

Why have permanent workers grown dissatisfied with their job?

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Abstract

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1 Introduction

Various international surveys show that in developed countries job satisfaction declines through time despite objective improvements in working conditions (The European Foundation for the Improvement of Living and Working Conditions, 2009). Boeri and Garibaldi (2009) suggest that this may ensue from the sea change in labour market conditions which determined an insufficient insurance in the rise of employment insecurity. Their suggestion is supported by the unexpected finding of a negative trend in the job satisfaction of the permanent workers which implies that the labour contract itself is not a sufficient guarantee against deep institutional transformations. Indeed, Origo and Pagani (2008) show that temporary workers that perceive their job to be secure are more satisfied with their job than permanent workers who perceive their job to be at risk.

An alternative explanation to the paradox of job satisfaction is work intensification (Green, 2004 and 2006) and difficulties in reconciling work and life (The European Foundation for the Improvement of Living and Working Conditions, 2009). Indeed, while the European labour market institutions were being transformed, another wave of changes directly affecting employees' life at work was underway at the firm and workplace level. Initially supported by pioneering management views (Walton, 1985), the idea that employees' genuine involvement in the firm's objectives is essential to the firm's performance started to spread first in the US and then across Europe and was made operative in many firms through the adoption of innovative work systems (EC, 2002). These reshaped the work organization and introduced new types of workplace practices centred on concepts like employees' autonomy, discretion and task variety.

Although the intuitive result of an enrichment of the new job over the traditional fordist small-task repetitive type of job finds some empirical support and workers involved in new workplace practices usually report relatively higher levels of job satisfactions (Freeman and Kleiner (2000), Bauer 2004, Mohr and Zoghi (2006)), the evidence on the employees' outcomes is not unanimous (Godard, 2001; Guest, 1999; Guest and Conway, 2007). Moreover, various findings regarding specific job dimensions in presence of innovative workplace prac-

tices are uncomfortable: the probability of occupational illnesses, mental strain and risk of injuries is shown to rise (Askenazy 2001, Fairris and Brenner, 2001, Brenner et al., 2004; Askenazy and Caroli, 2006); likewise, some find that the pace of work and the stress increase partly because of peer pressure in teams coupled with high quality standards (Adler et al., 1997); finally thorough reorganizations themselves appear to rise layoffs (Osterman, 2000, Black et al.,2004).

Interestingly, the contrast between the institutional transformation moving the labour market towards a higher flexibility, on the one side, and the search for substantial employees' involvement as revealed by firms espousing the new work system, on the other side, is quite striking. We think that this contradiction is likely to exacerbate the duality of the labour market and penalize the permanent workers most. Temporary workers, because of their short labour relation, cannot accumulate the tacit knowledge that involvement programs and practices aim to extract, so we expect them to be only marginal actors of the firm's reorganization design. On the contrary, permanent workers should be substantially affected by the work reorganization and the impact of these changes are expected to be revealed in job satisfaction scores and perceptions of job quality.

In particular, these institutional and workplace changes imply that permanent employees are likely to find themselves involved in demanding jobs while the outside opportunities are gloomier; then, as the cost of losing the job rises, the threshold of the acceptable effort also rises and intensification increases. In the transformed labour market, the new workplace can then ask for a deeper involvement which, while enriching the job, it can easily bring about intensification and stress: the permanent worker is then 'captured' into the new work system. In such a situation, a drop in the welfare of the permanent worker is conceivable although the welfare level remains higher than that of employees on temporary contracts.

In this paper we present a simple model that highlights the institutions-related factors and the workplace-related factors affecting the permanent workers' job satisfaction. We then estimate the model using the three waves of the European Working Condition Survey, from which we obtain very detailed information on extrinsic and intrinsic job attributes, and the OECD measures of labour market institutions to capture changes in flex-security.

The paper is organized as follows: section 2 briefly reviews the literature on the relationship between job satisfaction and institutional reforms and between job satisfaction and working conditions. Next we describe the model and the data we use in the estimation. Section 4 discusses the empirical results and the last section concludes.

2 Institutional reforms, innovative workplace practices and job satisfaction

If we exclude the undergoing recession, and look back at the last twenty years, we find that the European mass unemployment has essentially been healed (Boeri Garibaldi, 2009). It is well known however that the flip side of this important, though late, recovery has been a large increase in temporary contracts. Hence the good news (the higher probability of finding a job) comes with a bad news (once employed, job security is lower). The Danish way to reduce the effects of the bad news have been generous unemployment benefits (UB) to bridge the transition period and active labour market policies (ALMP) to increase the probability of hiring. This worked well for Denmark and the flex-security model has become the solution suggested to other European countries. However, the reforms of the labour markets in Europe did not precisely follow the Danish way; quite the opposite, many countries did not increase job security in face of a more flexible labour market (Boeri and Garibaldi, 2009). According to Boeri and Garibaldi (2009) the net decline in the employees' utility that ensued from these uneven changes is indeed consistent with the declining JS trend through time. Moreover, that fact that JS declines for the permanent workers suggests, according to the authors, that permanent workers, regardless of their job contract, feel vulnerable once the institutions allow and even support more employment flexibility. Indeed Origo-Pagani (2008) show that temporary workers are happier than permanent workers if the perceived job insecurity is lower.

3 Dataset and descriptive statistics

We use OECD country level measures of labour market institutions to capture changes in flex-security and individual data from the last three waves (1995-2000-2005) of the European Working Condition Survey (EWCS) to measure working conditions and other job related issues.

We consider three measures of labour market institutions: the OECD index of employment protection legislation, overall (epl) and distinguished between permanent (epl_perm) and temporary (epl_temp) workers (these indices vary between 0-6 and are increasing in protection); a measure of unemployment benefits (the replacement ratio) and the GDP percentage of active labour market policies (almp). As can be seen from Table 1, the decline of epl's rigidity is particularly clear from 1995 to 2000 and for temporary workers whose index drops by over 20% in the 1995-2000 quinquennium while in the same time the epl_perm declines by only 1.4%. Unemployment benefits actually grow in the same period but decline by 10% from 2000 to 2005 while almp decline steadily in the decade, by 9% and 8% in the first and second period respectively.

Table 1: Average labour market institutions by year

year	mean(epl_tot)	mean(epl_perm)	mean(epl_temp)	mean(ub1)	mean(almp)
1995	2.530714	2.400689	2.66402	32.5509	1.06494
2000	2.236195	2.367165	2.107756	34.1484	0.9662827
2005	2.152457	2.324802	1.985227	30.7485	0.8858266
Source:	OECD				

The EWCS, carried out every five years by the European Foundation for the Improvement of Living and Working Conditions, is designed to investigate the conditions of work across the EU Member States and other European countries and is the best source of information on working conditions and related issues. A target of 1000 workers are interviewed in all countries¹ about a wide range of work-related matters, such as work organisation, wage structure, working time, contractual arrangements, tenure. The survey also includes demo-

¹In the smallest countries (Cyprus, Estonia, Luxemburg, Malta and Slovenia) the sample is 600. The survey provides sampling weights in order to enable reliable comparisons across countries.

graphic and other background information like age, gender, education, family composition as well as occupation and sector. Like many other individual socio-economic surveys, most of the questions that we are interested in, such as work-related health, exposure to risk, working conditions, stress, job satisfaction are based on subjective evaluations; objective evaluations, if available, could be different but would not necessarily be preferable as in most cases it is the perceived reality that has social effects, not reality itself (Karppinen et al., 2006).

From the EWCS we compute a total of eight variables which capture physical working conditions, job characteristics related to innovative practices and job-related health problems.

Regarding physical working conditions, we consider the following questions and corresponding measures:

- Are you exposed at work to:
 1. Vibrations from hand tools, machinery, etc.
 2. Noise so loud that you would have to raise your voice to talk to people
 3. High temperatures which make you perspire even when not working
 4. Low temperatures whether indoors or outdoors
 5. Breathing in smoke, fumes, powder or dust etc.
 6. Handling or being in skin contact with chemical products or substances
 7. Radiation such as X rays, radioactive radiation, welding light, laser beams

Answers are on a 1-7 Likert scale: All of the time (1), Almost all of the time (2), Around 3/4 of the time (3), Around half of the time (4), Around 1/4 of the time (5), Almost never (6), Never (7). For each item we compute a dummy equal 1 if the value of the answer is less or equal 5 and then compute a summary indicator, called **exposure**, by summing the dummies. The second measure of physical working conditions is from another set of questions which use the same Likert scale:

- Does your main job involves:
 1. Tiring or painful positions

2. Carrying or moving heavy loads
3. Repetitive hand or arm movements

Again, we first compute the relative dummies and then the summary indicator which we name **position**.

We then consider two questions to capture the pace of work:

- Does your work involve, working at very high speed? and
- Does your work involve, working to tight deadlines?

Again, both questions use the above Likert scale from which we compute two dummy variables (**speed** and **dlines**) equal 1 if the value of the answer is less or equal 5.

Involvement in innovative practices is distinguished between a formal top-down dimension and a more individual dimension capturing a personal participation in the innovative system. The former is captured by the following questions:

- Over the past 12 months, have you, or not been consulted about changes in the organisation of work and or your working conditions?

This dummy variable we call formal involvement (**inv_for**).

The second dimension is captured by the following questions:

- Generally, does your main paid job involve, or not:
 1. assessing yourself the quality of your own work
 2. solving unforeseen problems on your own
 3. learning new things

Each item above is coded as a dummy variables which we sum to compute an overall indicator, called individual involvement (**inv_ind**).

Finally, job-related health problems are distinguished between physical and psychological. In particular we compute our measures from the following question:

- How does it (your job) affect your health?
 1. hearing problems
 2. problems with your vision
 3. skin problems
 4. backache
 5. headaches
 6. stomach ache
 7. muscular pains
 8. respiratory difficulties
 9. heart disease
 10. allergies
 11. stress
 12. overall fatigue
 13. sleeping problems
 14. anxiety
 15. irritability

All items are coded as dummy variables; we compute a measure of physical health problems (**body**) by averaging over the first ten dummies and a measure of psychological problems (**mind**) by averaging over the last five dummies.

Working conditions regarding exposures to substances, temperatures and similar have improved for both permanent and temporary workers (Tables 2 and 3) while the conditions regarding position and loads have, since the nineties, improved for the temps but deteriorated for the perms. Speed and deadlines have also increased specially in the last quinquennium, confirming previous results (Green, 2004) and more for the perms than for the temps. Formal involvement shows a setback and declines to levels similar to those of the mid nineties after the sharp rise in 2000; individual involvement is also declining for the temps while it holds and slightly improves for the perms. Finally, the relevance of psychological related problems is clearly on the rise for the perms but stable for the temps; both groups enjoy, instead, an improvement in physical conditions.

The picture suggested by these bivariate analysis is one in which the perms are relatively more empowered in their job and more involved in their workplace; however their pace of work has risen with time and they have to adjust to high speed of work and tight deadlines. Perms also suffer worsening working conditions related to stress and anxiety, a feature that is not shared by temporary workers. Offsetting effects are coming from the general improvement of the 'hard' working conditions.

The extent to which these trends and the trend in the labour market institutions are related to the declining trend in the permanent workers' job satisfaction is investigated in the next section. The nature of the data do not allow to ascertain causality links between job satisfaction on the one hand and working conditions and institutions on the other; our objective is then to 'explain' as much as possible of the correlation between job satisfaction and time by working on the explanatory variables and allowing their coefficients to change across years.

Table 2: Average working conditions of permanent workers by year

year	Working conditions				Involvement		Health	
	exposure	position	speed	dlines	formal	individual	body	mind
1995	1.296801	1.24159	0.5639703	0.562611	0.5229727	2.325128	0.095316	0.1403588
2000	1.264739	1.356882	0.5915723	0.5790957	0.7854767	2.287985	0.1076883	0.1455059
2005	1.190151	1.329318	0.6325529	0.6328635	0.5361113	2.35304	0.0955909	0.153549
Total	1.243651	1.316193	0.6005746	0.5960119	0.6193212	2.323223	0.0997214	0.1473427

Source: EWCS

Table 3: Average working conditions of temporary workers by year

year	Working conditions				Involvement		Health	
	exposure	position	speed	dlines	formal	individual	body	mind
1995	1.44018	1.47006	0.5490009	0.4717993	0.3943105	2.117362	0.0952697	0.1263959
2000	1.332058	1.46096	0.581138	0.5264522	0.6820976	2.056094	0.1076155	0.1326352
2005	1.2345	1.441613	0.5893876	0.5618106	0.4123241	2.038228	0.0869152	0.1227463
Total	1.310154	1.454016	0.578147	0.5311335	0.4979348	2.060817	0.0955351	0.1267923

Source: EWCS

4 A model to account for employees welfare changes

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5 Empirical specification and results

Our dependent variable is a dummy variable S equal 1 if the permanent worker states to be very satisfied or satisfied to the following question: "On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?". We therefore estimate a probit regression that, in its short form, is of the following type:

$$S_{ict} = c + \alpha_1 d_{00} + \alpha_2 d_{05} + \mathbf{inst}_{ct}\boldsymbol{\beta} + \mathbf{w}_{ict}\boldsymbol{\gamma} + \mathbf{z}_{ict}\boldsymbol{\rho} + \mathbf{f}_c\boldsymbol{\sigma} + \epsilon_{ict} \quad (1)$$

where subscript i indicates the worker, c the country of residence² and t the year of the survey: 1995, 2000 or 2005. d_{00} and d_{05} are dummy variables for the year 2000 and 2005 respectively. \mathbf{inst}_{ct} is the vector of labour market institutions, \mathbf{w}_{ict} is the vector of the working conditions defined above, \mathbf{z}_{ict} is the vector of individual controls, \mathbf{f}_c is the vector of country dummies and ϵ_{ict} are the errors terms.

In order to allow the association between labour market institutions and working conditions on the one hand, and the probability of job satisfaction on the other, to change in time, we extend the above regression by successive steps to obtain the following long form specification:

²We consider 15 UE countries: Belgium Denmark Germany Greece Spain France Ireland Italy Luxembourg Netherlands Austria Portugal Finland Sweden UK

$$\begin{aligned}
S_{ict} = & c + \alpha_1 d_{00} + \alpha_2 d_{05} \\
& + \mathbf{inst}_{ct} \beta + d_{00} \mathbf{inst}_{ct} \beta_{00} + d_{05} \mathbf{inst}_{ct} \beta_{05} \\
& + \mathbf{w}_{ict} \gamma + d_{00} \mathbf{w}_{ict} \gamma_{00} + d_{05} \mathbf{w}_{ict} \gamma_{05} \\
& + \mathbf{z}_{ict} \rho + \mathbf{f}_c \sigma + \epsilon_{ict}
\end{aligned} \tag{2}$$

Table 4 reports the marginal effects of the main probit estimates. Columns (1) and (2) replicate the existing evidence: the probability of being satisfied with the job declines from 1995 to 2000 and to 2005 and the rate of decline increases in time; controlling for standard individual characteristics and country fixed effect the probability of being satisfied reduces by 2.7% between 1995 and 2000 and by a further 4% between 1995 and 2005. Columns (3) and (4) add the vector of working conditions and the vectors of institutions, respectively. With the exception of involvement, both formal and individual, all working conditions and related health problems negatively associated with job satisfaction. The declining trend in job satisfaction however remains significant but the explanatory power of the regression rises significantly.

Turning to labour market institutions, only active labour market policies are significant and positively related to job satisfaction; nonetheless the inclusion of institutions as regressors reduces the coefficients of both time dummies and makes one insignificant. In fact, the standard errors of the original coefficient (not shown) also increase slightly with respect to the previous column; recall that labour market institutions vary only across country hence they work as country*time dummies and it is therefore impossible to distinguish the genuine institutions' role from other country-related factors. This partly explains the good job they do in tracking the job satisfaction trend. Column (5) includes both types of controls: working conditions and labour market institutions correlate only marginally, as can be deduced from the fact that the coefficients of columns (4) and (5) are similar in value and significance.

The following columns allow working conditions and institutions to vary, alternatively and contemporaneously, first in 2000 (columns (6), (7) and (8)), then in 2005 (columns (9), (10) and (11)) and finally in both years (columns (10), (11) and (12)). The correlation between working conditions and job satisfactions that significantly changes in 2000 is with formal

involvement: the correlation in this case rises significantly. On the contrary, the correlation between labour market institutions and job satisfactions that significantly changes in 2000 is with employment protections legislation for the permanent workers; in this case the correlation significantly declines and the declining trend in the job satisfaction of the permanent workers is no longer significant. The result holds when we allow both institutions and working conditions to change in 2000 (column (8)).

The replication of the same exercise in year 2005 (columns (9),(10) and (11)) shows that the institution that is significantly associated with job satisfaction in 2005 is unemployment benefits and the correlation is a negative one; regarding working conditions, formal involvement now shows a negative association similar in size to the previous one³ while job-related physical health problems are positively associated with job satisfaction. The changes in the correlations between job satisfaction and working conditions and/or institutions do not 'explain', however, the trend in job satisfaction.

The final column (12) allows changes in both years: the declining trend in job satisfaction now disappeared; the coefficients on the two year dummies are now positive though badly determined. Among the working conditions, tight deadlines show a correlation with the probability of job satisfaction of the perm: the correlation is negative and the size increasing in absolute value. Also negative and increasing in absolute value through time is the coefficient of job-related psychological problems. Significantly different between 1995 and 2000 is the (positive) correlation with formal involvement while in 2005 is (positive) correlation with job related body problems. Finally, among labour market institutions, only the negative association between job satisfaction and unemployment benefits in 2005 remains significant in the final specification.

The impossibility to distinguish between country specific trends and changes in labour market institutions can raise some doubts on the previous results according to which the declining trend in the job satisfaction of the permanent workers is most significantly related, though not exclusively, to those changes in labour market institutions that occurred between 1995

³It is not clear to what extent the change in the correlation between the indicator of formal involvement and job satisfaction in the years 2000 and 2005 is simply due to a slight change in the way the question is posed in the 2000 questionnaire with respect to the other questionnaire or, instead, capture a genuine setback of involvement in 2000 and a recover in 2005.

and 2000. In order to verify if changes in labour market institutions are necessary, in addition to sufficient, to explaining the declining trend in the job satisfaction of the perm, we repeat the previous exercise excluding the labour market institutions controls. Results are reported in Table 5; the upshot is that changes in the working conditions in 2005 can explain the declining trend of job satisfaction in 2005 while changes in the working conditions in both 2000 and 2005 can explain the declining trend in both 2000 and 2005. In particular, in this case it is clear that the working conditions that correlate to the declining trend in job satisfaction are tight deadlines, individual involvement and psychological job-related health problems while formal involvement in 2000 and physical job-related problems helps counterbalancing this negative trend. Changes in labour market institutions are therefore not necessary to account the trend in job satisfaction of the permanent workers.

6 Sensitivity Analysis

We carry out a few robustness checks. First of all, we replicate the estimates for the temporary workers. According to our hypothesis they should not be affected as much as the perms by the changes in the working conditions, specially those requiring an increase in personal involvement; as long as empowerment brings anxiety and stress, then we should also find that temps are relatively less affected by job-related psychological problems. Table 6 is the corresponding of Table 4 for the temps. The results confirm that the job satisfaction of temporary workers has not declined in time; this result is robust to all reported specifications. Moreover, the findings support the idea that the changes that have occurred in the workplace are only marginally related to the job satisfaction of the temporary workers as the role of working conditions is virtually stable across the quinquennia, the only exception being some changes in involvement which however compensate across periods. Labour market institutions have also a quite different role on the satisfaction of the temps: the measure of employment protection for the temporary is consistently and negatively associated with the probability of being satisfied while unemployment benefits show no relation to job satisfaction.

To assess the robustness of the results we also investigate the relevance of other factors that could explain the decline in the job satisfaction of the permanent workers. Among these we test the model by age groups; as permanent workers are relatively older, they may find it harder to adjust to a fast changing environment and hence their dissatisfaction increase. Finally we test the model by groups defined on the basis of the training received. If permanent workers are asked to perform relatively complex tasks but are not sufficiently trained, they may feel dissatisfied.
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7 Conclusions

In this paper we aimed to assess the relevance of working conditions relative to labour market institutions in explaining the declining trend in the job satisfaction of the permanent workers. We find that the job satisfaction of the permanent workers is negatively related to the high speed of work, to tight deadlines and to job related psychological problems and that the strength of the association between these factors and job satisfaction has risen in time. Among the labour market institutions, the decline in unemployment insurance in 2005 is also negatively and significantly associated with the perms' job satisfaction. We find that when controlling for both working conditions and labour market institutions, it is the change in the latter and specially the changes between 1995 and 2000, that can finally account for the declining trend in job satisfaction; however, when excluding labour market institutions, the changes in the working conditions are also sufficient to account for the declining trend in job satisfaction, implying that changes in labour market institutions are sufficient but not necessary to explain for the trend in the perms' job satisfaction.

The same exercise, replicated on the temporary workers, shows that the job satisfaction of the latter is not associated with changes in the working conditions nor with changes in labour market institutions. Indeed we find confirmation that the temps' job satisfaction is stable across time.

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Table 4: Marginal effects of the probability of being satisfied. Permanent workers

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
y00	-0.023*** (0.01)	-0.027*** (0.01)	-0.025*** (0.01)	-0.019*** (0.01)	-0.024*** (0.01)	-0.039** (0.02)	0.010 (0.01)	-0.007 (0.02)	-0.030*** (0.01)	-0.024*** (0.01)	-0.029*** (0.01)	0.019 (0.03)
y05	-0.035*** (0.01)	-0.040*** (0.01)	-0.022** (0.01)	-0.022 (0.01)	-0.017 (0.01)	-0.017 (0.01)	-0.013 (0.01)	-0.013 (0.01)	0.013 (0.02)	-0.016 (0.00)	0.024 (0.03)	0.054* (0.03)
exp			-0.008*** (0.00)		-0.009*** (0.00)	-0.008*** (0.00)	-0.009*** (0.00)	-0.008*** (0.00)	-0.009*** (0.00)	-0.009*** (0.00)	-0.009*** (0.00)	-0.009*** (0.00)
pos			-0.014*** (0.00)		-0.013*** (0.00)	-0.013*** (0.00)	-0.013*** (0.00)	-0.013*** (0.00)	-0.012*** (0.00)	-0.013*** (0.00)	-0.012*** (0.00)	-0.012*** (0.00)
speed			-0.023*** (0.01)		-0.023*** (0.01)	-0.022*** (0.01)	-0.022*** (0.01)	-0.023*** (0.01)	-0.024*** (0.01)	-0.023*** (0.01)	-0.024*** (0.01)	-0.030*** (0.01)
dlines			-0.020*** (0.00)		-0.021*** (0.00)	-0.019*** (0.01)	-0.021*** (0.00)	-0.020*** (0.01)	-0.016*** (0.01)	-0.021*** (0.00)	-0.015*** (0.01)	-0.006 (0.01)
i_ind			0.029*** (0.00)		0.029*** (0.00)	0.030*** (0.00)	0.029*** (0.00)	0.030*** (0.00)	0.031*** (0.00)	0.029*** (0.00)	0.030*** (0.00)	0.038*** (0.01)
i_for			0.046*** (0.00)		0.046*** (0.01)	0.026*** (0.01)	0.046*** (0.00)	0.027*** (0.01)	0.068*** (0.01)	0.046*** (0.00)	0.067*** (0.01)	0.040*** (0.01)
body			-0.120*** (0.03)		-0.115*** (0.03)	-0.104*** (0.03)	-0.115*** (0.03)	-0.106*** (0.03)	-0.142*** (0.03)	-0.114*** (0.03)	-0.141*** (0.03)	-0.150*** (0.04)
mind			-0.211*** (0.01)		-0.209*** (0.02)	-0.203*** (0.02)	-0.209*** (0.02)	-0.202*** (0.02)	-0.203*** (0.02)	-0.208*** (0.02)	-0.202*** (0.02)	-0.172*** (0.02)
ub				0.001 (0.00)	0.000 (0.00)	-0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)	-0.001 (0.00)	-0.000 (0.00)
almp				0.049*** (0.02)	0.035** (0.01)	0.033** (0.01)	0.042** (0.02)	0.041** (0.02)	0.027** (0.01)	0.028 (0.02)	0.024 (0.02)	0.029 (0.03)
epl_p				0.053 (0.05)	0.033 (0.05)	0.033 (0.05)	0.055 (0.04)	0.053 (0.04)	0.042 (0.05)	0.049 (0.04)	0.055 (0.04)	0.062* (0.04)
epl_t				0.000 (0.01)	-0.006 (0.01)	-0.005 (0.01)	-0.006 (0.01)	-0.005 (0.01)	-0.005 (0.01)	-0.005 (0.01)	-0.004 (0.01)	-0.002 (0.01)
exp00						-0.002 (0.00)		-0.002 (0.00)				-0.001 (0.00)
pos00						0.000 (0.00)		0.001 (0.00)				0.001 (0.00)
speed00						0.001 (0.01)		0.003 (0.01)				0.010 (0.01)
dlines00						-0.003 (0.01)		-0.004 (0.01)				-0.019 (0.01)
i_ind00						-0.005 (0.00)		-0.006 (0.01)				-0.013* (0.01)
i_for00						0.054*** (0.01)		0.052*** (0.01)				0.041*** (0.01)
body00						-0.037 (0.03)		-0.030 (0.03)				0.014 (0.03)
mind00						-0.016 (0.02)		-0.020 (0.02)				-0.048* (0.03)
ub00							0.001 (0.00)	0.000 (0.00)				-0.000 (0.00)
almp00							0.001 (0.01)	-0.001 (0.01)				0.005 (0.02)
epl_p00							-0.023*** (0.01)	-0.020*** (0.01)				-0.015 (0.01)
epl_t00							0.002 (0.00)	0.004 (0.00)				0.008 (0.01)
exp05									0.002 (0.00)		0.002 (0.00)	0.002 (0.01)
pos05									0.000 (0.01)		-0.001 (0.01)	-0.001 (0.01)
speed05									0.006 (0.01)		0.005 (0.01)	0.011 (0.01)
dlines05									-0.013 (0.01)		-0.013 (0.01)	-0.024* (0.01)
inv_ind05									-0.006 (0.01)		-0.005 (0.01)	-0.013 (0.01)
inv_for05									-0.052*** (0.02)		-0.049*** (0.02)	-0.022 (0.02)
body05									0.071*** (0.03)		0.068** (0.03)	0.078** (0.03)
mind05									-0.018 (0.02)		-0.017 (0.02)	-0.047* (0.03)
ub05										-0.002** (0.00)	-0.002*** (0.00)	-0.003*** (0.00)
almp05										0.007 (0.04)	0.012 (0.03)	0.017 (0.06)
epl_p05										0.015 (0.01)	0.012 (0.01)	0.002 (0.01)
epl_t05										0.015** (0.01)	0.012* (0.01)	0.017 (0.01)
_cons												
country	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
pers	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
occup	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
sects	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
size	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ps R2	0.002	0.041	0.152	0.037	0.148	0.150	0.148	0.151	0.150	0.149	0.151	0.153
N	34238	33946	33946	31951	31951	31951	31951	31951	31951	31951	31951	31951

Notes: Standard errors in parenthesis; ***Significant at the 1% level **Significant at the 5% level *Significant at the 10% level.

Table 5: Marginal effects of the probability of being satisfied. Permanent workers

	(1)	(2)	(3)	(4)
y00	-0.025*** (0.01)	-0.039** (0.02)	-0.031*** (0.01)	-0.009 (0.01)
y05	-0.022** (0.01)	-0.021** (0.01)	0.010 (0.02)	0.026 (0.02)
exposure	-0.008*** (0.00)	-0.007*** (0.00)	-0.010*** (0.00)	-0.008*** (0.00)
position	-0.014*** (0.00)	-0.014*** (0.00)	-0.013*** (0.00)	-0.013*** (0.00)
speed	-0.023*** (0.01)	-0.024*** (0.01)	-0.024*** (0.01)	-0.029*** (0.01)
dlines	-0.020*** (0.00)	-0.019*** (0.01)	-0.016*** (0.01)	-0.008 (0.01)
inv_ind	0.029*** (0.00)	0.031*** (0.00)	0.031*** (0.00)	0.039*** (0.01)
inv_for	0.046*** (0.00)	0.027*** (0.00)	0.070*** (0.01)	0.042*** (0.01)
body	-0.120*** (0.03)	-0.111*** (0.03)	-0.145*** (0.03)	-0.154*** (0.04)
mind	-0.211*** (0.01)	-0.204*** (0.02)	-0.208*** (0.02)	-0.179*** (0.02)
exp00		-0.004 (0.00)		-0.003 (0.00)
pos00		0.000 (0.00)		-0.001 (0.00)
speed00		0.004 (0.01)		0.009 (0.01)
dlines00		-0.004 (0.01)		-0.016* (0.01)
inv_ind00		-0.005 (0.00)		-0.014* (0.01)
inv_for00		0.055*** (0.01)		0.042*** (0.01)
body00		-0.029 (0.03)		0.014 (0.04)
mind00		-0.020 (0.02)		-0.044** (0.02)
exp05			0.003 (0.00)	0.001 (0.00)
pos05			-0.002 (0.01)	-0.002 (0.01)
speed05			0.004 (0.01)	0.010 (0.01)
dlines05			-0.011 (0.01)	-0.020* (0.01)
inv_ind05			-0.006 (0.01)	-0.014* (0.01)
inv_for05			-0.054*** (0.01)	-0.025* (0.01)
body05			0.062** (0.02)	0.071** (0.03)
mind05			-0.010 (0.02)	-0.038* (0.02)
_cons				
country	Yes	Yes	Yes	Yes
personal contr	Yes	Yes	Yes	Yes
occupations	Yes	Yes	Yes	Yes
sectors	Yes	Yes	Yes	Yes
size	Yes	Yes	Yes	Yes
Pseudo R2	0.152	0.155	0.155	0.156
N	33946	33946	33946	33946

Notes: Standard errors in parenthesis; ***Significant at the 1% level **Significant at the 5% level *Significant at the 10 % level.

Table 6: Marginal effects of the probability of being satisfied. Temporary workers

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
y00	0.006 (0.01)	0.001 (0.01)	-0.003 (0.01)	-0.001 (0.01)	-0.009 (0.01)	-0.043 (0.05)	-0.042 (0.06)	-0.084 (0.09)	-0.016 (0.01)	-0.005 (0.01)	-0.013 (0.01)	-0.049 (0.08)
y05	-0.003 (0.02)	-0.003 (0.02)	0.008 (0.02)	-0.004 (0.02)	-0.005 (0.01)	-0.001 (0.01)	-0.003 (0.01)	-0.000 (0.01)	0.045 (0.04)	0.048 (0.05)	0.091 (0.06)	0.073 (0.05)
exp			-0.005 (0.00)		-0.003 (0.00)	-0.002 (0.01)	-0.003 (0.01)	-0.002 (0.01)	-0.007 (0.01)	-0.003 (0.01)	-0.007 (0.01)	-0.008 (0.01)
pos			-0.030*** (0.00)		-0.030*** (0.00)	-0.032*** (0.01)	-0.030*** (0.01)	-0.032*** (0.01)	-0.027*** (0.00)	-0.030*** (0.00)	-0.026*** (0.00)	-0.027*** (0.01)
speed (d)			-0.028** (0.01)		-0.021** (0.01)	-0.014 (0.01)	-0.020* (0.01)	-0.013 (0.01)	-0.016 (0.01)	-0.021* (0.01)	-0.016 (0.01)	0.006 (0.02)
dlines			-0.036*** (0.01)		-0.034*** (0.01)	-0.037*** (0.01)	-0.034*** (0.01)	-0.038*** (0.01)	-0.033*** (0.01)	-0.033*** (0.01)	-0.032*** (0.01)	-0.041*** (0.01)
inv_ind			0.040*** (0.01)		0.038*** (0.01)	0.039*** (0.01)	0.038*** (0.01)	0.040*** (0.01)	0.042*** (0.01)	0.038*** (0.01)	0.041*** (0.01)	0.053*** (0.01)
inv_for			0.064*** (0.01)		0.061*** (0.01)	0.034*** (0.01)	0.060*** (0.01)	0.034*** (0.01)	0.086*** (0.01)	0.060*** (0.01)	0.085*** (0.01)	0.044** (0.02)
body			-0.113*** (0.03)		-0.109*** (0.03)	-0.126*** (0.03)	-0.110*** (0.03)	-0.125*** (0.03)	-0.094** (0.04)	-0.109*** (0.03)	-0.096** (0.04)	-0.112** (0.05)
mind			-0.253*** (0.03)		-0.245*** (0.03)	-0.241*** (0.03)	-0.244*** (0.03)	-0.239*** (0.03)	-0.231*** (0.04)	-0.244*** (0.03)	-0.230*** (0.04)	-0.217*** (0.04)
ub				-0.000 (0.00)	-0.001 (0.00)	-0.001 (0.00)	-0.001 (0.00)	-0.001 (0.00)	-0.001* (0.00)	-0.002 (0.00)	-0.001 (0.00)	-0.002 (0.00)
almp				0.080*** (0.02)	0.057*** (0.02)	0.060*** (0.02)	0.058** (0.03)	0.062** (0.03)	0.047** (0.02)	0.048* (0.03)	0.046* (0.03)	0.039 (0.03)
epl_p				-0.053 (0.04)	-0.064* (0.04)	-0.053 (0.04)	-0.031 (0.04)	-0.026 (0.05)	-0.055* (0.03)	-0.038 (0.03)	-0.037 (0.03)	-0.023 (0.05)
epl_t				-0.021** (0.01)	-0.026*** (0.01)	-0.024** (0.01)	-0.026** (0.01)	-0.026** (0.01)	-0.025*** (0.01)	-0.023** (0.01)	-0.022** (0.01)	-0.024** (0.01)
exp00						-0.004 (0.01)		-0.004 (0.01)				0.002 (0.01)
pos00						0.007 (0.01)		0.007 (0.01)				0.002 (0.01)
speed00						-0.021 (0.02)		-0.022 (0.02)				-0.043 (0.03)
dlines00						0.011 (0.02)		0.013 (0.02)				0.017 (0.02)
inv_ind00						-0.005 (0.01)		-0.006 (0.01)				-0.018* (0.01)
inv_for00						0.072*** (0.02)		0.072*** (0.02)				0.063*** (0.02)
body00						0.040 (0.08)		0.031 (0.08)				0.016 (0.09)
mind00						0.003 (0.04)		0.000 (0.04)				-0.021 (0.03)
ub00							0.001 (0.00)	0.000 (0.00)				0.000 (0.00)
almp00							0.025 (0.02)	0.021 (0.02)				0.019 (0.03)
epl_p00							-0.018* (0.01)	-0.013 (0.01)				-0.004 (0.01)
epl_t00							0.016 (0.01)	0.017 (0.01)				0.017 (0.01)
exp05									0.010* (0.01)		0.009* (0.01)	0.011 (0.01)
pos05									-0.008 (0.01)		-0.008 (0.01)	-0.007 (0.01)
speed05									-0.013 (0.02)		-0.012 (0.02)	-0.035 (0.03)
dlines05									0.000 (0.02)		-0.003 (0.02)	0.007 (0.02)
inv_ind05									-0.009 (0.02)		-0.008 (0.02)	-0.019 (0.01)
inv_for05									-0.063*** (0.02)		-0.061*** (0.02)	-0.016 (0.03)
body05									-0.032 (0.05)		-0.026 (0.05)	-0.009 (0.06)
mind05									-0.024 (0.06)		-0.025 (0.06)	-0.037 (0.06)
ub05										-0.001 (0.00)	-0.002 (0.00)	-0.001 (0.00)
almp05										-0.036 (0.03)	-0.012 (0.03)	-0.008 (0.05)
epl_p05										0.014 (0.01)	0.011 (0.01)	0.009 (0.02)
epl_t05										-0.005 (0.01)	-0.004 (0.01)	0.007 (0.01)
_cons												
country	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
pers	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
occup	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
sect	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
size	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R2	0.000	0.083	0.159	0.074	0.150	0.153	0.151	0.153	0.153	0.151	0.153	0.155
N	9000	8840	8840	7993	7993	7993	7993	7993	7993	7993	7993	7993

Notes: Standard errors in parenthesis; ***Significant at the 1% level **Significant at the 5% level *Significant at the 10% level.