 by means of computer-assisted telephone interviews (CATI). The ECVT is a statistical operation conducted by the Government of Spain's Ministry of Employment and Social Security (2010) for the Spanish territory as a whole. The ECVT provides objective and subjective data about each employee's work situation and family environment, occupation or job characteristics, labor mobility, job satisfaction, work organization, collective bargaining, labor relations, working hours, rewards, training, job security and work-life balance.

Our study includes 5,381 and 4,925 employees (wage earners) in 2008 and 2010 (3,079 men and 2,302 women, and 2,719 men and 2,206 women, respectively) as computed in the ECVT. Table 1 shows the results for employees' socio-demographic and occupational gender-related characteristics.

#### INSERT TABLE 1 ABOUT HERE

#### Model and measures

In order to conduct of the afore-mentioned multidimensional approach to job quality, the following five dimensions were measured (Author 2 *et al.*, 2016): 1) intrinsic job quality; 2) work organisation and workplace relationships; 3) working conditions, work intensity, and health and safety at work; 4) extrinsic rewards; and 5) work-life balance. According to empirical literature (Erhel *et al.*, 2012; European Commission, 2008; Leschke and Watt, 2014), these five dimensions incorporate the 31 indicators of the data source used in the present research.

We used a two-stage reflective explanatory model contrasted with microdata from a validated instrument (Requena-Santos, 2000). The two-stage empirical estimation methodology was applied as follows: in the first stage, the causal relationships among 31 indicators and the 5 latent dimensions describing gender-related job quality were tested and, in the second stage, the causal relationships among the indicators constructed for those 5 dimensions (based on the coefficients from the first stage) and the latent construct of gender-related job quality were tested. Finally, after applying the coefficients obtained from the second stage, a gender-related job quality index was constructed comparing 2008 to 2010 (mean values for the total and the separate 5 dimensions).

This methodology involved the design and econometric testing of 36 empirical models: 30 models for the first stage (5 for men, 5 for women and 5 for all data in 2008 and 2010) and 6 for the second stage (1 for men, 1 for women and 1 for all data in 2008 and 2010). Figure 1 shows the empirical model, the 31 explanatory variables and the 5 dimensions (to identify the variables and dimensions see Tables 2, 3 and 4):

#### INSERT FIGURE 1 ABOUT HERE

#### Results

#### First stage SEM estimation

Tables 2 and 3 show the results (standardized coefficients and measurement errors) of the first stage of estimating (SEM with measurement errors) the determinants of gender-related job quality. Firstly, it should be noted that all the variables specified in the model were statistically significant (minimum at 90% confidence level). Secondly, the goodness-of-fit measurements for the 30 proposed models were highly satisfactory. Thus, the indices NFI, RFI, IFI, TLI and

CFI had very high values, approaching the optimal value of 1. The RMSEA values were less than 0.065, thus corroborating the validity of the estimated models (see Table 2).

### **INSERT TABLE 2 ABOUT HERE**

As a starting point, a comparison between men and women of the standardized coefficients obtained for 2008 show important gender-related differences. In the intrinsic job quality dimension, the coefficients of satisfaction with personal development and education for the attainment of a given job are higher for women. In contrast, in the work organization and workplace relationships dimension, the coefficients obtained indicate greater effects on job quality for men, particularly in the variables related to the level of monotony or routine, stress, teamwork, opportunities for promotion and decision-making. This behaviour, which is more favourable to men, is reproduced when considering the working conditions, work intensity, and health and safety at work dimension. In this respect, worthy of note are the differences obtained in the coefficients of the perception of risks in the workplace, health and safety at work, commuting time, and workspace conditions. In their perceptions of working conditions, men are more satisfied than women. In contrast, women show a higher satisfaction with the working day and leave entitlements than their male counterparts.

In the extrinsic rewards dimension, a pattern of results that is more favourable to men is repeated, particularly in the coefficients obtained for satisfaction with flexible working hours, wage, and job stability. Only satisfaction with firm-paid training is slightly more favourable to women. Lastly, in the work-life balance dimension, the results are mixed. The direct effects on job quality are more positive for women with regard to satisfaction with time devoted to children and time for personal life outside work, whereas satisfaction with personal life and partner's involvement in household chores are more favourable to men.

#### **INSERT TABLE 3 ABOUT HERE**

The unequal intra-gender starting point in 2008 and the differentiated explanatory dynamic between genders from 2008 to 2010 determine an explanatory itinerary of job quality in Spain that is clearly differentiated between men and women (see Table 3). A comparison between men and women of the results for 2010 suggests very important differences that, to a large extent, determine once again a higher effect on job quality in the coefficients for men. In the intrinsic job quality dimension, the coefficient of satisfaction with motivation is partially

compensated by a dynamic that is more favourable to men in the coefficients of satisfaction with personal development, education for the job and overall satisfaction with the job. In the work organization and workplace relationships dimension, the coefficients obtained clearly indicate higher effects on job quality for men in 2010, particularly in the variables related to satisfaction with promotion opportunities, autonomy, decision-making and level of stress. In this dimension, only the coefficient concerning relationships between workers and directors presents a behaviour that is slightly more favourable to women.

This pattern of results, which overall is more favourable to men, is repeated in the working conditions, work intensity and health and safety at work dimension. In this respect, worthy of note are the differences in the coefficients of the perception of risks in the workplace, satisfaction with leave entitlements, working day, and lighting and workspace conditions. In this dimension, only the coefficient of health and safety at work presents a behaviour that is slightly more favourable to women. In the extrinsic rewards dimension, a pattern of results that is more favourable to men is repeated, particularly in the coefficients obtained for satisfaction with flexible working hours, job stability, social benefits and experience in the job. In this dimension, only satisfaction with wage is slightly more favourable to the work-life balance dimension shows direct effects on job quality favouring women, due to the better behaviour of satisfaction with personal life outside work, partner's involvement in household chores, and time devoted to children.

#### Second stage SEM estimation

Table 4 shows the results of the second stage of estimating the determinants (direct effects) of gender-related job quality. It should be noted that all the variables specified in the model were statistically significant (all at 99% confidence level). Also, the goodness-of-fit measurements for the 6 proposed models were highly satisfactory (see Table 4).

# INSERT TABLE 4 ABOUT HERE

The standardized coefficients obtained for the indicators of the 5 dimensions in 2008 and in 2010 highlight important gender differences in the explanation of job quality. Firstly, it is important to draw attention to a starting point that was clearly unfavourable to women. For 2008, the coefficients obtained for 4 of the 5 job quality dimensions were favourable to men:

working conditions, work intensity and health and safety at work; work-life balance; extrinsic rewards, and intrinsic job quality. Only work organization and workplace relationships present a direct effect on job quality that is favourable to women.

Secondly, it is worth noting that the evolution of the explanatory coefficients in the job quality dimensions during the first years of the recession (between 2008 and 2010) was generally favourable to both women and men. The coefficients of 4 of the 5 explanatory dimensions evolved positively for women: working conditions, work intensity, and health and safety at work; extrinsic rewards; work organization and workplace relationships, and worklife balance. For 2010, only the intrinsic job quality dimension presents lower explanatory coefficients than those for 2008. Moreover, this dynamic is similar for both men and women. The coefficients of 3 of the 5 explanatory dimensions evolved positively for men: working conditions, work intensity, and health and safety at work; extrinsic rewards, and work organization and workplace relationships. The work-life balance dimension maintained practically the same coefficients as those in 2008 and the intrinsic job quality evolved unfavourably, as it did for women.

Third and lastly, it should be noted that, as a result of the clearly unequal starting point in 2008 and a similar evolution during the first years of the recession (from 2008 to 2010), the explanatory effect on job quality of the 5 dimensions thereof continued to be clearly biased in favour of men in 2010. The coefficients of 3 of the 5 explanatory dimensions of job quality continued to be favourable to men: working conditions, work intensity and health and safety at work; intrinsic job quality, and work-life balance. The extrinsic rewards dimension maintained practically the same differences as those found in 2008. Only the work organization and workplace relationships dimension evolved favourably for women during the first years of the recession.

# Gender-related job quality composite index

Finally, a gender-related job quality composite index was constructed and its mean values shown, comparing 2008 to 2010 (see Table 5). The mean value of this composite indicator was M = 44.8 points in 2008 (M = 43.9 for women and M = 45.9 for men) and M = 54.5 points in 2010 (M = 51.3 for women and M = 56.1 for men). The means obtained for the general indicator highlight the fact that the improvement in job quality during the first years of the recession can be mainly explained by the working conditions, work intensity, and health and safety at work dimension for both male and female workers

These aggregate results are the outcome of a dynamic that was clearly more favourable to men than it was to women. None of the 5 explanatory dimensions of job quality during the first years of the recession evolved more positively for women. The results obtained suggest that, at the start of the crisis (2008), 4 of the 5 explanatory dimensions of job quality were favourable to men. Only intrinsic job quality presented mean values favourable to women. The results obtained for 2010 suggest that, during the first years of the recession (from 2008 to 2010), the gender gap increased. All the explanatory dimensions of job quality were either favourable to men or remained equal for both genders.

#### **INSERT TABLE 5 ABOUT HERE**

In short, gender inequality in job quality increased during the first years of the recession. In line with predictions related to Hypothesis 1, although inequality already existed at the start of the crisis (2 points difference in the composite indicator of job quality in favour of men), this inequality increased during the first years of the recession and had more than doubled by 2010 (4.8 points difference in the composite indicator of job quality in favour of men). The results show that 4 of the 5 explanatory dimensions of job quality were responsible for this increase in gender inequality: intrinsic job quality (from 0.6 points difference in 2008 to 0.0 points difference in 2010); work organization and workplace relationships (from -1.2 points difference in 2008 to -1.5 points difference in 2010); working conditions, work intensity, and health and safety at work (from -1.0 points difference in 2008 to -1.4 points difference in 2010). These results are aligned with expectations of Hypothesis 2. However, the inequality in the work-life balance dimension remained stable over time (-0.3 points difference in 2008 and -0.3 points difference in 2010).

# **Conclusion and discussion**

The main contribution of this study is that it is based on disaggregated microdata obtained from large samples of Spanish working men and women. The multidimensional nature of gender gap in job quality goes beyond the analysis of psychological variables and incorporates social and economic variables (Martel and Dupuis, 2006; Muñoz de Bustillo *et al.*, 2011; Gallie, 2013a). Similarly, while most of the data obtained refer to subjective indicators of Spanish workers' opinions of the quality of their jobs, several objective indicators (such as wages, weekly working hours or physical working conditions) are also incorporated. This analytical

strategy is consistent with the literature reviewed in this study (Anton *et al.*, 2015; Hauff and Kirchner, 2014; Muñoz de Bustillo *et al.*, 2012).

In addition to these strengths, this study provides four main results. First, despite the economic crisis, job quality in Spain has considerably improved over the analysis period. Thus, the mean value of the composite indicator for it was M = 44.8 points in 2008 and M = 54.5 points in 2010. Second and in line with expectations, over time the improvement in job quality during the first years of the recession was more favourable to men than it was to women. Third and according to predictions, the gender differences in the explanation of job quality during the first years of the recession increased considerably in favour of men. Fourth and last corroborating our assumptions, this increase in gender difference in job quality in favour of men is explained by a worsening of 4 of the 5 considered explanatory dimensions thereof: intrinsic job quality; work organization and workplace relationships; working conditions, work intensity and health and safety at work; and extrinsic rewards. Interestingly, only inequality in the work-life balance dimension remained stable between 2008 and 2010.

In connection with the improvement in job quality during the economic crisis, the results are quite consistent with those obtained by other European studies (Morley, 2010; Pot, 2011). Particularly noteworthy are the results of recent studies on a set of European countries between 2005 and 2010 (Green and Mostafa, 2012, Green *et al.*, 2013). In the case of Spain, those studies suggests a slight increase in job quality between 2005 and 2010, linked to a decrease in work intensity, and clear improvements in physical and social environments and working time quality. In another study for a wide range of European countries (Esser and Olsen, 2012), the results for job quality put Spain in an intermediate position in terms of worker autonomy and job security. However, that study also indicates the importance of the economic cycle and the unemployment rate to perceptions of job security. Along similar lines, Leschke and Watt (2014) put job quality in Spain close to the mean average of the 27 European Union countries (at the time their study was conducted), with a stabilization of results between 2005 and 2010. Indeed, and in line with the results from the considered microdata, recent empirical literature confirms the need for a multidimensional approach as a result of a broad set of explanatory dimensions that go beyond workplace quality analysis (Leschke *et al.*, 2012).

Regarding the research on gender differences in the explanation of job quality, the results obtained are consistent with the available evidence. European literature has shown that the recession could have widened some gender inequalities (Eurofound 2013, European Commission 2015). As a result of a deterioration in wages, the involuntary increase in non-standard forms of employment (part-time and fixed-term), work pressure and subjective

insecurity, women have a lower job quality than men (Erhel *et al.*, 2012, Leschke and Watt, 2014; Russell *et al.*, 2014). In Spain, the general European trend would have been exacerbated by a substantial deterioration in wages and general working conditions and work organisation, which have particularly affected women (Castaño, 2015; Economic and Social Council, 2017; Leschke and Watt, 2014).

In terms of public policy on employment and gender equality, our study results suggest two important conclusions (Osterman and Chimienti, 2012). First, the importance of paying much greater attention to the working environment and social relation dimensions in public policies on gender-related employment. It is not simply a debate between job quantity and quality (Green and Mostafa, 2012). To overcome the economic crisis, the results obtained reveal that social relations, health and safety at work, working conditions, work organization, extrinsic rewards, and work-life balance are increasingly becoming the cornerstones on which to build jobs where working men and women are sufficiently trained, innovative, autonomous, committed and satisfied. Indeed, the Spanish economy should strengthen these foundations of job quality in order to transform its extensive economic growth model and to improve social wellbeing. In this context and as suggested by Karamessini's and Rubery's work (2013), further research on the relationship between austerity policies and the gender gap in employment seems to be particularly interesting for future research. The present research has not in-depth addressed this issue, given that our data did not allow it. Future research should therefore analyse which dimensions of job quality have been mostly affected by austerity policies and how they have different effects on men's and women's professional life.

Second, and in line with the latest research, public policy on gender equality should also address new problems associated with the accelerated changes at work (Gallie, 2017). In particular: 1) the different job quality problems between highly skilled and less skilled working men and women (Gallie, 2013b); 2) the link between the gender gap and occupations (Green *et al.*, 2013; Stier and Yaish, 2014; Ruuskanen *et al.*, 2016); 3) the need to consider the different institutional regimes and organized labour in order to overcome gender-related job inequalities (Cloutier, 2012; Holman, 2013); and 4) the need to explore differentiated approaches to reconciling work and family, in order to prevent that gender-related equality policies penalize highly skilled women while benefiting the less skilled (Mandel, 2012; Mustosmäki *et al.*, 2016).

Beyond conclusions for public policy, the present research also offers a set of practical implications for firms and organizations. In this sense, the need for firms in Spain to incorporate strategies and practices to reduce the gender gap seems to be particularly indispensable. The

experience with different economic crises suggests a significant deterioration in women's job quality. However, it also emphasizes that the recovery of this job quality must be based on a multi-dimensional approach that covers the whole of its explanatory dimensions, not only those regarding wages or conciliation. Taking advantage of the economic recovery, firms should guarantee higher-quality jobs sensitive to gender differences that incorporate specific dimensions (such as working conditions, work organisation or workplace relationships) to reduce existing gender gaps.

This study has a number of limitations, particularly in relation to the indicators and dimensions used in the analysis. Nevertheless, the availability of the microdata survey on a representative sample of working men and women in Spain for 2008 and 2010 revealed the highly suggestive idea of establishing multidimensional and gender-related determinants of job quality and, in particular, of studying the effects of the first years of the economic crisis (Findlay *et al.*, 2013). In this respect, and bearing in mind the importance of this type of analysis to the material and non-material outcomes of work, the availability of: 1) more detailed data for other countries and further specifications related to working men and women, especially in connection with current knowledge-based occupations; 2) other sources of data on gender-related job quality, chiefly to capture job tasks; and 3) new statistical methods for analysing causal relationships, particularly SEM-PLS, would allow new approaches to be taken and major improvements to be made. The preliminary nature of this study therefore suggests the need for future research on the issue of gender inequalities in job quality.

#### References

- Antón, J.I., Fernández-Macías, E. and Muñoz-De Bustillo, R. (2015), *Job quality in Europe in the first decade of the 21st century*, Working Paper No. 1509, Johannes Kepler University of Linz.
- Blau, F.D., Brinton, M.C. and Grusky, D.B. (2006), *The Declining Significance of Gender?*, Russell Sage, New York.
- Brown, A., Charlwood, A. and Spencer, D.A. (2012), "Not all that it might seem: Why job satisfaction is worth studying despite it being a poor summary measure of job quality", *Work, Employment and Society*, Vol. 26 No. 6, pp. 1007-1118.
- Burchell, B., Fagan, C., O'Brien, C. and Smith, M. (2007), *Gender and Working Conditions in the European Union*, European Foundation for the Improvement of Living and Working Conditions, Dublin.
- Castaño, C. (Ed.) (2015), Las mujeres en la Gran Recesión [Women in the great recession], Cátedra, Madrid.

- Charles, M. and Bradley, K. (2002), "Equal but separate? A cross-national study of sex segregation in higher education", *American Sociological Review*, Vol. 67 No. 4, pp. 573-599.
- Cloutier, L., Bernard, P. and Tremblay, D.G. (2009), "Job quality and gender inequality: Key changes in Quebec over the last decade", *Studies in Social Justice*, Vol. 3 No. 2, pp. 189-201.
- Cloutier, L. (2012), "Job quality in Quebec and the United Kingdom: Trends by sex and family status", *International Labour Review*, Vol. 151 No. 1/2, pp. 61-84.
- Davoine, L., Erhel, C. and Guergoat-Lariviere, M. (2008), "Monitoring quality in work: European employment strategy indicators and beyond", *International Labour Review*, Vol. 147, pp. 163-98.
- Author 2, Author 1 and Author 4 (2016)
- Drobnic, S. and Guillén, A. (2011), Work-life Balance in Europe: The role of Job Quality, Palgrave Macmillan, Houndmills.
- Economic and Social Council (2017), *La participación laboral de las mujeres en España* [*The labour participation of women in Spain*], Spanish Economic and Social Council, Madrid.
- Erhel, C., Guergoat-Lariviere, M., Leschke, J. and Watt, A. (2012), *Trends in Job Quality during the Great Recession: A comparative approach for the EU*, Document de Travail No. 161-1, Centre d'Études de l'Emploi, Paris.
- Esser, I. and Olsen, K.M. (2012), "Perceived job quality: Autonomy and job security within a multi-level framework", *European Sociological Review*, Vol. 28 No. 4, pp. 443-454.
- European Commission (2008), "Measuring the quality of employment in the EU", in European Commission (Ed), *Employment in Europe Report 2008*, European Commission, Luxembourg.
- European Commission (2015), *Report on the Equality between Women and Men*, European Commission, Luxembourg.
- European Foundation for the Improvement of Living and Working Conditions, Eurofound (2002), *Quality of Work and Employment in Europe: Issues and Challenges*, Publications Office of the European Union, Luxembourg.
- European Foundation for the Improvement of Living and Working Conditions, Eurofound (2013), Women, Men and Working Conditions in Europe. A Report based on the fifth European Working Conditions Survey, Publications Office of the European Union, Luxembourg.
- Findlay, P., Kalleberg, A.L. and Warhurst, C. (2013), "The challenge of job quality", *Human Relations*, Vol. 66 No. 4, pp. 441-451.
- Fortin, N.M. (2005), "Gender role attitudes and the labour-market outcomes of women across OECD countries", *Oxford Review of Economic Policy*, Vol. 21 No.3, pp. 416-438.
- Fuwa, M. (2004), "Macro-level gender inequality and the division of household labor in 22 countries", *American Sociological Review*, Vol. 69 No. 6, pp. 751-767.
- Gallie, D. (2003), "The quality of working life: is Scandinavia different?", *European Sociological Review*, Vol. 19 No 1, pp. 61-79.
- Gallie, D. (2007), *Employment Regimes and the Quality of Work*, Oxford University Press, Oxford.

- Gallie, D., Felstead, A. and Green, F. (2012), "Job preferences and the intrinsic quality of work: The changing attitudes of British employees 1992-2006", *Work, Employment and Society*, Vol. 26 No. 5, pp. 806-821.
- Gallie, D. (2013a), *Economic Crisis, Quality of Work & Social Integration: The European Experience*, Oxford University Press, Oxford.
- Gallie, D. (2013b), "Direct participation and the quality of work", *Human Relations*, Vol. 66 No. 4, pp. 453-473.
- Gallie, D., Gebel, M., Giesecke, J., Halldén, K., Van der Meer, P. and Wielers, R. (2016), "Quality of work and job satisfaction: Comparing female part-time work in four European countries", *International Review of Sociology*, Vol. 26 No. 3, pp. 457-481
- Gallie, D. (2017), "The quality of work in a changing labour market", Social Policy & Administration, Vol. 51 No. 2, pp. 226-243.
- García-Mainar, I., García-Martín, G. and Montuenga, V.M. (2016), "Gender differences in occupations, job attributes and job satisfaction", *Revista de Economía Aplicada*, Vol. 24 No. 71, pp. 39-67.
- Green, F. (2006), *Demanding Work. The Paradox of Job Quality in the Affluent Economy*, Princeton University Press, Princeton, N.J.
- Green, F. and Mostafa, T. (2012), *Trends in Job Quality in Europe*. A *Report based on the Fifth European Working Conditions Survey*, Publications Office of the European Union, Luxembourg.
- Green, F., Mostafa, T., Parent, A., Vermeylen, G., van Houten, G., Biletta, I. and Lyly-Yrjanainen, M. (2013), "Is job quality becoming more unequal?", *Industrial and Labor Relations Review*, Vol. 66 No. 4, pp. 753-784.
- Guillén, A. and Dahl, S.A. (2009), *Quality of Work in the European Union: Concept, Data and Debates from a Transnational Perspective*, P.I.E. Peter Lang, Brussels.
- Handel, M.J. (2005), "Trends in perceived job quality, 1989 to 1998", Work and Occupations, Vol. 32 No. 1, pp. 66-94.
- Hauff, S. and Kirchner, S. (2014), *Cross-national differences and trends in job quality. A literature review and research agenda*, Diskussionspapiere der Universität Hamburg No. 13/2014, Hamburg.
- Holman, D. (2013), "Job types and job quality in Europe", *Human Relations*, Vol. 66 No. 4, pp. 475-502.
- Johansson, M., Katz, K. and Nyman, H. (2005), "Wage differentials and gender discrimination", *Acta Sociologica*, Vol. 48 No. 4, pp. 341-364.
- Kalleberg, A.L., Reskin, B.F. and Hudson, K. (2007), "Bad jobs in America: Standard and nonstandard employment relations in job Quality in the United States", *American Sociological Review*, Vol. 65 No. 2, pp. 256-268.
- Kalleberg, A.L. (2009), "Precarious work, insecure workers: Employment relations in transition", *American Sociological Review*, Vol. 74 No. 1, pp. 1–22.
- Karamessini, M., Rubery, J. (2013), Women and austerity. The economic crisis and the future for gender equality, Routledge, New York.
- Leschke, J., Watt, A. and Finn, M. (2012), Job Quality in the Crisis. An Update of the Job Quality Index (JQI). Working Paper No. 2012/07, ETUI, Paris.

- Leschke, J. and Watt, A. (2014), "Challenges in constructing a multi-dimensional European job quality index", *Social Indicators Research*, Vol. 118 No. 1, pp. 1-31.
- Levanon, A., England, P. and Allison, P. (2009), "Occupational feminization and pay: assessing causal dynamics using 1950–2000 US Census data", *Social Forces*, Vol. 88 No. 2, pp. 865-892.
- Mandel, H. and Semyonov, M. (2005), "Family policies, wage structures, and gender gaps: Sources of earnings inequality in 20 countries", *American Sociological Review*, Vol. 70 No. 6, pp. 949-967.
- Mandel, H. (2012), "Winners and losers: The consequences of welfare state policy for gender wage inequality", *European Sociological Review*, Vol. 28 No. 2, pp. 241-262.
- Martel, J.P. and Dupuis, G. (2006), "Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument", *Social Indicators Research*, Vol. 77 No. 2, pp. 333-368.
- Ministry of Employment and Social Security (2010), *Encuesta de Calidad de Vida en el Trabajo (EVCT) 2010*, Government of Spain, Madrid.
- Morley, J. (2010), Fourth European Working Conditions Survey: Contribution to Policy Development, Eurofound, Dublin.
- Mühlau, P. (2011), "Gender inequality and job quality in Europe", *Management Revue*, Vol. 22 No. 2, pp. 114-131.
- Muñoz de Bustillo, R., Fernández, E., Esteve, F. and Antón, J. (2011), "E pluribus unum? A critical survey of job quality indicators", *Socio-Economic Review*, Vol. 9, pp. 447-475.
- Muñoz de Bustillo, R., Fernández, E., Esteve, F. and Antón, J. (2012), *Measuring more than Money: The Social Economics of Job Quality*, Edward Elgar, Cheltenham and Northampton, MA.
- Mustosmäki, A., Oinas, T. and Antilla, T. (2016), "Abating inequalities? Job quality at the intersection of class and gender in Finland 1977-2016", *Acta Sociologica* (DOI: 10.1177/0001699316657580).
- Olsen, K.M., Kalleberg, A.L. and Nesheim, T. (2010), "Perceived job quality in the United States, Great Britain, Norway and West Germany 1989-2005", *European Journal of Industrial Relations*, Vol. 16 No. 3, pp. 221-240.
- Osterman, P. (2013), "Introduction to the special issue on job quality: What does it mean and how much we think about it?", *Industrial and Labor Relations Review*, Vol. 66 No. 4, pp. 739-752.
- Osterman, P. and Chimienti, E. (2012), "The politics of job quality: A case study of weatherization", *Work and Occupations*, Vol. 39 No. 4, pp. 409-426.
- Padavic, I. and Reskin, B. (2002), *Women and Men at Work,* Pine Forge Press, Thousand Oaks, CA.
- Petit, B. and Hook, J.L. (2009), *Gendered Tradeoffs: Family, Social Policy, and Economic Inequality in Twenty-One Countries,* Russell Sage Foundation, New York, N.Y.
- Pot, F. (2011), "Workplace innovation for better jobs and performance", *International Journal of Productivity and Performance Management*, Vol. 60 No. 4, pp. 404-415.
- Raley, S.B., Mattingly, M.J. and Bianchi, S.M. (2006), "How dual are dual-income couples? Documenting change from 1970 to 2001", *Journal of Marriage and Family*, Vol. 68 No. 2, pp. 11-28.

- Requena-Santos, J. (2000), "Satisfacción, bienestar y calidad de vida en el trabajo [Satisfaction, welfare and quality of working life]", *Revista Española de Investigaciones Sociológicas*, Vol. 92, pp. 11-44.
- Russell, H., McGinnity, F. and Kingston, G. (2014), *Gender and the Quality of Work: From Boom to Recession*, Equality Authority and Economic and Social Research Institute, Dublin.
- Ruuskanen, P., Selander, K. and Anttila, T. (2016), "Third-sector job quality: evidence from Finland", *Employee Relations*, Vol. 38 No. 4, pp. 521-535.
- Smith, M., Burchell, B., Fagan, C. and O'Brien, C. (2008), "Job quality in Europe", *Industrial Relations Journal*, Vol. 39 No. 6, pp. 586–603.
- Stier, H. (2012), *Skill-Based Inequality in Job Quality: A Multilevel Framework*, Instituut voor Arbeids Studies Working Paper No 122, University of Amsterdam, Amsterdam.
- Stier, H. and Yaish, M. (2014), "Occupational segregation and gender inequality in job quality: A multi-level approach", *Work, Employment and Society*, Vol. 28 No. 2, pp. 225-246.
- Tremblay, D.G. (2012), *Conciliation emploi-famille et temps sociaux*, Presses de l'Université du Québec, Québec.

		2008			2010	
	Men	Women	All	Men	Women	All
Employees (thousands of employees)	3,079	2,302	5,381	2,719	2,206	4,925
Percentage of total employees	57.2%	42.8%	100.0%	55.2%	44.8%	100.0%
Age (average in years)	41.6	40.1	41.0	42.2	41.4	41.8
Education (percentage)						
Primary	21.5%	12.9%	17.9%	15.8%	10.7%	15.2%
Compulsory secondary	23.4%	17.1%	20.8%	22.9%	17.2%	20.9%
Lower vocational and technical training	10.0%	9.3%	9.7%	11.9%	11.1%	11.6%
Upper vocational and technical training	10.6%	10.5%	10.5%	12.3%	11.3%	11.7%
Upper secondary general	12.7%	13.0%	12.8%	12.8%	14.9%	13.4%
Higher education: medium degree	8.8%	17.1%	12.2%	9.3%	17.5%	12.2%
Higher education: superior degree	13.1%	20.0%	16.0%	14.9%	17.3%	15.3%
Sector (percentage)						
Agriculture	5.5%	1.4%	5.1%	3.4%	1.0%	3.0%
Industry	22.5%	9.5%	16.7%	22.9%	10.0%	17.1%
Construction	18.2%	2.1%	12.7%	14.5%	1.7%	8.7%
Services	53.8%	87.0%	65.5%	59.2%	87.3%	71.2%
Professional situation (nercentage)				\ V		
Public sector worker	20.2%	32.6%	25 4%	21.6%	31.1%	24 3%
Private sector worker	79.8%	67.4%	74.6%	78.4%	68.9%	75.7%
Contract type (percentage)						
Permanent	87 30%	77 2%	70.8%	80.5%	70.3%	70.0%
Temporary	17.7%	22.8%	20.2%	19.5%	20.7%	20.1%
Working time (percentage)						
Full time	0/120/	00.00/	88 20/	02.80/	80.00/	96 00/
Full-ullie Dout time	5.00	80.8%	88.3% 11.70/	93.8%	80.0% 20.0%	80.0%
ran-unie	5.8%	19.2%	H./%	0.2%	20.0%	14.0%

# **Table 1.** Comparison of ECVT employee characteristics by gender in Spain<sup>1</sup>. 2008 and 2010

1. All figures refer to weighted data. Valid perc Source: Compiled by the authors.

$\mathbf{I}$ <b>UDIC</b> $\mathbf{Z}$ , <b>D U U U U U U U U U U</b>	Table 2. Determinants	(direct effects) of	gender-characteristics in	job quality in Spain	(first stage)*. 2008
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	Men		Wom	en	All			
	Standardized	1	Standardized	1	Standardize	d		
Dimension/variable	coefficients	Errors	coefficients	Errors	coefficients	s Errors		
1. Intrinsic job quality (IJQ)	-	1.842***	-	1.960***	-	1.893***		
1. Worker's overall satisfaction (OVERSAT)	0.850***	$0.708^{***}$	$0.848^{***}$	0.767***	0.849***	0.734***		
2. Satisfaction with motivation level (MOTIV)	0.807 * * *	1.862***	0.816***	1.900***	0.812***	1.876***		
3. Satisfaction with personal development (PERDEV)	0.763***	1.540***	0.803***	1.510***	0.781***	1.532***		
4. Satisfaction with education for the job (JOBEDUC)	0.308***	9.932***	0.357***	10.873***	0.329***	10.368***		
2 Work organization and workplace relationships (WOWR	о -	1 160***	_	1 227***	_	1 195***		
5 Satisfaction with autonomy (AUTON)	0 483***	3 820***	0 505***	3 576***	0 495***	3 574***		
6 Satisfaction with superiors' assessment (SUPASS)	0.768***	1 999***	0.787***	1 917***	0.777***	2 566***		
7 Satisfaction with decision-making (DECMAK)	0.700	1.999	0.563***	1.917	0.573***	1 5/19***		
8 Level of teamwork (TEAMW)	0.107***	0.130***	0.058**	0.145***	0.084***	0.144***		
9. Satisfaction with opportunities for promotion (PPOMOP)	0.107	7 688***	0.000	8 951***	0.004	7 707***		
10 Degree of stress (STPESS)	0.448	8 966***	0.409	8.835***	0.127***	0 105***		
10. Degree of stress (STRESS)	-0.120***	0.900	-0.180****	0.035***	-0.137	9.105		
12. Deletionships among workers (DELWORKERS)	-0.281***	0.000****	-0.549****	9.080***	-0.515	0.011		
12. Relationships allong workers (RELWORKERS)	0.080****	2.774****	0.009	2.002***	0.072***	2.0/4****		
13. Relationships workers with directors (RBWORDIR)	0.407***	2.314****	0.410	2.390	0.410***	2.303****		
3. Working conditions, work intensity,								
health and safety at work (WCWIHS)	-	3.609***		1.623***	_	2.934***		
14. Level of workspace conditions (WSPACE)	-0.031*	109.531***	-0.059*	246.932***	-0.042*** '	753.964***		
15. Level of lighting conditions (LIGHTCON)	-0.087**	0.087***	-0.074**	0.081***	-0.081***	0.083***		
16. Commuting time (COMMUT)	-0.031*	110.772***	-0.072**	249.829***	-0.063***	761.558***		
17. Weekly working hours (WWORKH)	0.329***	3.968***	0.309***	4.846***	0.319***	4.531***		
18 Satisfaction with leave entitlements (LEAVEENT)	-0.122***	10.313***	-0.091***	8 934***	-0.112***	9.312***		
19. Satisfaction with working day (WORKDAY)	-0.178***	47.213***	-0.131***	66.021***	-0.154***	54.244***		
20 Health and safety at work (HEALTHSAF)	0.768***	2.155**	0 711***	2.914***	0.736***	2.782***		
21. Perception of risks in the workplace (RISKPER)	0.840***	1.500*	0.556***	3.619***	0.625***	3.284***		
r in the second s								
4. Extrinsic rewards (EXRW)	-	2.336***	-	2.322***	-	2.561***		
22. Satisfaction with wage (WAGE)	0.666***	2.932***	0.631***	3.503***	0.651***	2.963***		
23. Satisfaction with social benefits (SOCBENEF)	0.467***	7.763***	0.454***	7.551***	0.461***	7.547***		
24. Satisfaction with flexible working hours (FLEXWH)	0.350***	9.175***	0.289***	10.624***	0.319***	9.839***		
25. Satisfaction with job stability (JOBSTAB)	0.440***	5.276***	0.407***	6.035***	0.415***	5.659***		
26. Worker's years of experience (WOREXP)	0.138***	116.583***	0.153***	89.507***	0.149***	105.941***		
27. Satisfaction with firm training (FIRMTRAIN)	0.658***	5.480***	0.690***	5.782***	0.667***	5.714***		
		<b>- - - - - - - - - -</b>						
5. Work-life balance (WLB)	-	7.582***	-	7.755***	-	7.654***		
28. Satisfaction personal life (PERLIFE)	-0.096***	2.749***	-0.147***	3.521***	-0.121***	3.091***		
29. Satisfaction time devoted to children (DEVCHILD)	0.777***	4.323***	0.798***	3.991***	0.786***	4.188***		
30. Satisfaction partner's involvement in chores (PARTINV)	0.932***	1.581***	0.901***	2.290***	0.919***	1.888***		
31. Satisfaction time personal life outside work (LIFEOWORK	) 0.788***	4.638***	0.806***	4.174***	0.795***	4.447***		
Coodness of fit indian								
UO Marst NEL 0.006, DEL 0.021, UEb 0.007, TL 1.0.022, CEL	0.007. DMCE	1.0049						
IJQ Mell: NFI: 0.990; KFI: 0.981; IFI: 0.997; ILI: 0.983; CFI:	0.997; KNISE	A: 0.046						
WOWR Men: NFI: 0.968; KFI: 0.924; IFI: 0.971; ILI: 0.931; C	CEL 0.082	MSEA: 0.051	50					
WC W INS MEN: NFI: 0.980; KFI: 0.967; IFI: 0.982; ILI: 0.970	; CFI: 0.982;	KMSEA: 0.0	55					
EXRW Men: NFI: 0.979; RFI: 0.927; IFI: 0.982; ILI: 0.957; C WLB Men: NFI: 0.996; RFI: 0.987; IFI: 0.996; TLI: 0.989; CF	FI: 0.982; RN I: 0.996; RMS	ASEA: 0.043 SEA: 0.054						
HO Women: NEL: 0.008: DEL: 0.001: IEI: 0.000: TI I: 0.002: C		ISE A · 0 022						
WOWR Women: NFL: 0.961; RFI: 0.997; IFI: 0.999; ILI: 0.995; C.	7; CFI: 0.965	; RMSEA: 0.052	057					

WCWIHS Women: NFI: 0.993; RFI: 0.990; IFI: 0.997; TLI: 0.996; CFI: 0.997; RMSEA: 0.017 EXRW Women: NFI: 0.965; RFI: 0.852; IFI: 0.968; TLI: 0.866; CFI: 0.968; RMSEA: 0.062 WLB Women: NFI: 0.999; RFI: 0.998; IFI: 0.999; TLI: 0.997; CFI: 0.998; RMSEA: 0.005

IJQ Total: NFI: 0.998; RFI: 0.988; IFI: 0.998; TLI: 0.990; CFI: 0.998; RMSEA: 0.039 WOWR Total: NFI: 0.957; RFI: 0.898; IFI: 0.960; TLI: 0.905; CFI: 0.960; RMSEA: 0.049 WCWIHS Total: NFI: 0.976; RFI: 0.962; IFI: 0.977; TLI: 0.964; CFI: 0.977; RMSEA: 0.057 EXRW Total: NFI: 0.975; RFI: 0.911; IFI: 0.976; TLI: 0.917; CFI: 0.976; RMSEA: 0.049 WLB Total: NFI: 0.999; RFI: 0.996; IFI: 0.999; TLI: 0.997; CFI: 0.999; RMSEA: 0.029

\* Regression analysis: Structural equation modelling (SEM). Estimated coefficients: direct effects.

P-value: \*\*\* Significant at 99% confidence level; \*\* Significant at 95% confidence level; \* Significant at 90% confidence level.

Source: Compiled by the authors.

Table 3. Determinants (	(direct effects) or	f gender-characteristics in	iob quality in S	pain (first stage)*. 2010
Tuble C. Determinants (	(anove oneolog) o.	gender endracteristics m	job quanty mb	puin (inst stage) · 2010

	Men Women		All			
Dimonsion/variable	Standardized	Error	Standardized	Errora	Standardized	l Errors
Dimension/variable	coefficients	EII0IS	coefficients	EIIOIS	coefficients	EII0IS
		1 1 4 4 4 4 4 4		1 7 40 ****		1 750 ****
1. Intrinsic job quality (IJQ)	-	1./64***	-	1.743***	-	1./55***
1. WORKER'S OVERALI Satisfaction (OVERSAL)	0.778***	1.149***	0.773***	1.1//***	0.775***	1.104***
2. Satisfaction with personal development (DEDDEV)	0.821***	1.054***	0.800***	1.5/9***	0.838****	1.55/***
3. Satisfaction with personal development (PERDEV)	0.792***	1.308***	0.770***	1.383***	0.782***	1.403***
4. Satisfaction with education for the job (JOBEDUC)	0.300****	8.301****	0.289****	9.231****	0.296****	8.720****
2. Work organization and workplace relationships (WOWR	) -	1.371***	-	1.246***	-	1.311***
5. Satisfaction with autonomy (AUTON)	0.548***	3.193***	0.504***	3.653***	0.527***	3.406***
6. Satisfaction with superiors' assessment (SUPASS)	0.802***	1.658***	0.804***	1.605***	0.803***	1.629***
7. Satisfaction with decision-making (DECMAK)	0.567***	4.425***	0.531***	4.726***	0.550***	4.568***
8 Level of teamwork (TEAMW)	0.045***	0 149***	0.061*	0.156***	0.053***	0.152***
9 Satisfaction with opportunities for promotion (PROMOP)	0 541***	6 542***	0 475***	7 866***	0.509***	7 204***
10 Degree of stress (STRESS)	-0.135***	8 504***	-0.161***	8 391***	-0 149***	8 472***
11 Level of monotony or routine in tasks (MONOT)	-0.211***	8 80/***	_0 223***	8 800***	-0.217***	8 807***
12 Relationships among workers (RELWORKERS)	0.692***	2 /05***	0.674***	2 5 6 8 * * *	0.683***	2 533***
12. Relationships workers with directors (REWORDIP)	0.072	2.400	0.074	2.306	0.005	2.335
15. Relationships workers with directors (RD wORDIR)	0.414	2.575	0.430	2.375	0.425	2.375
3. Working conditions, work intensity,						
health and safety at work (WCWIHS)	-	1.288***		0.743***	<b>_</b>	1.019***
14 Level of workspace conditions (WSPACE)	0.539***	3 422***	0.506***	3.420***	0.525***	3 411***
15 Level of lighting conditions (LIGHTCON)	0.528***	3.006***	0.483***	2.703***	0.515***	2.985***
16 Commuting time (COMMUT)	-0.064***	0.092***	-0.070**	0.073***	-0.068***	0.084***
17 Weekly working hours (WWORKH)	-0 111***	3 487***	-0.100***	4 374***	-0.116***	3 893***
18 Satisfaction with leave entitlements (I FAVEENT)	0.563***	3 449***	0.408***	4 254***	0.493***	3 869***
19 Satisfaction with working day (WORKDAY)	0.521***	48 306***	0.381***	86 193***	0.455***	70 564***
20 Health and safety at work (HEALTHSAE)	0.575***	2 640***	0.643***	3 026***	0.593***	2 753***
21 Perception of risks in the workplace (RISKPER)	0.575	10.01/***	0.045	7 770***	-0 231***	9/82***
21. Tereption of fisks in the workplace (RISKI ER)	-0.177	10.014	-0.2.)+	1.110	-0.231	7.402
4. Extrinsic rewards (EXRW)	-	2.281***	_	1.896***	-	1.962***
22. Satisfaction with wage (WAGE)	0.665***	2.880***	0.715***	2.775***	0.681***	2.841***
23. Satisfaction with social benefits (SOCBENEF)	0.511***	7.294***	0.454***	7.667***	0.499***	7.357***
24. Satisfaction with flexible working hours (FLEXWH)	0.392***	7.592***	0.290***	9.224***	0.379***	8.107***
25. Satisfaction with job stability (JOBSTAB)	0.473***	4.519***	0.372***	5.205***	0.467***	4.721***
26. Worker's years of experience (WOREXP)	0.159*** 1	10.586***	0.110***	97.473***	0.129*** 1	02.569***
27. Satisfaction with firm training (FIRMTRAIN)	0.624***	4.910***	0.637***	5.134***	0.663***	4.806***
5. Work-life balance (WLB)	- <sup>1</sup>	10.017***	-	10.615***	-	10.299***
28. Satisfaction personal life (PERLIFE)	-0.102***	2.844***	-0.108***	3.244***	-0.104***	3.026***
29. Satisfaction time devoted to children (DEVCHILD)	0.827***	4.183***	0.844***	3.724***	0.834***	3.978***
30. Satisfaction partner's involvement in chores (PARTINV)	0.945***	1.444***	0.965***	0.959***	0.954***	1.227***
31. Satisfaction time personal life outside work (LIFEOWORK	) 0.854***	4.231***	0.875***	3.241***	0.863***	3.523***
Goodness-of-fit-indices						
UO Men: NEI: 0.000; REI: 0.008; IEI: 0.000; TI I: 0.000; CEI: 0	000 PMSE	A · 0.005				
WOWD Map: NEL: 0.075; DEL: 0.040; IEI: 0.079; TI I: 0.040; C	7.777, MINISEA	л. 0.000 ИSEA+ 0.044	5			
WCWIES Man. NEL 0 050, DEL 0.017, IEL 0.056, TL 0.021	- 11. U.770, KN • CEI: 0.066• 1	$\mathbf{MSEA}$ . 0.040	, //1			
EVDW Mon. NEL 0.000 DEL 0.060 JEL 0.002 TH 0.071 C	, CI'I. 0.900; I	$SEA \cdot 0.020$	+1			
WLB Men: NFI: 0.999 RFI: 0.908; IFI: 0.992; TLI: 0.999: CFI	: 0.9992; RMS	EA: 0.030				
	,					
IJQ Women; NFI: 0.995; RFI: 0.997; IFI: 0.996; TLI: 0.980; CI	FI: 0.996; RM	SEA: 0.051				
WOWD WOMAN NEL 0 070, DEL 0 051, IEL 0 081, TI L 0 05.	6. CEL 0.081.	DMCEAO	041			

WOWR Women: NFI: 0.979; RFI: 0.951; IFI: 0.981; TLI: 0.956; CFI: 0.981; RMSEA: 0.041 WCWIHS Women: NFI: 0.969; RFI: 0.939; IFI: 0.977; TLI: 0.955; CFI: 0.977; RMSEA: 0.035 EXRW Women: NFI: 0.984; RFI: 0.945; IFI: 0.989; TLI: 0.962; CFI: 0.989; RMSEA: 0.031 WLB Women: NFI: 0.999; RFI: 0.996; IFI: 0.999; TLI: 0.997; CFI: 0.999; RMSEA: 0.032

IJQ Total: NFI: 0.999; RFI: 0.993; IFI: 0.999; TLI: 0.995; CFI: 0.999; RMSEA: 0.025 WOWR Total: NFI: 0.979; RFI: 0.951; IFI: 0.981; TLI: 0.956; CFI: 0.981; RMSEA: 0.041 WCWIHS Total: NFI: 0.955; RFI: 0.910; IFI: 0.959; TLI: 0.917; CFI: 0.958; RMSEA: 0.046 EXRW Total: NFI: 0.983; RFI: 0.910; IFI: 0.984; TLI: 0.917; CFI: 0.984; RMSEA: 0.048 WLB Total: NFI: 0.999; RFI: 0.997; IFI: 0.999; TLI: 0.998; CFI: 0.999; RMSEA: 0.027

\* Regression analysis: Structural equation modelling (SEM). Estimated coefficients: direct effects.

P-value: \*\*\* Significant at 99% confidence level; \*\* Significant at 95% confidence level; \* Significant at 90% confidence level.

Source: Compiled by the authors.

Table 4. Determinants (direct effects) of gender-characteristics in job quality in Spain (second stage)\*. 2008 and 2010

	Men	I	Wome	en	All		
Dimension/variable	Standardized coefficients	Errors	Standardized coefficients	Errors	Standardized coefficients	l Errors	
Job Quality (JQ) 2008	-	17.730***	-	21.630***	-	19.001***	
1. Intrinsic job quality (IJQ)	0.936***	2.502***	0.931***	3.317***	0.932***	3.109***	
<ol> <li>Work organization and workplace relationships (WOWR)</li> <li>Working conditions, work intensity,</li> </ol>	0.817***	11.297***	0.831***	10.652***	0.829***	7.862***	
health and safety at work (WCWIHS)	0.511***	10.903***	0.432***	11.676***	0.481***	11.098***	
4. Extrinsic rewards (EXRW)	0.577***	16.829***	0.571***	18.229***	0.576***	17.655***	
5. Work-life balance (WLB)	-0.160***	57.148***	-0.200***	57.097***	-0.170***	57.280***	
Job Quality (JQ) 2010	-	15.397***	-	14.721***	-	15.238***	
1. Intrinsic job quality (IJQ)	0.886***	4.234***	0.843***	5.981***	0.871***	4.862***	
<ol> <li>Work organization and workplace relationships (WOWR)</li> <li>Working conditions, work intensity,</li> </ol>	0.850***	10.302***	0.872***	7.966***	0.857***	9.382***	
health and safety at work (WCWIHS)	0.622***	10.149***	0.550***	9.788***	0.578***	10.366***	
4. Extrinsic rewards (EXRW)	0.615***	17.520***	0.617***	13.668***	0.615***	16.699***	
5. Work-life balance (WLB)	-0.161***	76.939***	-0.191***	82.031***	-0.172***	79.675***	

Goodness-of-fit-indices

JQ 2008 Men: NFI: 0.989; RFI: 0.945; IFI: 0.990; TLI: 0.948; CFI: 0.990; RMSEA: 0.074 JQ 2008 Women: NFI: 0.989; RFI: 0.947; IFI: 0.990; TLI: 0.951; CFI: 0.990; RMSEA: 0.068 JQ 2008 Total: NFI: 0.998; RFI: 0.987; IFI: 0.999; TLI: 0.989; CFI: 0.999; RMSEA: 0.030

JQ 2010 Men: NFI: 0.987; RFI: 0.935; IFI: 0.988; TLI: 0.938; CFI: 0.988; RMSEA: 0.075 JQ 2010 Women: NFI: 0.987; RFI: 0.933; IFI: 0.988; TLI: 0.938; CFI: 0.988; RMSEA: 0.073 JQ 2010 Total: NFI: 0.996; RFI: 0.973; IFI: 0.997; TLI: 0.975; CFI: 0.997; RMSEA: 0.046

\* Regression analysis: Structural equation modelling (SEM). Estimated coefficients: direct effects.

P-value: \*\*\* Significant at 99% confidence level. Source: Compiled by the authors.

	2008						2010						
	Men		Women		All		Men		Women		А	.11	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Mean and standard devi	ation												
1. Intrinsic job quality	19.24	4.50	19.77	4.99	19.46	4.78	19.37	4.43	19.41	4.55	19.39	4.49	
2. Work organisation and workplace relationships	20.62	5.84	19.37	5.82	19.72	5.83	23.06	6.05	21.58	5.73	22.22	5.93	
3. Working conditions, wor intensity, health and safety	k	2.05	5.07	2.00	5 70	2.82	15 72	4.05	14.21	2.72	15.10	2.06	
at work	6.28	3.85	5.27	3.80	5.78	3.82	15.73	4.05	14.31	5.15	15.12	3.96	
4. Extrinsic rewards	15.62	5.02	14.68	5.20	15.35	5.15	17.50	5.29	15.15	4.70	16.73	4.94	
5. Work-life balance	6.71	7.66	6.35	7.71	6.47	7.69	9.63	8.89	9.33	9.23	9.42	9.02	
Job quality composite indicator	45.87	11.75	43.85	11.91	44.81	11.82	56.11	12.41	51.32	11.78	54.51	12.26	
Mean differences Women/Men 2008 Women/Men 2010													
1. Intrinsic job quality						0.6			0.0				
2. Work organisation and w	orkplace	relations	hips			-1.2			-1.5				
3. Working conditions, wor	k intensit	y, health	and safet	y at wor	k	-1.0			-1.4				
4. Extrinsic rewards						-0.9			-2.3				
5. Work-life balance					X	-0.3			-0.3				
Job quality composite indic Source: Compiled by the	ator e authors		$\rightarrow$			-2.0			-4.8				
8			>										

Table 5. Gender-characteristics in job quality composite indicator in Spain. 2008 and 2010



Figure 1. Two-stage model of the direct effects on gender-characteristics job quality in Spain