GENDER DIFFERENCES IN OCCUPATIONS, JOB ATTRIBUTES, AND JOB SATISFACTION*

INMACULADA GARCÍA-MAINAR
GUILLERMO GARCÍA-MARTÍN
VÍCTOR M. MONTUENGA
Universidad de Zaragoza

The purpose of this paper is to analyse gender differences in job satisfaction in Spain, considering the gender distribution across occupational categories. Based on a representative sample of Spanish employees from the Spanish Quality of Work Life Survey, we use an estimation procedure that controls for potential endogeneity, and find that greater job satisfaction of women is associated with women being happier working in occupations where they are the majority. However, when considering additional objective and self-perceived variables, gender differences in job satisfaction disappear and occupational variables turn non-significant. This result suggests that women tend to congregate in jobs with particular characteristics that are preferred by them, and negates the correlation between job satisfaction and gender distribution across occupations.

Key words: job satisfaction, gender differences, occupational choice.

JEL Classification: J16, J24, J28.

W hile women in the labour market are generally shown to be working in occupations with worse labour conditions, including lower wages, than those of men [Reskin (1993); Blau and Kahn (2000); Bayard *et al*. (2004); Shauman (2006)], it is not uncommon for women to declare greater job satisfaction than men. This result is known as "the paradox of the contented female worker" [Mueller and Wallace (1996); Phelan (1994)]. Five different hypotheses have been put forward as possible explanations of gender differences in job satisfaction [Mueller and Wallace (1996); Phelan (1994); Sousa-Poza and Sousa-Poza (2007)]. These are: the differential job-input hypothesis (differences in objective personal and job characteristics); the own-gender referents hypothesis (men and women

differ in the referents for comparison); the differential entitlement hypothesis (differences in expectations between men and women); the differential job values hypothesis (men and women value objective job characteristics differently); and the subjective rewards hypothesis (men and women differ in the perception of the same subjective aspects of the job).

These notions can be re-interpreted in two basic arguments: expectations and preferences. According to the former, women expect less from their jobs, and it is easier for them to fulfill "low" expectations [Clark (1997); Sousa-Poza and Sousa-Poza (2003, 2007); Long (2005); Lalive and Stutzer (2010)]. The latter admits different views: thus, gender essentialism [Diener *et al*. (1999); England (2010)] suggests that men and women are innately and fundamentally different in interests and skills. Alternatively, provided that each specific job comprises an array of characteristics or attributes, men and women may differ in their job characteristics, in their perception of those characteristics, or in their preferences for such characteristics. Thus, the lower earnings of women may be counterbalanced with certain objective and subjective job characteristics that may be preferred by women [Groot and Maasen van den Brink (1999); Sloane and Williams (2000)][1].

Against this background, certain authors have claimed that greater job satisfaction among women may be due to the happiness that comes from working with other women. Clark (1997) and Sloane and Williams (2000) were the first to provide evidence of women's job satisfaction increasing with the proportion of women in the workplace. Haile (2012) investigates this hypothesis, finding that greater diversity in the workplace is associated with lower job satisfaction. Donohue and Heywood (2004) observe that working in female occupations is associated with greater job satisfaction for women, a result that can be rationalised, for example, into gender identity models [Akerlof and Kranton (2000, 2010)]. These authors argue that the strength of women's attachment to traditional norms and stereotypes may enhance their preferences for specific occupations, in which eventually women become over-represented. Provided that certain occupations are traditionally identified as female, deviating from the expected behaviour may lead to reductions in the utility of women at work. An alternative explanation relies on the amenities existing in specific occupations, which may lead to women preferring to work in such occupations [Becker (1985); Bender *et al*. (2005)].

Whereas the level of gender occupational segregation has shown a downward trend in most developed countries during recent decades [Anker (1998); Costa (2000)], the increases observed in female employment in Spain have been accompanied by a steady increase in gender segregation [Otero and Gradín (2001); Cebrián and Moreno (2008)], so that Spain today is a country where gender differences in the distribution of employment across occupations is remarkable [European Commission (2009); Garcia-Mainar *et al*. (2015)]. The allocation of men/women into already masculinised/fe-

---

(1) There is a third explanation for the paradox. It relies on self-selection of women into employment, according to which only successful women remain in the labour market, whereas less satisfied women leave, much more frequently than men. This hypothesis is consistently rejected by empirical work [Clark (1997); Long (2005); Sloane and Williams (2000); Sousa-Poza and Sousa-Poza (2007)]. We analyse this argument below.

minised occupations may help in understanding this situation. In the case of women, they are basically concentrated in services-related occupations (more than 80% of female employment). The service sector is usually considered as offering more flexibility in the working day, allowing for greater compatibility of family responsibilities with paid work. It also allows for more interpersonal relationships, and possibly requires less physical effort. If working women choose occupations with certain preferred job attributes, then they may eventually reach a higher level of job satisfaction. Since women tend to report being more job-satisfied than men, it is important to investigate whether women prefer to work in female-dominated occupations, and which job attributes they consider the most desirable. A better understanding of the reasons behind workers occupational decisions is of great importance in designing policies that help workers to fit in with their preferences. The more job-satisfied the worker, the happier he/she will be in general life. This leads to a more productive result for the employer, and human resource management should be concerned about the job attributes workers value the most. Additionally, the result of our investigation may be of interest in the design of policy measures aimed at achieving a more egalitarian distribution of paid work, housework, and caring time between men and women.

The release in 1999 of the Spanish Quality of Work Life Survey (*Encuesta de Calidad de Vida en el Trabajo,* ECVT henceforth), produced by the Spanish Labour Ministry, has allowed researchers in Spain to investigate various aspects of employment and labour relations, using both objective and subjective information. This is the only Spanish survey with data on satisfaction, which simultaneously provides a high, 3-digit-level disaggregation of the definitions of occupational categories. Using pooled data from 2007 to 2010, the last four waves available, the aim of this paper is to examine "the paradox of the contented female worker" and, more importantly, the relationship between this paradox and gender differences in occupations, a topic that, to the best of our knowledge, has not previously been addressed in Spain. The case of Spain is especially appealing, for three reasons. First, job satisfaction is low compared to most other Western EU countries [Kristenssen and Johansson (2008)]. Second, gender differences in distribution across occupations are significant, from a comparative, international perspective (European Commission, 2009). Third, there is varied evidence of the paradox in this country. Although most authors have found statistically significant greater satisfaction for women [Gamero (2004); Dueñas *et al.* (2010); Kaiser (2007)], others have observed statistically non-significant differences [Sousa-Poza and Sousa-Poza (2000a)], or greater job satisfaction for men [Mora and Ferrer-i-Carbonell (2009)]. Ascertaining whether gender differences in occupations are, or are not, related to job satisfaction is important in assessing the possible influence of political interests in pursuing equal opportunities for men and women.

We extend the procedure followed in Bender *et al.* (2005), by regressing job satisfaction on a set of objective individual and job characteristics, and progressively adding to this basic specification the variables of gender occupational composition, and subsequently sets of objective variables capturing financial and job characteristics at work, as well as others denoting self-perceived valuation of certain job attributes, such as flexibility. In so doing, we obtain a greater range of job characteristics, beyond the usual work-life balance type questions. Our results show that the gender-job paradox

does indeed exist, in the basic specification, but disappears when we control for these other sets of characteristics. Thus, dummies capturing the share of women in a particular occupation are reduced in significance after including job attributes, and the female job-satisfaction relationship is modified. These results remain basically unchanged, even after controlling for the potential endogeneity of some of the regressors, such as worked hours or union membership, through joint simulated maximum likelihood on a three-equation system. We interpret this result as indicating that women choose female-dominated jobs because they provide preferred conditions.

1. LITERATURE REVIEW

The empirical evidence for job satisfaction differentials between men and women in Spain is varied, depending on the data used and/or the period analysed. One of the earliest references is the double work by Sousa-Poza and Sousa-Poza (2000a, 2000b), who find, with international data from the 1997 International Social Survey Programme, that Spain is the country, among 21 analysed, with the greatest difference between job satisfaction for men and women. In these studies, job satisfaction is measured on a seven-point-scale, with Spain being the only case in which the job satisfaction differential in favour of men is statistically significant, since in most other cases it is either not significant, or there is a sizeable difference in favour of women (e.g. in the UK, the US, and New Zealand). Using a bottom-up psychological model for estimating an ordered probit (which includes objective and subjective variables), the gender variable in Spain is found to be not statistically significant in explaining differences in job satisfaction[2]. The authors conclude that the gender gap in job satisfaction in Spain is basically due to a combination of poorer working conditions and women's perspectives.

With rough data from the 1999 ECVT, Gamero (2004) observes that job satisfaction is greater for men but that, when estimating an ordered probit with the gender variable as the unique regressor, it is not statistically significant. However, after controlling for observable variables, the gender variable is negative and significant, indicating that job satisfaction is greater for women. This author concludes that expectations and omitted variables may explain the 'contented women' paradox in Spain and that it is, therefore, necessary to control for these variables. Using later waves of the ECVT, 2001 to 2004, and focusing on contract types [Gamero (2007)], and nationality [Gamero (2010)], this author finds that gender is again significant, supporting the view of greater job satisfaction for women.

Following the same approach as Sousa-Poza and Sousa-Poza (2000a), with pooled cross-sectional data from the ECVT, waves 2001 to 2004, Álvarez-Llorente (2004) shows in an ordered probit analysis that women are more job-satisfied than men. Using simulations, this author finds that women obtain more satisfaction from interpersonal relationships within the firm, and from the delivery of financial aid from the firm. Kaiser (2007), using international data from the European Community

---

Household Panel, waves 1994 to 2001, where "overall" job satisfaction is measured on a six-point scale, and again with ordered-probit regression models, finds that the gender job paradox exists globally for the 14 countries analysed. When testing individually, in ten countries (including Spain), the hypothesis cannot be rejected. A different result is obtained by Mora and Ferrer-i-Carbonell (2009). With data from recent university graduates (year 2000) in a Spanish region (Catalonia), which provides a very homogenous database, they show that the gender variable in an ordered probit model is negative for certain domains of job satisfaction (women are less satisfied), and non-significant for other domains[3]. They conclude that this result is due to the less favourable working conditions of women.

Moving now to the relationship between gender differences in job satisfaction, and unequal gender occupational distribution, two arguments have traditionally been used. First, the existence of discrimination against women [Bergmann (1974); Glass (1990)]. However, if this was the case, it would be expected that women working in female occupations would report lower levels of job satisfaction than men. Second, rationality, by which women choose those occupations that either require a lower accumulation of human capital, in order to match their lower attachment to the labour market, or provide certain desirable amenities. Thus, if women's careers are expected to be more affected by family circumstances than those of men, they may decide to interrupt them more frequently or, alternatively, to seek jobs that allow then to combine work and family demands at a minimum cost [Becker (1985); Mincer and Polachek (1974)].

More recently, social identity theories appear to be more comprehensive in explaining gender segregation. So long as the social norm trends toward more women working outside the home, conflicts may arise with respect to those occupations where women work alongside men, or with respect to the degree of gender diversity at the workplace. Thus, at the workplace level, Alesina and La Ferrara (2000) show that individual utility from joining a group increases with the share of group members of one's own kind, and decreases with the share of a different kind (Haile, 2012). More generally, Akerlof and Kranton (2000) argue that individuals may suffer from losses in utility when working in occupations with which they do not "identify". In this framework, social norms, stereotypes, etc, may make individuals happier in occupations identified with their own gender, since deviating from the social category norms provokes disutility [Akerlof and Kranton (2010); Lalive and Stutzer (2010)]. Following this argument, many social scientists have argued that differences in norms tied to social identities help explain demographic differences in economic outcomes. Thus, Booth and Van Ours (2009) find that the gender identity hypothesis may support the finding that Australian part-time female workers are happier with their working hours than full-time working women.

Empirically, there is some evidence at the international level showing that the job satisfaction of women increases with the number of women in a particular workpla-

---

(3) This result is not new in the literature. When analysing, with British data, homogenous groups –the young, graduates, professionals– Clark (1997) finds that gender differences in job satisfaction disappear [for a similar result in Australia, see Long (2005)].

ce/occupation [Clark (1997); Sloane and Williams (2000); Rose (2005); Haile (2012) for the UK; Fields and Blum (1997); Donohue and Heywood (2004); Peccei and Lee (2005), for the US]. To the best of our knowledge, no other countries have been studied in this way. Our objective is to investigate the case of Spain by extending the procedure applied in Bender *et al*. (2005), which we take as our baseline.

2. DATA AND ESTIMATION STRATEGY

2.1. *The data and descriptive statistics*

The data used in this paper come from the ECVT, an on-going programme (since 1999) that focuses on employment relationships and, more importantly for our research, on the valuations and attitudes of employees towards their work. Simultaneously, it provides a high level of disaggregation at the occupational level. The survey addresses employees older than 16, living in households, as being representative of the total employed population, and covering a number of issues relating to working conditions, which allows us to control for a battery of individual and job attributes. In particular, we focus on those that have to do with: a) socio-demographic variables of employees, with special interest in work-family balance; b) job conditions and attitudes of employees towards work; and c) self-perceived job-quality of employees. Thus, it combines objective information on labour, family, and individual characteristics, with pure subjective information on satisfaction with various aspects of the job and the perception of job attributes.

Micro data are available from the Spanish Labour Ministry since 2001, with the exception of year 2005 when the survey was not carried out. The questionnaire differs throughout the period, with marked differences before and after year 2004. While we do look at the period 2001-04, to provide comparison with our own results and results from other studies of that period [Álvarez-Llorente (2004); Gamero (2007, 2010)], our focus is on the most recent period. Specifically, our sample is constructed from pooling the last four consecutive waves, from 2007 to 2010. In order to gain homogeneity across workers, we exclude employees in the public sector, and the self-employed, leaving us with a sample of 19,554 employees, of whom 7,942 (40.6%) are women and 11,612 (59.4%) are men, with these values being representative of the population shares.

Workers are asked a number of questions concerning different aspects of job satisfaction, from which we retain the general domain about job satisfaction at the current job. Specifically, the interviewees are asked to "*indicate the satisfaction degree in their current (main) job*", by rating –on an eleven-point scale– from 0 (*no satisfaction*) to 10 (*very high satisfaction*). General job-satisfaction for the pooled 2007-2010 period is rated at 7.30, with the average for men being 7.27, and that for women being 7.32. With this rough data, little support is offered for the gender/job-satisfaction paradox in Spain. However, there may be cross-gender differences in behavior in the characteristics determining job satisfaction, such that a more rigorous analysis must be carried out. Furthermore, average values evolved differently over time during the period under consideration. Figure A1 in the Appendix shows the evolution of average job satisfaction over time. During the 2001-04 period, values are consistently

higher for men than for women, as they are in 2006[4]; after that, women's rates on job satisfaction surpass those of men (in 2010, 7.409 as against 7.317)[5].

Table A1 in the Appendix reports the definitions for all variables included in the analysis and their sample means, first for the overall group, and then distinguishing between men and women. Comparing average values, women in the sample show higher levels of education than men, live in larger cities, and are less frequently the main income earner in the family. As regards job characteristics, women work fewer hours in the paid job (more often they are involved in part-time or in shorter working days) and have less access to on-the-job training. Thus, although women are more educated, it is not entirely surprising that they are, largely, in the lowest income ranges (less than 1,000 euro per month). Women also have lower tenure, are more often over-educated, and less often unionised. They are primarily allocated to service industries such as clerical, education, and health-related activities, with men working relatively more than women in industry and construction.

Table A2 in the Appendix shows the distribution of men and women in occupational categories, according to the share of women in each occupation. Data availability prevents us from using indicators of gender diversity at the workplace. Rather, we use measures of gender distribution across occupations. This latter view implies that, under the hypothesis of employees willing to work with other employees of the same sex, they can only try to meet their preferences when choosing occupations, but not when choosing the firm. In Spain, where the unemployment rate is currently close to 25%, the capacity to manoeuvre in choosing a workplace with low gender diversity is quite reduced, whereas the choice of a preferred occupational category is more likely. Shares are aggregated into 4 large groups: share lower than 25%; share between 25% and 49%; between 50% and 74%; and 75% or higher; whereas occupations are considered at the 3 digit CNO 1994 classification[6]. To investigate the association between job satisfaction and occupational gender diversity, Table A2 also reports the proportion of men and women in the corresponding group of occupational categories. In general, individuals declare being quite satisfied. Only a low proportion (between 15% and 20%) of respondents admits to a job satisfaction rate below 6. Therefore, we have grouped the responses into three categories: less satisfied (those with values in the survey between 0 and 6), satisfied (values of 7 and 8), and very satisfied (values of 9 and 10)[7]. Results seem to suggest that women's job satisfaction increases with the female share (see penultimate row), but differences

---

(4) Despite this, our results for this period (see below) and those from other Spanish studies [Álvarez-Llorente (2004), Gamero (2007, 2010)] also find that female job satisfaction is statistically greater than that of males, after controlling for individual and job-related characteristics.

(5) There were almost no differences between men and women in 2007 and 2008, whereas the average rate for women was (statistically) significantly higher than that of men in 2009 and 2010. Somewhat paradoxically, average job satisfaction rates increased from 2006 on, even when the scale shifted from a 1-10 range in period 2001-04 to a 0-10 range in period 2006-10.

(6) *CNO Clasificación Nacional de Ocupaciones* (National Classification of Occupations) is based on the 1988 ISCO classification, but they do not entirely coincide.

(7) Figure A2, also in the Appendix, shows that, for the total sample, and for both the men and women samples, the median values are close to 7, the modes are 8, and the mean values are around 7.3.

are not marked. A more robust analysis must be carried out in order to assess the relevance of the female share, for which econometric tools are needed. This is pursued in the next section, after describing the estimation strategy.

2.2. *The strategy of estimation*

Since job satisfaction is measured on a scale, we estimate an ordered probit model to assess the existence of the contented female worker paradox. We use a standard job satisfaction equation by regressing the index of job satisfaction on a large set of economic determinants, both objective and subjective, as shown in [1]

$$JS_{it} = \alpha + \lambda_t + \beta_0 X_{it} + \beta_1 HW_{it} + \gamma_0 UM_{it} + \varepsilon_{it} \qquad [1]$$

where the self-reported job satisfaction, *JS*, of individual *i*, in year *t* depends on the year dummies (λ_t), and a vector of individual socio-demographic and job characteristics (X_{it}), individual hours worked (HW_{it}), and union membership (UM_{it}).

It is possible, however, that results from this estimation may suffer from endogeneity, resulting in simultaneity or reverse causation bias. Thus, job satisfaction and hours of work may be bi-directionally related. Whereas working more or fewer hours may have an impact of job satisfaction, it is also possible that job satisfaction may influence hours worked, provided the employee has some capacity to manoeuvre in choosing the number of hours, the length of the working day, and the type of contract (full or part-time). The observed fact that union members are less satisfied than non-members [Hamermesh (1977); Borjas (1979)] may be due to unobserved heterogeneity, with those who experience lower satisfaction being more likely to join a union. Thus, being a union member per se may bear no relation to job satisfaction, once the self-sorting of workers has been considered [Bryson *et al*. (2004, 2010)]. In order to account for the likely endogeneity among the dependent variable of interest, job satisfaction, and these two explanatory variables, we can proceed in two ways. The first would involve the use of a standard Instrumental Variables (IV) estimation. This attempts to instrument hours worked and union membership in order to obtain consistent estimates through 2SLS or GMM. However, the treatment of endogeneity when the dependent variable is ordered is not straightforward. In this context, the two-step method can be viewed only as an approximation of the correct estimator [see e.g. Van de Ven and Van Praag (1981), and Bryson *et al*. (2004)]. A simple way to circumvent this is by assuming that the dependent variable is cardinal. The second alternative takes advantage of the simultaneous estimation of different equations by allowing the unobserved individual components of such equations to be jointly distributed. We follow both procedures in turn.

Regarding the first approach, recent analysis has produced evidence that assuming either ordinality or cardinality of happiness scores has little effect on the qualitative empirical results [Ferrer-i-Carbonell and Frijters (2004)][8]. Thus, we can assume that job satisfaction is cardinal, so that IV estimation can be carried out to control for endogeneity, and tests for exogeneity of the regressors and for the validity of instruments can be routinely used. To aid identification of the effects of interest, we for-

---

(8) As a result, OLS estimation is very often preferred to ordered probit or logit models because of the straightforward interpretation of the coefficients [Mackerron (2012)].

mulate a set of exclusion restrictions. We need to make assumptions about the variables that affect worked hours and union membership but, conditional on these, have no residual impact on job satisfaction. Specifically, we use the average number of hours worked according to industry-occupation-workday-gender-period as an instrument of the hours worked by an individual. The variable so constructed is expected to be very correlated with the actual number of hours worked, but there is no reason to think that this indirectly influences individual worker job satisfaction. (For the use of this type of instrument, see Cornelissen *et al*. (2011), and references therein). Regarding union membership, we have used a subjective variable indicating knowledge of employees about union activities. This is expected to be somewhat correlated with membership, but not at all to individual job satisfaction.

Specifically, the exclusion restrictions can be modelled as

$$HW_{it} = \alpha + \lambda_t + \delta_0\, Z_{it} + \delta_1\, \overline{HW}_{it} + \upsilon_{it} \qquad [2]$$

$$UM_{it} = \alpha + \lambda_t + \gamma_0\, Z_{it} + \gamma_1\, UA_{it} + \nu_{it} \qquad [3]$$

where Z_{it} is a vector of explanatory exogenous variables included in equation [1] and $\overline{HW}_{it}$, UA_{it} are the instruments. The fitted values for HW and UM obtained in these equations are introduced in the estimation of equation [1].

When considering that job satisfaction is discrete and ordered, the second approach consists of the joint estimation of the job satisfaction equation by an ordered probit, together with selection equations on union membership and on hours worked. The simultaneous estimation of the three equations [1] to [3] is included in the general class of multiple equations models with discrete endogenous variables [Heckman (1978, 1979)]. Following Roodman (2011), we model job satisfaction and potential endogenous regressors as a system of three equations, which is estimated on a simulated maximum likelihood method from multivariate normal distribution functions. This resembles the Geweke-Hajivassiliou-Keane (GHK) simulator. The joint modelling of the three equations allows for the error terms to be correlated across equations, and thus for any endogeneity in the modelled equations. The cross-equation correlations of estimated errors (ρ) perform as a test of the endogeneity of regressors. When ρ is significantly different from zero, exogeneity is rejected [for an application of the influence of union membership and coverage on job satisfaction, see Bryson *et al*. (2010)]. We prefer this latter approach to traditional IV estimation, since it takes into account the ordered nature of our dependent variables and, furthermore, the possible lack of strong or valid instruments. Thus, the endogeneity is corrected by way of the error correlation estimates [Roodman (2011)].

A second possible source of endogeneity is sample selection bias. Spanish women in general participate less than men in the labour market, which may lead to self-selection of women into employment, so that only successful women remain in the labour market, whereas less satisfied women leave. As mentioned above, this may be an additional explanation of their reporting higher job satisfaction than men. There, we have already noted this possibility, and discussed that work controlling for this selection bias found no supporting evidence [Clark (1997); Long (2005); Sloane and Williams (2000); Sousa-Poza and Sousa-Poza (2007)]. In our sample, only information on working women is available, so that we investigate selection bias

by looking at homogenous groups –by different characteristics such as age, educational level, and marital and parental statuses– and comparing between them. After considering several possibilities, we focus on the group of workers with a higher educational level. Data from the Spanish Labour Force Survey show that participation rates of men and women are roughly similar only for this population sub-group. In the rest of the cases, participation rates of men are much higher than those of women, so that selection bias may also be present (see Table A3 in the Appendix).

3. RESULTS OF THE ESTIMATION

Table 1 shows the results of estimating the relationship between each of the (observable) personal and job characteristics, and job satisfaction, for all employees. We suppress the ten estimated cut-points to save space. (Similarly, coefficients for year control are also not presented.) Model [1] presents ordered probit estimates of equation [1] without considering the bias associated with potential endogeneity. Thus, causality is not investigated and coefficients should be interpreted as only partial correlations. In this first approach, the contented gender paradox is not rejected for Spain, since the coefficient for males is statistically significant and negatively estimated. Age variables have the typical U shape, indicating that, in the early years, satisfaction declines and then increases[9]. Foreign workers are more satisfied, *ceteris paribus*, than native Spanish workers. As is usual in the literature [Clark and Oswald (1996); Sloane and Williams (2000); Verhofstadt *et al*. (2007)], higher education is associated with lower job satisfaction. Larger population-size cities are associated with lower job satisfaction. The family structure and the necessity of balancing family and work responsibilities are found to be important elements in shaping job satisfaction, save for the existence of elder dependents in the household.

Regarding work-related variables, working longer hours results in lower satisfaction [for a similar result in Australia, see Booth and Van Ours (2009)]. Higher income is positively associated with greater job satisfaction. Labour stability and training at work both lead to increases in job satisfaction [as observed in other countries; see Booth *et al*. (2002); Origo and Pagani (2009); Sousa-Poza and Sousa-Poza (2007)]. With respect to activity branches, workers are generally more satisfied in services. Job satisfaction decreases with tenure, while being in a first job is positively related to job satisfaction. As typically found elsewhere[10], over-education, firm size, and unionisation all reduce job satisfaction, whereas it increases when the employee has a good knowledge of the company organizational structure.

Model [2] offers estimates by 2SLS of equation [1] once hours worked and union membership are instrumented in equations [2] and [3], and their fitted values introduced in equation [1]. Here, as suggested by Ferrer-i-Carbonell and Frijters

(9) Clark *et al*. (1996) argue that the initial satisfaction is high, it declines later, since expectations are compared to that of the reference group, which cannot always be fulfiled and, finally, workers internalise their own situation, increasing levels of satisfaction.
(10) See Borjas (1979), Clark (1997), Allen and van der Velden (2001), Cabral Vieira (2005) and Long (2005). See Badillo-Amador and Vila (2013) for an analysis of the impact of skill and educational mismatches on job satisfaction for Spain.

Table 1: ESTIMATES OF JOB SATISFACTION. SEVERAL MODELS

Variables	Model (1)		Model (2)		Model (3)		Model (4)	
	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.
Gender (1 man, 0 woman)	-0.084***	0.02	-0.134***	0.03	-0.094***	0.02	-0.104***	0.02
Age	-0.042***	0.01	-0.065***	0.01	-0.049***	0.01	-0.049***	0.01
$Age^2/100$	0.056***	0.01	0.086***	0.01	0.066***	0.01	0.066***	0.01
Nationality	-0.161***	0.03	-0.242***	0.04	-0.153***	0.03	-0.168***	0.03
Education2	0.007	0.02	0.045	0.03	0.011	0.02	0.008	0.02
Education3	-0.084***	0.02	-0.078**	0.04	-0.070***	0.02	-0.068***	0.02
Population2	-0.046**	0.02	-0.081**	0.03	-0.051**	0.02	-0.048**	0.02
Population3	-0.108***	0.03	-0.181***	0.04	-0.112***	0.03	-0.107***	0.03
Population4	-0.096***	0.02	-0.157***	0.03	-0.096***	0.02	-0.097***	0.02
Population5	-0.274***	0.03	-0.424***	0.05	-0.276***	0.03	-0.267***	0.03
Caring	-0.032	0.03	-0.062	0.05	-0.037	0.03	-0.036	0.03
Children	0.035***	0.01	0.055***	0.02	0.037***	0.01	0.037***	0.01
Children 0-3	-0.066**	0.03	-0.100***	0.04	-0.066***	0.03	-0.070***	0.03
Single-earner	-0.027*	0.02	-0.060***	0.02	-0.029*	0.02	-0.030**	0.02
Hours worked	-0.011***	0.00	-0.011***	0.00	-0.005**	0.00	-0.005**	0.00
Income2	0.186***	0.03	0.234***	0.07	0.095**	0.04	0.101**	0.04
Income3	0.322***	0.04	0.463***	0.07	0.222***	0.05	0.226***	0.05
Income4	0.386***	0.04	0.557***	0.08	0.282***	0.05	0.285***	0.05
Income5	0.438***	0.04	0.628***	0.08	0.327***	0.05	0.329***	0.05
Income6	0.582***	0.05	0.823***	0.09	0.466***	0.06	0.471***	0.06
Permanent	0.144***	0.02	0.251***	0.03	0.146***	0.02	0.139***	0.02
Training	0.245***	0.02	0.387***	0.03	0.249***	0.02	0.241***	0.02
Industry	0.124***	0.04	0.253***	0.07	0.116***	0.04	0.122***	0.04
Construction	0.147***	0.05	0.278***	0.07	0.136***	0.05	0.144***	0.05
Services	0.225***	0.04	0.407***	0.07	0.218***	0.04	0.223***	0.04
Tenure	-0.005***	0.00	-0.007***	0.00	-0.005***	0.00	-0.005***	0.00
First_job	0.072***	0.02	0.106***	0.03	0.069***	0.02	0.070***	0.02
Overeducation	-0.542***	0.02	-0.888***	0.03	-0.545***	0.02	-0.542***	0.02
Union	-0.158***	0.02	-0.277***	0.07	-0.154***	0.02	-0.017	0.06
Organization	0.461***	0.02	0.685***	0.02	0.460***	0.02	0.458***	0.02
Firm_size2	-0.093***	0.02	-0.141***	0.03	-0.096***	0.02	-0.096***	0.02
Firm_size3	-0.099***	0.02	-0.141***	0.04	-0.103***	0.02	-0.102***	0.02
Firm_size4	-0.091***	0.02	-0.121***	0.03	-0.091***	0.02	-0.096***	0.02
Year dummies	Yes		Yes		Yes		Yes	
ρ_{12}					-0.036**	0.02	-0.034**	0.02
ρ_{13}							-0.071**	0.04
ρ_{23}							0.007	0.05
R^2			0.15					
Log likelihood	-35,536				-100,017		-107,298	
Number of observations			19,554					
PANEL B: Tests of endogeneity and of weak instruments								
Endogeneity: Wu-Hausman								
Ho: Worked hours exogenous	5.432 (p = 0.0198)							
Ho: Union membership exogenous	0.043 (p = 0.8356)							
Selection equations (test of weak instruments)								
Average worked hours	Partial-R^2 0.229 R^2 0.474							
Knowledge union	Partial-R^2 0.090 R^2 0.186							

Notes: * p < .1, ** p < .05, *** p < .01.

Source: Own elaboration.

(2004), job satisfaction is considered cardinal. Whereas the standard Wu-Hausman test rejects the exogeneity of hours worked, once it is confirmed that our instrument is not weak, results for membership are less clear (bottom part of Table 1). Instruments habitually used for union membership, such as establishment age and an indicator of whether a workplace belongs to a multi-establishment firm or is a stand-alone workplace [Bryson *et al.* (2010)], are not available in our data set. Following Cornelissen *et al.* (2011), we tried different instruments constructed as sample averages across different groups (industry, occupation, region, …), with the usual indicators (R^2, Shea's partial R^2) showing little evidence against the weakness of such instruments[11]. We also tried indicators of labour market conditions (unemployment or temporary rates), with a similar finding. Among the ample set of possible instruments we attempted, the one that produced the best results in terms of partial R^2 among the potentially endogenous membership variable and the instrument was the worker's evaluation of the knowledge of union activity. This subjective variable ranges between 0, no knowledge, and 10, full knowledge. Using this indicator as an instrument, exogeneity is non-rejected by standard tests and membership coefficient is still estimated to be negative and significant. While not completely assuring that union membership is exogenous, our best instrument does not reject this hypothesis, and we then consider this variable as exogenous. The estimated coefficient for working hours, once endogeneity is controlled for, is negatively estimated, confirming that working more hours reduces job satisfaction. Estimates of the rest of the coefficients resemble those of Model [1]. Regarding our variable of interest, gender is significant with negative sign, showing that men are less job-satisfied than women.

As a way of gaining robustness in our results we now take into account the ordered nature of job satisfaction and estimate the three-equation system by conditional simulated likelihood, resembling the GHK simulator [Roodman (2011)]. We do so by allowing for the possibility that unobserved heterogeneity in job satisfaction and membership may be correlated with the process by which individuals choose the number of hours worked. This model is not fully recursive, since hours worked and membership variables enter the equation explaining job satisfaction, but the reverse does not apply. The estimated results are provided in Models [3] and [4]. In Model [3] hours worked is taken as the only endogenous variable, as suggested by the IV-2SLS estimation, while Model [4] allows for endogeneity of union membership as well. Hours worked stands as a significant determinant of job satisfaction, with the estimated correlation between the error terms of job satisfaction and hours worked equation being statistically significant, showing a negative sign. The significance of ρ confirms the endogeneity of hours worked, whereas the negative sign indicates that unaccounted factors, that tend to increase the numbers of hours worked, also tend to reduce job satisfaction. Regarding union membership, a similar finding is observed in Model [4]. The estimated correlation between the error terms of the job satisfaction and membership equations is statistically significant and negative, showing that unobserved characteristics favouring union membership lead to lower job satisfaction. Therefore, and contrary to the IV estimation, the endogeneity of the membership variable cannot be

---

(11) These measures of the goodness of fit are obtained from the first-stage regressions of potential endogenous variables on the set of exogenous and instruments; equations [2] and [3].

rejected. Once this is controlled for, the membership variable becomes non-significant, revealing the absence of a causal link between being a union member and lower job satisfaction (this result is also observed by Bryson *et al.*, 2004, for the UK). Hours worked, once endogeneity is controlled for, is still negatively correlated with job satisfaction, indicating that, as the number of hours worked increases, individual worker job satisfaction is reduced, with declining significance. The rest of the estimated coefficients maintain the same character as in Model [1]. In particular, the gender variable is statistically significant and estimated with negative sign, confirming again that men are less satisfied than women. Finally, there is no unaccounted-for correlation between the errors of the hours worked and membership equations, since the ρ is not statistically significant, so that they are not jointly determined.

When comparing the estimated coefficients from these four models, we find that the differences are small. Specifically, irrespective of controlling, or not, for endogeneity, the gender variable is consistently found to be significant and with negative sign. We therefore have confidence in the robustness of our results and, in the rest of the paper, our analysis is carried out by jointly estimating the system of three equations, considering worked hours and union membership to be endogenous.

Table 2 first presents the coefficients of the job satisfaction equation in the joint estimation, distinguishing by gender. Differences are few (see columns 1 and 2). Higher education is associated with low job satisfaction only in the case of men. Caring tasks are significant only in the case of women, with a negative sign for elder caring. The number of worked hours is also found to be statistically significant only in the case of women, as is being the sole earner in the couple. In both cases, the sign is negative. The coefficients estimated for higher levels of income are larger in the male sample. The last column reports estimates when considering only those individuals with higher studies. As mentioned above, we thus expect to reduce any selectivity bias from self-selection of women into employment. While the estimated coefficients of the remaining variables show certain differences with the results in our basic Model [4], in Table 1[12], the gender variable is still estimated negatively and is significant at the 1% level. Therefore, provided that selection into employment should be attenuated when considering only this group of workers, we can consider our results to be robust against selectivity bias.

We now investigate the robustness of the gender/job satisfaction paradox when adding different sets of variables. In the following tables, the estimated coefficients of the basic specification are not shown, to save space. They generally remain unchanged when adding new sets of variables, with respect to those presented in Tables 1 and 2. We begin by including dummy variables controlling for female distribution across occupations, with results reported in Table 3. In the overall sample, when the proportion of women exceeds 50%, satisfaction increases, even though these dummy variables are only statistically significant when the share is greater than 75% (as happens in the sample of those who hold university studies). In the female subsample, both these dummy variables are statistically significant, whereas in the male subsample, they are not. The gender variable, although still negative, becomes statistically non-significant.

---

(12) Medium population size and working in a first job are, in this case, non-significant.

Table 2: SIMULATED MLE ESTIMATES OF JOB SATISFACTION BY GROUPS

Variables	Men Coef.	St. error.	Women Coef.	St. error.	University studies Coef.	St. error.
Gender (1 man, 0 woman)					-0.118***	0.04
Age	-0.041***	0.01	-0.043***	0.01	-0.082***	0.01
$Age^2/100$	0.053***	0.01	0.063***	0.01	0.105***	0.02
Nationality	-0.157***	0.04	-0.175***	0.04	-0.479***	0.06
Education2	0.001	0.02	0.034	0.03		
Education3	-0.089***	0.03	0.010	0.04		
Population2	-0.031	0.03	-0.054	0.04	-0.063	0.06
Population3	-0.085**	0.04	-0.126***	0.04	-0.062	0.06
Population4	-0.085***	0.03	-0.096***	0.03	-0.074	0.05
Population5	-0.254***	0.04	-0.266***	0.05	-0.193***	0.07
Caring	-0.001	0.04	-0.095*	0.05	-0.054	0.08
Children	0.017	0.01	0.063***	0.02	0.053**	0.02
Children 0-3	-0.058*	0.03	-0.085*	0.04	0.078	0.06
Single-earner	-0.018	0.02	-0.051**	0.03	0.011	0.04
Hours worked	0.002	0.00	-0.005**	0.00	-0.008	0.00
Income2	0.088	0.08	0.133***	0.05	0.143	0.12
Income3	0.272***	0.08	0.184***	0.06	0.198	0.13
Income4	0.323***	0.09	0.225***	0.06	0.303**	0.13
Income5	0.388***	0.09	0.203***	0.08	0.316**	0.14
Income6	0.549***	0.10	0.258***	0.09	0.457***	0.15
Permanent	0.155***	0.03	0.113***	0.03	0.102**	0.05
Training	0.228***	0.02	0.272***	0.03	0.286***	0.04
Industry	0.062	0.05	0.315***	0.09	0.184	0.16
Construction	0.078	0.05	0.347***	0.11	0.136	0.17
Services	0.162***	0.05	0.428***	0.08	0.249	0.16
Tenure	-0.005***	0.00	-0.007***	0.00	-0.007**	0.00
First_job	0.071***	0.03	0.083***	0.03	0.063	0.04
Overeducation	-0.573***	0.03	-0.510***	0.03	-0.648***	0.04
Union	-0.036	0.07	-0.153	0.12	0.178	0.16
Organization	0.450***	0.02	0.473***	0.02	0.444***	0.04
Firm_size2	-0.072***	0.03	-0.116***	0.03	-0.147***	0.05
Firm_size3	-0.087***	0.03	-0.103***	0.04	-0.101*	0.06
Firm_size4	-0.068***	0.03	-0.106***	0.03	-0.170***	0.05
Year dummies	Yes		Yes		Yes	
ρ_{12}	-0.097***	0.03	-0.038*	0.02	-0.056*	0.03
ρ_{13}	-0.047	0.04	-0.031	0.07	-0.174**	0.09
ρ_{23}	0.016	0.05	0.126***	0.05	0.022	0.07
Log likelihood	-63,560		-43,598		-20,286	
Number of observations	11,612		7,942		3,832	

* $p < .1$, ** $p < .05$, *** $p < .01$.

Source: Own elaboration.

Table 3: SIMULATED MLE ESTIMATES OF JOB SATISFACTION WITH FEMALE SHARES

Variables	Overall		Men		Women		University studies	
	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.
Gender (1 man, 0 woman)	-0.083	0.07					-0.094	0.07
Women 25-49%	0.001	0.02	0.027	0.03	-0.235	0.44	0.009	0.05
Women 50-74%	0.023*	0.01	0.010	0.03	0.313***	0.07	0.066*	0.04
Women 75-100%	0.081***	0.03	0.078	0.05	0.012***	0.00	0.092**	0.05
ρ_{12}	-0.037**	0.02	-0.072**	0.03	-0.244***	0.02	-0.057*	0.03
ρ_{13}	-0.069*	0.04	-0.054	0.04	-0.661***	0.18	-0.171*	0.09
ρ_{23}	0.006	0.05	0.006	0.06	0.265***	0.04	0.024	0.07
Log likelihood	-107,293		-63,558		-42,944		-20,285	
Number of observations	19,554		11,612		7,942		3,832	

Notes: All regressors in Table 1 and 2 are included.

p < .1, ** p < .05, *** p < .01.

Source: Own elaboration.

All in all, our results suggest that women are more satisfied at work as the female share increases. An important consequence of the inclusion of these variables is that the coefficient of the gender variable reduces its magnitude and is no longer individually statistically significant, eliminating the contented female worker paradox. The immediate conclusion, therefore, would be that women are happier than men because they work in occupations that are typically female-dominated. It therefore remains to us to provide some rationale for this result. We investigate whether women join occupations with certain characteristics that are most preferred by them. In this view, the share of women would be interpreted as being a proxy for those job characteristics that capture flexibility, or some other aspects, inducing more satisfaction in women. If, by contrast, the inclusion of all these variables leaves the female share as significant, then we can consider other alternatives, among which the theories of social identity would appear as a good candidate.

To represent these job characteristics, we use a range of variables, including objective variables capturing financial aid or benefits at work, and others, such as supervision tasks, teamwork, or being covered by a union contract, along with several subjective variables reflecting the self-perception of certain job attributes, and the provision of family-friendly flexibility policies. Controlling for these variables makes it possible to take into account differences in objective job characteristics, as well as differences in the valuation of other working conditions. These sets of variables, defined in Table A1, are added in turn to the specification estimated in Table 3, while keeping the women's shares, with results presented in Table 4. The first block of Table 4 shows estimates when variables of financial aid/benefits are included. The gender variable remains insignificant. Compared to Table 3, the variables capturing female share now become non-significant, whereas most of the newly added variables are statistically significant. Financial aid in training, transport, and health increases job satisfaction in all samples, with benefits for housing leading to greater job satisfaction only for females, although only at the 10% significance level. Overall, financial aid helps to stimulate job satisfaction, with women's share dummies being insignificant [for a study of the impact of fringe benefits on job satisfaction, see Artz (2010)].

Table 4: SIMULATED MLE ESTIMATES OF JOB SATISFACTION
WITH FEMALE SHARES AND ADDITIONAL VARIABLES

Variables	Overall		Men		Women		University studies	
	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.
Gender	-0.082	0.08					-0.094	0.07
Aid_House	0.029	0.04	-0.011	0.04	0.116*	0.07	0.088	0.06
Aid_Training	0.141***	0.02	0.131***	0.03	0.161***	0.03	0.147***	0.04
Aid_Transport	0.133***	0.02	0.154***	0.02	0.090***	0.03	0.120***	0.04
Aid_Health	0.143***	0.03	0.145***	0.03	0.146***	0.04	0.124***	0.05
Women 25-49%	0.001	0.02	0.033	0.03	-0.029	0.05	0.006	0.05
Women 50-74%	0.030	0.02	0.014	0.04	0.038	0.05	0.069	0.05
Women 75-100%	0.085	0.06	0.079	0.06	0.066	0.05	0.106	0.08
ρ_{12}	-0.036**	0.02	-0.106***	0.03	-0.021	0.020	-0.052	0.03
ρ_{13}	-0.033	0.04	-0.008	0.04	0.001	0.08	-0.142	0.09
ρ_{23}	0.007	0.05	0.023	0.05	0.003	0.16	0.026	0.07
Log likelihood	-107,194		-63,492		-43,562		-20,261	
Number of observations	19,554		11,612		7,942		3,832	
Gender	-0.077	0.10					-0.093*	0.05
Subordinate	0.041*	0.02	0.044*	0.03	0.798***	0.28	0.019	0.04
Physical effort	-0.106***	0.02	-0.097***	0.02	-0.032	0.04	-0.051	0.04
Risk	-0.166***	0.02	-0.164***	0.02	-0.045	0.05	-0.201***	0.04
Teamwork	0.093***	0.02	0.073***	0.03	-0.517***	0.05	-0.027	0.06
Agreement	-0.100***	0.02	-0.059***	0.02	-0.225***	0.04	-0.118***	0.04
Women 25-49%	-0.044*	0.02	-0.018	0.03	-0.089	0.08	0.001	0.1
Women 50-74%	-0.032	002	-0.044	0.03	0.309	0.23	0.044	0.05
Women 75-100%	0.060	0.05	0.046	0.05	0.447*	0.24	0.104*	0.06
ρ_{12}	-0.043***	0.02	-0.045*	0.03	-0.041	0.03	-0.057*	0.03
ρ_{13}	-0.137***	0.04	-0.092**	0.04	-0.665**	0.32	-0.207**	0.09
ρ_{23}	0.005	0.05	0.008	0.05	-0.189***	0.03	0.024	0.07
Log likelihood	-107,170		-63,501		-43,026		-20,263	
Number of observations	19,554		11,612		7,942		3,832	
Gender	-0.084	0.06					-0.110	0.08
Easy days off	0.037***	0.00	0.032***	0.00	0.044***	0.00	0.042**	0.01
Women 25-49%	0.001	0.02	0.027	0.03	0.007	0.05	-0.001	0.01
Women 50-74%	0.027	0.02	0.002	0.03	0.056	0.05	0.091	0.07
Women 75-100%	0.076	0.05	0.084	0.05	0.075	0.05	0.081	0.07
ρ_{12}	-0.035**	0.02	-0.109**	0.03	-0.028	0.02	-0.055	0.04
ρ_{13}	-0.055	0.04	-0.051	0.04	0.036	0.08	-0.153*	0.09
ρ_{23}	0.007	0.05	0.020	0.05	0.086	0.05	0.031	0.07
Log likelihood	-104,703		-62,245		-42,322		-19,854	
Number of observations	18,314		10,973		7,341		3,608	

Notes: All regressors in Table 1 and 2 are included.

* p < .1, ** p < .05, *** p < .01.

Source: Own elaboration.

A second set of objective and subjective variables are now included, rather than those capturing benefits, with results appearing in the second block of Table 4. As before, and relative to results in Table 3, the gender and female share variables reduce their magnitude and are not statistically significant in almost all of the cases, while the new variables have different impacts by gender on job satisfaction. In the overall sample, being covered by a collective agreement, or having a high-risk job, or one that requires physical effort, reduces satisfaction at work, whereas working in teams increases it. The presence of subordinates also augments job satisfaction, but this is only marginally significant. By gender, having subordinates, working in teams, and holding a less risky job are all positively related to greater male job satisfaction, with female job satisfaction responding negatively to working in teams and being covered by a collective agreement, and positively to having subordinates. Focusing on the subsample of workers with university studies, the most outstanding result is that the gender variable is close to being significant at the 10% level. The coefficient is estimated with negative sign, which would indicate that, once an ample set of characteristics are controlled for (including the female share in a given occupation), women are marginally more satisfied than men. As argued above, in this subsample, selection bias is expected to be mitigated, so that self-selectivity of women into employment cannot be an explanation for the contented working women paradox. Other differences with respect to the overall sample observed in this subsample are that working in teams, having subordinates, and the degree of physical effort do not appear to influence job satisfaction.

The last block of Table 4 shows the results obtained when including a variable representing the ease of obtaining days off for family reasons (*Easy_days off*). This variable is statistically significant and positively estimated, showing a higher coefficient and being more precisely estimated in the case of women. Again, the gender and female share variables reduce their magnitude relative to those in Table 3 and are not statistically significant.

In Table 5, the three sets of variables are incorporated simultaneously into the estimation. Once more, the gender variable is insignificant, even in the subsample of workers with high-level studies, as are the variables capturing the share of female employees. By contrast, many additional variables are found to be statistically significant in the total sample, with differences between men and women in line with the results obtained when the sets of variables are included one by one. In summary, the paradox of the contented female worker (found when a standard job satisfaction equation is estimated) vanishes when the share of women in occupations is included. We find little support for the hypothesis that the share of women per se is a determinant of job satisfaction; rather, the results are consistent with women sorting into jobs that provide certain characteristics that are valued differently by men and by women.

In order to provide robustness to our findings, the analysis so far discussed has also been carried out for the period 2001-2004, where we have attempted to use the information most similar to that used for the 2007-2010 period. The basic results remain (see Table 6). Thus, in the benchmark specification (Model 1), the gender coefficient is statistically significant and negative, showing that women are more job satisfied than men. This result is also found in other studies using the same period and the same database [Álvarez-Llorente (2004); Gamero (2007, 2010)]. When the

Table 5: SIMULATED MLE ESTIMATES OF JOB SATISFACTION
WITH FEMALE SHARES AND ADDITIONAL VARIABLES TOGETHER

Variables	Overall		Men		Women		University studies	
	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.
Gender	-0.065	0.05					-0.128	0.10
Aid_House	0.023	0.03	-0.005	0.10	0.077	0.07	0.099	0.07
Aid_Training	0.109***	0.02	0.104***	0.03	0.129***	0.04	0.127***	0.04
Aid_Transport	0.125***	0.02	0.143***	0.02	0.091***	0.04	0.131***	0.04
Aid_Health	0.132***	0.03	0.133***	0.03	0.137***	0.04	0.094**	0.05
Subordinate	0.023	0.02	0.029	0.03	0.028	0.04	0.015	0.03
Physical effort	-0.093***	0.02	-0.086***	0.02	-0.112***	0.03	-0.043	0.04
Risk	-0.144***	0.02	-0.151***	0.02	-0.146***	0.03	-0.183***	0.04
Teamwork	0.082***	0.02	0.049*	0.03	-0.127***	0.03	-0.072	0.06
Agreement	-0.104***	0.02	-0.064***	0.02	-0.167***	0.03	-0.131***	0.04
Easy_days off	0.031***	0.00	0.027***	0.00	0.041***	0.00	0.040***	0.01
Women 25-49%	-0.035	0.03	-0.013	0.02	-0.022	0.05	-0.021	0.05
Women 50-74%	-0.014	0.02	-0.045	0.03	0.033	0.04	0.067	0.06
Women 75-100%	0.062	0.04	0.047	0.06	0.087	0.06	0.097	0.07
ρ_{12}	-0.017	0.02	-0.050*	0.028	-0.034*	0.02	-0.054	0.04
ρ_{13}	-0.008	0.04	-0.008	0.04	0.023	0.07	-0.223***	0.08
ρ_{23}	0.004	0.04	0.005	0.06	0.144***	0.04	0.011	0.07
Log likelihood	-104,538		-62,148		-42,243		-19,793	
Number observations	18,314		10,973		7,341		3,608	

Notes: All regressors in Table 1 and 2 are included.

* p < .1, ** p < .05, *** p < .01.

Source: Own elaboration.

female share in an occupation is added (Model 2), that coefficient becomes non significant and those capturing a larger female share appear to be significant. However, as observed for the 2007-10 period, neither the gender variable nor the female shares remain significant when additional variables capturing objective and subjective job related variables are added, either one by one, or all together (Models 3 to 6)[13]. Note that the variable expressing flexibility at work, Time_flexibility, is defined as the ease in the starting and finishing times at the job place. It presents the highest coefficient and it is the most precisely estimated.

4. CONCLUSIONS

With pooled data from the 2001-2004 and 2007-2010 waves of the ECVT, our estimates of a basic specification, including the gender variable and a large set of objective working conditions (individual and job characteristics), show that women are,

_____

(13) When considering only the second block of additional variables (column 4) the gender coefficient is significant. However, it becomes non-significant when the rest of the variables are included.

Table 6: SIMULATED MLE ESTIMATES OF JOB SATISFACTION (2001-2004). SEVERAL MODELS

	(1)		(2)		(3)		(4)		(5)		(6)	
Variables	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.	Coef.	St. error.
Gender	-0.105***	0.03	-0.100	0.07	-0.100	0.07	-0.064**	0.03	-0.119	0.08	-0.092	0.06
Women 25-49%			-0.08	0.32	-0.002	0.03	-0.091***	0.03	-0.024	0.03	-0.104*	0.06
Women 50-74%			0.016*	0.01	0.032	0.08	0.122*	0.07	0.027	0.03	0.142	0.09
Women 75-100%			0.035***	0.01	0.045	0.04	0.039	0.04	0.020	0.04	0.056	0.05
Aid_House					0.023	0.46					0.024	0.55
Aid_Training					0.072**	0.03					0.042	0.04
Subordinate							0.025	0.03			0.050	0.03
Physical effort							-0.094***	0.01			-0.098***	0.01
Risk							-0.073***	0.01			-0.056***	0.01
Teamwork							0.029	0.02			0.058**	0.03
Agreement							0.031	0.03			0.025	0.03
Time_flexibility									0.156***	0.01	0.157***	0.01
Log likelihood	-19,302		-19,301		-18,730		-12,928		-19,032		-14,455	
Number of observations	10,131		10,131		9,836		6,854		10,095		6,680	

Notes: All regressors in Table 1 and 2 are included.

p < .1, ** p < .05, *** p < .01.

Source: Own elaboration.

in fact, more job-satisfied than men. We have specifically tackled the potential sources of endogeneity bias, such as simultaneity or self-selection. We have controlled for simultaneity by estimating with a 2SLS procedure, assuming that job satisfaction is cardinal, and also through the joint estimation of the three-equation system with simulated maximum likelihood. The basic results remain unchanged. Self-selection of women into employment is controlled for by analysing the case of workers with high-level studies, since within this group gender differences in participation rates are the lowest. Again, our main results are largely unchanged.

When variables capturing the proportion of female workers in a particular occupation are included, the significance of the gender variable vanishes, suggesting that women are happier at their job simply because they work with other women. Nevertheless, it could be that the reason women are happier working with other women is due to women sorting themselves into occupations that offer, from their perspectives, certain specific attributes. If this is the case, women are happier in female-dominated occupations because they are more willing to work in those occupations. To test this hypothesis, both objective and self-perceived variables capturing benefits from the firm, job characteristics, and family-friendly attributes are added to previous specifications, first separately and then altogether. The results are clear: the gender variable and the dummies capturing female share by occupation reduce their magnitude and are no longer statistically significant, whereas the sets of variables added are associated with job satisfaction, and with somewhat different impact across genders. Working in teams stimulates males job satisfaction and reduces female job satisfaction. The rest of coefficients have the same sign but large differences in values are observed in benefits for transport and promotion, requirement of physical effort or being covered by an agreement.

While we do not attempt to explicitly test which hypothesis better explains the cross-gender differences in job satisfaction, we can posit several considerations based on our estimated results. We interpret, as do Bender *et al*. (2005), that job satisfaction differentials are largely due to the exclusion of determinants of satisfaction; in particular, those objective and self-perceived variables that value certain attributes of a particular occupation. Other hypotheses may be of lesser importance in Spain. Thus, the expectations hypothesis suggested in Clark (1997), which predicts that the gender paradox would diminish over time as female participation continues to rise, does not fit well with the Spanish case. First, gender occupational segregation in Spain is relatively very high, so that women are expected to have more accurate expectations resulting from experience. That is to say, as Hamermesh (2001) argues, that the difference between expectations and reality should close relatively quickly. Second, our raw measures in the Appendix indicate that the job satisfaction of women in Spain has increased in recent years, rather than declined. Similarly, this latter evidence, coupled with the fact that the gender variable is found to be insignificant, is counter to the view of discrimination against women, since they do not feel less satisfied than men. Finally, since women select into occupations with certain attributes, and not merely into occupations where women are the majority, identity theories do not prevail in our case.

However, the tightness of the Spanish labour market, its reduced mobility, and the social norms and stereotypes rooted in it, may prevent total adaptation by wo-

men, so that this hypothesis cannot be completely dismissed. Thus, to the extent that characteristics that are more valued by women are strongly stereotyped, so that social norms dictate individual behaviour, and deviating from those norms may suppose large losses in women's utility, identity theories may still play a role here. In other words, we cannot distinguish whether women choose to work in a specific occupation because the attributes are in fact more desirable to them, or because deviating from such expected behaviour reduces their satisfaction. In this respect, we have controlled for as many job-related variables as are available in our data-base, but we have intentionally excluded from our analysis workers in the public sector and the self-employed, to gain homogeneity across individuals.

An additional note to our study is that all information used is provided by the employee only. Neither objective information nor subjective valuation of job attributes is obtained from employers. This avoids having any knowledge of a firm's preferences for gender distribution across occupations, which would be of great importance in our analysis, especially where the labour market is tight.

We have also observed that certain job characteristics influence men and women differently. In particular, the possibility of obtaining days off due to family reasons shows a higher coefficient, and is more precisely estimated, in the case of women. If this result is a consequence of the stronger involvement of women in family responsibilities, public policies should focus on pursuing a more egalitarian share between men and women. Thus, the search for jobs that allow the reconciliation of paid work and house work and caring should not exclusively be a goal for women. On the other hand, if this result is due more to the true preferences of women, public policies aiming to reduce gender occupational segregation may have a negative effect, causing a reduction in job satisfaction for women, if working conditions are not first equalised across occupations. For a more robust assessment of such policies, more research on the issue of gender differences in job satisfaction should be undertaken. In particular, considering the diverse domains of job satisfaction may shed light on how the relationship between working conditions and individual perceptions may differ between men and women. This topic is left for future research.

APPENDIX A

Figure A1 shows the evolution of average job satisfaction rates for all individuals in the three samples (total, men, and women) during the period under study. As indicated above, the ECVT was not conducted in 2005. Additionally, the questionnaire was modified, in 2006, so no direct comparison with data prior to 2005 is valid. The trend is clearly upwards after 2006, and in the last two years women's job satisfaction has surpassed that of men.

Figure A2 shows the distribution of job satisfaction rates for the pooled period 2007-2010, distinguishing between men and women. Scores 7 and 8 concentrate more than 50% of the total distribution.

Table A1: Variable definitions and average values (2007-2010)

Variable	Definition	Total	Men	Women
Sat_Job	Satisfaction with the current job (0: not satisfied, 10: very sati.)	7.302	7.271	7.322
Personal characteristics				
Gender	1: man, 0: woman	0.594		
Age	Age in years	40.459	41.086	39.543
Age^2/100	Age squared divided by 100	17.528	18.063	16.744
Nationality	1: Spanish, 0: foreign	0.872	0.871	0.873
Education1	Compulsory studies	0.448	0.486	0.392
Education2	Non-compulsory secondary studies	0.356	0.347	0.369
Education3	Degree/university studies	0.196	0.167	0.239
Population1	City size lower than 10,000 inhabitants	0.202	0.216	0.181
Population2	City size between 10,001 and 50,000 inhabitants	0.278	0.283	0.270
Population3	City size between 50,001 and 100,000 inhabitants	0.120	0.117	0.125
Population4	City size between 100,001 and 1,000,000 inhabitants	0.317	0.312	0.325
Population5	City size higher than 1,000,000 inhabitants	0.082	0.071	0.100
Caring	1: there are people to care for except children	0,057	0,057	0,058
Children	Number of children	0,530	0,556	0,491
Children 0-3	1: children 0-3 years old	0,113	0,122	0,101
Single-earner[a]	He/she is the unique income earner in the family	0.461	0.543	0.339
Job characteristics				
Hours worked	Number of hours worked per week	39,573	41,889	36,188
Income1	Up to 600 euro per month (net)	0.079	0.025	0.158
Income2	Between 601 and 1,000 euro per month (net)	0.272	0.184	0.400
Income3	Between 1,001 and 1,200 euro per month (net)	0.237	0.258	0.207
Income4	Between 1,201 and 1,600 euro per month (net)	0.228	0.290	0.137
Income5	Between 1,601 and 2,100 euro per month (net)	0.108	0.139	0.063
Income6	More than 2,100 euro per month (net)	0.076	0.104	0.035
Permanent	Permanent contract: 1, fixed-term contract: 0	0.769	0.780	0.753
Training	The firm has provided some training in the last 12 months	0.446	0.471	0.409
Sector1	Agriculture	0.035	0.046	0.020
Sector2	Industry	0.229	0.285	0.147
Sector3	Construction	0.128	0.199	0.023
Sector4	Services	0.608	0.470	0.810
Linked personal and job characteristics				
Tenure	Number of years in the same firm	8,966	9,936	7,548
First_job	1: This is the first job	0.208	0.196	0.226
Over-education	1: higher-than-required qualification	0.189	0.156	0.237
Union	The employee is unionised	0.166	0.192	0.128
Organization	Knowledge (more than 7 on a 0-10 scale) of firm organization	0.552	0.553	0.550
Firm_size1	Firm size lower than 10 employees	0.287	0.261	0.326
Firm_size2	Firm size between 11 and 50 employees	0.248	0.273	0.211
Firm_size3	Firm size between 51 and 250 employees	0.168	0.172	0.161
Firm_size4	Firm size higher than 250 employees	0.297	0.293	0.302

Note: [a]Obtained by comparing individual income with family income. When both belong to the same income range, it has been considered that additional earnings in the family are of minor importance, and thus the earnings of the employee are the main source of family income. [b] The numbers of observations of Easy days off are 18,314, 10,913 and 7,941 for overall, men, and women, respectively.

Source: Own elaboration.

Table A1: VARIABLE DEFINITIONS AND AVERAGE VALUES (2007-2010) (continuation)

Variable	Definition	Total	Men	Women
Other job characteristics				
Aid_House	Firm provides financial aid for the house (1-Yes/ 0-No)	0.049	0.060	0.034
Aid_Training	Firm provides financial aid for training (1-Yes/ 0-No)	0.202	0.212	0.187
Aid_Transport	Firm provides financial aid for transport (1-Yes/ 0-No)	0.217	0.245	0.176
Aid_Health	Firm provides financial aid for expenses in health (1-Yes/ 0-No)	0.121	0.133	0.104
Subordinates	Does the employee have subordinates in the job? (1-Yes/ 0-No)	0.197	0.243	0.130
Teamwork	Does the employee work, or work sometimes, in teams? (1-Yes/ 0-No)	0.802	0.828	0.766
Agreement	Is the employee covered by some type of collective agreement? (1-Yes/ 0-No)	0.342	0.363	0.311
Degree_Effort	Degree of physical effort in job (0-10). Recoded to 0 (low) if <5; 1 (high) if >4	0.560	0.601	0.499
Degree_Risk	Degree of risk in job (0-10). Recoded to 0 (low) if <5; 1 (high) if >4	0.400	0.486	0.272
Easy_days off[b]	Possibility to ask for days off due to family reasons (0: very difficult; 10: no difficult at all).	6.678	6.724	6.610
Knowledge union	Worker's knowledge on unions' activity (0: very low; 10: very high)	3.254	3.483	2.920
Number of observations		19,554	11,612	7,942

Note: [a]Obtained by comparing individual income with family income. When both belong to the same income range, it has been considered that additional earnings in the family are of minor importance, and thus the earnings of the employee are the main source of family income. [b] The numbers of observations of Easy days off are 18,314, 10,913 and 7,941 for overall, men, and women, respectively.

Source: Own elaboration.

Table A2: JOB SATISFACTION DISTRIBUTION BY FEMALE SHARE (%)

	Female share	0 24%	25-49%	50-74%	75-100%	Total
	Job satisfaction					
Men	Dissatisfied (0-6)	28.67	25.23	27.46	26.52	27.76
	Satisfied (7-8)	52.90	53.78	52.76	55.87	53.17
	Very satisfied (9-10)	18.43	20.99	19.78	17.61	19.08
	Total	62,90	19,12	14,02	3,96	100
Women	Dissatisfied (0-6)	31.83	29.22	28.86	30.24	29.64
	Satisfied (7-8)	51.31	50.44	49.10	45.27	48.21
	Very satisfied (9-10)	16.86	20.34	22.04	24.49	22.15
	Total	8.66	15.73	41.93	33.68	100

Note: Authors' own calculation from the Spanish Quality of Work Life Survey, ECVT, 2007-2010.
Source: Own elaboration.

Table A3: PARTICIPATION RATES IN SEVERAL SUB-GROUPS (%)

	Men	Women
Total	69.83	50.95
Less than 35 years old	80.14	70.45
More than 35 years old	64.61	42.35
High educational level	84.52	80.93
Less than high educational level	65.25	41.89
Non-married	70.41	52.36
Married	69.32	49.87

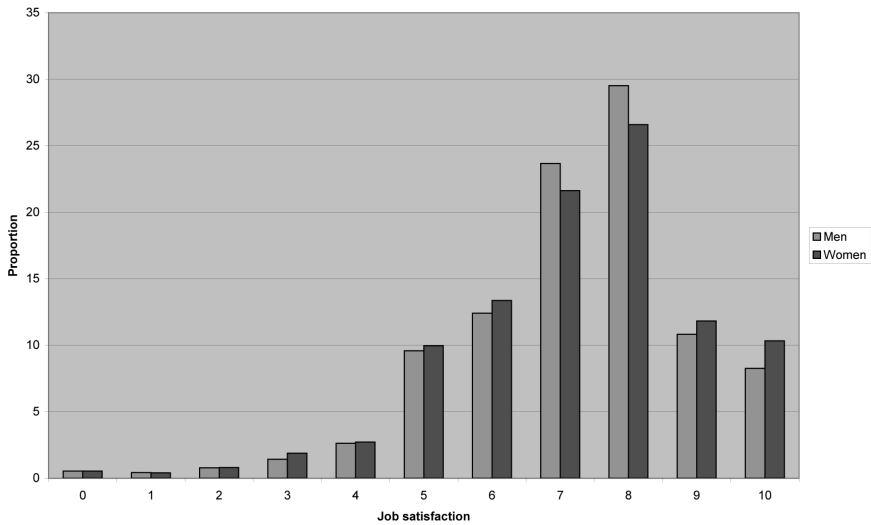Source: Spanish Labour Force Survey, 2008: III.
Own elaboration.

Figure A1: AVERAGE JOB SATISFACTION (2001-2010)
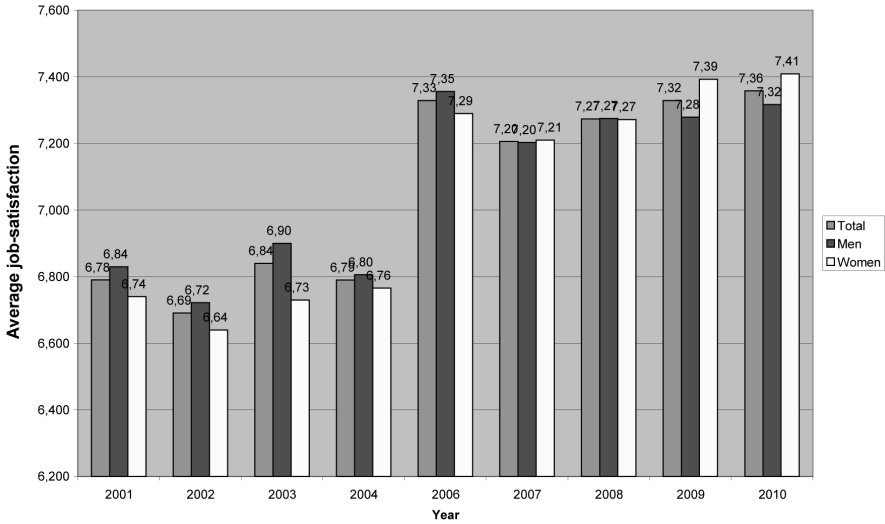
Source: Own elaboration.

Figure A2: DISTRIBUTION OF JOB SATISFACTION (2007-2010 AVERAGE)

Source: Own elaboration.

REFERENCES

Akerlof, G. and R. Kranton (2000): "Economics and identity", *Quarterly Journal of Economics*, vol. 115, pp. 715-752.

Akerlof, G. and R. Kranton R. (2010): *Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being*, University Press, Princeton.

Alesina, A. and E. La Ferrara, (2000): "Participation in heterogeneous communities", *Quarterly Journal of Economics*, vol. 115, pp. 847-904.

Allen, J. and R. van der Velden (2001): "Educational mismatches versus skill mismatches: effects on wage, job satisfaction, and on-the-job search", *Oxford Economic Paper*, vol. 53, pp. 434-452.

Álvarez-Llorente, G. (2004), "Análisis empírico de los determinantes de la satisfacción laboral en España", *Revista de Economía y Empresa*, vol. 52-53, pp. 105-118.

Anker, R. (1998): *Gender and Jobs: Sex Segregation of Occupations in the World,* International Labor Office Press, Geneva.

Artz, B. (2010): "Fringe benefits and job satisfaction", *International Journal of Manpower*, vol. 31, pp. 626-644.

Badillo-Amador, L.L. and Vila (2013): "Education and skill mismatches: wage and job satisfaction consequences", *International Journal of Manpower*, vol. 34, pp. 416-428.

Bayard, K., R. Troske, J. Hellerstein and D. Neumark (2003): "New evidence on sex segregation and sex differences in wages from matched employee–employer data", *Journal of Labor Economics*, vol. 21, pp. 887-922.

Becker, G. (1985): "Human capital, effort, and the sexual division of labor", *Journal of Labor Economics*, vol. 3, pp. 533-558.

Bender, K., S. Donohue and J. Heywood (2005): "Job satisfaction and gender segregation", *Oxford Economic Papers*, vol. 57, pp. 479-496.

Bergmann, B. (1974): "Occupational segregation, wages and profits when employers discriminate by race or sex", *Eastern Economic Journal*, vol. 1, pp. 103-110.

Blau, F. and L. Kahn (2000): "Gender differences in pay", *Journal of Economic Perspectives*, vol. 14, pp. 75-99.

Booth, A., M. Francesconi and J. Frank, J. (2002): "Temporary jobs: stepping stones or dead ends?", *The Economic Journal*, vol. 112, pp. F189-F213.

Booth, A. and J. Van Ours, (2009): "Hours of work and gender identity: does part-time work make the family happier?", *Economica*, vol. 76, pp. 176-196.

Borjas, G.J. (1979): "Job satisfaction, wages and unions", *Journal of Human Resources*, vol. 14, pp. 21-40.

Bryson, A., L. Cappellari and C. Lucifora (2004): "Does union membership really reduce job satisfaction?, *British Journal of Industrial Relations*, vol. 42, pp. 439-459.

Bryson, A., L. Cappellari and C. Lucifora (2010): "Why so unhappy? The effects of unionization on job satisfaction", *Oxford Bulletin of Economics and Statistics*, vol. 72, pp. 357-380.

Cabral Vieira, J. (2005): "Skill mismatches and job satisfaction", *Economic Letters*, vol. 89, pp. 39-47.

Cebrián, I. and G. Moreno (2008): "La situación de las mujeres en el mercado de trabajo español. Desajustes y retos", *Economía Industrial*, vol. 367, pp. 121-137.

Clark, A. (1997): "Job satisfaction and gender: why are women so happy at work?" *Labour Economics*, vol. 4, pp. 341-372.

Clark, A. and A. Oswald (1996): "Satisfaction and comparison income", *Journal of Public Economics*, vol. 61, pp. 359-381.

Clark, A., A. Oswald and P. Warr (1996): "Is job satisfaction U shaped in age?" *Journal of Occupational and Organizational Psychology*, vol. 691, pp. 57-81.

Cornelissen, T., J. Heywood and U. Jirjahn (2011): "Performance pay, risk attitudes and job satisfaction", *Labour Economics*, vol. 18, pp. 229-239.

Costa, D. (2000): "From mill town to board room: The rise of women's paid labor", *Journal of Economic Perspectives*, vol. 14, pp. 101-122.

Diener, E., E.M. Suh, R. Lucas and H. Smith (1999): "Subjective well-being: three decades of progress", *Psychological Bulletin*, vol. 125, pp. 276-302.

Donohue, S. and J. Heywood (2004): "Job satisfaction and gender: An expanded specification from the NLSY", *International Journal of Manpower*, vol. 25, pp. 211-234.

Dueñas, D., C. Iglesias and R. Llorente (2010): "Job quality, job satisfaction and services in Spain", *Journal of Innovation Economics*, vol. 15, pp. 145-166.

England, P. (2010): "The gender revolutions. Uneven and stalled", *Gender and Society*, vol. 24, pp. 149-166.

European Commision (2009): *Gender segregation in the labour market. Root causes, implications and policy responses in the EU*, European Commission's Expert Group on Gender and Employment EGGE, Publications Office of the European Union, Luxembourg.

Ferrer-i-Carbonell, A. and P. Frijters, (2004): "How important is methodology for the estimates of the determinants of happiness?", *The Economic Journal*, vol. 114, pp. 641-659.

Fields, D. and T. Blum (1997): "Employee satisfaction in work groups with different gender composition", *Journal of Organizational Behavior*, vol. 18, pp. 181-196.

Gamero, C. (2004): "Satisfacción laboral de los asalariados en España. Especial referencia a las diferencias por género", *Cuadernos de Economía*, vol. 27, pp. 109-146.

Gamero, C. (2007): "Satisfacción laboral y tipo de contrato en España", *Investigaciones Económicas*, vol. XXXI, pp. 415-444.

Gamero, C. (2010): "Satisfacción laboral de los asalariados inmigrantes", *Revista de Economía Aplicada*, vol. 54, pp. 33-56.

García-Mainar, I., G. García-Martín and V. Montuenga (2015): "Over-education and gender occupational differences in Spain", *Social Indicators Research*, DOI: 10.1007/s11205-014-0811-7.

Glass, J. (1990): "The impact of occupational segregation on working conditions", *Social Forces*, vol. 68, pp. 779-796.

Groot, W. and H. Maasen van den Brink (1999): "Job satisfaction and preference drift", *Economics Letters*, vol. 633, pp. 363-367.

Haile, G. (2012): "Unhappy working with men? Workplace gender diversity and job-related well-being in Britain", *Labour Economics*, vol. 19, pp. 319-330.

Hamermesh, D. (1977): "Economic considerations in job satisfaction trends", *Industrial Relations*, vol. 15, pp. 111-114.

Hamermesh, D. (2001): "The changing distribution of job satisfaction", *Journal of Human Resources*, vol. 36, pp. 1-30.

Heckman, J. (1978): "Dummy endogenous variables in a simultaneous equations system", *Econometrica*, vol. 46, pp. 931-961.

Heckman, J. (1979): "Sample selection bias as a specification error", *Econometrica*, vol. 47, pp. 153-161.

Kaiser, L.C. (2007): "Gender-job satisfaction differences across Europe. An indicator for labour market modernization", *International Journal of Manpower*, vol. 28, pp. 75-94.

Kristensen, N. and E. Johansson (2008): "New evidence on cross-country differences in job satisfaction using anchoring vignettes", *Labour Economics*, vol. 15, pp. 96-117.

Lalive, A. and R. Stutzer (2010): "Approval of equal rights and gender differences in well-being", *Journal of Population Economics*, vol. 23, pp. 933-962.

Long, A. (2005): "Happily ever after? A study of job satisfaction in Australia", *The Economic Record*, vol. 81, pp. 303-321.

MacKerron, G. (2011): "Happiness economics from 35,000 feet", *Journal of Economic Surveys*, vol. 26, pp. 705-735.

Mincer, J. and S. Polachek (1974): "Family investment in human capital: earnings of women", *Journal of Political Economy*, vol. 82, pp. 76-108.

Mora, T. and A. Ferrer-i-Carbonell (2009): "The job satisfaction gender gap among young recent university graduates: evidence from Catalonia", *Journal of Socio-Economics*, vol. 38, pp. 581-589.

Mueller, C.W. and J.E. Wallace (1996): "Justice and the paradox of the contented female worker", *Social Psychology Quarterly*, vol. 59, pp. 338-349.

Origo F. and L. Pagani (2009): "Flexicurity and job satisfaction in Europe: the importance of perceived and actual job stability for well-being at work", *Labour Economics*, vol. 16, pp. 547-555.

Otero, S. and C. Gradín (2001): "Segregación ocupacional en España, una perspectiva territorial", *Hacienda Pública Española*, vol. 159, pp. 163-190.

Peccei, R. and H. Lee (2005): "The impact of gender similarity on employee satisfaction at work: a review and re-evaluation", *Journal of Management Studies*, vol. 42, pp. 1571-1592.

Phelan, J. (1994): "The paradox of the contented female worker: an assessment of alternative explanations", *Social Psychology Quarterly*, vol. 57, pp. 95-107.

Reskin, B. (1993): "Sex segregation in the workplace", *Annual Review of Sociology*, vol. 19, pp. 241-270.

Roodman, D. (2011): "Fitting fully observed recursive mixed-process models with cmp", *Stata Journal*, 11(2), 159-206.

Rose, M. (2005): "Job satisfaction in Britain: coping with complexity", *British Journal of Industrial Relations*, vol. 43, pp. 5-467.

Shauman, K. (2006): "Occupational sex segregation and the earnings of occupations: What causes the link among college-educated workers?", *Social Sciences Research*, vol. 35, pp. 577-619.

Sloane, P. and H. Williams (2000): "Job satisfaction, comparison earnings and gender", *Labour*, vol. 14, pp. 473-501.

Sousa-Poza, A. and A. Sousa-Poza (2000a): "Taking another look at the gender/job paradox", *Kyklos*, vol. 53, pp. 135-152.

Sousa-Poza, A. and A. Sousa-Poza (2000b), "Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction", *Journal of Socio Economics*, vol. 29, pp. 517-538.

Sousa-Poza, A. and A. Sousa-Poza (2003): "Gender differences in job satisfaction in Great Britain, 1991-2000: permanent or transitory?", *Applied Economics Letters*, vol. 10, pp. 691-694.

Sousa-Poza, A. and A. Sousa-Poza (2007): "The effect of job satisfaction on labor turnover by gender: an analysis for Switzerland", *Journal of Socio-Economics*, vol. 36, pp. 895-913.

Van de Ven, W.P. and B.M.S. Van Praag (1981): "The demand for deductibles and private health insurance: a probit model with sample selection", *Journal of Econometrics*, vol. 17, pp. 229-52.

Verhofstadt, E., H. De Witte and E. Omey (2007): "Higher educated workers: better jobs but less satisfied?", *International Journal of Manpower*, vol. 28, pp. 135-151.

RESUMEN

El objetivo de este artículo es analizar el papel de la desigual distribución de hombres y mujeres por ocupaciones en las diferencias por sexo en satisfacción laboral en España. Con datos de la Encuesta de Calidad de Vida en el Trabajo, y controlando la posible existencia de endogeneidad, los resultados muestran que la mayor satisfacción de las mujeres con el trabajo está asociada a que están más contentas trabajando en ocupaciones donde el porcentaje de mujeres es considerable. Al incluir variables que recogen las condiciones laborales, las diferencias por sexo en satisfacción desaparecen, a la vez que las variables que expresan la proporción de mujeres se vuelven no significativas. Estos resultados sugieren que las mujeres tienden a ubicarse en ocupaciones con características preferidas por ellas, al tiempo que niegan la aparente correlación entre distribución ocupacional por sexo y diferencias en satisfacción laboral.

Palabras clave: satisfacción laboral, diferencias por sexo, ocupación.

Clasificación JEL: J16, J24, J28.