

The gender-job satisfaction paradox through time and countries

Cristina Pita & Ramón José Torregrosa

To cite this article: Cristina Pita & Ramón José Torregrosa (2021) The gender-job satisfaction paradox through time and countries, Applied Economics Letters, 28:12, 1000-1005, DOI: 10.1080/13504851.2020.1792402

To link to this article: <https://doi.org/10.1080/13504851.2020.1792402>



Published online: 15 Jul 2020.



Submit your article to this journal [↗](#)



Article views: 109



View related articles [↗](#)



View Crossmark data [↗](#)

ARTICLE



The gender-job satisfaction paradox through time and countries

Cristina Pita^a and Ramón José Torregrosa^{a,b}

^aDepartment of Economics and Economic History, University of Salamanca, Salamanca, Spain; ^bInstituto Multidisciplinar de Empresa, University of Salamanca, Salamanca, Spain

ABSTRACT

Much has been written about the so-called gender-job satisfaction paradox, derived from the fact that a significant number of empirical studies found that women reported higher levels of job satisfaction than their male counterparts, although they had what were considered 'worse' jobs in terms of pay and other nonmonetary working conditions. In this article, we use a procedure to compare the relative performance of groups when their achievements are described by distributions of outcomes over an ordered set of categories, the Balanced Worth Vector (BWV), to analyse whether women consistently report to be more satisfied at work than men in different periods of time and countries. The BWV offers a cardinal, complete and transitive evaluation that is based in the likelihood of getting better results. In our setting, the BWV methodology provides a complete ranking of the countries covered by the European Working Conditions Survey according to the relative levels of job satisfaction with working conditions that women and men in each country report. Our results indicate a decreasing gender differential over time and substantial differences across countries, proving that the gender-gap paradox cannot be considered a widespread phenomenon.

KEYWORDS

Gender; job satisfaction; paradox; balanced worth vector

JEL CLASSIFICATION

I31; J16; J28

I. Introduction

Researchers on job satisfaction have been encountering an unexpected finding over the years on the grounds that female workers used to report to be more satisfied at their jobs than males, in spite of the fact that, on average, women worked in jobs with lower quality and pay than men. This striking result has become known as the gender-job satisfaction paradox and it has met several explanations in the job satisfaction literature (Hodson 1989; Clark 1997; Bender, Donohue, and Heywood 2005; Gazioglu and Tansel 2006), most of which are based on the fact that both men and women have faced different conditions both at home and in labour markets and women have thus enjoyed less successful careers which have lowered their expectations. As long as males and females become more similar in work opportunities, the differential in job satisfaction should accordingly decrease (Sousa-Poza and Souza-Poza 2003; Green et al. 2018). Cross-national analyses of the gender-job satisfaction paradox have delivered mixed results, being the results positive in some countries and negative in others, and also different across studies (Sousa-

Poza and Sousa-Poza 2000a; Kaiser 2007; Westover 2012; Hauret and Williams 2017; Perugini and Vladislavljević 2019). We intend to shed new light on the gender-job satisfaction paradox applying a procedure -the Balanced Worth Vector- specifically designed to compare distributions of categorical data to the European Working Conditions Survey (EWCS) in order to rank the job satisfaction of male and female workers in 35 countries.

The paper proceeds as follows. In the next two sections we depict the BWV procedure and the data. The following sections are devoted to the BWV results and finally we summarize the main conclusions of our analysis.

II. The procedure

Questions regarding job satisfaction are quite similar across surveys, asking workers for an overall evaluation of job satisfaction with their working conditions, and offering them several categorical responses. Score methods are commonly used when dealing with ordered categorical data, which consist in giving weights to each of the categories in

an appropriate order, evaluating the groups according to their mean values. The problem of such methodology is that the choice of weights introduces an exogenous cardinalization in the original information, leading to arbitrary results.

An alternative method is based on the concept of stochastic dominance. This procedure is robust, and only relies on the categorical information, without using external weights. But this method provides neither a complete order nor cardinal information about the relative goodness of the distributions (Herrero and Villar 2018). To amend these problems, Lieberman (1976) posed a procedure to compare any pair of distributions, based on the concept of probabilistic dominance. That is, how likely it is that an individual from one group chosen at random will belong to a higher category than an individual from the other group chosen at random. The procedure works as follows:

Assume that two groups, e.g. men and women, exhibit distributions over a set of k categories. Let x_{iz} be the frequency in which category $z \in \{1, 2, \dots, k\}$ appears in group $i = 1, 2$, denote by

$$p_{ij} = x_{i1}(x_{j2} + x_{j3} + \dots + x_{jk}) + x_{i2}(x_{j3} + \dots + x_{jk}) + \dots + x_{i(k-1)}x_{jk}$$

the probability that a randomly chosen individual from group i belongs to a better category than a randomly chosen individual from group j , where $i \neq j$ and $i, j = 1, 2$, and by

$$e_{ij} = x_{i1}x_{j1} + x_{i2}x_{j2} + \dots + x_{ik}x_{jk}$$

the probability that randomly chosen individuals from both groups belong to the same category. It follows that $e_{12} = e_{21}$ and $p_{12} + p_{21} + e_{12} = 1$. Let

$$N_{ij} = p_{ij} - p_{ji}, i \neq j; i, j = 1, 2 \quad (1)$$

be the Index of Net Difference (IND) that ranks group probabilistic dominance endogenously, providing information about the intensity of such dominance. The problem of Lieberman's procedure is that it is not transitive when it is applied to more than two groups. To overcome this Herrero and Villar (2013, 2018) characterize the Balanced Worth Vector (BWV). Although we are dealing with only two groups in this paper, i.e. males and females, we follow the BWV characterization. For

our two-groups case, the BWV is given by a vector (v_1, v_2) such that

$$\left(p_{21} + \frac{1}{2}e_{21}\right)v_1 = \left(p_{12} + \frac{1}{2}e_{12}\right)v_2. \quad (2)$$

In words, the BWV balances the expected worth of choosing at random an individual of a not-lower category in both groups. Nevertheless, as Equation (2) is not sufficient to determine (v_1, v_2) , it is necessary to add another equation and thus, we pose

$$v_1 + v_2 = 2, \quad (3)$$

to equate the mean of the BWV components to one. Hence, from Equations (2) and (3) we can deduce that

$$v_i = 2p_{ij} + e_{ij}, i \neq j; i, j = 1, 2. \quad (4)$$

Equation (4) is the instrument that we are going to apply to compare our groups. Notice that it is proportional to the IND since, according to Equation (1),

$$v_i = N_{ij} + 1, i \neq j; i, j = 1, 2.$$

III. The data

Our dataset comes from five waves of the EWCS, which is conducted by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) and is ideal for our purposes, since it covers a wide range of countries and is representative of the working population in each country. Among the 106 questions of the 2015 EWCS, Q88 stands out as the best predictor of overall job satisfaction:

'On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?'

The answers to question Q88 for the respective EWCS waves are:

Where DK/NO/NA gathers 'Do not know', 'No opinion' and 'Not available' categories. Our main goal in this paper is to calculate the BWV for men and women, both comparing the samples of the five waves of the EWCS and the samples in the different countries for the 2015 EWCS. The web site of the Instituto Valenciano de Investigaciones Económicas (IVIE) supplies an algorithm to calculate the BWV (<http://www.ivie.es/balanced-worth/>). In order to

make all our calculations replicable, we show the main relative frequency matrices at the beginning of each section.

IV. The gender-paradox through Time

The composition of countries included in the EWCS has changed over time, with the addition of new countries in recent waves. Whereas the 1995 EWCS was limited to the EU15 area, nowadays the survey goes beyond the scope of the EU. For this reason, we have calculated the BWV for men and women of the EU15 countries over time. [Table 1](#) and [2](#) show the frequencies, the BWV, and the difference between the female and the male components of the BWV.

Comparing job satisfaction between men and women within the same group of countries over time, we conclude that the gender differential decreases from 2000 to 2015 and becomes almost negligible, in line with the previous findings of Sousa-Poza and Souza-Poza (2003), Andrade et al. (2019) and Green et al. (2018). Unfortunately, we cannot analyse the significance of these differences because there does not exist an appropriate methodology to do it. Overcoming this problem should be an interesting topic for further research.

V. The gender-paradox across Countries

We have calculated the BWV for men and women in each of the 2015 EWCS countries. The results are shown in [Table 3](#), where countries have been

ranked according to the difference between women's and men's BWV components (see the last column). With a positive difference we list countries where women report higher job satisfaction than men whereas in countries with a negative difference, men report higher job satisfaction than women.

Our results indicate the existence of clear differences among countries, with the paradox being fulfilled in some countries but not in other ones, in line with previous research (Kaiser 2007; Sousa-Poza and Sousa-Poza 2000a ; Perugini and Vladisavljević 2019).

[Figure 1](#) illustrates this high level of heterogeneity among countries, even between neighbouring ones which could be considered similar according to many economic and wellbeing indicators. For instance, several countries in Central Europe, such as Austria, Germany, Luxemburg and Switzerland, follow a different pattern in terms of the gender-job satisfaction paradox. In the same line, both Benelux and Scandinavian countries also reveal different results in terms of job satisfaction for each gender. Surprisingly, Denmark, which ranks first in job and life satisfaction (Sousa-Poza and Sousa-Poza 2000b; Pita and Torregrosa 2020; Ortiz-Ospina and Roser 2020), displays the highest difference in self-reported job satisfaction between males and females and in an unexpected direction. Danish men report to be substantially more satisfied than Danish women in

Table 1. Job satisfaction in the EWCS waves.

Year	N	Very satisfied	Satisfied	Not very satisfied	Not at all satisfied	DK/NO/NA
2015	43,850	0.25701077	0.5932416	0.12188379	0.02786383	0.00571129
2010	43,816	0.23556621	0.58528961	0.14251118	0.036633	0.00842237
2005	29,680	0.24119484	0.5564607	0.15384989	0.04849457	0.0079851
2000	32,754	0.25167703	0.55732341	0.14975497	0.0412446	0.00729604
1995	15,986	0.31939461	0.53383589	0.11074028	0.03602921	0.00556416

Table 2. Job satisfaction by gender for EU15 through time.

Year	Gender	Very satisfied	Satisfied	Not very satisfied	Not at all satisfied	BWV	Diff
2015	M	0.27393208	0.58871662	0.11012773	0.02722357	0.99495	
	W	0.28582435	0.56966058	0.11675669	0.02775838	1.00505	0.0101
2010	M	0.26083088	0.59690637	0.11666614	0.02559661	0.97977	
	W	0.28652218	0.56821562	0.12198879	0.02327342	1.02023	0.04046
2005	M	0.26740355	0.5727249	0.12428431	0.03558724	0.96568	
	W	0.29174984	0.56584807	0.11740963	0.02499245	1.03432	0.06864
2000	M	0.26959425	0.57065949	0.12425944	0.03548682	0.94256	
	W	0.32085093	0.53802691	0.11394374	0.02717843	1.05744	0.11488
1995	M	0.30662664	0.54821958	0.11028201	0.03487177	0.97674	
	W	0.33719874	0.51377875	0.11137931	0.0376432	1.02326	0.04652

Table 3. Job satisfaction distributions, BWV components and its difference by country.

Country	Gender	Very satisfied	Satisfied	Not very satisfied	Not at all satisfied	BWV	Diff
Malta	M	0.27106121	0.56886617	0.13131849	0.02875414	0.89512	
	W	0.34479001	0.5533199	0.086955	0.01493509	1.10488	0.20976
Macedonia	M	0.14196612	0.51672784	0.2512263	0.09007973	0.90603	
	W	0.18961865	0.53576652	0.21785059	0.05676423	1.09397	0.18794
Serbia	M	0.1632934	0.48882616	0.28637651	0.06150393	0.90698	
	W	0.18289374	0.56855573	0.19634553	0.05220499	1.09302	0.18604
Austria	M	0.36921924	0.56368117	0.05808007	0.00901952	0.92169	
	W	0.45785175	0.46886087	0.0563823	0.01690507	1.07831	0.15662
Bulgaria	M	0.25245594	0.52999037	0.18838091	0.02917278	0.92298	
	W	0.26297583	0.61123925	0.1097734	0.01601153	1.07702	0.15404
Ireland	M	0.34240797	0.55001414	0.0896042	0.01797369	0.92325	
	W	0.43172338	0.45779517	0.08225687	0.02822458	1.07675	0.1535
Estonia	M	0.13569733	0.75022346	0.0894114	0.0246678	0.928662	
	W	0.18860088	0.72459055	0.07595252	0.01085604	1.07134	0.142678
Croatia	M	0.23023504	0.51534336	0.2016034	0.0528182	0.92874	
	W	0.23627218	0.59465133	0.13815982	0.03091667	1.07126	0.14252
Hungary	M	0.15470219	0.69714392	0.12704035	0.02111353	0.93763	
	W	0.20796109	0.6660036	0.09663638	0.02939893	1.06237	0.12474
Greece	M	0.19770209	0.56879864	0.19108014	0.04241913	0.94482	
	W	0.26195501	0.51026821	0.19211261	0.03566418	1.05518	0.11036
Netherlands	M	0.28288716	0.6423162	0.04920375	0.0255929	0.9528	
	W	0.33824387	0.58059175	0.06073922	0.02042517	1.0472	0.0944
Lithuania	M	0.16124669	0.66001731	0.17096156	0.00777445	0.95433	
	W	0.20827722	0.62245742	0.1568698	0.01239557	1.04567	0.09134
Cyprus	M	0.29204781	0.5419221	0.15147752	0.01455257	0.95642	
	W	0.32596589	0.53057011	0.1267496	0.01671441	1.04358	0.08716
Czech. R.	M	0.29276834	0.61808083	0.07805308	0.01109776	0.96031	
	W	0.34503235	0.55430769	0.09064372	0.01001625	1.03969	0.07938
Montenegro	M	0.18713463	0.56145857	0.20904776	0.04235904	0.967	
	W	0.18518307	0.60765322	0.16628535	0.04087836	1.033	0.066
Poland	M	0.22199511	0.62600718	0.1244392	0.02755851	0.98474	
	W	0.20128124	0.68746519	0.09846004	0.01279353	1.01526	0.03052
UK	M	0.36480844	0.52574645	0.08747596	0.02196915	0.98672	
	W	0.38259855	0.50391552	0.09072874	0.0227572	1.01328	0.02656
Albania	M	0.11949644	0.42890643	0.34484875	0.10674839	0.99284	
	W	0.11081346	0.46012731	0.31008795	0.11897128	1.00716	0.01432
Latvia	M	0.16322884	0.65052225	0.16307339	0.02317553	0.99302	
	W	0.15569313	0.6714711	0.16149013	0.01134563	1.00698	0.01396
Spain	M	0.2331785	0.58429056	0.14350099	0.03902995	0.99452	
	W	0.24414507	0.57006375	0.14068772	0.04510346	1.00548	0.01096
Sweden	M	0.25979955	0.58807243	0.13018036	0.02194767	0.99459	
	W	0.26530867	0.58220289	0.13706769	0.01542075	1.00541	0.01082
Germany	M	0.30068691	0.59311179	0.09434771	0.0118536	0.99948	
	W	0.30225538	0.58972672	0.09962682	0.00839109	1.00052	0.00104
Slovenia	M	0.21084181	0.60829683	0.1495183	0.03134306	1.00109	
	W	0.19869865	0.63203465	0.1382856	0.0309811	0.99891	-0.00218
Portugal	M	0.19658251	0.6564952	0.13575369	0.01116859	1.00517	
	W	0.17407467	0.700308	0.09509093	0.0305264	0.99483	-0.01034
Italy	M	0.17761327	0.65363828	0.12393661	0.04481184	1.00531	
	W	0.18695813	0.62845319	0.13529585	0.04929283	0.99469	-0.01062
Belgium	M	0.28137861	0.62291843	0.06689952	0.02880344	1.00666	
	W	0.29253342	0.58639957	0.10012557	0.02094145	0.99334	-0.01332
Romania	M	0.11284959	0.77338118	0.1003603	0.01340892	1.0111	
	W	0.10076591	0.78483451	0.10238825	0.01201133	0.9889	-0.0222
France	M	0.21455426	0.59010272	0.15247696	0.04286607	1.01299	
	W	0.21351374	0.57470826	0.16916797	0.04261003	0.98701	-0.02598
Slovakia	M	0.19735223	0.63965551	0.1561531	0.00683917	1.02878	
	W	0.18072908	0.63912744	0.16583418	0.0143093	0.97122	-0.05756
Norway	M	0.4438332	0.50719218	0.03709649	0.01187814	1.02897	
	W	0.43104799	0.48879068	0.07158025	0.00858108	0.97103	-0.05794
Finland	M	0.28323101	0.65196916	0.06479982	0	1.03056	
	W	0.27626474	0.62615182	0.08919433	0.00838911	0.96944	-0.06112
Luxemburg	M	0.2999748	0.54761212	0.13136816	0.02104492	1.03067	
	W	0.28194535	0.55005596	0.11544925	0.05254944	0.96933	-0.06134
Switzerland	M	0.42627116	0.43798006	0.10159594	0.03415284	1.03397	
	W	0.35995986	0.54095593	0.09114403	0.00794018	0.96603	-0.06794
Turkey	M	0.17808266	0.61520217	0.16860402	0.03811114	1.04275	
	W	0.16591743	0.58853906	0.19453153	0.05101198	0.95725	-0.0855
Denmark	M	0.48789247	0.44385282	0.0611982	0.00705651	1.0576	
	W	0.45243242	0.43196845	0.09896818	0.01663096	0.9424	-0.1152

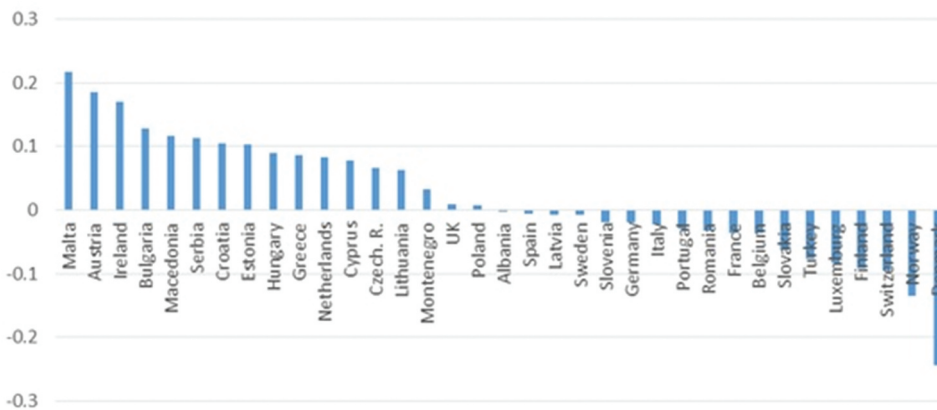


Figure 1. Difference between men's and women's BWV components by countries ranked from the highest to the lower.

spite of the country's well-established reputation on gender equality. On the other hand, the empirical evidence supports the gender-job satisfaction paradox in many Eastern European countries. In Southern European countries, we observe no large differences between genders. Both in Ireland and the UK we find empirical evidence for the gender paradox, which has been a common finding in the literature (Sousa-Poza and Sousa-Poza 2000a).

VI. Concluding remarks

Using a new methodology to re-evaluate the gender-job satisfaction paradox across time and countries, we have reached two main conclusions. First, males and females reported levels of job satisfaction have become more similar over this century, suggesting that the paradox should vanish in the future as long as males and females continue facing more analogous labour-market conditions and developing more parallel and undifferentiated careers. Secondly, when we undertake a cross-national analysis with recent data, we do not find empirical evidence to support the gender-job satisfaction paradox in all countries.

In brief, the bottom line is that studying job satisfaction leads us to find challenging results that still need to be interpreted and explained. Our underlying suspicion is that job quality, as it has been interpreted in the past, and job satisfaction are not perfectly correlated. In our view, there

is scope for further research on this issue.

Acknowledgments

The authors wish to acknowledge Donald Williams, Carmen Herrero, Antonio Villar, Javier Perote, Rianne Schaap, Carlos González and two anonymous referees for their helpful comments. The usual disclaimer applies.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

Financial support was provided by the Regional Government of Castile and Leon through grant [SA049G19].

References

- Andrade, M. S., J. H. Westover, and J. Peterson. 2019. "Job Satisfaction and Gender." *Journal of Business Diversity* 19 (3): 22–40.
- Bender, K. A., S. M. Donohue, and J. S. Heywood. 2005. "Job Satisfaction and Gender Segregation." *Oxford Economics Papers* 57: 479–496. doi:10.1093/oep/gpi015.
- Clark, A. E. 1997. "Job Satisfaction and Gender: Why are Women so Happy at Work?" *Labour Economics* 4 (4): 341–372. doi:10.1016/S0927-5371(97)00010-9.
- European Foundation for the Improvement of Living and Working Conditions. 2018. *European Working Conditions Survey Integrated Data File, 1991-2015. [Data Collection]*. 7th ed. UK Data Service. SN: 7363. doi:10.5255/UKDA-SN-7363-7.

- Gazioglu, S., and A. Tansel. 2006. "Job Satisfaction in Britain: Individual and Job-related Factors." *Applied Economics* 38: 1163–1171. doi:10.1080/00036840500392987.
- Green, C. P., J. S. Heywood, P. Kler, and G. Leeves. 2018. "Paradox Lost: The Disappearing Female Job Satisfaction Premium." *British Journal of Industrial Relations* 56 (3): 484–502. doi:10.1111/bjir.12291.
- Hauret, L., and D. R. Williams. 2017. "Cross-National Analysis of Gender Differences in Job Satisfaction." *Industrial Relations: A Journal of Economy and Society* 56 (2): 203–235.
- Herrero, C., and A. Villar. 2013. "On the Comparison of Group Performance with Categorical Data." *PLoS One* 8 (12): e84784. doi:10.1371/journal.pone.0084784.
- Herrero, C., and A. Villar. 2018. "The Balanced Worth: A Procedure to Evaluate Performance in Terms of Ordered Attributes." *Social Indicators Research* 140 (3): 1279–1300. doi:10.1007/s11205-017-1818-7.
- Hodson, R. 1989. "Gender Differences in Job Satisfaction: Why Aren't Women More Dissatisfied?" *Sociological Quarterly* 30: 385–399. doi:10.1111/j.1533-8525.1989.tb01527.x.
- Kaiser, L. C. 2007. "Gender-job Satisfaction Differences across Europe: An Indicator for Labor Market Modernization." IZA Discussion Papers, No. 1876.
- Liebersohn, S. 1976. "Rank-sum Comparisons between Groups." *Sociological Methodology* 7: 276–291. doi:10.2307/270713.
- Ortiz-Ospina, E., and M. Roser. 2020. "Happiness and Life Satisfaction." Our World in Data. <https://ourworldindata.org/happiness-and-life-satisfaction#all-charts-preview>
- Perugini, C., and M. Vladislavjević. 2019. "Gender Inequality and the Gender-job Satisfaction Paradox in Europe." *Labour Economics* 60: 129–147. doi:10.1016/j.labeco.2019.06.006.
- Pita, C., and R. J. Torregrosa. 2020. "Re-evaluating Job Satisfaction." Research Gate https://www.researchgate.net/publication/339067736_Re-evaluating_Job_Satisfaction
- Sousa-Poza, A., and A. A. Sousa-Poza. 2000a. "Taking Another Look at the Gender/Job-Satisfaction Paradox." *Kyklos* 53 (2): 135–152. doi:10.1111/1467-6435.00114.
- Sousa-Poza, A., and A. A. Souza-Poza. 2000b. "Well-being at Work: A Cross-national Analysis of the Levels and Determinants of Job Satisfaction." *Journal of Socio-Economics* 29: 517–538. doi:10.1016/S1053-5357(00)00085-8.
- Sousa-Poza, A., and A. A. Souza-Poza. 2003. "Gender Differences in Job Satisfaction in Great Britain, 1991-2000: Permanent or Transitory?" *Applied Economics Letters* 10-11: 691–694. doi:10.1080/1350485032000133264.
- Westover, J. 2012. "The Job Satisfaction-gender Paradox Revisited: A Cross-national Look at Gender Differences in Job Satisfaction, 1989-2005." *Journal of Global Responsibility* 3 (2): 263–277. doi:10.1108/20412561211260557.